



RESERVE DATA ANALYST

Sample HOA

Acme City, USA

Level 1 Reserve Study (With Site Inspection)

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Report Number: Sample

Report Version: Final

Reserve Data Analyst

www.reservedataanalyst.com

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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

The recommendations for the allocation rates of the different funding models are only for the beginning year of this reserve study; all future years are projections which are educated guesses and have numerous assumptions (e.g., inflation, proper maintenance, proper installation, known reserve account balances, etc.) built into the models. The further out in time a reader of the study goes, the less reliable the projections are likely to be.

From year to year the recommendations of the reserve analyst will typically change (sometimes significantly) based on variables such as what projects have been done, what projects has been deferred, changes to the allocation rate, changes to the starting balance, changes to the component list, actual inflation rate figure (versus projections), maintenance or lack of maintenance of components, etc. Annual updates to this report help to incorporate changes to these variables as they occur so revisions to the recommendations are less significant than if updates are done infrequently.

To view a list of disclosures, definition and calculations (formulas) that this study is based off of please visit our website at www.reservedataanalyst.com/disclosures

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 navigate this study more easily, we recommend printing out the Table of Contents/Component Index page(s) at the beginning of the study.

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: (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 – Chart & Spreadsheet)

- > Various funding models with different goals in mind. (Comments On Each Projections Page)

Organization Name	Sample HOA
Organization Location	Acme City, USA
# of Contributing Members	12
Approximate Year of Construction	2002
Fiscal Year Time Period	January 1st - December 31st
Level of Service	Level 1 Reserve Study (With Site Inspection)
Prepared for Fiscal Year	2025
Last On-Site Inspection Date	February 15, 2024
Inflation Rate for Projections	3.50%
*Rate of Return (APR) for Account Balances**	2.25%
*Tax Rate on Interest Earned**	30.00%
Funding Plan Method	Inflation Adjusted Pooled Cash Flow Method

Reserve Account Summary

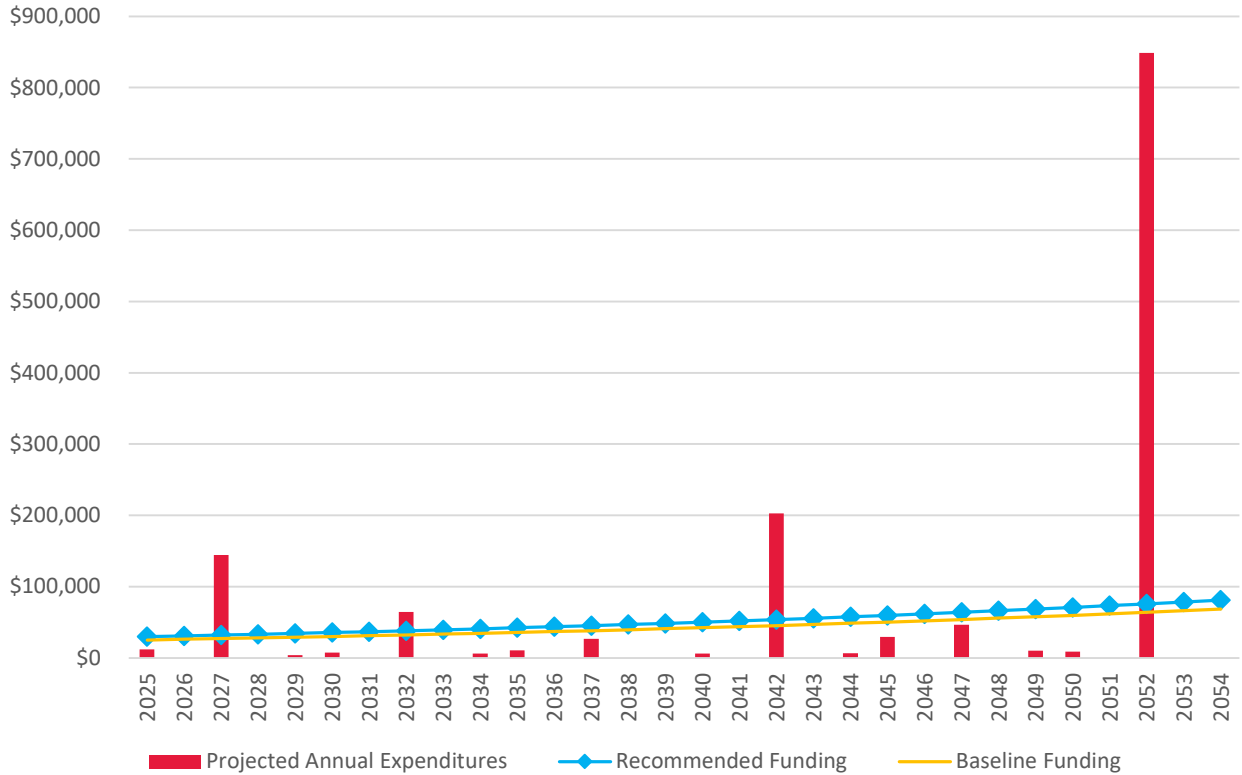
<p>Current Percent Funded</p> <p>41.1%</p>	<p>*Estimated Beginning Balance</p> <p>Current Fully Funded Balance</p>	<p>\$123,750</p> <p>\$300,753</p>	<p>Risk Indicator</p> <p>High Risk</p>
	Reserve Account Surplus or (Deficit)	(\$177,003)	
	Avg. Surplus or (Deficit) Per Member	(\$14,750)	
	*Current - Reserve Allocation Rate	\$5,750	
	*Approved Special Assessment(s)	N/A	
	*Approved Loan(s) Amount	N/A	
<p><i>A low percent funded range for any significant period of time carries a high risk for having to rely on emergency financing. Our risk rating is the 10 year average percent funded from the Current Model's projections.</i></p>			

