



RESERVE DATA ANALYST

Timberline Ridge HOA

Sammamish, WA

Level III Reserve Study Update (No Site-Visit)

Fiscal Year: 2021

Report#: 16546

Version: Final

Reserve Data Analyst, Inc.

www.reservedataanalyst.com

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Timberline Ridge HOA Introduction

Thank you for utilizing the services of Reserve Data Analyst for your reserve study. We strive to create a comprehensive report that can be utilized for your budgeting needs. If there are any questions, concerns, corrections or revisions needed please do not hesitate to call or email us. While this study does have some explanations of the methodology used, we have kept it to a minimum for brevity. More detailed explanations of methodology & concepts are explained in our Reserve Study Guidebook available at the following link:



www.reservedataanalyst.com/guidebook

There are a couple of tips to consider that will help you both navigate this study and understand the different sections within the study:

- ❏ **Study Navigation** - To most easily navigate this study, we recommend printing out the Table of Contents page at the beginning of the study and the Component Index pages at the rear of the study. We have found it easiest for most readers to have the PDF of this study open on their computer while referring to the printed-out Table of Contents and Component Index pages.

Within this reserve study you will find:

- ❏ A list of common questions that a typical reader of our reserve study will have as well as links to additional information on the topics: (*Reserve Study Knowledge Base*)
- ❏ A list of the site and building components that are reportedly the Client's responsibility along with their respective costs and quantity: (*The Component List*)
- ❏ A timeline of the estimated dates that we recommend funds be allocated to the repair/replacement project. (*Projected Expenditures Report*)
- ❏ Various funding models with different goals in mind (e.g. only staying cash positive). Keep in mind that funding models that remain in a *low percent funded range* for an extended period will carry a much higher risk for reliance on emergency financing or the need to defer overdue projects should some of the component projects occur sooner than projected. (*Summary and Projections for each Funding Model*)

Timberline Ridge HOA Executive Summary

Name	Timberline Ridge HOA
Location	Sammamish, WA
Contributing Members	200
Base Year / Age	June 1, 2000
Fiscal Year Ends	December 31, 2021

Level of Service	Level III Reserve Study Update (No Site-Visit)
Prepared for Fiscal Year	2021
Last On-Site Inspection Date	December 6, 2018
Inflation Rate for Projections	3.00%
*Interest Rate for Projections	1.00%
*Tax Rate On Interest Earned	30.0%
Funding Plan Method	Pooled Cash Flow Method

Reserve Account Summary

*Current Annual Reserve Allocation Rate	\$21,000 per year
*Estimated FY Start Balance	\$122,378
*Approved Special Assessments	None approved for fiscal year 2021.
*Approved Loans	None approved for fiscal year 2021.
Fiscal Year Beginning Fully Funded Balance	\$287,602 (ideal amount in reserve account)
Current Percent Funded	-----> 43%
	<div style="display: flex; justify-content: space-around; width: 100%;"> <div style="width: 33%; background-color: #f08080; text-align: center;">0-30% LOW</div> <div style="width: 33%; background-color: #ffff00; text-align: center;">30-70% FAIR</div> <div style="width: 33%; background-color: #90ee90; text-align: center;">70-100% GOOD</div> </div>
Avg. (Deficit) or Surplus Per Contributing Member	(-\$826) per member

5-Year Summary - Annual Reserve Allocation Rates & Year End % Funded

	100% Funding Model		Recommended Funding Model		Baseline Funding Model		*Current Funding Model		
2021	\$191,432	100%	\$28,775	47%	\$23,378	45%	\$21,000	44%	2021
2022	\$28,133	100%	\$29,638	52%	\$24,079	49%	\$21,630	47%	2022
2023	\$28,977	100%	\$30,527	56%	\$24,802	52%	\$22,279	50%	2023
2024	\$29,847	100%	\$31,443	58%	\$25,546	52%	\$22,947	49%	2024
2025	\$30,742	100%	\$32,387	61%	\$26,312	53%	\$23,636	50%	2025
	Account is at least 100% funded each year.		Achieve 100% funded within the timeframe of this study.		Reserve account above \$0 within timeframe of study.		Current allocation rate has been supplied by the Client.		

* Data supplied by the Client, assumed to be correct and not independently verified.

**Any negative percent funded shown is for visual representation of deficiency.

Timberline Ridge HOA Reserve Study Knowledge Base

What is a Reserve Study?

A reserve study is a budgeting tool that can be utilized to make more informed budgeting decisions regarding a reserve account, it is an independent assessment of the adequacy of the reserve account balance and allocation rate utilizing a mathematical formula known as the “Percent Funded” calculation.

The Reserve Analyst develops funding models that:

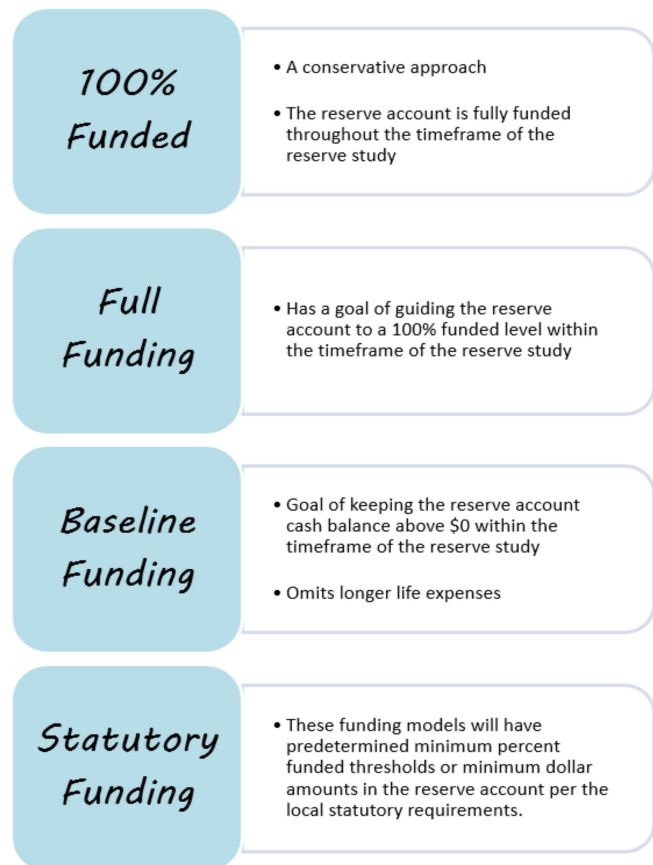
- Distribute the costs as fairly as possible over time
- Have stable budgets over time (i.e. limiting large fluctuations from one year to the next)
- Limit the risk for reliance on emergency financing or having to defer overdue projects

A Reserve Study is an independent assessment of the reserve account and is not the Budget

The reserve study is not the budget and it should not be revised to just reflect the budgeting decisions of the Client. An example of this is to push off overdue projects that the Client may not have the funds to complete. The reserve study should reflect the replacement dates of the components utilizing average useful lives and average costs for these projects; the useful lives can be updated to reflect actual on-site conditions as the components age. Should the Client decide to defer projects that appear to be overdue this is simply a budgeting decision that carries its own risk.

How Much Should We Reserve?

There is no right or wrong answer to the question of “How Much Should We Reserve?” as the reserve contributions in all the funding models in this study are based on different funding goals. It is more appropriate to consider the risk levels associated with different funding models as each Client has different risk tolerances and challenges in enacting whatever funding model is most appropriate to them. In our opinion any funding model that projects the reserve account balance to dip to zero would not be appropriate or fiscally responsible as future emergency financing or deferring projects are typically the outcome. Below are some of the more common funding models utilized:



Timberline Ridge HOA Reserve Study Knowledge Base

About Percent Funded

Percent funded is a calculation of how much is in the reserve account versus an ideal amount known as the Fully Funded Balance. The different risk levels associated with the levels of funding are explained in more depth below.



The below video link explains the Percent Funded calculation in more detail:

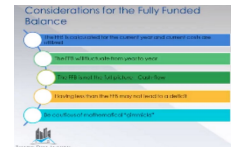


www.reservedataanalyst.com/pf

About the Fully Funded Balance

The Fully Funded balance is a mathematical calculation that represents the accrued deterioration of a component or a group of components at a specific point in time. It is an answer to the question of “How much should be in a reserve account at a specific point in time?” When the reserve account balance is the same as the Fully Funded Balance the reserve account is considered Fully Funded (100% Funded) at that specific point in time.

The below video link provides a more in-depth explanation of the Fully Funded balance:



www.reservedataanalyst.com/ffb

Calculating Inflation in the Reserve Study

Inflationary factors impact the project costs over time and are the main driving force that must be overcome with diligent and steadfast budgeting towards reserves. Due to the compounding impact of inflation on costs, in a relatively short period of time, a reserve account can become severely underfunded if it is not considered in the budgeting scenarios. Follow the below link to learn more about how we calculate inflationary factors (escalation of the prices) in the reserve study and some of the tools we use in the process:



www.reservedataanalyst.com/inf

Timberline Ridge HOA Reserve Study Knowledge Base

Component Useful Life Estimates

The useful life of components in the reserve study are predominantly based on our experiences with many different types of organizations and their respective repair and replacement cycles with building and site components. In addition to our own experiences working with many organizations over the years there is ample data available online regarding useful life estimates of building and site components. It is important to note that the estimates in the reserve study are based on averages and are not specific to any one property. Follow the below link to view some of the various useful life tables that we utilize:



www.reservedataanalyst.com/ul

Determining Component Project Costs

We utilize many sources for determining what is an appropriate component project cost in the reserve study. These can include:

- Client invoices, bids, estimates
- Our in-house database that is based on the collection of many Client invoices, bids and estimates
- Cost manuals that, when used correctly, are very accurate for average cost figures

It's important to understand that unless we are provided actual project costs based on a Client invoice/bid or estimate we utilize average costs figures that are not specific to any one Client. In the bidding process you will find that there is a ...

... large difference in price from one vendor to the next for a variety of reasons. We aim to be in the middle of these estimates unless we have Client data to incorporate into the reserve study. Future costs (projections) for the component expenses are simply inflated from current cost based on the inflation assumption in the reserve study. It is important to remember that our current recommendations are based on current project costs and not the inflated number that is utilized in the projections portion of the reserve study. The below link goes into this topic in more detail:



www.reservedataanalyst.com/cost

National Reserve Study Standards

There are two recognized organizations that dictate national reserve study standards in the industry. The Community Association's Institute and the Association of Professional Reserve Analysts award designations to those reserve study professionals that meet education & work experience, adhere to the minimum report requirements, complete ongoing continuing education courses and abide by ethical considerations in the field. The standards for both organizations can be viewed at the links below:



www.reservedataanalyst.com/CAI



www.reservedataanalyst.com/APRA

Timberline Ridge HOA

Reserve Study Knowledge Base

What Components to Include in the Study?

Reserve expenses for components are major expenses which must be budgeted for in advance to provide the necessary funds in time for their occurrence. Reserve expenses are reasonably predictable both in terms of frequency and cost. They are expenses that when incurred would have a significant impact on the smooth operation of the budgetary process from one year to the next if they were not reserved for in advance.

A common concern when beginning this process is what components are to be included and funded for in the Reserve Study. Nationally recognized CAI Reserve Study Standards as well as APRA Standards of Practice dictate that the reserve components need to meet the following criteria:

- The component is owned and maintained by the Client
- The component expense is not already covered in the Operating Budget
- The component has a limited life expectancy
- The component has a reasonably defined remaining useful life
- As required by local statutes

Ongoing Component Maintenance

While this reserve study has been developed to disclose and inform the Client of the predictable larger long-term project costs related to site and building components, there is also a need to complete regular inspections and repairs to virtually all components on much shorter cycles. These costs would typically be covered in the annual and ongoing Operating Budget (e.g. roof inspections & repairs, spot painting, sprinkler head replacement, door hardware replacement).

Virtually all the components should receive regular cycles of inspection and repairs either in-house or by a qualified Vendor. Failure to complete ongoing maintenance typically leads to shorter useful lives and higher costs later. RSMeans provides a free link to common building and site component items to inspect at various corresponding time frames.

Many of our Clients have found these PDF checklists helpful in setting up maintenance plans. The link can be found below:

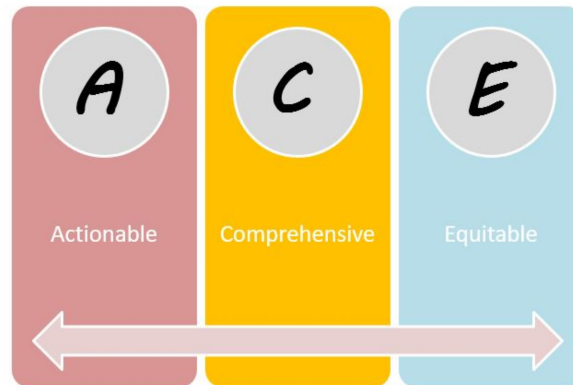


www.reservedataanalyst.com/RSmeans

Timberline Ridge HOA Reserve Study Knowledge Base

You Have a Reserve Study Now What?... Goal Setting

Adequately budgeting for reserves is often one of the more difficult tasks our Clients face. Reserve component projects are infrequent and often years down the line, making it very easy to just “deal with it later”. We have found those that are most successful with reserve budgeting goals typically follow some simple rules.



1. Actionable

Is your goal possible within the constraints & limitations of very important but often overlooked factors related to statutory requirements and the governing documents? What may seem very “Reasonable” to the Board may very well be illegal or against the governing documents.

2. Comprehensive

Your goal should be clear and specific, otherwise you won't be able to focus your efforts or feel truly motivated to achieve it. When drafting your goal, try to answer the four "W" questions - What do we want to accomplish? Why is this goal important? Who is involved? When is this goal set to occur?

3. Equitable

Your goal should be reasonable and attainable to be successful. In other words, it should stretch your abilities but remain possible. When you set an achievable goal, you may be able to identify previously overlooked opportunities or resources that can bring you closer to it. This often means that transitioning to a more stable financial track will take years of smaller goals being obtained. Severely underfunded reserve accounts typically develop after many years or decades; it's usually not reasonable for the answers to come quick or easily.



Beware setting reserve budgeting goals that someone else has the ultimate control over (e.g. future Boards). For example, “We’ll plan to start raising the reserve allocation rate in 3 years”. This simply puts the responsibility on someone else and is just another way to “deal with it later”. A future Board may have other ideas entirely or could be dealing with an economic downturn during which times raising the allocation rate is extremely difficult.

Timberline Ridge HOA
Site / Building Map



- Monument
- Flower Bed
- Blackwell Playground
- Tennis Court Playground
- Tennis Courts
- Circle Park
- Walking Paths & Trails

Timberline Ridge HOA Reserve Analyst Comments

Reserve Study Update Comments - Inflation

This region has seen high inflation over the preceding 12-month time period. Per the most recent construction cost data in this region the inflation rate has been 4.41% since the prior reserve study was performed. This inflation rate has been applied to the component project estimated costs in this reserve study update.

Note that a historical average 3% has been applied to projections (future estimated project costs) in the reserve study as even though there will be time periods of inflation that are well above and below this historical average inflation rate we would expect the long term average to fall back in line with the historical average in the United States based on data going back over 100 years. To learn more about how inflation is applied to the reserve study please visit www.reserveataanalyst.com/inf

Excluded Components

Unless noted otherwise the below components have been excluded from funding in this reserve study. Note that the inclusion of any of these items later via a revision or update to this study will impact the funding strategies developed by the Reserve Analyst.

Operating Account Expense

The below components are reportedly paid from the Operating Account and have not been included in this reserve study.

1. Landscaping – (plantings, shrubs, gravel, bark, refurbishment)
2. Tree Care
3. Play Structure Safety Surface – Replenish
4. Trail Gravel Replenishment
5. Mailbox Structures – Paint
6. Park Signs – Paint/Refurbish/Replace

Not Client's Responsibility

The below components are reportedly not the Client's responsibility per their interpretation of their governing documents. Note that the Reserve Analyst does not interpret governing documents and have excluded items based on the Client's request and their interpretation of their own governing documents. If there is ambiguity or questions as to what specific wording means in the governing documents, we recommend consulting with a qualified and experienced attorney in the matter.

1. Utility Systems – Water, Sewer & Storm Sewer - Utility Company's Responsibility
2. Retention Ponds - City

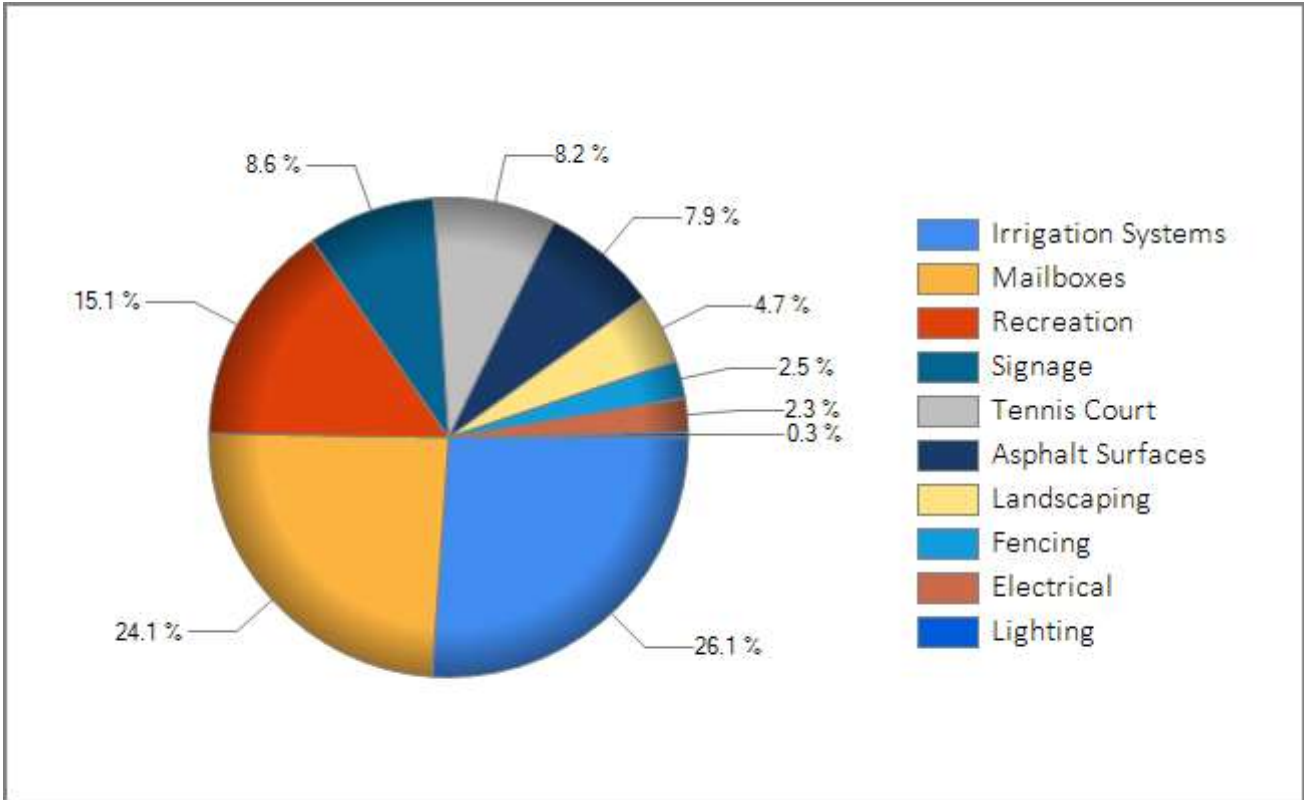
**Timberline Ridge HOA
The Component List**

Report Date September 18, 2020
 Beginning Fiscal Year January 01, 2021
 Account Number 16546

Version Number Final

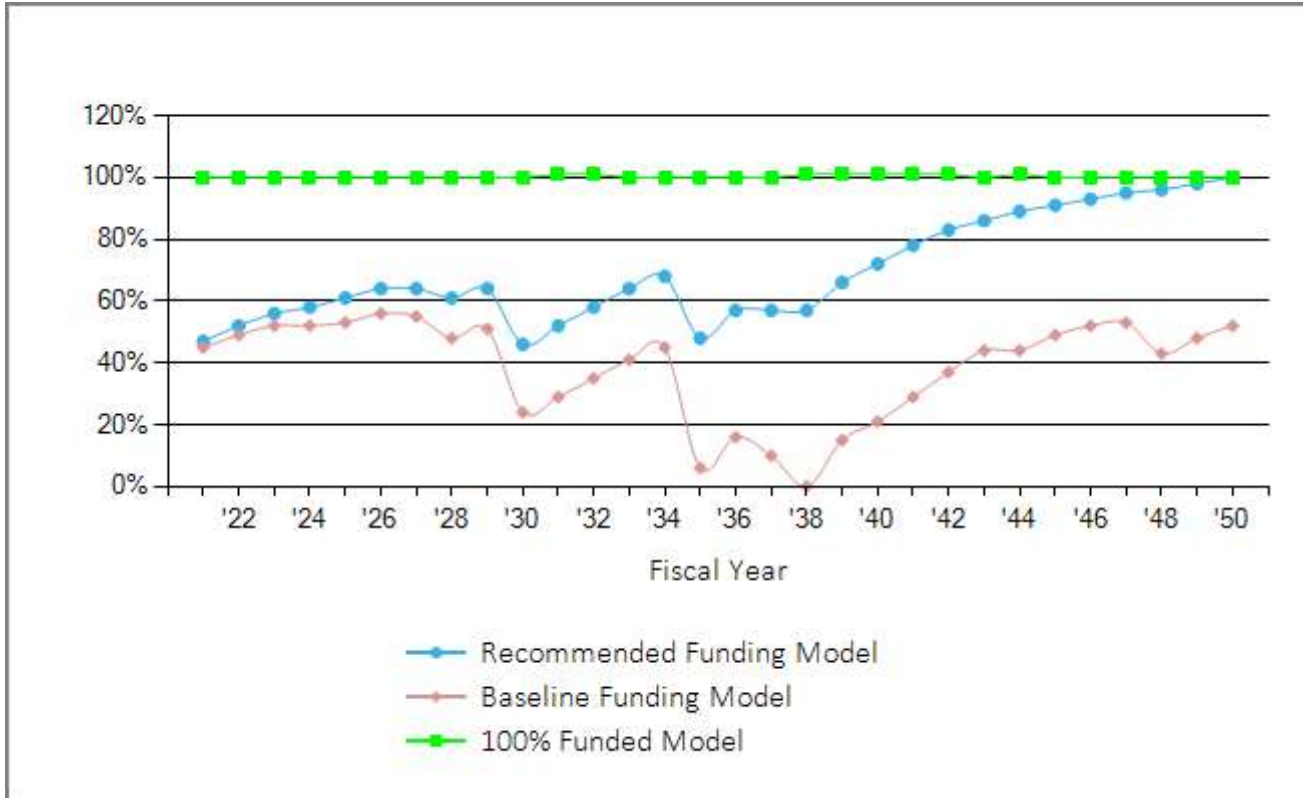
Component Description	Approx. Date In Service	Replacement Year	Useful Life	Adjustment	Remaining UL	Units	Unit Cost & % Funded	Current Cost
Asphalt Pathways - Replace	2018	2038	20	0	17	6,592 sf	5.77	38,069
Backflow Device - Irrigation - Replace	2000	2021	20	0	0	2 ea	1,222.01	2,444
Basketball Hoops - Replace	2000	2027	27	0	6	2 ea	2,555.12	5,110
Benches - Replace	2000	2025	25	0	4	4 ea	944.28	3,777
Bollards - Repair Contingency	2000	2030	30	0	9	14 ea	555.46	7,776
Electrical - Modernize	2000	2030	30	0	9	4 ea	2,777.31	11,109
Fence (split rail 2017) - Replace	2017	2037	20	0	16	50 lf	21.82	1,091
Fence (split rail 2020) - Replace	2020	2040	20	0	19	504 lf	21.82	10,997
Irrigation Controllers - Replace	2016	2031	15	0	10	2 ea	2,888.40	5,777
Irrigation Distribution Systems - Replace	2000	2035	35	0	14	132,732 sf	0.89	117,866
Lights at Monuments - Replace	2017	2032	15	0	11	7 ea	222.18	1,555
Mailbox Kiosk Roofs - Replace	2000	2021	15	0	0	605 sf	7.22	4,368
Mailbox Kiosk Structure - Replace	2000	2030	30	0	9	24 ea	3,888.23	93,317
Mailboxes - Replace	2004	2024	20	0	3	200 ea	94.43	18,886
Metal Cooking Grill - Replace	2008	2023	15	0	2	1 ea	760.98	761
Monuments - Repair Contingency	2000	2030	30	0	9	7 ea	3,888.23	27,218
Pavers - Replace	2000	2035	35	0	14	1,290 sf	17.77	22,928
Picnic Table - Replace	2000	2025	25	0	4	1 ea	1,777.47	1,777
Playground Structures - Replace	2008	2028	20	0	7	2 ea	33,327.67	66,655
Tennis Court - Resurface	2017	2027	10	0	6	7,100 sf	2.65	18,815
Tennis Court Fence - Replace	2000	2037	40	-3	16	320 lf	49.71	15,908
Wood Park Sandblasted Signs - Replace	2000	2030	30	0	9	2 ea	3,332.77	6,666
Total Asset Summary								\$482,872

**Timberline Ridge HOA
Current Cost by Category Chart**



The above chart illustrates the current cost breakdown percentage of the Component Categories in this reserve study (highest percentage components listed at top). Special attention should be given to those component categories which take up a bulk of the % of the current cost 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. Refer to the Cash Flow Projections and the Annual Expenditure Report for the projected timeline of expected expenditures.

Timberline Ridge HOA Projected Percent Funded Chart



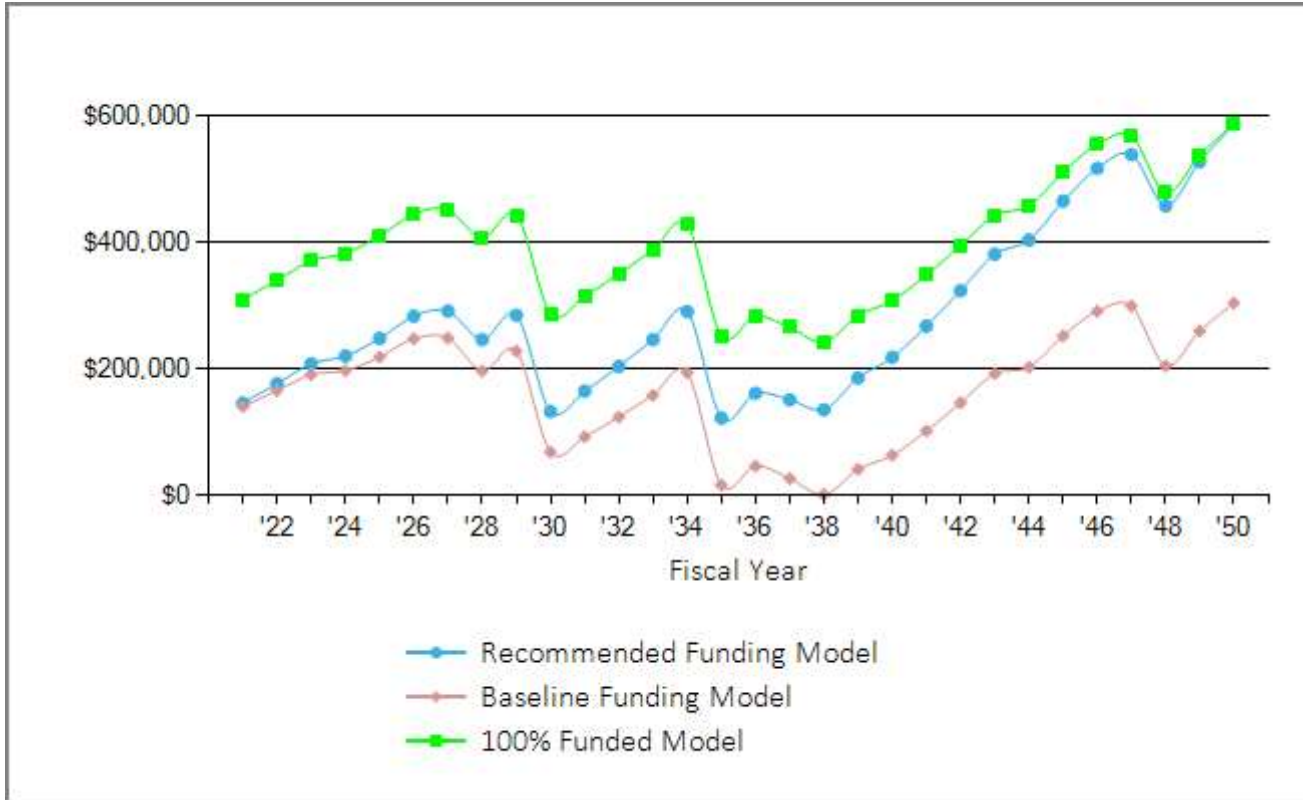
The above chart compares the funding models by the percentage funded levels over the 30-year timeframe of this reserve study, as calculated at the end of each fiscal year.

The Recommended Funding Model increase the Client's reserve account Percent Funded Level to 100% funding within the timeframe of this study. Once this 100% funded level is reached it is a good indicator that the Client is on track to meet its future obligations with minimal risk of reliance on emergency financing or having to defer projects that come due.

The Baseline Funding Model has only a goal of keeping the reserve account cash positive within the timeframe of the reserve study. This model carries significant risk for reliance on emergency financing and/or having to defer projects due to the common occurrence of components failing earlier than projected or costs increasing more rapidly than projected.

The 100% Funded Model assumes the reserve account is an average of 100% Funded in each year of the reserve study. This model minimizes risk for reliance on emergency financing and places the reserve account onto a low risk path for budgeting.

Timberline Ridge HOA Projected Reserve Account Balance Chart



The chart above compares the annual year-end balance of the reserve account for the respective funding models over the 30 years covered in this reserve study. Projected reserve account balances will see large fluctuations from year to year due to projects occurring in any given year.

**Timberline Ridge HOA
100% Funded - Summary**

Report Date	September 18, 2020
Account Number	16546
Version	Final
Budget Year Beginning	January 1, 2021
Budget Year Ending	December 31, 2021
Total Units	200

Report Parameters	
Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2021 Beginning Balance	\$122,378

This funding model has a goal of being a minimum of 100% funded, annually, over the timeframe of this reserve study. Allocation rates will fluctuate based on the expenditures projected in any given year. The initial year has a much higher allocation rate than subsequent years as the reserve account is currently underfunded and requires a significant cash injection in the initial fiscal year to elevate the reserve account to a 100% Funded track.

The following page provides the 30-year projections for this funding model.

Full Funding Model 30 Year Summary of Calculations	
Required Annual Contribution	\$191,432.33
<i>\$957.16 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$2,148.98</u>
Total Annual Allocation to Reserves	\$193,581.32
<i>\$967.91 per unit annually</i>	

**Timberline Ridge HOA
100% Funded - Projections**

Beginning Balance: \$122,378

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2021	482,872	191,432	2,149	6,812	309,147	309,147	100%
2022	497,358	28,133	2,361		339,641	338,953	100%
2023	512,279	28,977	2,575	807	370,386	369,437	100%
2024	527,647	29,847	2,657	20,637	382,253	381,047	100%
2025	543,477	30,742	2,847	6,252	409,590	408,474	100%
2026	559,781	31,664	3,089		444,344	443,837	100%
2027	576,574	32,614	3,139	28,568	451,529	451,529	100%
2028	593,872	33,061	2,818	81,978	405,430	405,153	100%
2029	611,688	34,053	3,076		442,559	442,559	100%
2030	630,038	32,594	1,992	190,609	286,536	285,517	100%
2031	648,940	33,572	2,186	7,764	314,531	312,875	101%
2032	668,408	34,579	2,429	2,153	349,386	347,637	101%
2033	688,460	35,617	2,695		387,698	386,486	100%
2034	709,114	36,685	2,971		427,354	427,354	100%
2035	730,387	35,319	1,748	212,964	251,457	250,973	100%
2036	752,299	36,379	1,967	6,805	282,997	282,548	100%
2037	774,868	37,704	1,843	57,471	265,072	263,763	100%
2038	798,114	38,835	1,678	64,180	241,406	238,464	101%
2039	822,057	40,000	1,970		283,376	279,497	101%
2040	846,719	41,200	2,137	19,284	307,429	302,915	101%
2041	872,120	42,436	2,418	4,414	347,869	343,398	101%
2042	898,284	43,709	2,741		394,319	390,720	101%
2043	925,233	45,020	3,075		442,415	440,573	100%
2044	952,990	48,729	3,177	37,272	457,049	454,675	101%
2045	981,579	50,191	3,551		510,790	508,768	100%
2046	1,011,027	51,696	3,853	12,095	554,244	553,240	100%
2047	1,041,357	53,247	3,945	43,930	567,506	567,506	100%
2048	1,072,598	54,845	3,320	148,061	477,610	476,233	100%
2049	1,104,776	56,490	3,739		537,839	536,050	100%
2050	1,137,919	58,185	4,081	13,090	587,014	585,546	100%

**Timberline Ridge HOA
Recommended Funding - Summary**

Report Date	September 18, 2020
Account Number	16546
Version	Final
Budget Year Beginning	January 1, 2021
Budget Year Ending	December 31, 2021
Total Units	200

Report Parameters	
Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2021 Beginning Balance	\$122,378

We have developed a funding plan which will help steer the reserve account into a high funded range within the 30-year timeframe of this reserve study. This Recommended Funding Model requires the Client to allocate the recommended allocation amount into the reserve account with annual increases thereafter. In the following pages you will find the recommended allocation rates to the reserve account, annual projected expenditures and the percent funded of the reserve account if following this Recommended Funding Model.

This Recommended Funding Plan Considers 4 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 Client to be fiscally responsible.

The following page provides the 30-year projections for this funding model.

Recommended Funding Model Summary of Calculations	
Required Annual Contribution	\$28,775.00
<i>\$143.87 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$1,010.38</u>
Total Annual Allocation to Reserves	\$29,785.38
<i>\$148.93 per unit annually</i>	

Timberline Ridge HOA
Recommended Funding - Projections

Beginning Balance: \$122,378

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2021	482,872	28,775	1,010	6,812	145,351	309,147	47%
2022	497,358	29,638	1,225		176,214	338,953	52%
2023	512,279	30,527	1,442	807	207,376	369,437	56%
2024	527,647	31,443	1,527	20,637	219,709	381,047	58%
2025	543,477	32,387	1,721	6,252	247,565	408,474	61%
2026	559,781	33,358	1,966		282,890	443,837	64%
2027	576,574	34,359	2,021	28,568	290,701	451,529	64%
2028	593,872	35,390	1,709	81,978	245,822	405,153	61%
2029	611,688	36,451	1,976		284,249	442,559	64%
2030	630,038	37,545	918	190,609	132,103	285,517	46%
2031	648,940	38,671	1,141	7,764	164,152	312,875	52%
2032	668,408	39,831	1,413	2,153	203,243	347,637	58%
2033	688,460	41,026	1,710		245,979	386,486	64%
2034	709,114	42,257	2,018		290,254	427,354	68%
2035	730,387	43,525	846	212,964	121,660	250,973	48%
2036	752,299	44,831	1,118	6,805	160,803	282,548	57%
2037	774,868	46,175	1,047	57,471	150,554	263,763	57%
2038	798,114	47,561	938	64,180	134,872	238,464	57%
2039	822,057	48,988	1,287		185,147	279,497	66%
2040	846,719	50,457	1,514	19,284	217,834	302,915	72%
2041	872,120	51,971	1,858	4,414	267,249	343,398	78%
2042	898,284	53,530	2,245		323,024	390,720	83%
2043	925,233	55,136	2,647		380,807	440,573	86%
2044	952,990	56,790	2,802	37,272	403,127	454,675	89%
2045	981,579	58,494	3,231		464,852	508,768	91%
2046	1,011,027	60,248	3,591	12,095	516,596	553,240	93%
2047	1,041,357	62,056	3,743	43,930	538,465	567,506	95%
2048	1,072,598	63,918	3,180	148,061	457,502	476,233	96%
2049	1,104,776	65,835	3,663		527,000	536,050	98%
2050	1,137,919	67,810	4,072	13,090	585,793	585,546	100%

**Timberline Ridge HOA
Baseline Funding - Summary**

Report Date	September 18, 2020
Account Number	16546
Version	Final
Budget Year Beginning	January 1, 2021
Budget Year Ending	December 31, 2021
Total Units	200

Report Parameters	
Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2021 Beginning Balance	\$122,378

The Baseline Funding Model is considered a bare minimum approach which has a goal of keeping the reserve account balance above \$0 within the 30-year timeframe of this reserve study and does not consider projected expenses that fall outside of the 30-year timeframe of the reserve study.

This funding model carries a higher risk for reliance on emergency financing specifically in years when large component expenses occur earlier than projected or costs see significant increases. Additionally, in the future when longer life components come into the 30-year timeframe of future reserve studies their projected expenditures will have a significant impact on the allocation requirements to keep the reserve account cash positive.

The following page provides the 30-year projections for this funding model.

Baseline Threshold Funding Model Summary of Calculations	
Required Annual Contribution	\$23,377.87
<i>\$116.89 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$972.60</u>
Total Annual Allocation to Reserves	\$24,350.47
<i>\$121.75 per unit annually</i>	

Timberline Ridge HOA
Baseline Funding - Projections

Beginning Balance: \$122,378

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2021	482,872	23,378	973	6,812	139,916	309,147	45%
2022	497,358	24,079	1,148		165,143	338,953	49%
2023	512,279	24,802	1,324	807	190,461	369,437	52%
2024	527,647	25,546	1,368	20,637	196,738	381,047	52%
2025	543,477	26,312	1,518	6,252	218,316	408,474	53%
2026	559,781	27,101	1,718		247,135	443,837	56%
2027	576,574	27,914	1,725	28,568	248,207	451,529	55%
2028	593,872	28,752	1,365	81,978	196,346	405,153	48%
2029	611,688	29,614	1,582		227,542	442,559	51%
2030	630,038	30,503	472	190,609	67,907	285,517	24%
2031	648,940	31,418	641	7,764	92,203	312,875	29%
2032	668,408	32,360	857	2,153	123,267	347,637	35%
2033	688,460	33,331	1,096		157,694	386,486	41%
2034	709,114	34,331	1,344		193,370	427,354	45%
2035	730,387	35,361	110	212,964	15,877	250,973	6%
2036	752,299	36,422	318	6,805	45,812	282,548	16%
2037	774,868	37,515	181	57,471	26,036	263,763	10%
2038	798,114	38,640	3	64,180	500	238,464	0%
2039	822,057	39,799	282		40,582	279,497	15%
2040	846,719	40,993	436	19,284	62,727	302,915	21%
2041	872,120	42,223	704	4,414	101,240	343,398	29%
2042	898,284	43,490	1,013		145,743	390,720	37%
2043	925,233	44,794	1,334		191,871	440,573	44%
2044	952,990	46,138	1,405	37,272	202,142	454,675	44%
2045	981,579	47,522	1,748		251,412	508,768	49%
2046	1,011,027	48,948	2,018	12,095	290,282	553,240	52%
2047	1,041,357	50,417	2,077	43,930	298,846	567,506	53%
2048	1,072,598	51,929	1,419	148,061	204,133	476,233	43%
2049	1,104,776	53,487	1,803		259,423	536,050	48%
2050	1,137,919	55,091	2,110	13,090	303,535	585,546	52%

**Timberline Ridge HOA
Current Funding - Summary**

Report Date	September 18, 2020
Account Number	16546
Version	Final
Budget Year Beginning	January 1, 2021
Budget Year Ending	December 31, 2021
Total Units	200

Report Parameters	
Inflation	3.00%
Annual Contribution Increase	3.00%
Interest Rate on Reserve Deposit	0.70%
Tax Rate Included in Interest Rate	
2021 Beginning Balance	\$122,378

The Current Funding Model is based on the reserve allocation data supplied by the Client; it has not been independently verified and is assumed to be correct.

The following page provides the 30-year projections for this funding model. It is assumed the reserve allocation rate will have annual increases to offset inflationary factors.

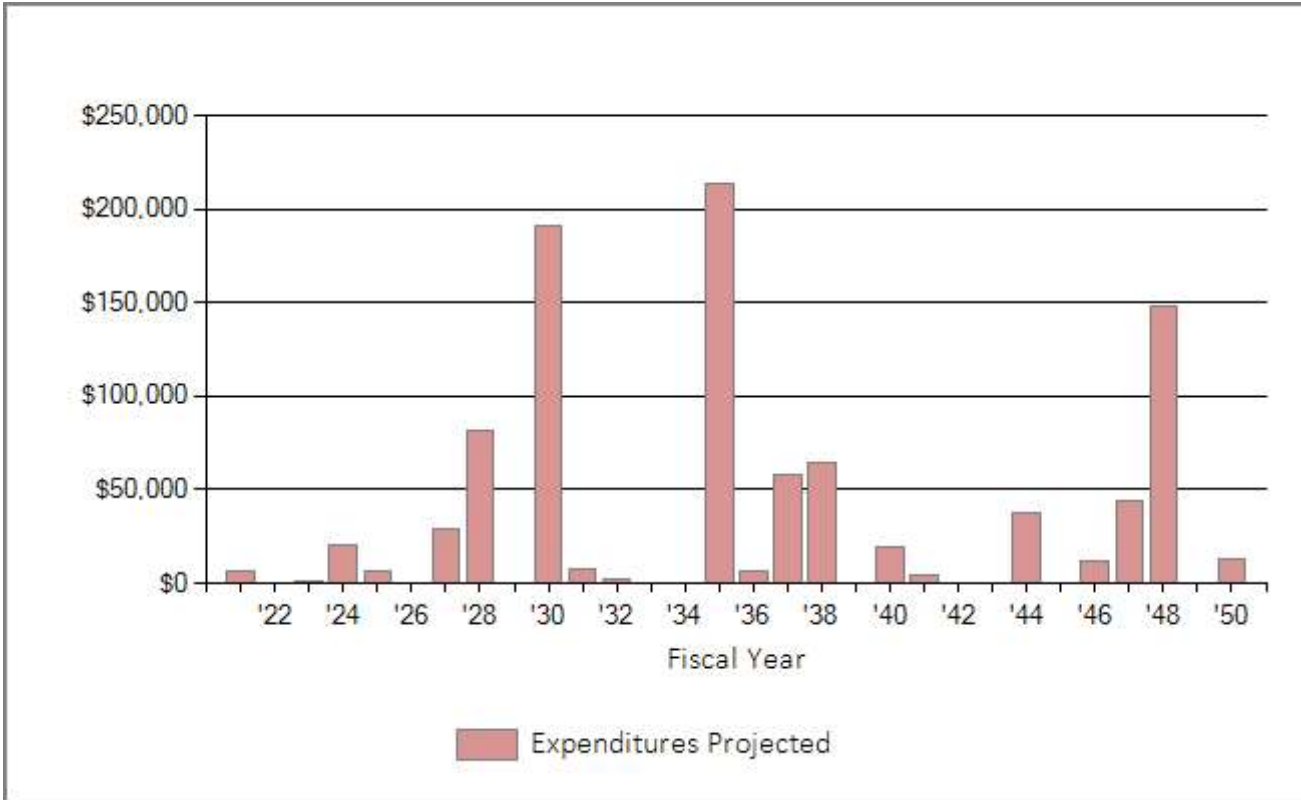
Current Assessment Funding Model Summary of Calculations	
Required Annual Contribution	\$21,000.00
<i>\$105.00 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$955.96</u>
Total Annual Allocation to Reserves	\$21,955.96
<i>\$109.78 per unit annually</i>	

**Timberline Ridge HOA
Current Funding - Projections**

Beginning Balance: \$122,378

Year	Replacement Cost	Reserve Contribution	Net Interest Earned	Reserve Expenditures	Year End Account Balance	Year End Fully Fund Balance	Year End % Funded
2021	482,872	21,000	956	6,812	137,521	309,147	44%
2022	497,358	21,630	1,114		160,266	338,953	47%
2023	512,279	22,279	1,272	807	183,009	369,437	50%
2024	527,647	22,947	1,297	20,637	186,617	381,047	49%
2025	543,477	23,636	1,428	6,252	205,429	408,474	50%
2026	559,781	24,345	1,608		231,382	443,837	52%
2027	576,574	25,075	1,595	28,568	229,484	451,529	51%
2028	593,872	25,827	1,213	81,978	174,547	405,153	43%
2029	611,688	26,602	1,408		202,558	442,559	46%
2030	630,038	27,400	275	190,609	39,624	285,517	14%
2031	648,940	28,222	421	7,764	60,503	312,875	19%
2032	668,408	29,069	612	2,153	88,031	347,637	25%
2033	688,460	29,941	826		118,798	386,486	31%
2034	709,114	30,839	1,047		150,685	427,354	35%
2035	730,387	31,764		212,964	-30,515	250,973	
2036	752,299	32,717		6,805	-4,603	282,548	
2037	774,868	33,699		57,471	-28,376	263,763	
2038	798,114	34,710		64,180	-57,846	238,464	
2039	822,057	35,751			-22,095	279,497	
2040	846,719	36,824		19,284	-4,555	302,915	
2041	872,120	37,928	203	4,414	29,162	343,398	8%
2042	898,284	39,066	478		68,706	390,720	18%
2043	925,233	40,238	763		109,707	440,573	25%
2044	952,990	41,445	797	37,272	114,677	454,675	25%
2045	981,579	42,689	1,102		158,467	508,768	31%
2046	1,011,027	43,969	1,332	12,095	191,673	553,240	35%
2047	1,041,357	45,288	1,351	43,930	194,383	567,506	34%
2048	1,072,598	46,647	651	148,061	93,620	476,233	20%
2049	1,104,776	48,046	992		142,658	536,050	27%
2050	1,137,919	49,488	1,253	13,090	180,309	585,546	31%

Timberline Ridge HOA Projected Expenditures Chart



The above chart provides a visual of the reserve account projected expenditures over the 30 years covered in this study. We suggest making a 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.

**Timberline Ridge HOA
Projected Expenditures Report**

Description	Expenditures
Replacement Year 2021	
1002 Backflow Device - Irrigation - Replace	2,444
1015 Mailbox Kiosk Roofs - Replace	4,368
Total for 2021	\$6,812
<i>No Replacement in 2022</i>	
Replacement Year 2023	
1018 Metal Cooking Grill - Replace	807
Total for 2023	\$807
Replacement Year 2024	
1017 Mailboxes - Replace	20,637
Total for 2024	\$20,637
Replacement Year 2025	
1005 Benches - Replace	4,251
1021 Picnic Table - Replace	2,001
Total for 2025	\$6,252
<i>No Replacement in 2026</i>	
Replacement Year 2027	
1004 Basketball Hoops - Replace	6,102
1025 Tennis Court - Resurface	22,466
Total for 2027	\$28,568
Replacement Year 2028	
1023 Playground Structures - Replace	81,978
Total for 2028	\$81,978
<i>No Replacement in 2029</i>	
Replacement Year 2030	
1006 Bollards - Repair Contingency	10,147

**Timberline Ridge HOA
Projected Expenditures Report**

Description	Expenditures
<i>Replacement Year 2030 continued...</i>	
1007 Electrical - Modernize	14,495
1016 Mailbox Kiosk Structure - Replace	121,758
1019 Monuments - Repair Contingency	35,513
1029 Wood Park Sandblasted Signs - Replace	8,697
Total for 2030	\$190,609
 Replacement Year 2031	
1010 Irrigation Controllers - Replace	7,764
Total for 2031	\$7,764
 Replacement Year 2032	
1014 Lights at Monuments - Replace	2,153
Total for 2032	\$2,153
 <i>No Replacement in 2033</i>	
<i>No Replacement in 2034</i>	
 Replacement Year 2035	
1011 Irrigation Distribution Systems - Replace	178,283
1020 Pavers - Replace	34,681
Total for 2035	\$212,964
 Replacement Year 2036	
1015 Mailbox Kiosk Roofs - Replace	6,805
Total for 2036	\$6,805
 Replacement Year 2037	
1008 Fence (split rail 2017) - Replace	1,751
1025 Tennis Court - Resurface	30,193
1026 Tennis Court Fence - Replace	25,528
Total for 2037	\$57,471
 Replacement Year 2038	
1001 Asphalt Pathways - Replace	62,922

**Timberline Ridge HOA
Projected Expenditures Report**

Description	Expenditures
<i>Replacement Year 2038 continued...</i>	
1018 Metal Cooking Grill - Replace	1,258
Total for 2038	<u>\$64,180</u>
 <i>No Replacement in 2039</i>	
Replacement Year 2040	
1009 Fence (split rail 2020) - Replace	19,284
Total for 2040	<u>\$19,284</u>
 Replacement Year 2041	
1002 Backflow Device - Irrigation - Replace	4,414
Total for 2041	<u>\$4,414</u>
 <i>No Replacement in 2042</i> <i>No Replacement in 2043</i>	
Replacement Year 2044	
1017 Mailboxes - Replace	37,272
Total for 2044	<u>\$37,272</u>
 <i>No Replacement in 2045</i>	
Replacement Year 2046	
1010 Irrigation Controllers - Replace	12,095
Total for 2046	<u>\$12,095</u>
 Replacement Year 2047	
1014 Lights at Monuments - Replace	3,354
1025 Tennis Court - Resurface	40,576
Total for 2047	<u>\$43,930</u>
 Replacement Year 2048	
1023 Playground Structures - Replace	148,061
Total for 2048	<u>\$148,061</u>

**Timberline Ridge HOA
Projected Expenditures Report**

Description	Expenditures
<i>No Replacement in 2049</i>	
Replacement Year 2050	
1005 Benches - Replace	8,901
1021 Picnic Table - Replace	4,189
Total for 2050	<u>\$13,090</u>

Timberline Ridge HOA
Spreadsheet - Component Expenditures

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Beginning Balance	122,378	145,351	176,214	207,376	219,709	247,565	282,890	290,701	245,822	284,249
Annual Reserve Account Contribution	28,775	29,638	30,527	31,443	32,387	33,358	34,359	35,390	36,451	37,545
Interest Earned	1,010	1,225	1,442	1,527	1,721	1,966	2,021	1,709	1,976	918
Expenditures	6,812		807	20,637	6,252		28,568	81,978		190,609
Fully Funded Balance	309,147	338,953	369,437	381,047	408,474	443,837	451,529	405,153	442,559	285,517
Percent Funded	47%	52%	56%	58%	61%	64%	64%	61%	64%	46%
Ending Reserve Account Balance	145,351	176,214	207,376	219,709	247,565	282,890	290,701	245,822	284,249	132,103

ID Description

1001 Asphalt Pathways - Replace										
1002 Backflow Device - Irrigation - Replace	2,444									
1004 Basketball Hoops - Replace							6,102			
1005 Benches - Replace					4,251					
1006 Bollards - Repair Contingency										10,147
1007 Electrical - Modernize										14,495
1008 Fence (split rail 2017) - Replace										
1009 Fence (split rail 2020) - Replace										
1010 Irrigation Controllers - Replace										
1011 Irrigation Distribution Systems - Replace										
1014 Lights at Monuments - Replace										
1015 Mailbox Kiosk Roofs - Replace	4,368									
1016 Mailbox Kiosk Structure - Replace										121,758
1017 Mailboxes - Replace				20,637						
1018 Metal Cooking Grill - Replace			807							
1019 Monuments - Repair Contingency										35,513
1020 Pavers - Replace										
1021 Picnic Table - Replace					2,001					
1023 Playground Structures - Replace								81,978		
1025 Tennis Court - Resurface							22,466			
1026 Tennis Court Fence - Replace										
1029 Wood Park Sandblasted Signs - Replace										8,697

Year Total:	6,812		807	20,637	6,252		28,568	81,978		190,609
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Timberline Ridge HOA
Spreadsheet - Component Expenditures

	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040
Beginning Balance	132,103	164,152	203,243	245,979	290,254	121,660	160,803	150,554	134,872	185,147
Annual Reserve Account Contribution	38,671	39,831	41,026	42,257	43,525	44,831	46,175	47,561	48,988	50,457
Interest Earned	1,141	1,413	1,710	2,018	846	1,118	1,047	938	1,287	1,514
Expenditures	7,764	2,153			212,964	6,805	57,471	64,180		19,284
Fully Funded Balance	312,875	347,637	386,486	427,354	250,973	282,548	263,763	238,464	279,497	302,915
Percent Funded	52%	58%	64%	68%	48%	57%	57%	57%	66%	72%
Ending Reserve Account Balance	164,152	203,243	245,979	290,254	121,660	160,803	150,554	134,872	185,147	217,834

ID Description

1001 Asphalt Pathways - Replace								62,922		
1002 Backflow Device - Irrigation - Replace										
1004 Basketball Hoops - Replace										
1005 Benches - Replace										
1006 Bollards - Repair Contingency										
1007 Electrical - Modernize										
1008 Fence (split rail 2017) - Replace							1,751			
1009 Fence (split rail 2020) - Replace										19,284
1010 Irrigation Controllers - Replace	7,764									
1011 Irrigation Distribution Systems - Replace					178,283					
1014 Lights at Monuments - Replace		2,153								
1015 Mailbox Kiosk Roofs - Replace						6,805				
1016 Mailbox Kiosk Structure - Replace										
1017 Mailboxes - Replace										
1018 Metal Cooking Grill - Replace								1,258		
1019 Monuments - Repair Contingency										
1020 Pavers - Replace					34,681					
1021 Picnic Table - Replace										
1023 Playground Structures - Replace										
1025 Tennis Court - Resurface							30,193			
1026 Tennis Court Fence - Replace							25,528			
1029 Wood Park Sandblasted Signs - Replace										

Year Total:	7,764	2,153			212,964	6,805	57,471	64,180		19,284
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**Timberline Ridge HOA
Spreadsheet - Component Expenditures**

	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Beginning Balance	217,834	267,249	323,024	380,807	403,127	464,852	516,596	538,465	457,502	527,000
Annual Reserve Account Contribution	51,971	53,530	55,136	56,790	58,494	60,248	62,056	63,918	65,835	67,810
Interest Earned	1,858	2,245	2,647	2,802	3,231	3,591	3,743	3,180	3,663	4,072
Expenditures	4,414			37,272		12,095	43,930	148,061		13,090
Fully Funded Balance	343,398	390,720	440,573	454,675	508,768	553,240	567,506	476,233	536,050	585,546
Percent Funded	78%	83%	86%	89%	91%	93%	95%	96%	98%	100%
Ending Reserve Account Balance	267,249	323,024	380,807	403,127	464,852	516,596	538,465	457,502	527,000	585,793

ID Description

1001 Asphalt Pathways - Replace										
1002 Backflow Device - Irrigation - Replace	4,414									
1004 Basketball Hoops - Replace										
1005 Benches - Replace										8,901
1006 Bollards - Repair Contingency										
1007 Electrical - Modernize										
1008 Fence (split rail 2017) - Replace										
1009 Fence (split rail 2020) - Replace										
1010 Irrigation Controllers - Replace						12,095				
1011 Irrigation Distribution Systems - Replace										
1014 Lights at Monuments - Replace							3,354			
1015 Mailbox Kiosk Roofs - Replace										
1016 Mailbox Kiosk Structure - Replace										
1017 Mailboxes - Replace				37,272						
1018 Metal Cooking Grill - Replace										
1019 Monuments - Repair Contingency										
1020 Pavers - Replace										
1021 Picnic Table - Replace										4,189
1023 Playground Structures - Replace								148,061		
1025 Tennis Court - Resurface							40,576			
1026 Tennis Court Fence - Replace										
1029 Wood Park Sandblasted Signs - Replace										

Year Total:	4,414			37,272		12,095	43,930	148,061		13,090
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Timberline Ridge HOA
FY Beginning Fully Funded Balance Calculations

Asset ID	Description	Current Cost	x	Age	/	Useful Life	=	Fully Funded
1001	Asphalt Pathways - Replace	\$38,069	x	3	/	20	=	\$5,710
1002	Backflow Device - Irrigation -...	\$2,444	x	20	/	20	=	\$2,444
1004	Basketball Hoops - Replace	\$5,110	x	21	/	27	=	\$3,975
1005	Benches - Replace	\$3,777	x	21	/	25	=	\$3,173
1006	Bollards - Repair Contingency	\$7,776	x	21	/	30	=	\$5,444
1007	Electrical - Modernize	\$11,109	x	21	/	30	=	\$7,776
1008	Fence (split rail 2017) - Repla...	\$1,091	x	4	/	20	=	\$218
1009	Fence (split rail 2020) - Repla...	\$10,997	x	1	/	20	=	\$550
1010	Irrigation Controllers - Replace	\$5,777	x	5	/	15	=	\$1,926
1011	Irrigation Distribution Syste...	\$117,866	x	21	/	35	=	\$70,720
1014	Lights at Monuments - Repla...	\$1,555	x	4	/	15	=	\$415
1015	Mailbox Kiosk Roofs - Replace	\$4,368	x	15	/	15	=	\$4,368
1016	Mailbox Kiosk Structure - Re...	\$93,317	x	21	/	30	=	\$65,322
1017	Mailboxes - Replace	\$18,886	x	17	/	20	=	\$16,053
1018	Metal Cooking Grill - Replace	\$761	x	13	/	15	=	\$660
1019	Monuments - Repair Conting...	\$27,218	x	21	/	30	=	\$19,052
1020	Pavers - Replace	\$22,928	x	21	/	35	=	\$13,757
1021	Picnic Table - Replace	\$1,777	x	21	/	25	=	\$1,493
1023	Playground Structures - Repl...	\$66,655	x	13	/	20	=	\$43,326
1025	Tennis Court - Resurface	\$18,815	x	4	/	10	=	\$7,526
1026	Tennis Court Fence - Replace	\$15,908	x	21	/	37	=	\$9,029
1029	Wood Park Sandblasted Sign...	\$6,666	x	21	/	30	=	\$4,666

Total Asset Summary:

\$287,602

Timberline Ridge HOA About the Component Detail Reports Section

In the following Component Details Section of this reserve study you will find each component that has been listed within the Component List. This section has more detailed information for each component and reviewing it will often answer questions that arise regarding specific components within this reserve study. Below you will find an explanation of what and where this information is located.

1

Elevated Walkways/Hallways- Topcoat- 2019

3

	Asset ID	1055	1,340 sf	@ \$4.75
			Asset Cost	\$6,365.00
			Percent Replacement	100%
			Future Cost	\$6,365.00
	Category	Decks/Porches/Patios		
	Placed in Service	June 2012		
	Useful Life	5		
	Replacement Year	2019		
	Remaining Life	0		

2

4



5

This elastomeric surface type (at elevated walkways, covered staircases and covered hallways) needs to be top coated periodically for waterproof integrity, protection of surrounding structure and appearance. As routine maintenance, we strongly suggest annual professional inspections, with cleaning and repair as needed. Clean with mild solution such as TSP; bleach can be added if mold/mildew becomes a problem. Plan for regular intervals of professional maintenance top coating at the interval indicated.

1. Component Name and next Replacement Year as well as a unique Asset ID to cross reference with other sections within this reserve study.
2. This area has the category of the component, estimated placed in-service date (when last installed), the estimated useful life of the component (estimate of how long the component will last), the next replacement year in this reserve study and the remaining useful life (how many years before replacement is estimated to occur).
3. The area has the total measurement/unit count of the component, the cost per unit, the total asset cost (unit count X unit cost), the percent replacement (amount funded to be replaced in a cycle), and the future cost (estimated cost at the next replacement date).
4. Pictures of the component are included for Level I studies unless the Client has requested fewer pages in the study in which case we will omit them.
5. Specific comments about this component which can include explanations for adjustments to the useful life, phasing, maintenance of the component, Vendor recommendations, etc.

**Timberline Ridge HOA
Component Detail Reports**

Lights at Monuments - Replace - 2032

Asset ID	1014	7 ea	@ \$222.18
Asset Actual Cost			\$1,555.29
Percent Replacement			100%
Future Cost			\$2,152.88
Category	Lighting		
Placed in Service	June 2017		
Useful Life	15		
Replacement Year	2032		
Remaining Life	11		

Monument lights are newer LED's and appear to be deteriorating at a rate typical of their age. We recommend budgeting for replacement at the timeframe indicated due to constant exposure to the elements and deterioration of the component over time.

**Timberline Ridge HOA
Component Detail Reports**

Mailbox Kiosk Roofs - Replace - 2021

Asset ID	1015	605 sf	@ \$7.22
Category	Mailboxes	Asset Actual Cost	\$4,368.10
Placed in Service	June 2000	Percent Replacement	100%
Useful Life	15	Future Cost	\$4,368.10
Replacement Year	2021		
Remaining Life	0		

Mailbox kiosk roofs are in fair to poor condition. Damages and missing shingles noted. Some vehicle damage likely.

Mailbox Kiosk Structure - Replace - 2030

Asset ID	1016	24 ea	@ \$3,888.23
Category	Mailboxes	Asset Actual Cost	\$93,317.47
Placed in Service	June 2000	Percent Replacement	100%
Useful Life	30	Future Cost	\$121,758.13
Replacement Year	2030		
Remaining Life	9		

Wood mailbox kiosks are in variable condition. Board reported that these were recently refurbished to repair damaged wood. Inspection revealed structures have wood and composition roofs in poor condition, with damaged and missing shingles noted. These wood structures should be inspected and painted/stained as needed paid from the Operating account. Over time these structures will need refurbishment including roof replacement, wood repairs and stability enforcement to maximize their service lives. We recommend preparing for eventual total replacement of these wood structures.

Mailboxes - Replace - 2024

Asset ID	1017	200 ea	@ \$94.43
Category	Mailboxes	Asset Actual Cost	\$18,885.60
Placed in Service	June 2004	Percent Replacement	100%
Useful Life	20	Future Cost	\$20,636.80
Replacement Year	2024		
Remaining Life	3		

These are reported to have been installed in 2004. Appear to be deteriorating at a rate typical of their age based on our visual inspection of this component. As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from

**Timberline Ridge HOA
Component Detail Reports**

Mailboxes - Replace continued...

operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

**Timberline Ridge HOA
Component Detail Reports**

Backflow Device - Irrigation - Replace - 2021

			2 ea	@ \$1,222.01
Asset ID	1002	Asset Actual Cost		\$2,444.03
		Percent Replacement		100%
Category	Irrigation Systems	Future Cost		\$2,444.03
Placed in Service	June 2000			
Useful Life	20			
Replacement Year	2021			
Remaining Life	0			

As routine maintenance, inspect regularly, test system, repair as needed from operating budget. We recommend funding for this component at the time frame indicated.

**Timberline Ridge HOA
Component Detail Reports**

Benches - Replace - 2025

		4 ea	@ \$944.28
Asset ID	1005	Asset Actual Cost	\$3,777.14
		Percent Replacement	100%
Category	Recreation	Future Cost	\$4,251.20
Placed in Service	June 2000		
Useful Life	25		
Replacement Year	2025		
Remaining Life	4		

Wood and metal benches are in fair condition. One bench was damaged at the time of inspection. Individual board replacement and staining regularly can maximize the service life of these benches. The metal will eventually corrode requiring full replacement.

Metal Cooking Grill - Replace - 2023

		1 ea	@ \$760.98
Asset ID	1018	Asset Actual Cost	\$760.98
		Percent Replacement	100%
Category	Recreation	Future Cost	\$807.32
Placed in Service	June 2008		
Useful Life	15		
Replacement Year	2023		
Remaining Life	2		

Metal cooking grill is in fair condition. Some surface rust noted. Plan for eventual replacement as these structures will deteriorate from the heat as well as the exposure to the elements.

Picnic Table - Replace - 2025

		1 ea	@ \$1,777.47
Asset ID	1021	Asset Actual Cost	\$1,777.47
		Percent Replacement	100%
Category	Recreation	Future Cost	\$2,000.56
Placed in Service	June 2000		
Useful Life	25		
Replacement Year	2025		
Remaining Life	4		

The Picnic table appear to be deteriorating at a rate typical of their age. We recommend for eventual replacement at the time frame indicated due to constant exposure. We recommend cleaning and inspecting annually - paint/stain as needed paid for from the Operating account.

**Timberline Ridge HOA
Component Detail Reports**

Basketball Hoops - Replace - 2027

		2 ea	@ \$2,555.12
Asset ID	1004	Asset Actual Cost	\$5,110.24
		Percent Replacement	100%
Category	Tennis Court	Future Cost	\$6,101.90
Placed in Service	June 2000		
Useful Life	27		
Replacement Year	2027		
Remaining Life	6		

The tennis court backboard appears to be in fair condition. No major damage noted. Inspect, repair & paint as needed annually from the Operating budget. We recommend budgeting for replacement at the timeframe indicated to cycle with the next tennis court resurfacing.

Tennis Court - Resurface - 2027

		7,100 sf	@ \$2.65
Asset ID	1025	Asset Actual Cost	\$18,815.00
		Percent Replacement	100%
Category	Tennis Court	Future Cost	\$22,466.09
Placed in Service	June 2017		
Useful Life	10		
Replacement Year	2027		
Remaining Life	6		

The tennis court was resurfaced in 2017 for approx. \$16K. For the safety and playability of the tennis court these surfaces should be inspected annually, and repairs made as needed between resurfacing projects. When tennis court do not receive regular cycles of resurfacing water often causes extensive damage as it seeps into the cracks on the court and causes underlying deterioration of the aggregate base. If nothing is done, then eventually a resurfacing project would not be possible (if the base is in below average condition) and the Community will need to budget for total replacement of the court at a much higher cost.

**Timberline Ridge HOA
Component Detail Reports**

Playground Structures - Replace - 2028

		2 ea	@ \$33,327.67
Asset ID	1023	Asset Actual Cost	\$66,655.34
		Percent Replacement	100%
Category	Recreation	Future Cost	\$81,977.67
Placed in Service	June 2008		
Useful Life	20		
Replacement Year	2028		
Remaining Life	7		

These play structures are reported to have been installed around 2008. These are study metal and should have a service life much longer than the prior structures which were built of wood/plastic. The play structures appear to be deteriorating at a rate typical of its age. We recommend budgeting for replacement at the timeframe indicated to limit liability issues that arise from old structures that require ongoing repairs and have safety issues and before actual failure of the structure. There is a very wide range in cost figures for this type of component due to significant quality variations. The estimate in this reserve study is based on replacement with a similar quality structure.

**Timberline Ridge HOA
Component Detail Reports**

Bollards - Repair Contingency - 2030

		14 ea	@ \$555.46
Asset ID	1006	Asset Actual Cost	\$7,776.45
		Percent Replacement	100%
Category	Signage	Future Cost	\$10,146.51
Placed in Service	June 2000		
Useful Life	30		
Replacement Year	2030		
Remaining Life	9		

Bollard appears to be deteriorating at a rate typical of their age. These are made of study concrete, masonry and metal materials. There is no expectation of total replacement but repairs should be anticipated for grout failure, concrete cracking and damage from tree roots. As routine maintenance, inspect regularly, clean/touch up for appearance and complete minor repairs, paid from operating budget. Reserve funding for refurbishment of this monument recommended to maintain a consistent, quality appearance. A repair contingency has been included. Review annually and adjust as conditions and repair needs dictate.

Wood Park Sandblasted Signs - Replace - 2030

		2 ea	@ \$3,332.77
Asset ID	1029	Asset Actual Cost	\$6,665.53
		Percent Replacement	100%
Category	Signage	Future Cost	\$8,697.01
Placed in Service	June 2000		
Useful Life	30		
Replacement Year	2030		
Remaining Life	9		

Wood park signs have a fair to poor surface appearance. We recommend painting at this time to protect the underlying wood. Due to the wood construction eventual replacement should be anticipated as wood will rot and split. As routine maintenance, inspect regularly, clean/touch up for appearance and repair from operating budget. Reserve funding recommended for regular intervals of replacement to maintain a consistent, quality appearance.

**Timberline Ridge HOA
Component Detail Reports**

Electrical - Modernize - 2030

		4 ea	@ \$2,777.31
Asset ID	1007	Asset Actual Cost	\$11,109.22
		Percent Replacement	100%
Category	Electrical	Future Cost	\$14,495.02
Placed in Service	June 2000		
Useful Life	30		
Replacement Year	2030		
Remaining Life	9		

Fair condition noted. Small Circuit breaker panels and meter sockets installed onsite for the common area irrigation and lighting systems. These are located behind some of the monuments. Anticipate the need for eventual replacement of these panels as they are exposed to the elements and the enclosures will eventually corrode. Cost for each location to modernize.

**Timberline Ridge HOA
Component Detail Reports**

Monuments - Repair Contingency - 2030

Asset ID	1019	7 ea	@ \$3,888.23
Category	Signage	Asset Actual Cost	\$27,217.60
Placed in Service	June 2000	Percent Replacement	100%
Useful Life	30	Future Cost	\$35,512.79
Replacement Year	2030		
Remaining Life	9		

Community monument appears to be deteriorating at a rate typical of their age. These are made of sturdy concrete, masonry and metal materials. There is no expectation of total replacement but repair should be anticipated for grout failure, concrete cracking and damage from tree roots. As routine maintenance, inspect regularly, clean/touch up for appearance and complete minor repairs, paid from operating budget. Reserve funding for refurbishment of this monument recommended to maintain a consistent, quality appearance. A repair contingency has been included. Review annually and adjust as conditions and repair needs dictate.

**Timberline Ridge HOA
Component Detail Reports**

Irrigation Controllers - Replace - 2031

Asset ID	1010	Asset Actual Cost	2 ea	@ \$2,888.40
Category	Irrigation Systems	Percent Replacement		\$5,776.80
Placed in Service	June 2016	Future Cost		100%
Useful Life	15			\$7,763.53
Replacement Year	2031			
Remaining Life	10			

These are newer in age. They also have the weather station option. We recommend funding for replacement at the timeframe indicated.

**Timberline Ridge HOA
Component Detail Reports**

Pavers - Replace - 2035

		1,290 sf	@ \$17.77
Asset ID	1020	Asset Actual Cost	\$22,928.46
		Percent Replacement	100%
Category	Landscaping	Future Cost	\$34,681.35
Placed in Service	June 2000		
Useful Life	35		
Replacement Year	2035		
Remaining Life	14		

Located at the Circle Park. We recommend budgeting for replacement at the timeframe indicated as these sand set paver systems will typically become uneven with time due to settling, root intrusion, drainage issues and use.

**Timberline Ridge HOA
Component Detail Reports**

Irrigation Distribution Systems - Replace - 2035

		132,732 sf	@ \$0.89
Asset ID	1011	Asset Actual Cost	\$117,866.02
		Percent Replacement	100%
Category	Irrigation Systems	Future Cost	\$178,282.92
Placed in Service	June 2000		
Useful Life	35		
Replacement Year	2035		
Remaining Life	14		

Local repairs reported but no large scale replacement of piping and valves. As routine maintenance, inspect and test system regularly, perform any minor repairs as necessary from maintenance budget. Although the failure rate of the elements within this component are typically difficult to predict, prudent planning suggests setting aside funding, for large scale replacement/refurbishing of irrigation systems (I.E. piping, control valves, gate valves, etc.), on a cyclical basis.

**Timberline Ridge HOA
Component Detail Reports**

Fence (split rail 2017) - Replace - 2037

Asset ID	1008	50 lf	@ \$21.82
Category	Fencing	Asset Actual Cost	\$1,091.00
Placed in Service	June 2017	Percent Replacement	100%
Useful Life	20	Future Cost	\$1,750.73
Replacement Year	2037		
Remaining Life	16		

Approx. 50 linear feet of the spit rail fence at NE 30th Ct. has recently been replaced. Although rustic looking by design, this type of fencing will eventually need to be replaced due to constant weathering and exposure. Inspect regularly and repair as needed from operating budget. Plan for regular intervals of replacement at roughly the time frame indicated below.

Note: assumed to be left to weather naturally; no funding for seal/stain herein.

[Cost estimate provide by the Client based on recent completed project.](#)

**Timberline Ridge HOA
Component Detail Reports**

Tennis Court Fence - Replace - 2037

Asset ID	1026	320 lf	@ \$49.71
Category	Tennis Court	Asset Actual Cost	\$15,908.16
Placed in Service	June 2000	Percent Replacement	100%
Useful Life	40	Future Cost	\$25,527.93
Adjustment	-3		
Replacement Year	2037		
Remaining Life	16		

Appears to be deteriorating at a rate typical of its age. Sturdy component that can last for extended period of time if not damaged or abused. Clean, repair as needed from operating funds. Best to plan for eventual replacement at roughly the time frame indicated.

**Timberline Ridge HOA
Component Detail Reports**

Asphalt Pathways - Replace - 2038

		6,592 sf	@ \$5.77
Asset ID	1001	Asset Actual Cost	\$38,068.80
		Percent Replacement	100%
Category	Asphalt Surfaces	Future Cost	\$62,921.92
Placed in Service	August 2018		
Useful Life	20		
Replacement Year	2038		
Remaining Life	17		

Asphalt pathways at park were reportedly replaced in 2018 for approx. \$33,326. As routine maintenance, keep surface clean, repair cracks and clean oils stains promptly.

Most asphalt areas can be expected to last approximately 20 years before it will become necessary for major rehabilitation or replacement to be completed.

**Timberline Ridge HOA
Component Detail Reports**

Fence (split rail 2020) - Replace - 2040

Asset ID	1009	504 lf	@ \$21.82
Category	Fencing	Asset Actual Cost	\$10,997.28
Placed in Service	June 2020	Percent Replacement	100%
Useful Life	20	Future Cost	\$19,283.80
Replacement Year	2040		
Remaining Life	19		

Although rustic looking by design, this type of fencing will eventually need to be replaced due to constant weathering and exposure. Inspect regularly and repair as needed from operating budget. Plan for regular intervals of replacement at roughly the time frame indicated below.

Note: assumed to be left to weather naturally; no funding for seal/stain herein.

[Cost estimate provide by the Client based on recent completed project.](#)

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Definitions, Disclosure & Calculations Appendixes

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Abbreviations

ea = each	FY = fiscal year	If or lin ft = lineal feet	ls = lump sum
RL = remaining life	sf or sq ft = square feet	sy or sq yd= square yard	
UL = useful life	100 sq ft = 1 square)	% = percent	

1. Allocation %

A percentage of the total Reserve Allocation. See - Calculations Appendix

2. 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.

3. 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) and utilized to determine the approximate complex age. This parameter is provided for information only.

4. 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 following are two typical CID subdivision types:

- 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.).
- 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.*

5. 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.

6. Condition Assessment

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

7. 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.

8. 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.

9. Disbursement / Expenditures

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

10. Extended Cost

See - Calculations Appendix.

11. Fiscal Year (FY)

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

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

12. 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.

13. Funding Goal

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

- Baseline Funding- Maintaining a Net Reserve Balance above zero for length of the study.
- Full Funding- Maintaining a Reserve Balance at or near Percent Funded of 100%.
- Statutory Funding- Maintaining a specified Reserve Balance/Percent Funded per statutes.
- Threshold Funding- Establishing and maintaining a set predetermined Reserve Balance or Percent Funded.

14. 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:

- 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.
- Component Method- The component method develops a reserve-funding plan where the total contribution is based on the sum of contributions for individual components. The component method is the more conservative (typically higher reserve account balance) of the two funding options and assures that the association will achieve and maintain an ideal level of reserves over time. This method also allows for computations on individual components in the analysis. However, this method has also limitations with respects to variations in actual useful life of components and is much more time intensive to accurately follow this funding strategy.

Timberline Ridge HOA

Definitions, Disclosure & Calculations Appendixes

15. **Funding Plan**
The combined Funding Method & Funding Goal.
16. **FY End Balance (same as next FY Start Balance)**
The balance in reserves at end of applicable fiscal year. See - Calculations Appendix.
17. **FY Start Balance (same as prior year FY End Balance)**
The balance in reserves at start of applicable fiscal year.
18. **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'.
19. **Interest Earned**
The annual earning of reserve funds that have been deposited into certificates of deposit (CDs), money market accounts or other investment vehicles. See - Calculations Appendix.
20. **Interest Rate**
The ratio of the gain received from an investment and the investment over a period (usually one year), prior to any federal or state-imposed taxes.
21. **Interest Rate (net effective)**
The ratio of the gain received from an investment and the investment over a period (usually one year), after any federal or state-imposed taxes.
22. **Levels of Service**
- Level 1 Reserve Study** (Full or Comprehensive)- A Reserve Study in which the following five Reserve Study tasks are performed:
- Component Inventory
 - Condition Assessment (based upon on-site visual observations)
 - Life and Valuation Estimates
 - Fund Status
 - Funding Plan
- Level 2 Reserve Study** (Update, With-Site-Visit/On-Site Review)- A Reserve Study update in which the following five tasks are performed:
- Component Inventory (from prior study)
 - Condition Assessment (based upon on-site visual observations)
 - Life and Valuation Estimates
 - Fund Status
 - Funding Plan
 - *Note- Updates are reliant on the validity of prior Reserve Studies.
- 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:
- Life and Valuation Estimates (from prior study - updated)
 - Fund Status
 - Funding Plan
 - *Note- Updates are reliant on the validity of prior Reserve Studies.
23. **Percent Funded**
A comparison of the Fully Funded Balance (ideal balance) to the Fiscal Year Actual Start Balance expressed as a percentage and used to provide a 'general indication' of reserve strength. See Calculations Appendix.
24. **Quantity**
The number or amount of a reserve component or subcomponent.
25. **Remaining Life (RL)**
The estimated time, in years, that a reserve component can be expected to continue to serve its intended function.
26. **Replacement %**
A percentage of the total replacement for a reserve component or subcomponent. This parameter is normally 100%.
27. **Reserve Allocation**
The amount to be annually budgeted towards reserves based on a Funding Plan.
28. **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:
- association responsibility,
 - with limited useful life expectancies,
 - predictable remaining useful life expectancies,
 - above a minimum threshold cost,
 - and, as required by statutes.
29. **Restoration**
Defined as to bring back to an unimpaired or improved condition. General types follow:
- 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.
 - 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.
 - Landscape- In general, funding utilized to defray the cost (in whole or part) of sectional landscape areas including modernization to improve water conservation & drainage.
30. **Risk Factor (Percent Funded)**
The associated risk of the availability of reserves to fund expenditures by interpreting the Percent Funded parameter as follows:
- 70% and above- LOW
 - 30% to 70%- MODERATE
 - 30% and below- HIGH
- *High risk is associated with a higher risk for reliance on special assessments, loans and litigation.
31. **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.
32. **Unit of Measure**
A system of units used in measuring a reserve component or subcomponent (i.e. each, lineal feet, square feet, etc.).
33. **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.

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Disclosures Index

The below disclosures are in accordance with reserve study standards developed by CAI, APRA and statutory requirements.

1. **Items Beyond the Scope of this Report**

This reserve study has been conducted to outline a financial plan for the proper and adequate budgeting of the Association component repair and/or replacement. This report should not be utilized for any other purpose and should not be considered or deemed appropriate or reliable for, but not limited to, any of the following:

- Building or land appraisals for any purpose
- State or local zoning ordinance violations
- Building code violations
- Soils conditions, soils contamination or geological stability of site
- Engineering analysis or structural stability of site
- Air quality, asbestos, electromagnetic radiation, formaldehyde, lead, mercury, or radon
- Water quality or other environmental hazards
- Invasions by termites and any or all other destroying organisms or insects
- Damage or destruction due to pests, birds, bats or animals to buildings or site
- Adequacy or efficiency of any system or component on site
- Specifically excluded reserve items
- Septic systems and septic tanks
- Buried or concealed portions of swing pools, pool liners, Jacuzzis/spas or similar items
- Items concealed by signs, carpets or other things
- Missing or omitted information supplied by the Association for the purposes of reserve study preparation
- Hidden improvements such as sewer lines, water lines, or other buried or concealed items

2. **Qualifications**

We are a professional business in the market to prepare Reserve Studies. Our Reserve Analysts' are either designated with or working towards the RS and/or PRA designations which are given by the two leading industry organizations which require peer review, continuing education and provide resources to stay on top of industry trends.

3. **Invasive Testing**

Estimated life expectancies and life cycles are based upon conditions that were readily accessible and visible at the time of the site visit. We did not destroy any landscape work, building walls, or perform any methods of intrusive/invasive testing during the site visit. In these cases, information may have been obtained by contacting the contractor or vendor that has worked on the property. The physical analysis performed during this site visit is not intended to be exhaustive in nature and may include representative sampling.

4. **Conflicts of Interests**

As the preparer of this reserve study; the Reserve Analyst certifies that we do not have any vested interests, financial interests, or other interests that would cause a conflict of interest in the preparation of this reserve study.

5. **Representative Sampling**

This study and report is based on observations of the visible and apparent conditions of a reasonable representative sampling of the property's elements at the time of inspection. Although due diligence was performed during the inspection phase, we make no representations regarding latent or concealed defects that may exist. The inspection did not constitute any invasive investigations and was not intended to determine whether applicable building components, systems, or equipment are adequate or in compliance with any specific or commonly accepted design requirement, building code, or specification. Such tasks as material testing, engineering analysis, destructive testing, or performance testing of building systems, components, or equipment are not considered as part of the scope of work, nor are they considered by the reserve study industry standard.

6. **Reliance on Client & Vendor Data Provided**

Information provided to the preparer of a reserve study by an official representative of the association regarding financial, historical, physical, quantitative or reserve project issues will be deemed reliable by the preparer. A reserve study will reflect information provided to the preparer of the reserve study. The total of actual or projected reserves required as presented in the reserve study is based upon information provided that was not audited. A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. The results of this study are based on the independent opinion of the preparer and their experience and research during their career in preparing Reserve Studies. In addition, the opinions of experts on certain components have been gathered through research within their industry and with client's actual vendors. There is no implied warranty or guarantee regarding our life and cost estimates/predictions. There is no implied warranty or guarantee in any of our work product. Our results and findings will vary from another preparer's results and findings. A Reserve Study is necessarily a work in progress and subsequent Reserve Studies will vary from prior studies.

7. **Update to Prior Reserve Studies**

Level II Studies: Quantities of major components as reported in previous reserve studies are deemed to be accurate and reliable. The reserve study relies upon the validity of previous reserve studies. Level III Studies: In addition to the above we have not visited the property when completing a Level III "No Site Visit" study. Therefore, we have not verified the current condition of the common area components. It is assumed all prior study component information related to quantities, condition assessments, useful life and remaining useful life are accurate.

8. **Assumption Regarding Ongoing Maintenance**

The projected life expectancy of the major components and the funding needs of the reserves of the association are based upon the association performing appropriate routine and preventative maintenance for each major component. Failure to perform such maintenance can negatively impact the remaining useful life of the major components.

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9. Assumptions Regarding Defect in Design or Construction

This Reserve Study assumes that all construction assemblies and components identified herein are built properly and are free from defects in materials and/or workmanship. Defects can lead to reduced useful life and premature failure. It was not the intent of this Reserve Study to inspect for or to identify defects. If defects exist, repairs should be made so that the construction components and assemblies at the community reach their full and expected useful lives. We have assumed all components have been properly built and will reach normal, typical life expectancies. In general, a reserve study is not intended to identify or fund for construction defects. We did not and will not look for or identify construction defects during our site visit.

10. Basis of Cost Estimates

Pricing used for the repair or replacement costs indicated in this report are derived from a variety of sources, e.g., recent contractor bids received by subject property HOA or prior clients, construction product vendor catalogs, internet, or national construction cost estimating publishers (RS Means / Marshall & Swift). The material and labor pricing provided are estimates and have been augmented, as necessary, to account for specific site conditions (i.e. material handling, scaffolding, etc.). The total expenses represent a useful guideline whereby reserve funds can be accumulated for future repairs and replacements. The estimated repair and replacement expenses, unless otherwise noted, do not include allowances for architectural, engineering, or permitting fees.

11. Limitations on Report Use

A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. This Reserve Study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described. Additionally, other unanticipated expenses may arise that are not included within this reserve study. This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

12. WA State RCW 64.34.382 & WA State RCW 64.38.070

This reserve study includes all aspects required per WA State RCW requirements outlined in the Washington Condominium Act and the Homeowners' Association Act.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair, or replacement of a reserve component.

13. Disclosures Required by RCW 64.90.550.

This Reserve Study meets all requirements of the Washington Uniform Common Interest Ownership Act.

- a) This Reserve Study was prepared with the assistance of a reserve study professional and that professional was independent;
- b) This Reserve Study includes all information required by RCW 64.90.550 Reserve Study – Contents; and
- c) This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

Timberline Ridge HOA

Definitions, Disclosure & Calculations Appendixes

Calculations Index

1. **Allocation % =**
Reserve Allocation (Component Method) / Total Reserve Allocation (Component Method) x 100
2. **Current Cost =**
Extended Cost (for a component without subcomponents)
i. -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. **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
5. **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)
Accumulation Function and Amount Function
<https://www.reservedataanalyst.com/int>
6. **Percent Funded =**
(Reserve Account Balance / Fully Funded Balance) x 100
7. **Reserve Allocation (Component Method) =**
Current Cost / Useful Life

8. **Fully Funded Balance =**

Basic Fully Funded

There are two published methods of calculating Fully Funded. The first only considers the present value of a component. Present value in each period will change according to the inflation applied.

$$FullyFunded = (Age / Useful Life) * Present Value$$

Community Association Press Fully Funded

To account for inflation and interest earned on deposit the writers of 'RESERVE FUNDS: How & Why community Associations Invest Assets' came up with:

$$Basic_FF = (Age / Useful Life) * Present Value$$

$$CAI_FF = Basic_FF + Basic_FF / (1 + interest)^{Remaining\ Life} - Basic_FF / (1 + inflation)^{Remaining\ Life}$$

This is better than the basic method but still an approximation. The below formula most accurately incorporates inflationary and interest impact over time.

Annuity Due Fully Funded

To reach a more accurate future replacement cost the below formula is most accurate in that the component is actually fully funded when the projected is expected to occur whereas the above two formula come up slightly short (when inflation and interest rates are not the same):

$$Future\ Cost = (1 + inflation)^n * Current\ Cost$$

$$n = Years\ Until\ Replacement$$

Then get the payment needed for the full-term replacement, (using useful life) with equation (2)

Finally, get the future value of the Annuity Due with equation (1) using the age of the component for n. The result is an Annuity Due Fully Funded

Note: The "Basic" formula for the Fully Funded Balance is utilized by most companies in the reserve study industry however this formula is not the most accurate. The above Annuity Formula is most accurate for mathematical calculations over time. More info can be found at the following link:
www.reservedataanalyst.com/math

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	Total Funded Assets	22	
	Total Unfunded Assets	<u>0</u>	
	Total Assets	22	