



Level 2 Reserve Study Update (With Site-Visit)

Prepared For Fiscal Year 2020

July 10, 2019

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Preface

This comprehensive reserve study report was produced using specialized web-based software powered by Global Reserves.

The individual responsible for report preparation and/or oversight is Anastasia Kolodzik.

Information contained in the report is considered reliable, but is not guaranteed. The report does not warrant against the contingency of unforeseen conditions or circumstances, unreliable information, or an unpredictable inflationary or deflationary spiral. The report is not intended to predict precise expectations, but rather to chart the expectations that a reasonable person might anticipate in planning for the fiscal future. The scope of this report is expressly limited to the components described herein.

It is strongly recommended by the Reserve Study Industry to have this reserve study report updated on an annual basis to ensure the security of a long-term funding plan. These necessary updates provide statutory compliance (as applicable) and allow for adjustments due to actual year-end inflation rate, actual year-end reserve balance and the unpredictable nature of the lives of many of the reserve components under consideration.

Reserve Disclosures

Profile

Name	
Location	Orlando, FL 32836
Units/General Type	60 / Planned Development (PD)
Base Year / Age	2003 / 16
Fiscal Year Ends	December-31

Parameters

Level of Service	Level 2 Reserve Study Update (With Site-Visit)
Prepared for Fiscal Year (FY)	2020
Most Recent On-Site Inspection Date	July 02, 2019
Allocation Increase Rate	ref Cash Flow Analysis
Contingency Rate	ref Component Details
Inflation Rate	3.0%
Interest Rate / Tax Rate	3.0% / 30.0%
Interest Rate (net effective)	2.1%
Current Reserve Allocation	\$28,000 per year
Current Reserve Balance	\$118,520 as of December 31, 2019
Funding Plan - Method / Goal	Straight-Line / Threshold - set Reserve Allocation

Summary

FY Start Balance	\$149,009	<i>(projected to current FY end/next FY start)</i>		
Fully Funded Balance	\$525,366			
<hr/>				
Percent Funded	28%			
<hr/>				
<i>Proposed Budget</i>	<i>per year</i>	<i>per month</i>	<i>per unit per month</i>	
<hr/>				
Reserve Allocation	\$123,797	\$10,316	\$171.94	

Association management/members need to understand that Percent Funded is a general indication of reserve strength and that the parameter fluctuates from year to year due to the Disbursement Schedule.

The Reserve Allocation was determined using the Funding Plan indicated above under the Parameters section. This allocation should be increased annually using the Allocation Increase Rate found in the Cash Flow Analysis.

Association management should budget the Reserve Allocation amount toward reserves for next fiscal year, to ensure the availability of reserves to fund future reserve component expenditures. This amount reflects an increase of 342.13 % from the Current Reserve Allocation. The Reserve Allocation must be reviewed and adjusted for inflation (and other vital factors) in succeeding years to ensure the- Security of a Successful Plan!

Reserve Disclosures

<i>Reserve Component</i>	<i>Current Cost</i>	<i>Useful Life</i>	<i>Remaining Life</i>
01 Equipment			
01.01 Irrigation System (full system)	\$97,088	30	10
01.02 Irrigation System (Reclaimed Water)	\$4,725	20	2
01.03 Light Poles	\$35,490	40	24
01.04 Mailboxes Stations (boxes and posts)	\$15,592	25	10
01.05 Street and Traffic Signs	\$3,675	20	10
02 Fencing			
02.01 Aluminum Fence	\$72,450	25	12
02.02 Perimeter Walls	\$16,380	7	6
02.03 Retaining Walls	\$125,580	30	15
03 Pavement			
03.01 Aprons (repaired in 2019)	\$9,660	35	34
03.02 Aprons (not replaced in 2019)	\$123,480	35	5
03.03 Asphalt repair and Coating	\$76,072	20	3
03.04 Concrete Sidewalks	\$81,428	35	15
04 Restoration			
04.01 Drainage Basins Repair (with partial replacement)	\$6,063	20	8
04.02 Monument Signs	\$5,985	30	20
04.03 Tree Maintenance	\$34,125	1	1

Grand Total: 15

\$707,793

Cash Flow Analysis

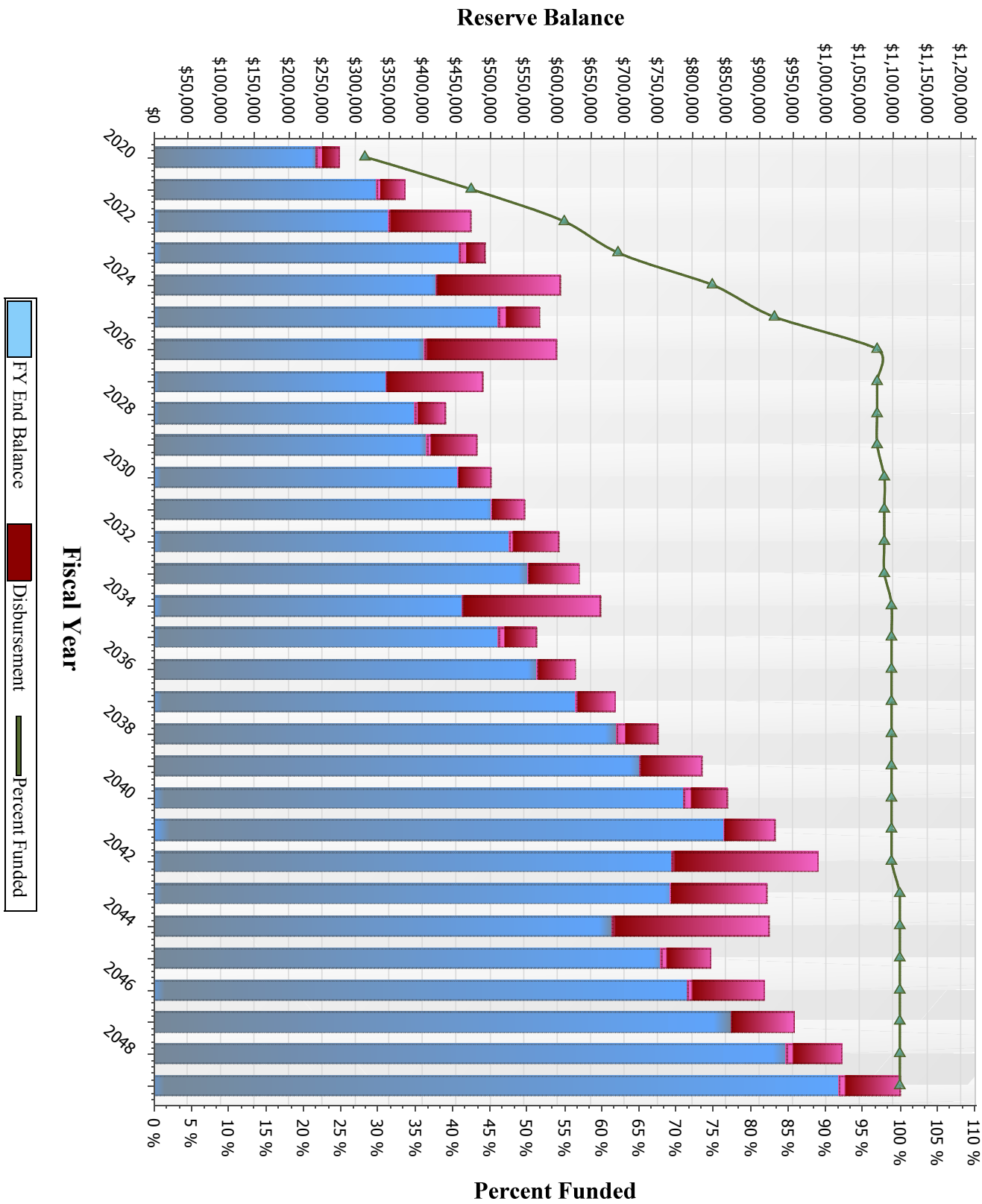
Fiscal Year	FY Start Balance	Interest Earned	Reserve Allocation	Allocation Increase Rate	Special Assessment	Disbursement	FY End Balance	Fully Funded Balance	Percent Funded
2019	--	--	--	--	--	\$0	\$149,009	\$452,445	--
2020	\$149,009	\$3,129	\$123,797	342.1%	\$0	\$35,149	\$240,786	\$525,366	28%
2021	\$240,786	\$5,057	\$127,511	3.0%	\$0	\$41,216	\$332,138	\$566,052	43%
2022	\$332,138	\$6,975	\$131,336	3.0%	\$0	\$120,412	\$350,038	\$603,529	55%
2023	\$350,038	\$7,351	\$135,276	3.0%	\$0	\$38,408	\$454,258	\$562,469	62%
2024	\$454,258	\$9,539	\$139,335	3.0%	\$0	\$182,711	\$420,421	\$606,597	75%
2025	\$420,421	\$8,829	\$143,515	3.0%	\$0	\$60,308	\$512,457	\$505,413	83%
2026	\$512,457	\$10,762	\$75,469	-47.4%	\$0	\$196,421	\$402,267	\$529,316	97%
2027	\$402,267	\$8,448	\$77,733	3.0%	\$0	\$142,691	\$345,757	\$415,874	97%
2028	\$345,757	\$7,261	\$80,065	3.0%	\$0	\$44,526	\$388,557	\$356,561	97%
2029	\$388,557	\$8,160	\$82,467	3.0%	\$0	\$71,754	\$407,430	\$398,820	97%
2030	\$407,430	\$8,556	\$84,941	3.0%	\$0	\$47,236	\$453,691	\$416,631	98%
2031	\$453,691	\$9,528	\$87,489	3.0%	\$0	\$48,655	\$502,054	\$462,650	98%
2032	\$502,054	\$10,543	\$90,114	3.0%	\$0	\$74,167	\$528,544	\$511,007	98%
2033	\$528,544	\$11,099	\$92,817	3.0%	\$0	\$74,805	\$557,656	\$537,114	98%
2034	\$557,656	\$11,711	\$95,602	3.0%	\$0	\$204,430	\$460,539	\$565,955	99%
2035	\$460,539	\$9,671	\$98,470	3.0%	\$0	\$54,760	\$513,920	\$464,823	99%
2036	\$513,920	\$10,792	\$101,424	3.0%	\$0	\$56,402	\$569,734	\$517,587	99%
2037	\$569,734	\$11,964	\$104,467	3.0%	\$0	\$58,094	\$628,071	\$573,116	99%
2038	\$628,071	\$13,189	\$107,601	3.0%	\$0	\$59,838	\$689,023	\$631,516	99%
2039	\$689,023	\$14,469	\$110,829	3.0%	\$0	\$91,217	\$723,104	\$692,893	99%
2040	\$723,104	\$15,185	\$114,154	3.0%	\$0	\$63,483	\$788,960	\$726,921	99%
2041	\$788,960	\$16,568	\$117,578	3.0%	\$0	\$74,441	\$848,666	\$793,743	99%
2042	\$848,666	\$17,822	\$121,106	3.0%	\$0	\$217,485	\$770,109	\$854,605	99%
2043	\$770,109	\$16,172	\$124,739	3.0%	\$0	\$141,513	\$769,507	\$773,360	100%
2044	\$769,507	\$16,160	\$128,481	3.0%	\$0	\$232,644	\$681,505	\$771,450	100%
2045	\$681,505	\$14,312	\$132,335	3.0%	\$0	\$73,594	\$754,559	\$679,228	100%
2046	\$754,559	\$15,846	\$136,306	3.0%	\$0	\$112,187	\$794,524	\$751,793	100%
2047	\$794,524	\$16,685	\$140,395	3.0%	\$0	\$91,947	\$859,657	\$790,611	100%
2048	\$859,657	\$18,053	\$144,607	3.0%	\$0	\$80,419	\$941,898	\$855,429	100%
2049	\$941,898	\$19,780	\$148,945	3.0%	\$0	\$91,752	\$1,018,871	\$938,120	100%

2.1% - Interest Rate
3.0% - Inflation

Min FY End Balance:	\$240,786	Min % Funded:	28%
Avg FY End Balance:	\$590,290	Avg % Funded:	91%

Yearly Review Chart

Disbursement with Percent Funded Comparison



Disbursement By Year

<i>Fiscal Year</i>	<i>Disbursement</i>	<i>Disbursement Breakdown</i>		
2020	\$35,149	\$35,149	04.03	Tree Maintenance
2021	\$41,216	\$5,013	01.02	Irrigation System (Reclaimed Water)
		\$36,203	04.03	Tree Maintenance
2022	\$120,412	\$83,124	03.03	Asphalt repair and Coating
		\$37,288	04.03	Tree Maintenance
2023	\$38,408	\$38,408	04.03	Tree Maintenance
2024	\$182,711	\$143,150	03.02	Aprons (not replaced in 2019)
		\$39,561	04.03	Tree Maintenance
2025	\$60,308	\$19,559	02.02	Perimeter Walls
		\$40,749	04.03	Tree Maintenance
2026	\$41,970	\$41,970	04.03	Tree Maintenance
2027	\$50,911	\$7,681	04.01	Drainage Basins Repair (with partial replacement)
		\$43,230	04.03	Tree Maintenance
2028	\$44,526	\$44,526	04.03	Tree Maintenance
2029	\$202,231	\$130,477	01.01	Irrigation System (full system)
		\$20,954	01.04	Mailboxes Stations (boxes and posts)
		\$4,939	01.05	Street and Traffic Signs
		\$45,861	04.03	Tree Maintenance
2030	\$47,236	\$47,236	04.03	Tree Maintenance