Funding Model Reserve Allocation Rates & Year-End % Funded - 10 Year Summary

	100% Funded		Recommended		Baseline		**Current**		
2025	\$206,135	100.9%	\$29,950	45.0%	\$25,275	43.5%	\$5,951	37.4%	2025
2026	\$26,000	100.4%	\$30,998	50.3%	\$26,160	47.6%	\$6,160	36.2%	2026
2027	\$25,000	100.1%	\$32,083	27.9%	\$27,075	21.6%	\$6,375	-4.3%	2027
2028	\$29,000	100.6%	\$33,206	37.5%	\$28,023	29.9%	\$6,598	-1.4%	2028
2029	\$29,000	100.6%	\$34,368	44.6%	\$29,004	35.9%	\$6,829	-0.2%	2029
2030	\$30,015	100.5%	\$35,571	50.2%	\$30,019	40.3%	\$7,068	-0.4%	2030
2031	\$31,066	100.3%	\$36,816	56.0%	\$31,069	45.4%	\$7,316	1.7%	2031
2032	\$32,153	100.1%	\$38,105	53.3%	\$32,157	40.0%	\$7,572	-15.0%	2032
2033	\$36,000	100.4%	\$39,438	59.0%	\$33,282	45.2%	\$7,837	-11.3%	2033
2034	\$37,260	100.6%	\$40,819	63.1%	\$34,447	48.8%	\$8,111	-9.9%	2034
~ 100% funded at end of each fiscal year.		Achieve 100% funded within projections.		Account stays above \$0 for projections.		Current allocation rate has been supplied by the Client.			

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

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.

One of the greatest challenges when planning for reserve budgeting is creating and implementing a funding model that is stable and fair while also adequate to cover reserve project expenditures that are typically infrequent and erratic. This is particularly true for reserve accounts that drop to low levels of funding; there will be a need to catch up the reserve account to a more suitable level while also being as fair and stable as possible as time progresses.

We have created numerous funding models with various goals in mind; the above models (Recommended & Baseline) adhere to the principle of having stability going forward in time while also covering the projected annual reserve expenditures. Their respective annual allocation rates (lines on the chart) are shown compared to the annual reserve expenditures (columns on the chart) within the timeframe of the projections. Note the relative stableness of the annual funding model allocation rates versus the infrequent and erratic nature of the reserve expenditures.

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:

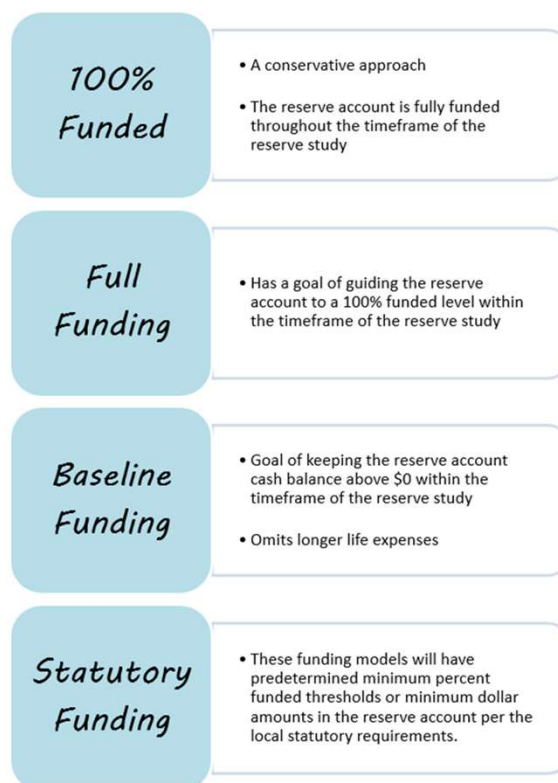
- Distribute the costs as fairly as possible over time.
- Have stable budgets over time (i.e., limiting large fluctuations from one year to the next)
- Limit the risk of reliance on emergency financing or having to defer overdue projects.

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

This 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. This report should reflect the replacement dates of the components utilizing average or historical records for the useful lives & costs for these projects; the useful lives can be updated to reflect actual on-site conditions as the components age and in updates to this report. Should the Client decide to make budgeting decisions such as deferring projects (typically due to a lack of funds) and that appear to be overdue carries its own risk with relation to scenarios like higher project costs later and marketability issues.

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:



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

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

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:

- It's 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.

When to Complete Reserve Projects?

Components should be replaced when they are no longer functioning as designed. This is best determined by your component specific Vendor who can inspect and give their best professional advice on the condition assessment and timeframe on when/what needs to be done. Note that this reserve study is ***not*** a “to do list”; it is a budgeting document with

recommendations for when we suggest having the funds allocated towards the projects. If something fails earlier than projected then replace it, if it lasts longer (as determined by your component specific Vendor) then take their advice as they are the professionals in their specific field. Projects should be completed when they need to be completed regardless of our projections in the study. Note that this does not mean it would be appropriate to delay projects simply because funds are not available though as that is a budgeting decision not based on component specific Vendor recommendations. A common issue we see is the delay of projects simply because there is a lack of reserve funds available, only to have a much larger and more expensive project later due to collateral.

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.

Virtually all the components should receive regular cycles of inspection and repairs 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.



www.reservedataanalyst.com/RSmeans:

Recommendations Versus Projections

In the reserve study the Reserve Analyst's *recommendations* for the allocation rates of the different funding models apply only to the year the reserve study is being developed for. All *projections* in the study are future educated guesses with assumptions about a significant number of variables (e.g., inflation rate, financial, component useful life, component remaining useful life, proper maintenance, etc.).

Projections can be accurate or extremely inaccurate based on these assumptions; because of this we do not suggest giving much consideration to projections in the decision making for overall reserve budgeting. This may sound counter-intuitive, but this is due to recommendations for the allocation rates, in the initial year of the study, being based on predominantly current known factors (e.g., *current costs, current inflation, current maintenance practices*) versus projections which are based on future assumptions to a variety of variables (e.g., *future costs, future inflation rates, and future maintenance practices*). Follow the below link to our website to learn more about recommendations versus projections.



www.reservedataanalyst.com/projections

You Have a 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 these simple rules when creating and implementing a reserve budget.

Actionable

Is your goal possible within the constraints & limitations of very important but often overlooked factors related to statutory requirements and the governing documents?

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?

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.



<https://www.reservedataanalyst.com/ace>

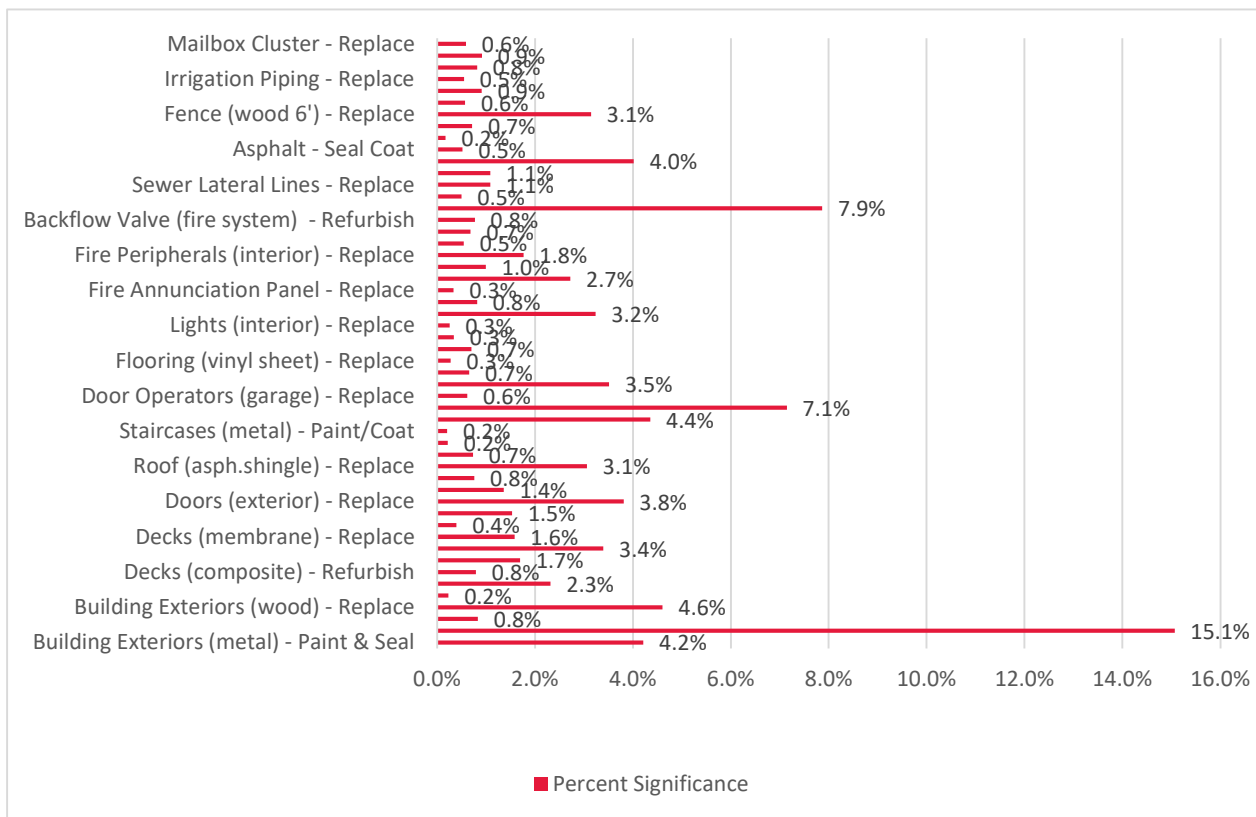
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ID	Component Description	Allocation/Delay Year	Replace Year	Useful Life (UL)	Age Adjustment	Remaining UL	Quantity	Qty. Type	Cost Per Qty.	% Replace	Current Cost	% Significance
Totals \$551,160 100.0%												
>> Building Exterior Components <<												
1770	Building Exteriors (metal) - Paint &	2022	2032	10	7	4,885 sf			\$4.75	100.0%	\$23,204	4.2%
1780	Building Exteriors (metal) - Replace	2002	2052	50	27	4,885 sf			\$17.00	100.0%	\$83,045	15.1%
1940	Building Exteriors (wood) - Paint &	2022	2027	5	2	1,612 sf			\$2.85	100.0%	\$4,594	0.8%
1950	Building Exteriors (wood) - Replace	2002	2052	50	27	1,612 sf			\$15.75	100.0%	\$25,389	4.6%
2340	Deck Railings (metal) - Paint	2022	2032	10	7	68 lf			\$18.85	100.0%	\$1,282	0.2%
2350	Deck Railings (metal) - Replace	2002	2042	40	17	68 lf			\$188.00	100.0%	\$12,784	2.3%
2400	Decks (composite) - Refurbish	2002	2027	25	2	104 sf			\$42.00	100.0%	\$4,368	0.8%
2410	Decks (comp./superstructure) -	2002	2052	50	27	104 sf			\$90.00	100.0%	\$9,360	1.7%
2420	Decks (mem./superstructure) -	2002	2042	40	17	208 sf			\$90.00	100.0%	\$18,720	3.4%
2450	Decks (membrane) - Replace	2041	2062	20	37	208 sf			\$42.00	100.0%	\$8,736	1.6%
2470	Decks (membrane) - Topcoat & Non-	2022	2027	5	2	208 sf			\$10.50	100.0%	\$2,184	0.4%
2740	Doors (garage double) - Paint	2031	2042	10	17	1,250 sf			\$6.75	100.0%	\$8,438	1.5%
2750	Doors (exterior) - Replace	2022	2072	50	47	12 ea			\$1,750.00	100.0%	\$21,000	3.8%
2790	Doors (garage double) - Replace	2002	2032	30	7	2 ea			\$3,750.00	100.0%	\$7,500	1.4%
4800	Lights (double security) - Replace	2022	2047	25	22	8 ea			\$525.00	100.0%	\$4,200	0.8%
6970	Roof (asph.shingle) - Replace	2002	2027	25	2	25 sq			\$675.00	100.0%	\$16,875	3.1%
7310	Roof Gutters & Downs. - Replace	2002	2027	25	2	278 lf			\$14.50	100.0%	\$4,031	0.7%
7360	Roof Skylights - Replace	2002	2027	25	2	16 sf			\$75.00	100.0%	\$1,200	0.2%
7751	Staircases (metal) - Paint/Coat	2022	2032	10	7	150 sf			\$7.50	100.0%	\$1,125	0.2%
7760	Staircases (metal) - Replace	2002	2052	50	27	150 sf			\$160.00	100.0%	\$24,000	4.4%
8400	Windows (vinyl) - Replace	2002	2052	50	27	525 sf			\$75.00	100.0%	\$39,375	7.1%
>> Building Interior Components <<												
2710	Door Operators (garage) - Replace	2014	2029	15	4	4 ea			\$850.00	100.0%	\$3,400	0.6%
2840	Doors (storage) - Replace	2002	2052	50	27	9 ea			\$2,150.00	100.0%	\$19,350	3.5%
3820	Flooring (pedestrian coat) - Recoat	2018	2025	5	0	330 sf			\$11.00	100.0%	\$3,630	0.7%
3900	Flooring (vinyl sheet) - Replace	2002	2027	25	2	108 sf			\$14.00	100.0%	\$1,512	0.3%
4430	Interior Surfaces - Paint	2012	2025	10	0	3,500 sf			\$1.10	100.0%	\$3,850	0.7%
4820	Lights (exterior) - Replace	2002	2027	25	2	12 ea			\$156.74	100.0%	\$1,881	0.3%
4830	Lights (interior) - Replace	2002	2027	25	2	8 ea			\$175.00	100.0%	\$1,400	0.3%
>> Electrical / Plumbing / Fire <<												
3010	Electrical System (outside) -	2002	2042	40	17	5,100 sf			\$3.50	100.0%	\$17,850	3.2%
3090	Entry Access Panel - Replace	2019	2034	15	9	1 ea			\$4,500.00	100.0%	\$4,500	0.8%
3410	Fire Annunciation Panel - Replace	2002	2027	25	2	1 ea			\$1,850.00	100.0%	\$1,850	0.3%
3420	Fire BDA System - Replace	2002	2027	25	2	1 ea			\$15,000.00	100.0%	\$15,000	2.7%
3430	Fire Control Panel - Replace	2002	2027	25	2	1 ea			\$5,500.00	100.0%	\$5,500	1.0%

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ID	Component Description	Allocation/Delay Year	Replace Year	Useful Life (UL)	Age Adjustment	Remaining UL	Quantity	Qty. Type	Cost Per Qty.	% Replace	Current Cost	% Significance
3530	Fire Peripherals (interior) - