

# Reserve Analysis Report

## Monarch Estates

2737 Sandy Ridge  
Firestone, CO 80504

### Level I Study with Site Inspection

Fiscal Year End Date: 12/31/2016



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# Sections of This Report

Section

## **1 Preface**

Written description of a reserve study and the figures in the report

Includes glossary, preparer qualifications, and calculation description

## **2-7 Executive Summary**

Summarizes key findings of the report. Includes development description and lists the projected balance and percent funded. Summarizes the funding plans

Includes category breakdown pie chart

## **2-8 Percent Funded**

Describes percent funded calculation and funding levels

Includes current percent funded chart and 30 year percent funded projection chart

## **2-9 30 Year Projections**

Includes 30 year projection charts for annual expenses and reserve balance projections for each of the 3 funding plans

## **2-10 Category Significance**

Includes category percentage column charts for fully funded balance and annual depreciation

## **2-11 Theoretical 30 Year Funding Plan**

Lists details of each of the 3 funding plans (current, recommended, and threshold) over the next 30 years

Charts of the figures in this table are located in the 30 year projections

## **2-12 Future Percent Funded**

Includes table and chart of percent funded for various levels of funding over the next 15 years

## **3 Component Summary & Component Significance**

Lists all components included in the study in table form

Shows Depreciation and Fully Funded Balance Significance including quick glance graph

These figures are the basis for all other calculations in the study

## **4 Annual Expenses by Component**

Lists all projected expenses for each component over the next 30 years in table form

## **5 Component Details**

Lists details of each individual component

Includes notes and pictures of selected components if site inspection was conducted

## Preface

A reserve study is a detailed report that assists common interest developments (CID) in planning for long-term common area repair and replacement expenses. These common areas differ for every development. They can include streets, roofs, recreational facilities and many other items.

A reserve study estimates the costs of common area repairs and replacements over a 30 year period. Each component is given a useful life, remaining life, and estimated cost. A reserve study then calculates the funds necessary to cover these expenses by creating funding plans.

### **The Big Picture - What are the significant figures to look at in the report?**

- **The Component List** – What are our reserve components and when will they need maintenance

Every reserve study must start with a list of the components. The component summary contains the list of all the components, their useful and remaining lives, and their estimated costs. These numbers are the building blocks for most of the figures in the study.

- **Percent Funded** - What is our current financial standing

Probably the most important number in a reserve study is percent funded. It's almost like a credit score for an association. It tells them the current strength of their reserve fund.

Over 70% = Well Funded    Between 30-70% = Fairly Funded    Below 30% = Poorly Funded

The lower your percent funded the higher the risk of a special assessment. A low percent funded also increases the likelihood of deferred maintenance which can cause declining property values.

- **Funding Plans** - How much do we need to save for the future

The next important part of the study is the theoretical 30 year funding plans. The study contains 3 funding plans. It projects what the percent funded will be over the next 30 years if the CID follows each of these plans.

Current Funding Plan – This plan is based on what the association is currently contributing to its reserve fund. This information is supplied by the board or management

Recommend Funding Plan – This is McCaffery's recommendation, if a CID follows the recommended plan they should end up well funded and near the 100% funded level.

5% Threshold Funding Plan - The threshold funding plan is a 30 year cash flow plan that calculates the minimum amount a CID should contribute so their reserve balance won't fall below 5% funded and cause the need for a special assessment. The percent funded will at some point fall into poorly funded levels but will never drop below 5%. If a CID has a funding plan that is below this threshold plan they should also plan on a future special assessment and/or a deferred maintenance. (Following this plan does carry higher risk of a special assessment if a component fails early or costs more than expected)

## **Why Should a Reserve Study be performed?**

Certain states, such as California, require that reserve studies be completed and updated annually and that the board of directors inform owners of the reserve status with their annual budget. In addition, the board of directors of a common interest development (CID) has a legal and fiduciary duty to maintain the community in a good state of repair. Property Values are directly affected by the level of maintenance and upkeep of the common area components. Reserve studies create a maintenance plan, which keeps a development in good condition, therefore increasing property appreciation and value. The amount of funds in the reserve account also greatly affects property values. Reserve studies inform CID's how much they should have in their reserve account, which eliminates costly special assessments. Over time each member of a CID should contribute their fair share to the reserve account so when expenses arise the required funds are available. Reserve Studies help board members fulfill their fiduciary duty and also help avoid litigation against CID board members.

## **Where do Component Repair/Replacement Cost Estimates Come From?**

The most accurate cost source is actual bids from contractors or to look at contracts from when the repair/replacement was last performed. In most cases bids or contracts are not available so unit costs for similar work done in the same local area are used. In addition, it is helpful to talk to local vendors who have knowledge of the work and can help with a cost estimate. A third source is to use construction cost estimators such as RS Means. Many times the entire quantity of a component will not need to be replaced or repaired all at once. An example of this is concrete sidewalks. All sidewalks should never have to be replaced, but some sections may experience cracking. In this case an allowance can be created for their partial replacement.

The cost source number for each component is provided in the component summary and details. An explanation of each follows:

1. **Local Historical Cost** – Cost based on bids for similar work done in same area.
2. **McCaffery Estimate** – Estimate or Allowance made by McCaffery Staff Member.
3. **Board/Manager Direction** – Cost estimate provided by board member or property manager.
4. **Bid/Contract** – Bid came from actual bid or contract.
5. **Cost Manual** – Cost came from estimating manual.
6. **Previous Study** – Cost came from previous reserve study.

## **Glossary of Terms:**

**Contingency** – An allowance for miscellaneous components, unpredictable expenses and/or costs that were higher than expected. (5% of total current cost unless directed otherwise)

**Current Budgeted Reserve Assessment** – Amount currently being deposited into reserve account. Provided by Property Manager or Board Member.

**Depreciation This Year** – Amount that should be saved for component during current year. Provided for each component and summed for all components. If the association is 100% funded this is the amount they should contribute to the reserve fund annually.  $= (\text{Total Current Cost} / \text{Normal Useful Life})$

**Depreciation Percent** – A components percentage of the total depreciation of all components.  $= (\text{Component Depreciation} / \text{Total Depreciation of all components})$

**Fully Funded Balance** – The total depreciation over the life of the component. In other words, the amount that should have been saved during the life of the component. Provided for each component and summed for all components  $= ((\text{Useful Life} - \text{Remaining Life}) * \text{Depreciation This Year})$

**Full Funded Balance Percent** – A component's percentage of the total fully funded balance of all components.  $= (\text{Component FFB} / \text{Total FFB of all Components})$

**Monthly Contribution** – The amount that should be allocated to each component using the recommended funding plan.  $= ((\text{Component Depreciation} / \text{Total Depreciation}) * \text{Recommended Monthly Funding})$

**Life Remaining Percent** – The percentage of life that a component has remaining  $= (\text{Remaining Live} / \text{Useful Life})$

**Normal Useful Life** – Typical useable life for a component.

**Percent Funded** – The percentage of the fully funded balance that the CID has in reserve fund.  $(\text{Projected Balance} / \text{Fully Funded Balance})$

**Projected Balance** – Projected balance at fiscal year end with current funding plan. Calculated using current reserve balance, remaining contributions to reserves before year-end, and planned expenses before year-end. Supplied by board or management.