Disbursement By Year

<i>Fiscal Year</i>	<i>Disbursement</i>	<i>Disbursement Breakdown</i>		
2031	\$151,954	\$103,299	02.01	Aluminum Fence
		\$48,655	04.03	Tree Maintenance
2032	\$74,167	\$24,054	02.02	Perimeter Walls
		\$50,113	04.03	Tree Maintenance
2033	\$51,617	\$51,617	04.03	Tree Maintenance
2034	\$375,685	\$195,654	02.03	Retaining Walls
		\$126,864	03.04	Concrete Sidewalks
		\$53,167	04.03	Tree Maintenance
2035	\$54,760	\$54,760	04.03	Tree Maintenance
2036	\$56,402	\$56,402	04.03	Tree Maintenance
2037	\$58,094	\$58,094	04.03	Tree Maintenance
2038	\$59,838	\$59,838	04.03	Tree Maintenance
2039	\$102,027	\$29,584	02.02	Perimeter Walls
		\$10,810	04.02	Monument Signs
		\$61,633	04.03	Tree Maintenance
2040	\$63,483	\$63,483	04.03	Tree Maintenance
2041	\$74,441	\$9,054	01.02	Irrigation System (Reclaimed Water)
		\$65,387	04.03	Tree Maintenance
2042	\$217,485	\$150,136	03.03	Asphalt repair and Coating
		\$67,349	04.03	Tree Maintenance

Disbursement By Year

<i>Fiscal Year</i>	<i>Disbursement</i>	<i>Disbursement Breakdown</i>		
2043	\$141,513	\$72,144	01.03	Light Poles
		\$69,369	04.03	Tree Maintenance
2044	\$71,451	\$71,451	04.03	Tree Maintenance
2045	\$73,594	\$73,594	04.03	Tree Maintenance
2046	\$112,187	\$36,385	02.02	Perimeter Walls
		\$75,802	04.03	Tree Maintenance
2047	\$91,947	\$13,872	04.01	Drainage Basins Repair (with partial replacement)
		\$78,075	04.03	Tree Maintenance
2048	\$80,419	\$80,419	04.03	Tree Maintenance
2049	\$91,752	\$8,920	01.05	Street and Traffic Signs
		\$82,832	04.03	Tree Maintenance
Grand Total:	\$2,867,894			

Reserve Balance Distribution

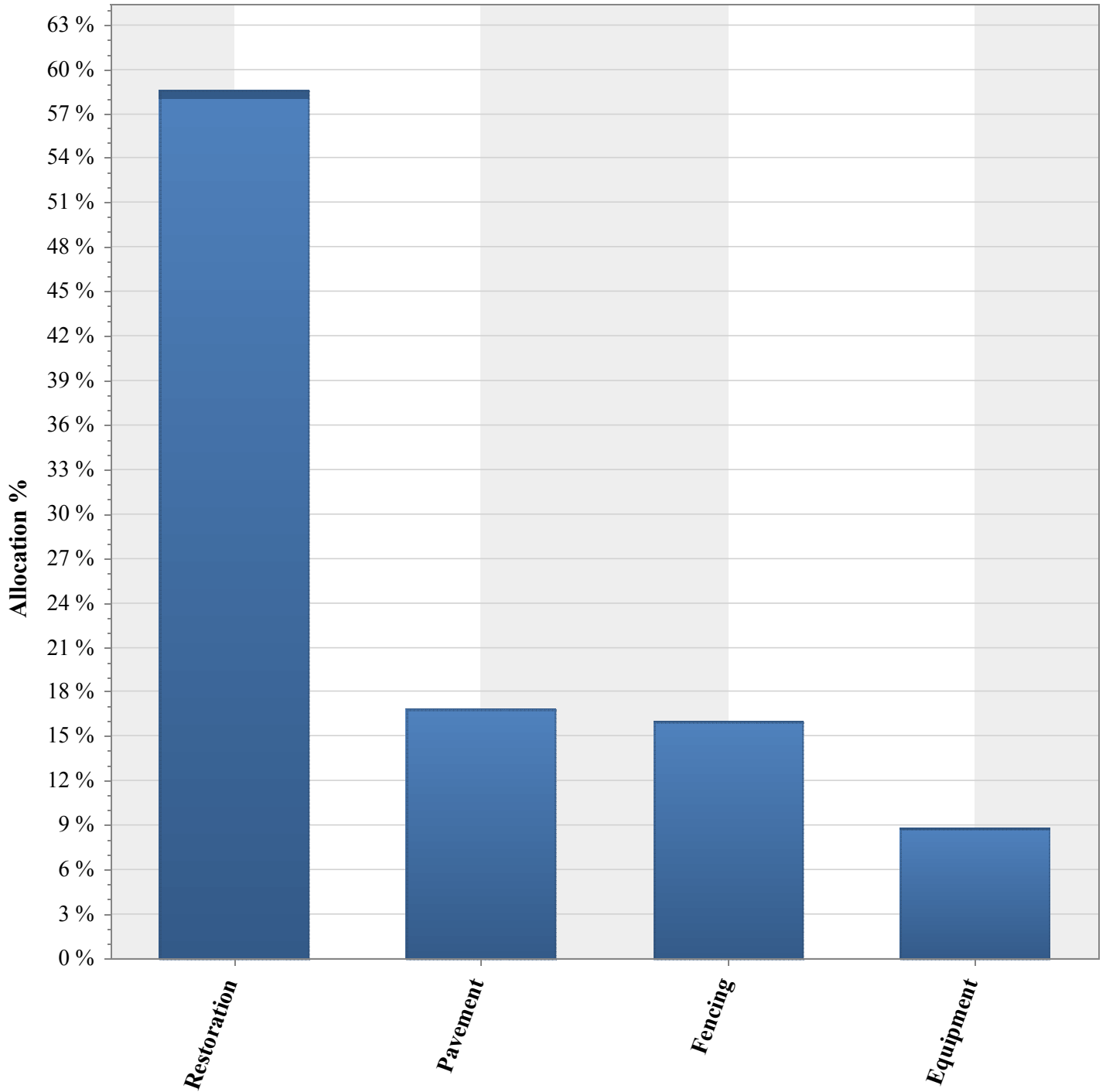
<i>Note- This distribution is based on the disbursement by year in ascending order.</i>	\$149,009 : FY Start Balance \$149,009 : Distributed Funds
	\$0 : Remaining Funds

<i>Reserve Component</i>	<i>Distribution</i>	<i>Percentage</i>
01 Equipment		
01.01 Irrigation System (full system)		
01.02 Irrigation System (Reclaimed Water)		
01.03 Light Poles		
01.04 Mailboxes Stations (boxes and posts)		
01.05 Street and Traffic Signs		
02 Fencing		
02.01 Aluminum Fence		
02.02 Perimeter Walls		
02.03 Retaining Walls		
03 Pavement		
03.01 Aprons (repaired in 2019)		
03.02 Aprons (not replaced in 2019)		
03.03 Asphalt repair and Coating	\$149,009	100.0%
03.04 Concrete Sidewalks		
04 Restoration		
04.01 Drainage Basins Repair (with partial replacement)		
04.02 Monument Signs		
04.03 Tree Maintenance		

Allocation Breakdown

<i>Reserve Component</i>		<i>Reserve Allocation (per year)</i>	<i>Reserve Allocation (per month)</i>	<i>Reserve Allocation (per unit per month)</i>	<i>Allocation %</i>
01	Equipment	\$10,814.07	\$901.17	\$15.02	8.73%
01.01	Irrigation System (full system)	\$6,772.97	\$564.41	\$9.41	5.47%
01.02	Irrigation System (Reclaimed Water)	\$494.43	\$41.20	\$0.69	0.40%
01.03	Light Poles	\$1,856.86	\$154.74	\$2.58	1.50%
01.04	Mailboxes Stations (boxes and posts)	\$1,305.25	\$108.77	\$1.81	1.05%
01.05	Street and Traffic Signs	\$384.56	\$32.05	\$0.53	0.31%
02	Fencing	\$19,722.82	\$1,643.57	\$27.39	15.94%
02.01	Aluminum Fence	\$6,065.02	\$505.42	\$8.42	4.90%
02.02	Perimeter Walls	\$4,897.22	\$408.10	\$6.80	3.96%
02.03	Retaining Walls	\$8,760.58	\$730.05	\$12.17	7.08%
03	Pavement	\$20,790.37	\$1,732.54	\$28.87	16.79%
03.01	Aprons (repaired in 2019)	\$577.62	\$48.14	\$0.80	0.47%
03.02	Aprons (not replaced in 2019)	\$7,383.50	\$615.29	\$10.25	5.96%
03.03	Asphalt repair and Coating	\$7,960.28	\$663.36	\$11.06	6.43%
03.04	Concrete Sidewalks	\$4,868.97	\$405.75	\$6.76	3.93%
04	Restoration	\$72,469.74	\$6,039.14	\$100.65	58.54%
04.01	Drainage Basins Repair (with partial replacement)	\$634.44	\$52.87	\$0.88	0.51%
04.02	Monument Signs	\$417.52	\$34.79	\$0.58	0.34%
04.03	Tree Maintenance	\$71,417.78	\$5,951.48	\$99.19	57.69%
Grand Total:		\$123,797	\$10,316.42	\$171.93	100%

Category Breakdown Chart



Fully Funded Balance Breakdown - Next FY

<i>Reserve Component</i>	<i>Current Cost</i>	<i>Useful Life</i>	<i>Remaining Life</i>	<i>Fully Funded Balance</i>
01 Equipment	\$161,267			\$102,520
01.01 Irrigation System (full system)	\$100,001	30	9	\$70,001
01.02 Irrigation System (Reclaimed Water)	\$4,867	20	1	\$4,623
01.03 Light Poles	\$36,555	40	23	\$15,536
01.04 Mailboxes Stations (boxes and posts)	\$16,060	25	9	\$10,278
01.05 Street and Traffic Signs	\$3,785	20	9	\$2,082
02 Fencing	\$220,842			\$115,595
02.01 Aluminum Fence	\$74,624	25	11	\$41,789
02.02 Perimeter Walls	\$16,871	7	5	\$4,820
02.03 Retaining Walls	\$129,347	30	14	\$68,985
03 Pavement	\$299,359			\$234,059
03.01 Aprons (repaired in 2019)	\$9,950	35	33	\$569
03.02 Aprons (not replaced in 2019)	\$127,184	35	4	\$112,649
03.03 Asphalt repair and Coating	\$78,354	20	2	\$70,519
03.04 Concrete Sidewalks	\$83,870	35	14	\$50,322
04 Restoration	\$47,558			\$41,468
04.01 Drainage Basins Repair (with partial replacement)	\$6,245	20	7	\$4,059
04.02 Monument Signs	\$6,165	30	19	\$2,260
04.03 Tree Maintenance	\$35,149	1	0	\$35,149
Grand Total:	\$729,027			\$493,642

Category Summary - Next FY

<i>Category</i>	<i>Current Cost</i>	<i>Useful Life (Min - Max)</i>	<i>Remaining Life (Min - Max)</i>	<i>Fully Funded Balance</i>
01 Equipment	\$161,267	20 - 40	1 - 23	\$102,520
02 Fencing	\$220,842	7 - 30	5 - 14	\$115,595
03 Pavement	\$299,359	20 - 35	2 - 33	\$234,059
04 Restoration	\$47,558	1 - 30	0 - 19	\$41,468
Grand Total:	\$729,027			\$493,642

Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>	
01 Equipment								
01.01	Irrigation System (full system) UL: 30 RL: 10 Complete replacement of system including all sprinkler heads and lines.	1	each	\$92,465.00	7	100%	5%	\$97,088
01.02	Irrigation System (Reclaimed Water) UL: 20 RL: 2 System includes one (1) controller . Does not include zone sprinklers and lines.	1	each	\$4,500.00	6	100%	5%	\$4,725
01.03	Light Poles UL: 40 RL: 24 13 light poles including components, wiring and installation. Estimated at 3 ft concrete base underground.	13	each	\$2,600.00	6	100%	5%	\$35,490
01.04	Mailboxes Stations (boxes and posts) UL: 25 RL: 10 Posts (33) and boxes (60) Painted and repaired in 2018.	33	each	\$450.00	3	100%	5%	\$15,592
01.05	Street and Traffic Signs UL: 20 RL: 10 4 metal signs including poles and installation in concrete.	4	units	\$875.00	5	100%	5%	\$3,675
02 Fencing								
02.01	Aluminum Fence UL: 25 RL: 12 Estimated life expectancy commtigent upon erosion of ground supporting fence line and concrete wall (addressed in another entry)	1,840	lin ft	\$37.50	8	100%	5%	\$72,450
02.02	Perimeter Walls UL: 7 RL: 6 Approximately 1840 lin ft of stucco wall with 25500 sq ft of surface. Perimeter wall paint and repair only. Some places in need of repair - see photos.	1	each	\$15,600.00	5	100%	5%	\$16,380
02.03	Retaining Walls UL: 30 RL: 15 1840 lin ft retaining wall shows erosion and signs of repair. Cracking along top edges (minimal) . Estimate comprised of removal and replacement of complete wall.	1,840	lin ft	\$65.00	6	100%	5%	\$125,580
03 Pavement								
03.01	Aprons (repaired in 2019) UL: 35 RL: 34 Concrete aprons replacement due to tree roots raising pads to unacceptable levels.	4	each	\$2,300.00	3	100%	5%	\$9,660
03.02	Aprons (not replaced in 2019) UL: 35 RL: 5 Replacement of aprons due to trees roots upheaving pads to unacceptable level	56	each	\$2,100.00	5	100%	5%	\$123,480
03.03	Asphalt repair and Coating UL: 20 RL: 3 4600 sq yds 2" asphalt overlay and seal coat. Including 10% gutter repair at time of overlay.	4,600	sq yd	\$15.75	5	100%	5%	\$76,072

Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
03 Pavement							
03.04 Concrete Sidewalks UL: 35 RL: 15 Concrete sidewalks normal wear and tear has been deminished by tree roots upheaving sidewalks in various places through out community. 59 panels were replaced in 2019 and 2017.	14,100	sq ft	\$5.50	5	100%	5%	\$81,428
04 Restoration							
04.01 Drainage Basins Repair (with partial replacement) UL: 20 RL: 8 7 "catch" basins on sides of streets.	7	each	\$825.00	6	100%	5%	\$6,063
04.02 Monument Signs UL: 30 RL: 20 2 monument signs at entrance. Painted in 2019. Includes immediate lighting, landscaping and graphics.	2	units	\$2,850.00	8	100%	5%	\$5,985
04.03 Tree Maintenance UL: 1 RL: 1 Tree maintenance allowance as requested by board for yearly trimming.	130	each	\$250.00	7	100%	5%	\$34,125

Grand Total: 15

Field Report

**Note- Field observations are normally based on an inspection of all accessible reserve components under consideration. Roofing system observations (if applicable) are normally based on a minimum inspection of at least 15% of the total number of units within the complex. Level 1 Reserve Studies normally provide for reserve component identification, quantification and specification via actual field observations and/or measurements. Recommend that association management institute a log book to record "Reserve Fund Disbursements" to facilitate future reserve studies. The log should include copy of all contracts/invoices.*

COAT/PAINT/STAIN

Metal- Visible rust must be completely removed/converted on metal substrates (e.g. wrought iron) & then primed prior to high quality coating application to afford protection from the elements. High gloss is recommended for maximum durability.

Stucco- The term stucco is widely used to describe the cement plaster used for coating exterior surfaces of buildings. Three-coat work (scratch- 3/8" thick, brown- 3/8" thick, and finish- 3/8" thick) is normally applied over metal reinforced wood-frame structures. The finish coat (decorative surface) is integrally colored & frequently applied over metal reinforced wood-frame structures. The finish coat (decorative surface) is integrally colored & frequently textured.

Minimal care will keep a stucco surface attractive for many years. Cracks should be filled with a stucco patching compound to match the existing finish coat. This product is available in many colors at most building supply centers. Periodic pressure cleaning will keep the stucco clean & the finish coat bright for many years. In time, however, the stucco will eventually require recoat, paint or fog-coat application.

Wood- Deteriorated or damaged wood must be removed/replaced & then primed prior to high quality coating application to afford protection from the elements.

**Note- Ninety percent (90%) of failures are due to either moisture related problems or inadequate preparation of the surface.*

**Note- Touch-up applications are recommended between useful life expectancies of the component.*

DECK COMPOUND

All deck coatings require periodic maintenance. The time interval depends on coating life, traffic patterns & exposure to the elements. The deck surface must be inspected/repaired/sealed under an annual maintenance program to prevent water infiltration.

DRAINAGE SYSTEMS

Drainage systems & flood control basins should be inspected, repaired, and cleared of debris (in the spring & fall) under a semi-annual maintenance program.

EQUIPMENT

Unable to verify proper operation of all items. If properly maintained per manufacturer's recommendations and/or industry standards, these components should obtain useful life expectancy.

FENCING

Various fencing materials exists on the market today & include: aluminum, block, chain link, vinyl, wood, wood-crete & wrought iron. Wood fence is by far the most common fencing material & wood fence posts are especially vulnerable to rapid deterioration unless elevated to eliminate earth-to-wood contact.

Field Report

PAVEMENT

Weather, traffic & time work to erode the asphalt pavement. The sun dries out the natural oils, while the unprotected surface is left to oxidize. The brittle blacktop surface cracks, allowing moisture penetration (the primary cause of pavement failure). A surface seal (sealcoat) fills in minor cracks & depressions that lead to larger ones. It also penetrates & resaturates the dried out surface with natural oils & solids to create a protective shield that guards the pavement from weathering & further deterioration. A sealcoat can substantially increase the pavements useful life expectancy. When the sealcoat starts to change from a deep black to a dull gray, it generally indicates that it's time to re-coat. Cracks in concrete driveway/curbs/gutters/sidewalks must be filled under an annual maintenance program to deter further deterioration due to erosion or sectional replaced with a base/pavement designed to prevent recurrence.

POOL/SPA

Coping- Coping (cast stone) is used to top off the side of a pool/spa & finish the edge to the adjacent decking. Coping is subject to deterioration over a period of years & can be retarded by periodically treating the cast stone with a silicone-based compound.

Coping/Deck Joint- A major cause of tile/coping problems may be the sealed joint between the coping & deck. If this is not watertight, water runs under the coping & behind the tile causing coping/tile movement & damage. Sealant (e.g. Deck-O-Seal) should be periodically installed to prevent problems.

Deck- Recommend filling of cracks to prevent further deterioration due to erosion or sectional replacement with a base/pavement designed to prevent recurrence.

Equipment- Unable to verify proper operation of all items. If properly maintained, these items should obtain useful life. Pool/spa filter elements should be inspected/cleaned at least once a year under an annual maintenance program. Recommend replacement of the pool/spa filter pump timer (when it fails) with a timer that has an additional heater circuit designed to turn off gas fired heater approximately 25 minutes before the filter pump turns off, eliminating the problem of pounding/knocking due to overheated water & reducing scale/lime deposits which decrease the useful life of heater. Pump/motor assemblies should be periodically cleared of debris to allow for heat dissipation.

Furniture- Recommend replacement (when necessary) during the fall/winter months to take advantage of year end close-out deals.

Plaster- Although plaster finishes have lasted 20 years, the life of the finish depends upon the quality of the original work & careful control of the water chemistry. The pool/spa water should be emptied & refilled periodically (as determined by water analysis) to ensure/extend the useful life of the plaster. The water should also be clear (not turbid), colorless, and low in scale-forming chemicals.

Tile- Many concrete pools/spas include a tile trim (or border) around the perimeter or a tile-trimmed gutter. Although tile is almost indestructible, problems are almost invariably associated with grouting. Unless water chemistry is watched carefully, the grout between the tile (& coping) slowly erodes. The scum that forms on the tile at the waterline is a combination of oil & dust. There are special tile cleaners available that can be applied with a brush. Remove light scale deposits from the tile with solution of muriatic acid (1 part acid to 6 parts water; prevent possible injury by consulting with proper authorities/experts prior to mixing any solutions). Proper maintenance will prevent any problems occurring.

**Note- In a spa, the maximum recommended temperature is 104° Fahrenheit. In a pool, the ideal range for water temperature is 78°-82° Fahrenheit.*

**Note-Recommend that association management institute a log book to record "Pool/Spa Maintenance & Repairs" to facilitate future reserve studies.*

Field Report

ROOFS

Built-up Roofing (BUR)- Commonly used on flat or very-low slope roofs where a completely impervious membrane is required. A properly maintained BUR will normally have a service life of from 10 to 20 years. Deterioration occurs due to ultraviolet rays from the sun which oxidize & shrink the coating. As the coatings shrink & pull back from the edges of the roof, the underlying roofing felt is exposed & begins to rot. The sun also bakes out the roofing oils, which cause a pliable roof to turn hard & brittle.

Composition Shingle- Easy to maintain/repair & normally designed to last a minimum of 15 to 20 years.

Metal- A properly constructed metal roof generally requires little maintenance (however, prime/paint may be required periodically), is fireproof & normally will have a service life of 50+ years.

Tile- A properly constructed concrete or clay tile roof generally requires little maintenance, is fireproof & normally will have a service life of 50+ years.

Wood Shake/Shingle- Fire hazard with a normal service life of about 20 to 25 years. Recommend reroofing with an alternative roofing material (i.e. composition shingle, aluminum shingle, tile, etc.) to reduce/eliminate the fire hazard & funding requirement for this component.

Flashing- Flashing is used to protect seams or joints from water seepage. It is installed at the junction formed by the roof & a vertical wall, along roof rakes & eaves, along ridges, in roof valleys, around chimneys, vent pipes & stacks, at intersections of different roof planes, and at other points on the roof where water from rain could penetrate the roof & enter the structure. Leaks frequently occur at the joint where a minor roof intersects with a major roof or where the roof deck meets a vertical wall.

Gutters/Downspouts/Drain Inlets- Inspect gutters/downspouts/drain inlets (in the fall- after the leaves fall & before the rains begin) under an annual maintenance program. Clean out debris that may prevent adequate drainage. Flush with a garden hose & check for leaks.

*Note- Recommend roof surface be inspected/repared by qualified personnel under an annual maintenance program.

*Note- Recommend that association management institute a log book to record "Roof Maintenance & Repairs" to facilitate future reserve studies.

SLOPE STABILIZATION/EROSION CONTROL

Surface Saturation- Heavy rains can cause street flooding and minor mudslides, while longer-term problems occur when the soil gets oversaturated. The following may serve as a general guideline:

- 1) When rainfall is less than 6 inches, there tend to be few problems.
- 2) With more than 6 inches of rain, soil begins to saturate and can absorb less water. Small mudslides with a few feet of soil erosion can occur.
- 3) With more than 10 inches of rain, more serious problems begin. These include large mudslides during storms and, later in the year, the chance of massive mudslides, as water undermines bedrock layers of compacted earth.

Drainage- Concrete bench drains (V-ditches) are designed to channel water off the slope and down to the storm drain or natural drainage channel. These drains must be kept free of debris to allow for proper drainage. Baffles are railroad ties or timber partly buried in the hillside that work best on slight to medium slopes, slowing the flow of water runoff and giving it more time to soak into the ground. Riprap stones or concrete rubble cover the slope to slow the flow of water runoff.

*Note- Contact your local Fire Department's Forestry Division and/or a local University to obtain additional information on erosion control and fire safe planting for your area. Many internet websites offer valuable information on preventing accelerated soil erosion & minimizing sedimentation.

Field Report

WOOD DESTROYING ORGANISMS

The association is normally responsible for the repair & maintenance of the common area occasioned by the presence of wood destroying organisms (e.g. termites) unless the governing documents indicate otherwise. Reserves to fund this item may be considered optional, because when & where an infestation will occur & the severity of the infestation is difficult to predict. Therefore, annual inspections by qualified personnel are recommended to discover any infestation in its early stages before it becomes a serious problem. Any visible areas of earth-to-wood contact must be eliminated.

The parameters and assumptions under which this study was completed, is based on information provided by the association/client, its representatives, its management company (as applicable), its contractors, other contractors, specialists and independent consultants, the State Department of Real Estate (or other state agency, as applicable), the Community Associations Institute (CAI), construction pricing and estimating manuals, and the preparer's own experience gained in the preparation of reserve study reports.

The reserve funding program reflects assumptions about future events. Some may not materialize, and unanticipated events/circumstances may develop. Therefore, the actual component cost and/or remaining life of a reserve component may vary from the reserve funding program. The preparer of this report does not express an opinion on the probability that actual item cost and/or remaining life may or may not approximate the reserve funding program.

It is assumed, unless otherwise indicated to the preparer, that all reserve items have been constructed properly, and that each estimated useful life will approximate that of the norm per industry standards and manufacturers specifications. Arbitrary estimates may have been used on reserve components with an indeterminable but potential liability to the association. The decision for the inclusion of these reserve components, and other assets considered or not, is ultimately left to the association/client.

The remaining life of the reserve components does not have a variance factor for unusual weather or natural disasters. It is assumed that a reasonable schedule of maintenance/repair will be conducted. The level of maintenance/repair any particular component receives may serve to prolong or shorten that components useful life. The actual life of any given component may vary due to quality of construction, original design, workmanship, intensity of use, maintenance/repair, and unusual weather. This study only addresses the maintenance and replacement of those reserve components listed, the associated costs/lives, and a reserve funding program.

Various percentage rate factors are generally used in the Cash Flow Analysis. A low-conservative net effective interest rate is normally used to compensate for any applicable federal and state taxes imposed. The annual inflation rate is normally determined using the national "CPIU", the Consumer Price Index for all urban consumers in the United States. Because it is difficult to accurately predict these factors over time, it is vital to update them annually.

Life-of-the-project items (e.g. building foundation/structure, concrete pavement, utilities, etc.) are generally excluded from this report. However, if the association has reason to expect the component to wear out or fail before the project does and if, due to the age of the units, the item may wear out within thirty (30) years, then that item should be included as a reserve component. Generally excluded are minor expenses which may be funded by a contingency and/or general maintenance/repair fund. Also excluded are expenses incurred due to natural disasters, accidents, or other occurrences, which are more properly insured for.

Calculations

1) Allocation % =

Reserve Allocation (Component Method) / Total Reserve Allocation (Component Method) x 100

2) Current Cost =

Extended Cost (for a component without subcomponents)

-or-

Sum of subcomponent Extended Costs (for a component with subcomponents)

3) Extended Cost =

Quantity x Unit Cost x Replacement % x (1+Contingency Rate)

4) Fully Funded Balance =

Current Cost / Useful Life x (Useful Life - Remaining Life)

5) FY End Balance (same as Next FY Start Balance) =

Initial or current fiscal year-

Current Reserve Balance + Interest Earned + Reserve Allocation to Fund + Special Assessment to Fund + Funds Due from Operating - Approved Funds to Disburse - Disbursements

Subsequent fiscal years-

FY Start Balance + Interest Earned + (Reserve Allocation (from previous year) x (1 + Reserve Allocation Rate)) - Disbursements

6) Interest Earned=

Initial fiscal year-

Current Reserve Balance x (Interest Rate (net effective)/12 x Number of funding months remaining in current fiscal year)

Subsequent fiscal years-

FY Start Balance x Interest Rate (net effective)

7) Percent Funded =

(FY Start Balance / Fully Funded Balance) x 100

8) Reserve Allocation (Component Method) =

Current Cost / Useful Life

Definitions

Abbreviations

bldgs = <i>buildings</i>	lf or lin ft = <i>lineal feet</i>	sy or sq yd = <i>square yard</i>
ea = <i>each</i>	RL = <i>remaining life</i>	UL = <i>useful life</i>
FY = <i>fiscal year</i>	sf or sq ft = <i>square feet</i> (100 sq ft = 1 square)	% = <i>percent</i>

1) Age

The approximate age of the complex. This parameter is provided for information only.

2) Allocation %

A percentage of the total Reserve Allocation. See Calculations- APPENDIX B.

3) Allocation Increase Rate

Expressed as a percentage rate that reflects the increase of a given year's Reserve Allocation over the previous year's Reserve Allocation and utilized only in the Cash Flow Analysis.

4) Base Year

The year in which the governing documents were recorded and/or the buildings constructed (average year may be used for phases built over a period of time), and utilized to determine the approximate complex age. This parameter is provided for information only.

5) Common Interest Development (CID)

Defined by shared property and restrictions in the deed on use of the property. A CID is governed by a mandatory Association of homeowners which administers the property and enforces its restrictions. The Association Board is responsible for repairing, replacing, or maintaining the common areas, other than the exclusive use common areas, and the owner of each separate interest is responsible for maintaining that separate interest and any exclusive use common area appurtenant to the separate interest. The following are two typical CID subdivision types:

- A) Condominium- In general, the recorded owner has title to the unit (or airspace). They are typically responsible for the interior of their individual unit/garage, all utilities that service their unit and any exclusive use common area associated with their unit (e.g. balcony, doors/windows, patio yard, etc.).
- B) Planned Development- In general, the recorded owner has title to the lot. They are typically responsible for the maintenance and repair of any structure or improvement located on their respective lot.

Note- CIDs & subdivision types are general and may not apply or may vary, based on your local.

6) Component Inventory

The task of selecting and quantifying reserve items. 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 representatives.

7) Condition Assessment

The task of evaluating the current condition of the component based on observed or reported characteristics and normally documented in the field report for a Level 1 or Level 2 Reserve Study.

Definitions

8) **Contingency Rate**

Expressed as a percentage rate that reflects a factor added to the unit cost to prepare for an event that is liable to occur, but not with certainty.

9) **Current Cost**

The current fiscal year's estimated cost to maintain, replace, repair, or restore a reserve component to its original functional condition. Sources utilized to obtain estimates may include: the association, its contractors, other contractors, specialists and independent consultants, the State department of Real Estate (or other state department as applicable), construction pricing and estimating manuals, and the preparer's own experience and/or database of costs formulated in the preparation of other reserve study reports. See Calculations- APPENDIX B.

10) **Disbursement**

The funds expected to be paid or expended from the Reserve Balance.

11) **Extended Cost**

See Calculations- APPENDIX B.

12) **Fiscal Year (FY)**

A 12-month period for which an organization plans the use of its funds. There are two distinct types:

A) *Calendar Fiscal Year (ends December 31)*

B) *Non-Calendar Fiscal Year (does not end December 31)*

13) **Full Funded Balance (FFB)**

Total Accrued Depreciation. An indicator against which the FY Start Balance can be compared.

The balance that is in direct proportion to the fraction of life "used up" of the cost.

See Calculations- APPENDIX B.

14) **Funding Goal**

Independent of methodology utilized, the following represents the basic categories of funding plan goals:

A) *Baseline Funding*- Maintaining a Net Reserve Balance at or near zero.

B) *Full Funding*- Maintaining a Reserve Balance at or near Percent Funded of 100%.

C) *Statutory Funding*- Maintaining a specified Reserve Balance/Percent Funded per statutes.

D) *Threshold Funding*- Establishing and maintaining a set Net Reserve Balance or Percent Funded.

15) **Funding Method (or Funding Plan)**

An association's plan to provide income to the reserve fund to offset expected disbursements from that fund. The following represents two (2) basic methodologies used to fund reserves:

A) *Cash Flow Method*- A method of developing a reserve funding plan where allocations 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.

B) *Component Method*- A method of developing a reserve funding plan where the total reserve allocation is based on the sum of allocations for individual components.

Definitions

16) Funding Plan

The combined Funding Method & Funding Goal.

17) FY End Balance (same as next FY Start Balance)

The balance in reserves at end of applicable fiscal year. See Calculations- Appendix B.

18) FY Start Balance (same as prior year FY End Balance)

The balance in reserves at start of applicable fiscal year.

19) Inflation Rate

Expressed as a percentage rate that reflects the increase of this year's costs over the previous year's costs. Also known as a 'cost increase factor'.

20) Interest Earned

The annual earning of reserve funds that have been deposited in certificates of deposit (CDs), money market accounts or other investment vehicles. See Calculations- Appendix B.

21) Interest Rate

The ratio of the gain received from an investment and the investment over a period of time (usually one year), prior to any federal or state imposed taxes.

22) Interest Rate (net effective)

The ratio of the gain received from an investment and the investment over a period of time (usually one year), after any federal or state imposed taxes.

23) Levels of Service

A) Level 1 Reserve Study (Full or Comprehensive)- A Reserve Study in which the following five Reserve Study tasks are performed:

- a) Component Inventory
- b) Condition Assessment (based upon on-site visual observations)
- c) Life and Valuation Estimates
- d) Fund Status
- e) Funding Plan

B) Level 2 Reserve Study (Update, With-Site-Visit/On-Site Review)- A Reserve Study update in which the following five tasks are performed:

- a) Component Inventory
- b) Condition Assessment (based upon on-site visual observations)
- c) Life and Valuation Estimates
- d) Fund Status
- e) Funding Plan

**Note- Updates are reliant on the validity of prior Reserve Studies.*

Definitions

C) Level 3 Reserve Study (Update, No-Site-Visit/Off-Site Review)- A Reserve Study update with no on-site visual observations in which the following three tasks are performed:

- a) Life and Valuation Estimates
- b) Fund Status
- c) Funding Plan

**Note- Updates are reliant on the validity of prior Reserve Studies.*

24) Percent Funded

A comparison of the Fully Funded Balance to the FY Start Balance expressed as a percentage, and used to provide a 'general indication' of reserve strength. See Calculations- APPENDIX B.

25) Quantity

The number or amount of a particular reserve component or subcomponent.

26) Remaining Life (RL)

The estimated time, in years, that a reserve component can be expected to continue to serve its intended function. Projects anticipated to occur in the current fiscal year (but have not been approved) have a remaining life of "zero".

27) Replacement %

A percentage of the total replacement for a particular reserve component or subcomponent. This parameter is normally 100%.

28) Reserve Allocation

The amount to be annually budgeted towards reserves based on a Funding Plan.

29) Reserve Component (or subcomponent)

The individual line items in the reserve study, developed or updated in the physical analysis that form the building blocks of the reserve study. They typically are:

- A) association responsibility,
- B) with limited useful life expectancies,
- C) predictable remaining useful life expectancies,
- D) above a minimum threshold cost,
- E) and, as required by statutes.

30) Restoration

Defined as *to bring back to an unimpaired or improved condition*. General types follow:

- A) Building- In general, funding utilized to defray the cost (in whole or part) of major building components that are not necessarily included as line items and may include termite treatment.
- B) Irrigation System- In general, funding utilized to defray the cost (in whole or part) of sectional irrigation system areas including modernization to improve water management.
- C) Landscape- In general, funding utilized to defray the cost (in whole or part) of sectional landscape areas including modernization to improve water conservation & drainage.

Definitions

31) Risk Factor

The associated risk of the availability of reserves to fund expenditures by interpreting the Percent Funded parameter as follows:

- A) 70% and above- *LOW*
- B) 31% to 69%- *MODERATE*
- C) 30% and below- *HIGH*

32) Source Code

The source of information utilized to obtain cost and/or life estimates.

- 0- Actual Cost
- 1- Arbitrary Estimate
- 2- Architect/Engineer
- 3- Association
- 4- Bid/Proposal
- 5- Builder/Developer
- 6- Contractor
- 7- Cost Estimating Manual
- 8- Industry Standard
- 9- Manufacturer
- 10- Prior Reserve Study
- 11- Reserve Study Firm
- 12- Specialist/Expert
- 13- Vendor/Rep

33) Unit Cost

The current fiscal year's estimated cost to maintain, replace, repair, or restore an individual "unit of measure" of a reserve component or subcomponent to its original functional condition.

34) Unit of Measure

A system of units used in measuring a reserve component or subcomponent (i.e. each, lineal feet, square feet, etc.).

35) Useful Life (UL)

Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve item can be expected to serve its intended function if properly constructed and maintained in its present application or installation.




Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
01 Equipment							
01.01	Irrigation System (full system) Complete replacement of system including all sprinkler heads and lines. UL: 30 RL: 10	1 each	\$92,465.00	7	100%	5%	\$97,088
							
01.02	Irrigation System (Reclaimed Water) System includes one (1) controller . Does not include zone sprinklers and lines. UL: 20 RL: 2	1 each	\$4,500.00	6	100%	5%	\$4,725
							
01.03	Light Poles 13 light poles including components, wiring and installation. Estimated at 3 ft concrete base underground. UL: 40 RL: 24	13 each	\$2,600.00	6	100%	5%	\$35,490
							

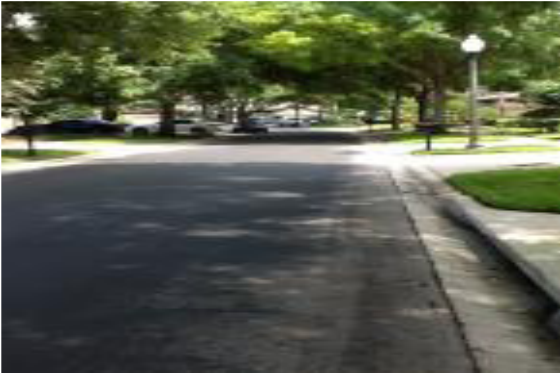

Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
01 Equipment							
01.04 Mailboxes Stations (boxes and posts) Posts (33) and boxes (60) Painted and repaired in 2018. UL: 25 RL: 10	33	each	\$450.00	3	100%	5%	\$15,592
							
01.05 Street and Traffic Signs 4 metal signs including poles and installation in concrete. UL: 20 RL: 10	4	units	\$875.00	5	100%	5%	\$3,675
							
02 Fencing							
02.01 Aluminum Fence Estimated life expectancy commtigent upon erosion of ground supporting fence line and concrete wall (addressed in another entry) UL: 25 RL: 12	1,840	lin ft	\$37.50	8	100%	5%	\$72,450
							

Component Details




<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
02 Fencing							
02.02	Perimeter Walls	1 each	\$15,600.00	5	100%	5%	\$16,380
	Approximately 1840 lin ft of stucco wall with 25500 sq ft of surface. Perimeter wall paint and repair only. Some places in need of repair - see photos. UL: 7 RL: 6						
							
02.03	Retaining Walls	1,840 lin ft	\$65.00	6	100%	5%	\$125,580
	1840 lin ft retaining wall shows erosion and signs of repair. Cracking along top edges (minimal) . Estimate comprised of removal and replacement of complete wall. UL: 30 RL: 15						
							
03 Pavement							
03.01	Aprons (repaired in 2019)	4 each	\$2,300.00	3	100%	5%	\$9,660
	Concrete aprons replacement due to tree roots raising pads to unacceptable levels. UL: 35 RL: 34						
							

Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
03 Pavement							
03.02 Aprons (not replaced in 2019) Replacement of aprons due to trees roots upheaving pads to unacceptable level UL: 35 RL: 5	56	each	\$2,100.00	5	100%	5%	\$123,480
							
03.03 Asphalt repair and Coating 4600 sq yds 2" asphalt overlay and seal coat. Including 10% gutter repair at time of overlay. UL: 20 RL: 3	4,600	sq yd	\$15.75	5	100%	5%	\$76,072
							
03.04 Concrete Sidewalks Concrete sidewalks normal wear and tear has been deminished by tree roots upheaving sidewalks in various places through out community. 59 panels were replaced in 2019 and 2017. UL: 35 RL: 15	14,100	sq ft	\$5.50	5	100%	5%	\$81,428
							

04 Restoration

Component Details

<i>Reserve Component</i>	<i>Quantity</i>	<i>Unit of Measure</i>	<i>Unit Cost</i>	<i>Source Code</i>	<i>Rplc %</i>	<i>Cont %</i>	<i>Extended Cost</i>
04 Restoration							
04.01 Drainage Basins Repair (with partial replacement) 7 "catch" basins on sides of streets. UL: 20 RL: 8	7	each	\$825.00	6	100%	5%	\$6,063
							
04.02 Monument Signs 2 monument signs at entrance. Painted in 2019. Includes immediate lighting, landscaping and graphics. UL: 30 RL: 20	2	units	\$2,850.00	8	100%	5%	\$5,985
							
04.03 Tree Maintenance Tree maintenance allowance as requested by board for yearly trimming. UL: 1 RL: 1	130	each	\$250.00	7	100%	5%	\$34,125
							

Grand Total: 15