**Recommended Reserve Contribution** – Recommended amount that the CID should allocate into reserves to offset future expenses.

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

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

**Total Cost** – Total cost to replace or repair component in today’s dollars.  $=(\text{Quantity} \times \text{Unit Cost})$

**Total Future Cost** - Current cost adjusted to future cost taking into account inflation and replacement year.  $=(\text{Current Cost} * (1 + \text{inflation rate})^{(\text{Replacement Year} - \text{Present Year})})$

**Threshold Reserve Contribution** – Reserve contribution that should be allocated into reserves to keep reserve balance above a minimum amount during the next 30 years. (Minimum amount is 5% funded unless otherwise noted)

**Under Funded** – Amount association is short of fully funded balance; also known as a deficit.  $=(\text{Fully Funded Balance} - \text{Projected Balance})$

**Unit Cost** – Cost per Unit.

**Unit of Measure** – Unit used to measure component. (Explanations shown below)

SF – Square Feet

SY – Square Yard

LF – Linear Feet

Each – Per Single Unit

Lump Sum - Total cost for component

Allowance – Allowance for component repair or replacement

Contract – Cost obtained from actual contract or bid

**Useful Life** – Time in years component is expected to last.

### **What Procedures were used for calculation and establishment of reserves?**

In this study the fully funded reserve balance for a component at a given time was computed using the component method. Using the component method the fully funded reserve balance equals the current cost of replacement or repair multiplied by the number of years the component has been in service divided by the useful life of the component.

For example if the cost of a boiler is \$10,000, the useful life is 10 years and the remaining life is 3 years. The recommended reserve balance would be:

$$\$10,000 \times ((10-3)/10) = \$7,000.$$

## Preparer Qualifications

Brian McCaffery, President and founder of McCaffery Reserve Consulting, earned his Bachelor of Science Degree in Architectural Engineering from the University of Colorado in Boulder. His degree program included coursework in Building Exterior, Lighting, Electrical Systems, Heating Ventilating and Air Conditioning, Concrete and Steel Design, Civil Engineering, Structural Engineering, and Estimating. He has worked in the Building Construction/Architectural Engineering industry for 11 years and has been performing reserve studies for the past 9 years. During his professional career, Brian has worked for multiple companies that perform reserve studies. He has performed over 3,000 reserve studies throughout the state of California and the United States. Brian is a certified Reserve Specialist, designated by the Community Associations Institute (CAI). The Reserve Specialist designation is awarded to experienced, qualified reserve specialists, who through years of specialized experience, can help ensure that your community association prepares its reserve budget as accurately as possible. Brian also has a permit to perform reserve studies in the state of Nevada (Reserve study permit #9).

McCaffery understands that most homeowners, board members, and property managers can have a difficult time understanding all the numbers in a reserve study. That is why we make it a priority to make our report easy for anyone to understand. The layout of this report is set up with graphs, explanations and figures to make it easy to follow. If you read though the full report you should have a good understanding of the numbers and calculations. We strive to make sure our studies are second to none in the industry. The important figures are summarized in the executive summary and the supporting graphs and figures give a full explanation of how the findings were derived. Further descriptions are provided in the descriptions section.

For more useful information on reserve studies please visit:

[www.mccafferyreserveconsulting.com](http://www.mccafferyreserveconsulting.com)

For a quick video that highlights the main sections please see:

<http://www.mccafferyreserveconsulting.com/sample-reserve-study>

Or scan QR code below with a smart phone



## One Page Description of how we come up with the Numbers in this Report

The numbers in this report start with the components listed in the component summary.

1. Every component is given a useful life, remaining life, and an estimated cost

We will use a boiler as an example. This boiler is expected to last 10 years and has been in use for 7 years. The estimated cost is \$10,000.

Component	Useful Life	Remaining Life	Cost
Boiler	10	3	\$10,000

2. The fully funded balance is calculated

Fully Funded Balance = (Useful life-Remaining Life)/Useful Life \* Cost

$$(10-3)/10 * \$10,000 = \$7,000$$

The fully funded balance is then summed for all components and this is the total fully funded balance for the development.

3. Fully Funded Balance is then compared to the actual projected year-end balance that the development has saved for reserves

This is called the percent funded. For our example let's say the development had \$5,000 saved for their boiler. Their percent funded would be:

$$\text{Percent Funded} = \text{Projected Year End Reserve Balance}/\text{Fully Funded Balance}$$
$$\$5,000/\$7,000 = 71\%$$

4. Next expenses are projected for each component for the next 30 years using the useful and remaining lives

This information is shown in the annual expenses by component section. Inflation is included in these figures.

5. Using the projected expenses for the next 30 years the funding plans are created

Funding plans are created so that the development has enough money to offset their projected expenses for the next 30 years.

We try to create funding plans that have a uniform contribution over a 30 year period with a slight increase over time for inflation.



## Executive Summary

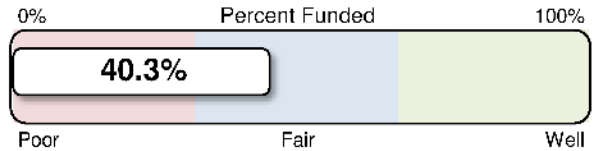
Monarch Estates

This is a Homeowners Association with 140 Homes.

The common area components include: fencing, monuments, and landscaping.

A Full Study with an on-site inspection was performed on March 11th, 2016

Number of Units	140
Year Built	2003
Fiscal Year End	December 31, 2015

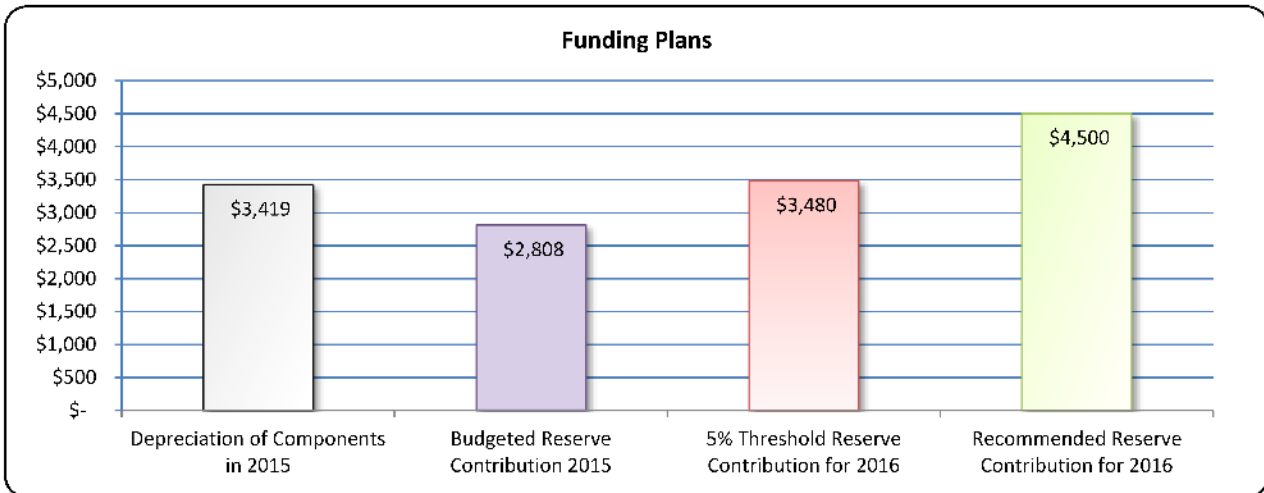


Reserve Fund Balance December 31, 2015

Fully Funded Reserve Balance	\$ 31,391
Projected Balance	\$ 12,638
Under Funded (Deficiency in Reserve Funding)	\$ 18,753
Deficiency in Reserve Funding Per Unit	\$ 133.95
<b>Percent Funded</b>	<b>40.3%</b>

### Funding Plans

	Annually	Monthly	Per Unit Monthly
Depreciation of Components in 2015	\$ 3,419	\$ 285	\$ 2.04
Budgeted Reserve Contribution 2015	\$ 2,808	\$ 234	\$ 1.67
5% Threshold Reserve Contribution for 2016	\$ 3,480	\$ 290	\$ 2.07
<b>Recommended Reserve Contribution for 2016</b>	<b>\$ 4,500</b>	<b>\$ 375</b>	<b>\$ 2.68</b>



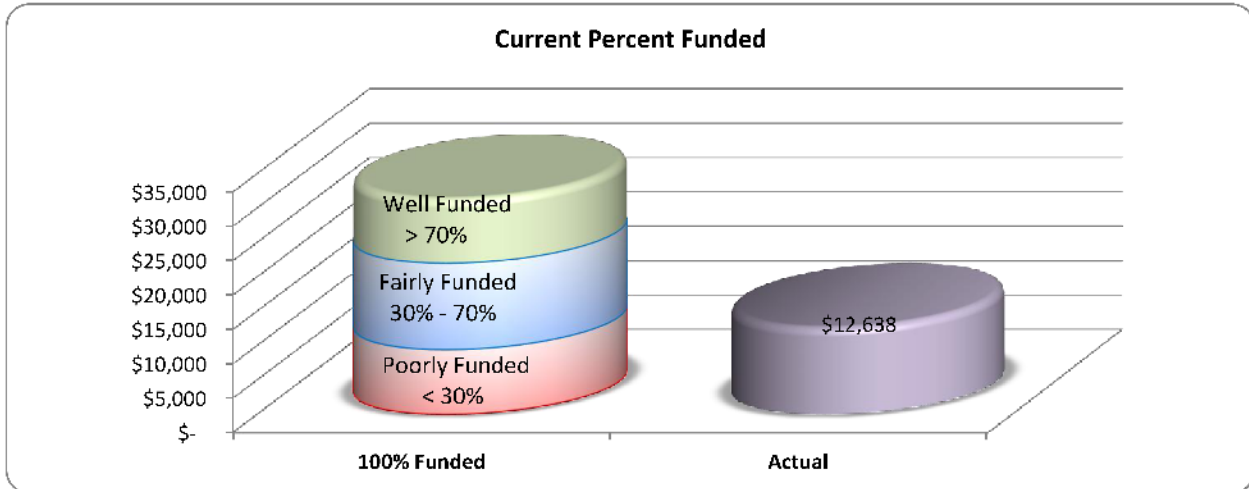
## Percent Funded

Percent Funded is probably the most important number in a reserve study

Your current percent funded is: 
$$\frac{\text{Year End Balance } \$ 12,638}{\text{Fully Funded Balance } \$ 31,391} = \boxed{40\%}$$

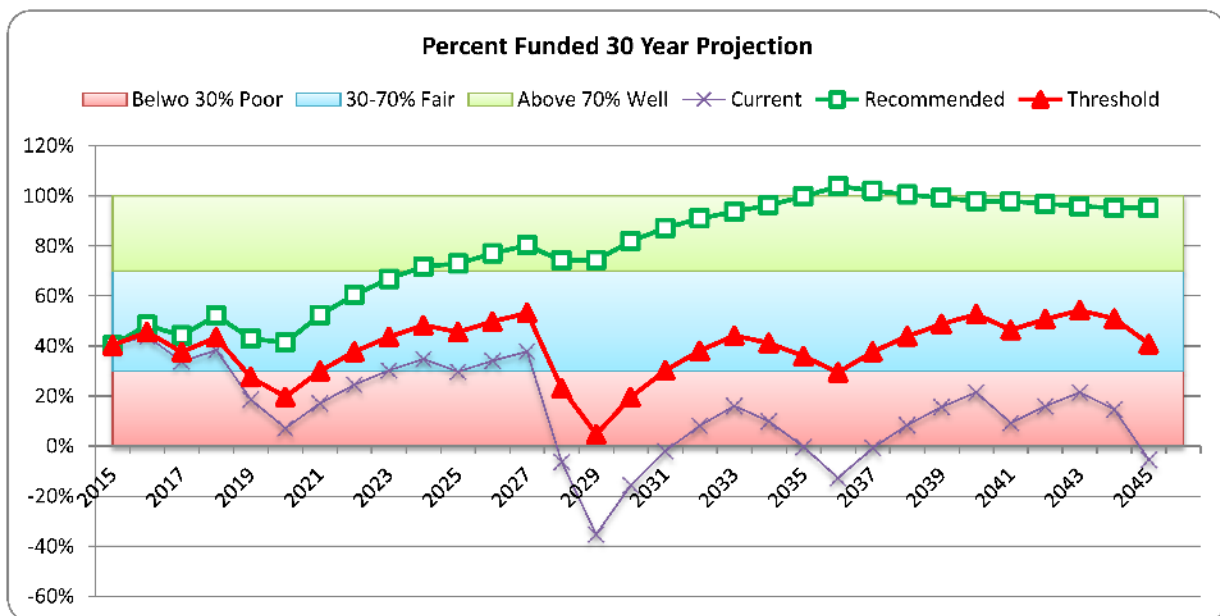
Above 70% = Well Funded      Between 30% and 70% = Fairly Funded      Below 30% = Poorly Funded

The higher your percent funded, the lower the risk of special assessments and deferred maintenance.



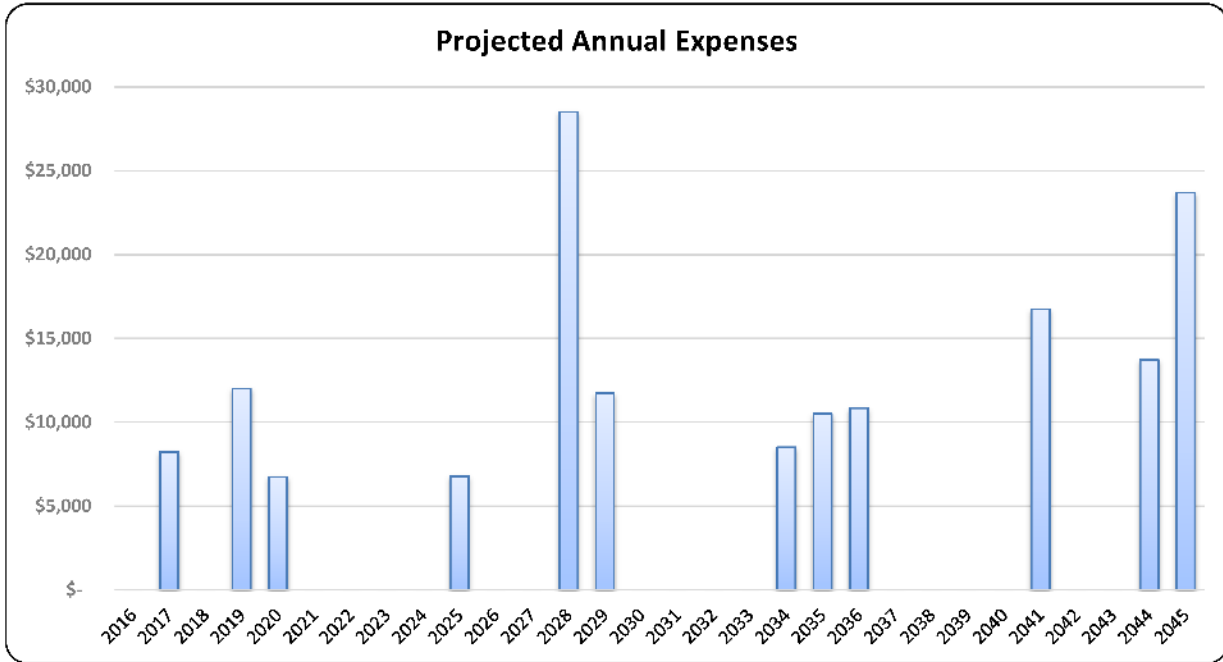
If you follow one of the 3 funding plans in this reserve study this is what your percent funded may look like over the next 30 years. Anytime the Current line drops below 0% a special assessment is likely.

	Annually	Monthly	Per Unit Monthly
Current Reserve Contribution 2015	\$ 2,808	\$ 234	\$ 1.67
5% Threshold Reserve Contribution for 2016	\$ 3,480	\$ 290	\$ 2.07
Recommended Reserve Contribution for 2016	\$ 4,500	\$ 375	\$ 2.68

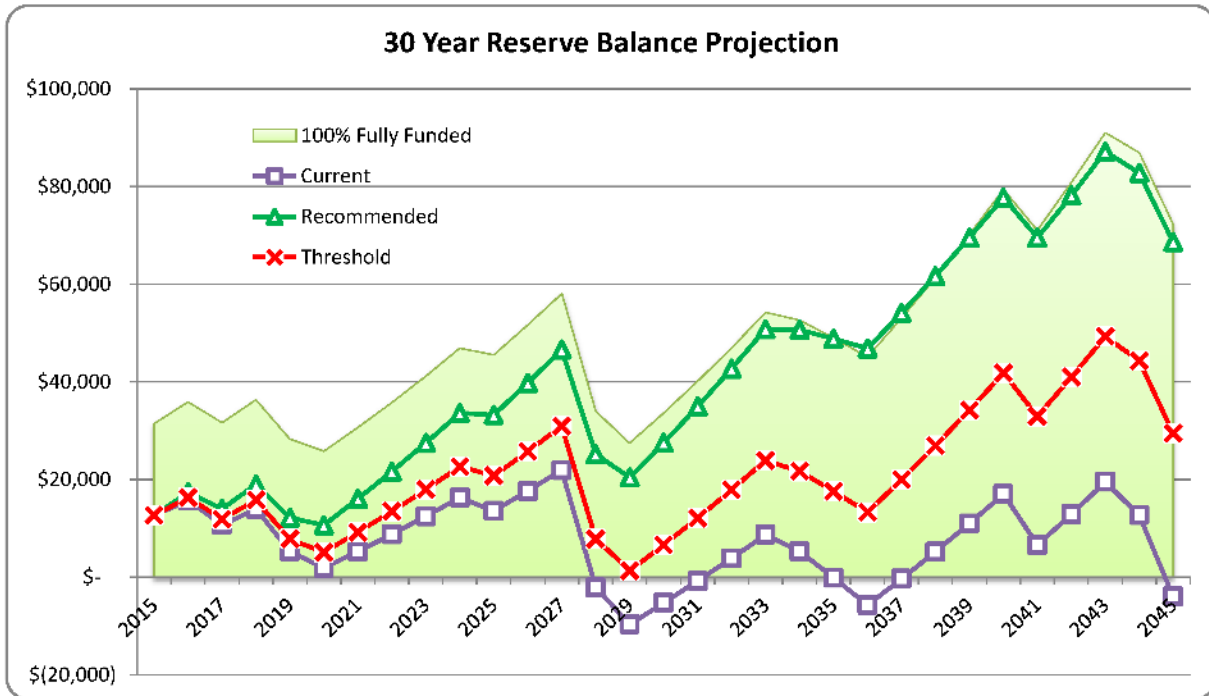


### 30 Year Projections

Reserve expenses will vary from year to year. A reserve study predicts these expenses and offsets them by creating a uniform funding plan that increases slightly over time to keep up with inflation.



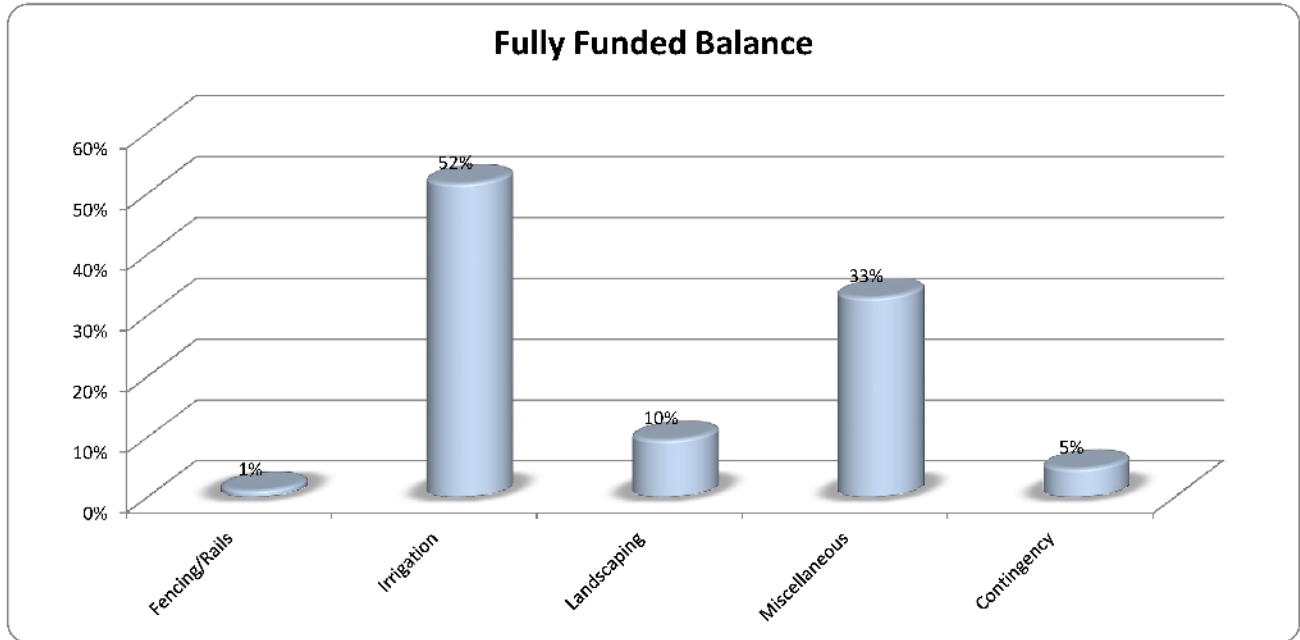
The black 100% funded line shows the ideal balance over the next 30 years. It increases over time due to inflation and depreciation of your components. The 100% funded line will drop after years with large expenses. The recommend funding plan will keep you well funded. The threshold plan will approach \$0 dollars, following this plan has a higher risk of special assessments or deferred maintenance.



## Category Significance

This chart breaks down the total fully funded balance for each category

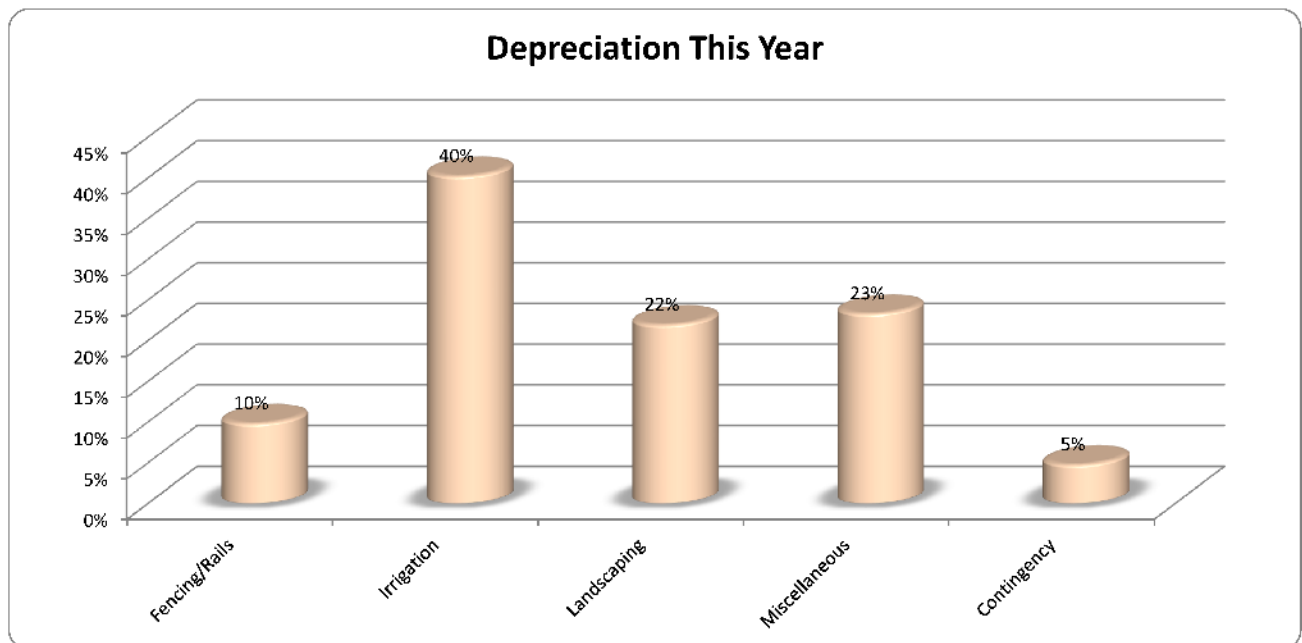
Fencing/Rails	Fully Funded Balance	\$	335	=	1%
Total	Fully Funded Balance	\$	31,391		



This chart breaks down the total annual depreciation for each category

Fencing/Rails	Annual Depreciation	\$	335	=	10%
Total	Annual Depreciation	\$	3,419		

This chart may differ from the chart above because it does not account for remaining life



## Theoretical 30 Year Funding Plans

Monarch Estates

Above 70% = Well Funded  
 Between 30% and 70% = Fairly Funded  
 Below 30% = Poorly Funded  
(Low Risk of Special Assessment)  
 (Higher Risk of Special Assessment)

Before Tax Interest Rate	1.5%
Annual Inflation Rate	3.0%
Annual Funding Increase	3.0%

Year End	Annual Expenses	Fully Funded Balance	Current Funding Plan			Recommended Funding Plan			5% Threshold Funding Plan		
			Contribution	Balance	% Funded	Contribution	Balance	% Funded	Contribution	Balance	% Funded
2015	\$ -	\$ 31,391	\$ 2,808	\$ 12,638	40%	\$ -	\$ 12,638	40%	\$ -	\$ 12,638	40%
2016	\$ -	\$ 35,855	\$ 2,892	\$ 15,720	44%	\$ 4,500	\$ 17,328	48%	\$ 3,480	\$ 16,308	45%
2017	\$ 8,240	\$ 31,646	\$ 2,979	\$ 10,695	34%	\$ 4,635	\$ 13,982	44%	\$ 3,584	\$ 11,897	38%
2018	\$ -	\$ 36,332	\$ 3,068	\$ 13,923	38%	\$ 4,774	\$ 18,966	52%	\$ 3,692	\$ 15,767	43%
2019	\$ 12,020	\$ 28,271	\$ 3,160	\$ 5,273	19%	\$ 4,917	\$ 12,148	43%	\$ 3,803	\$ 7,786	28%
2020	\$ 6,753	\$ 25,780	\$ 3,255	\$ 1,854	7%	\$ 5,065	\$ 10,642	41%	\$ 3,917	\$ 5,067	20%
2021	\$ -	\$ 30,636	\$ 3,353	\$ 5,235	17%	\$ 5,217	\$ 16,018	52%	\$ 4,034	\$ 9,177	30%
2022	\$ -	\$ 35,761	\$ 3,453	\$ 8,767	25%	\$ 5,373	\$ 21,632	60%	\$ 4,155	\$ 13,470	38%
2023	\$ -	\$ 41,165	\$ 3,557	\$ 12,455	30%	\$ 5,534	\$ 27,491	67%	\$ 4,280	\$ 17,952	44%
2024	\$ -	\$ 46,862	\$ 3,664	\$ 16,306	35%	\$ 5,700	\$ 33,604	72%	\$ 4,408	\$ 22,630	48%
2025	\$ 6,785	\$ 45,525	\$ 3,774	\$ 13,539	30%	\$ 5,871	\$ 33,194	73%	\$ 4,541	\$ 20,725	46%
2026	\$ -	\$ 51,624	\$ 3,887	\$ 17,629	34%	\$ 6,048	\$ 39,740	77%	\$ 4,677	\$ 25,712	50%
2027	\$ -	\$ 58,048	\$ 4,004	\$ 21,897	38%	\$ 6,229	\$ 46,565	80%	\$ 4,817	\$ 30,915	53%
2028	\$ 28,515	\$ 33,972	\$ 4,124	\$ (2,166)	-6%	\$ 6,416	\$ 25,164	74%	\$ 4,962	\$ 7,825	23%
2029	\$ 11,748	\$ 27,457	\$ 4,247	\$ (9,667)	-35%	\$ 6,608	\$ 20,402	74%	\$ 5,110	\$ 1,305	5%
2030	\$ -	\$ 33,608	\$ 4,375	\$ (5,292)	-16%	\$ 6,807	\$ 27,514	82%	\$ 5,264	\$ 6,588	20%
2031	\$ -	\$ 40,104	\$ 4,506	\$ (786)	-2%	\$ 7,011	\$ 34,938	87%	\$ 5,422	\$ 12,109	30%
2032	\$ -	\$ 46,959	\$ 4,641	\$ 3,855	8%	\$ 7,221	\$ 42,683	91%	\$ 5,584	\$ 17,875	38%
2033	\$ -	\$ 54,189	\$ 4,780	\$ 8,694	16%	\$ 7,438	\$ 50,761	94%	\$ 5,752	\$ 23,895	44%
2034	\$ 8,512	\$ 52,604	\$ 4,924	\$ 5,236	10%	\$ 7,661	\$ 50,672	96%	\$ 5,924	\$ 21,666	41%
2035	\$ 10,521	\$ 48,980	\$ 5,072	\$ (135)	0%	\$ 7,891	\$ 48,801	100%	\$ 6,102	\$ 17,572	36%
2036	\$ 10,837	\$ 45,090	\$ 5,224	\$ (5,748)	-13%	\$ 8,128	\$ 46,824	104%	\$ 6,285	\$ 13,284	29%
2037	\$ -	\$ 52,995	\$ 5,380	\$ (368)	-1%	\$ 6,552	\$ 54,078	102%	\$ 6,474	\$ 19,957	38%
2038	\$ -	\$ 61,333	\$ 5,542	\$ 5,174	8%	\$ 6,748	\$ 61,638	100%	\$ 6,668	\$ 26,925	44%
2039	\$ -	\$ 70,124	\$ 5,708	\$ 10,960	16%	\$ 6,951	\$ 69,514	99%	\$ 6,868	\$ 34,197	49%
2040	\$ -	\$ 79,387	\$ 5,879	\$ 17,003	21%	\$ 7,159	\$ 77,716	98%	\$ 7,074	\$ 41,784	53%
2041	\$ 16,750	\$ 71,028	\$ 6,056	\$ 6,564	9%	\$ 7,374	\$ 69,506	98%	\$ 7,286	\$ 32,947	46%
2042	\$ -	\$ 80,754	\$ 6,237	\$ 12,900	16%	\$ 7,595	\$ 78,144	97%	\$ 7,505	\$ 40,946	51%
2043	\$ -	\$ 91,000	\$ 6,425	\$ 19,518	21%	\$ 7,823	\$ 87,139	96%	\$ 7,730	\$ 49,290	54%
2044	\$ 13,728	\$ 86,942	\$ 6,617	\$ 12,700	15%	\$ 8,058	\$ 82,777	95%	\$ 7,962	\$ 44,264	51%
2045	\$ 23,698	\$ 72,221	\$ 6,816	\$ (3,991)	-6%	\$ 8,300	\$ 68,620	95%	\$ 8,201	\$ 29,431	41%

Note: All future projections are theoretical. The estimated lives and costs of components will likely change over time depending on factors such as inflation rates and levels of maintenance. Reserve analysis should be performed annually to account for these factors.

### Future Percent Funded

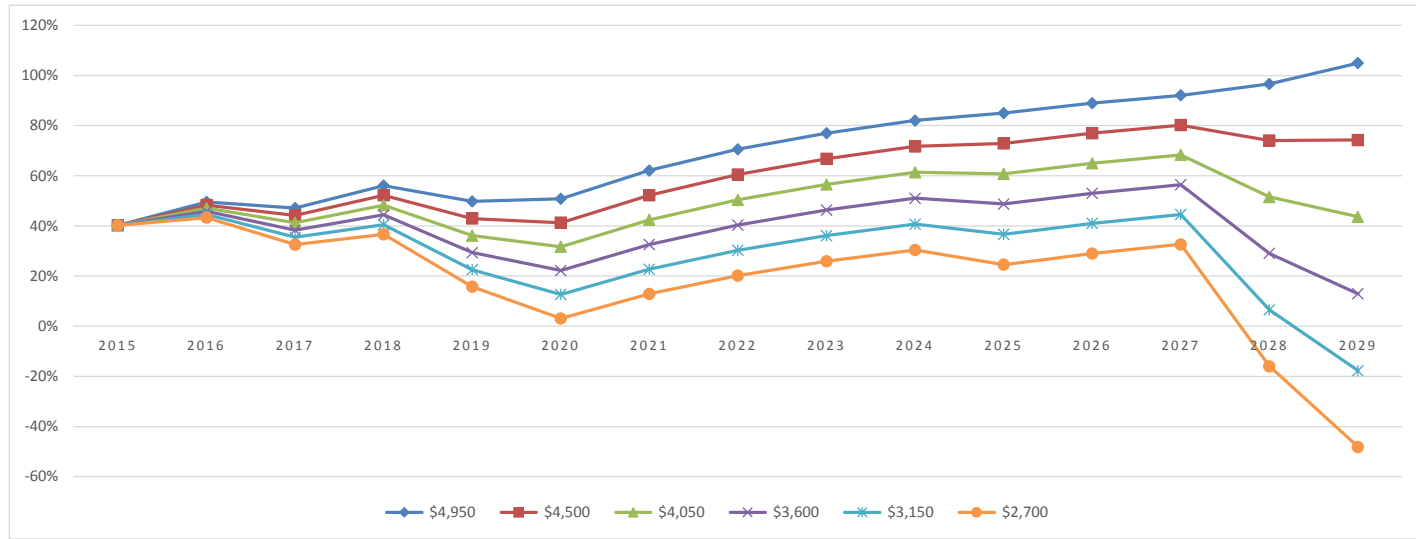
This table and chart shows where your percent funded will be over the next 15 years starting with different levels of funding. Keep in mind all figures assume a 3% annual increase in funding to keep up with inflation.

Above 70% = Well Funded  
(Low Risk of Special Assessment)

Between 30% and 70% = Fairly Funded

Below 30% = Poorly Funded  
(Higher Risk of Special Assessment)

Funding Plan	Reserve Contribution 2015	Percent Funded														
		2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
110% Recommended	\$ 4,950	40%	50%	47%	56%	50%	51%	62%	71%	77%	82%	85%	89%	92%	97%	105%
<b>Recommended</b>	\$ 4,500	40%	48%	44%	52%	43%	41%	52%	60%	67%	72%	73%	77%	80%	74%	74%
90% Recommended	\$ 4,050	40%	47%	41%	48%	36%	32%	42%	50%	57%	61%	61%	65%	68%	52%	44%
80% Recommended	\$ 3,600	40%	46%	38%	44%	29%	22%	33%	40%	46%	51%	49%	53%	56%	29%	13%
70% Recommended	\$ 3,150	40%	45%	35%	41%	23%	13%	23%	30%	36%	41%	37%	41%	45%	7%	-18%
60% Recommended	\$ 2,700	40%	43%	33%	37%	16%	3%	13%	20%	26%	30%	25%	29%	33%	-16%	-48%



Note: All future projections are theoretical. The estimated lives and costs of components will likely change over time depending on factors such as inflation rates and levels of maintenance. Reserve analysis should be performed annually to account for these factors.

**Component Summary**  
Monarch Estates

<b>Category Component</b>	<b>Approx. Quantity</b>	<b>Unit of Measure</b>	<b>Useful Life</b>	<b>Remaining Life</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Cost Source</b>
<b>Fencing/Rails</b>							
Split Rail Vinyl	838	LF	30	29	\$ 12.00	\$ 10,056	1
						\$ 10,056	
<b>Irrigation</b>							
Controllers	4	Each	12	1	\$ 2,000	\$ 8,000	1
Backflow Valves	4	Each	16	3	\$ 1,500	\$ 6,000	1
System Repairs	1	Allowance	15	3	\$ 5,000	\$ 5,000	1
						\$ 19,000	
<b>Landscaping</b>							
Landscape Replacements	1	Allowance	8	4	\$ 6,000	\$ 6,000	1
						\$ 6,000	
<b>Miscellaneous</b>							
Mailboxes	140	Each	25	12	\$ 100	\$ 14,000	1
Mounment Lighting and Update	2	Each	22	9	\$ 2,600	\$ 5,200	1
						\$ 19,200	
<b>Contingency</b>							
5%							1
<b>TOTALS</b>						<b>\$ 54,256</b>	

Notes: Any other items not listed are included in operating budget.

Component Significance

Category Component	Fully Funded Balance			Depreciation This Year			Monthly Contribution
	\$ Amount	%	Quick Glance Graph	\$ Amount	%	Quick Glance Graph	
<b>Fencing/Rails</b>							
Split Rail Vinyl	\$ 335	1.07%		\$ 335	9.80%		\$ 36.76
	\$ 335	1.07%		\$ 335	9.80%		\$ 36.76
<b>Irrigation</b>							
Controllers	\$ 7,333	23.36%		\$ 667	19.50%		\$ 73.11
Backflow Valves	\$ 4,875	15.53%		\$ 375	10.97%		\$ 41.13
System Repairs	\$ 4,000	12.74%		\$ 333	9.75%		\$ 36.56
	\$ 16,208	51.63%		\$ 1,375	40.21%		\$ 150.79
<b>Landscaping</b>							
Landscape Replacements	\$ 3,000	9.56%		\$ 750	21.93%		\$ 82.25
	\$ 3,000	9.56%		\$ 750	21.93%		\$ 82.25
<b>Miscellaneous</b>							
Mailboxes	\$ 7,280	23.19%		\$ 560	16.38%		\$ 61.41
Mounment Lighting and Update	\$ 3,073	9.79%		\$ 236	6.91%		\$ 25.92
	\$ 10,353	32.98%		\$ 796	23.29%		\$ 87.34
<b>Contingency</b>							
5%	\$ 1,495	4.76%		\$ 163	4.76%		\$ 17.86
	<b>\$ 31,391</b>	<b>100.00%</b>	<b>100%</b>	<b>\$ 3,419</b>	<b>100%</b>	<b>100%</b>	<b>\$ 375</b>



**Annual Expenses by Component**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Fencing/Rails</b>										
Split Rail Vinyl	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Irrigation</b>										
Controllers	\$ -	\$ 8,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Backflow Valves	\$ -	\$ -	\$ -	\$ 6,556	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
System Repairs	\$ -	\$ -	\$ -	\$ 5,464	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Landscaping</b>										
Landscape Replacements	\$ -	\$ -	\$ -	\$ -	\$ 6,753	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Miscellaneous</b>										
Mailboxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mounment Lighting and Update	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,785
<b>Totals</b>	\$ -	\$ 8,240	\$ -	\$ 12,020	\$ 6,753	\$ -	\$ -	\$ -	\$ -	\$ 6,785

**Annual Expenses by Component**

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
<b>Fencing/Rails</b>											
Split Rail Vinyl	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Irrigation</b>											
Controllers	\$ -	\$ -	\$ -	\$ 11,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Backflow Valves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,521	\$ -
System Repairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,512	\$ -	\$ -
<b>Landscaping</b>											
Landscape Replacements	\$ -	\$ -	\$ 8,555	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,837
<b>Miscellaneous</b>											
Mailboxes	\$ -	\$ -	\$ 19,961	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mounment Lighting and Upc	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Totals</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 28,515</b>	<b>\$ 11,748</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 8,512</b>	<b>\$ 10,521</b>	<b>\$ 10,837</b>

**Annual Expenses by Component**

	2037	2038	2039	2040	2041	2042	2043	2044	2045
<b>Fencing/Rails</b>									
Split Rail Vinyl	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,698
<b>Irrigation</b>									
Controllers	\$ -	\$ -	\$ -	\$ -	\$ 16,750	\$ -	\$ -	\$ -	\$ -
Backflow Valves	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
System Repairs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Landscaping</b>									
Landscape Replacements	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,728	\$ -
<b>Miscellaneous</b>									
Mailboxes	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Mounment Lighting and Upc	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Totals</b>	\$ -	\$ -	\$ -	\$ -	\$ 16,750	\$ -	\$ -	\$ 13,728	\$ 23,698

### Component Details

#### Fencing/Rails

#### Split Rail Vinyl

Approximate Component Quantity	- 838	Estimated Current Unit Cost	\$ 12.00
Unit of Measure	- LF	Estimated Total Current Cost	\$ 10,056
Normal Useful Life (Years)	- 30	Estimated Total Future Cost	\$ 23,698
Estimated Remaining Useful Life (Years)	- 29	Fully Funded Balance	\$ 335
Estimated Replacement Year	- 2045	Depreciation This Year	\$ 335
Cost Source	- 1	Monthly Contribution	\$ 36.76
Depreciation Percent	- 9.80%	Fully Funded Balance Percent	1.07%
Life Remaining Percent	- <b>97%</b>		



#### Irrigation

#### Controllers


Approximate Component Quantity	- 4	Estimated Current Unit Cost	\$ 2,000.00
Unit of Measure	- Each	Estimated Total Current Cost	\$ 8,000
Normal Useful Life (Years)	- 12	Estimated Total Future Cost	\$ 8,240
Estimated Remaining Useful Life (Years)	- 1	Fully Funded Balance	\$ 7,333
Estimated Replacement Year	- 2017	Depreciation This Year	\$ 667
Cost Source	- 1	Monthly Contribution	\$ 73.11
Depreciation Percent	- 19.50%	Fully Funded Balance Percent	23.36%
Life Remaining Percent	- <b>8%</b>		

#### Irrigation

#### Backflow Valves

Approximate Component Quantity	- 4	Estimated Current Unit Cost	\$ 1,500.00
Unit of Measure	- Each	Estimated Total Current Cost	\$ 6,000
Normal Useful Life (Years)	- 16	Estimated Total Future Cost	\$ 6,556
Estimated Remaining Useful Life (Years)	- 3	Fully Funded Balance	\$ 4,875
Estimated Replacement Year	- 2019	Depreciation This Year	\$ 375
Cost Source	- 1	Monthly Contribution	\$ 41.13
Depreciation Percent	- 10.97%	Fully Funded Balance Percent	15.53%
Life Remaining Percent	- <b>19%</b>		


### Irrigation

Approximate Component Quantity	-	1
Unit of Measure	-	Allowance
Normal Useful Life (Years)	-	15
Estimated Remaining Useful Life (Years)	-	3
Estimated Replacement Year	-	2019
Cost Source	-	1
Depreciation Percent	-	9.75%
Life Remaining Percent	-	 <b>20%</b>

### System Repairs

Estimated Current Unit Cost	\$	5,000.00
Estimated Total Current Cost	\$	5,000
Estimated Total Future Cost	\$	5,464
Fully Funded Balance	\$	4,000
Depreciation This Year	\$	333
Monthly Contribution	\$	36.56
Fully Funded Balance Percent		12.74%


### Landscaping

Approximate Component Quantity	-	1
Unit of Measure	-	Allowance
Normal Useful Life (Years)	-	8
Estimated Remaining Useful Life (Years)	-	4
Estimated Replacement Year	-	2020
Cost Source	-	1
Depreciation Percent	-	21.93%
Life Remaining Percent	-	 <b>50%</b>

### Landscape Replacements

Estimated Current Unit Cost	\$	6,000.00
Estimated Total Current Cost	\$	6,000
Estimated Total Future Cost	\$	6,753
Fully Funded Balance	\$	3,000
Depreciation This Year	\$	750
Monthly Contribution	\$	82.25
Fully Funded Balance Percent		9.56%

### Miscellaneous


Approximate Component Quantity	-	140
Unit of Measure	-	Each
Normal Useful Life (Years)	-	25
Estimated Remaining Useful Life (Years)	-	12
Estimated Replacement Year	-	2028
Cost Source	-	1
Depreciation Percent	-	16.38%
Life Remaining Percent	-	 <b>48%</b>

### Mailboxes

Estimated Current Unit Cost	\$	100.00
Estimated Total Current Cost	\$	14,000
Estimated Total Future Cost	\$	19,961
Fully Funded Balance	\$	7,280
Depreciation This Year	\$	560
Monthly Contribution	\$	61.41
Fully Funded Balance Percent		23.19%



**Miscellaneous****Mounment Lighting and Update**

Approximate Component Quantity	-	2	Estimated Current Unit Cost	\$	2,600.00
Unit of Measure	-	Each	Estimated Total Current Cost	\$	5,200
Normal Useful Life (Years)	-	22	Estimated Total Future Cost	\$	6,785
Estimated Remaining Useful Life (Years)	-	9	Fully Funded Balance	\$	3,073
Estimated Replacement Year	-	2025	Depreciation This Year	\$	236
Cost Source	-	1	Monthly Contribution	\$	25.92
Depreciation Percent	-	6.91%	Fully Funded Balance Percent		9.79%
Life Remaining Percent	-	 <b>41%</b>			

## **Disclaimer**

This report attempts to determine the estimated remaining useful life of the components that can be visually observed. This report is expressly for the use of the client and only for the purpose of establishing reserve funding requirements. The study is not a guarantee or warranty, or a recommendation to purchase. Estimated remaining useful lives are calculated with reasonable consideration for weather conditions. Natural disasters, including seismic activity will not be addressed in this report. Reserve Funding for earthquake damages and other disasters exceeds the scope of the study. We recommend the development consider additional insurance to cover unforeseen disasters. We assume the components of the association will receive proper maintenance. The report is expressly for the use of the client and only for the purpose of establishing reserve funding requirements.

In providing the opinions of probable construction costs, the client understands that McCaffery Reserve Consulting (MRC) has no control over costs or the price of labor, equipment or materials, or over the contractor's method of pricing, and that the opinions of probable construction costs provided herein are to be made on the basis of MRC's qualifications and experience. MRC makes no warranty, expressed or implied, as to the accuracy of such opinions as compared to bid or actual costs.

Because the reserve study is a projection, the estimated lives and costs of components will likely change over time depending on a variety of factors such as future inflation rates and levels of maintenance applied by future boards, unknown defects in materials that may lead to premature failures, etc. As a result, some components may experience longer lives while others will experience premature failures. Some components may cost less at the time of replacement due to changes in manufacturing methods while others may cost more due to material shortages or high demand. All future projections are therefore theoretical and reserve studies should be updated annually.

MRC has made a reasonable effort to ensure that the report is accurate. This study does not preclude errors resulting from unforeseen conditions or circumstances. The scope of this report is expressly limited to the components described herein. MRC has obtained certain information, documentation and materials from the association agent and the reserve study is based upon the accuracy of such information. Material inaccuracies could adversely effect the reserve study. MRC is not responsible for such inaccuracies. This study is limited to a visual observation. There has been neither destructive testing nor inspection of the interior of private units; floors, wall or ceiling cavities, or structural elements. It is assumed that the components have been constructed per original construction documents and comply with applicable codes. This study is not designed to uncover latent or patent defects. Estimates represent replacement of a component with similar materials unless otherwise noted. Local building codes have not been researched to determine whether or not current ordinances will permit the replacement of any component with components of like material. The estimates do not take into account the abbreviated useful life of a component as a result of its original construction, installation, or design. MRC is not responsible for any claims, demands, or damages arising out of the discovery of asbestos, radon or any environmental claims, demands or damages. We do not assume any liability for damages which may result from this study. We are not responsible for conditions this report fails to disclose. The information contained in this study is deemed reliable as of the date of this study, but is not guaranteed.

The Association, by accepting this study, agrees to release MRC from any claims, demands or damages. The Association, in consideration of MRC performing the reserve study, hereby agrees to indemnify, defend and hold harmless MRC from and against any and all liability, damages, losses, claims, demands, or lawsuits arising out of or relating to this reserve study.

The information contained within the report is assembled in conjunction with the client and is intended to assist the client with its reserve planning. MRC does not guarantee, either explicitly or implied, that all repair and replacement items have been identified, the accuracy of the probable costs or the product lives associated with these items.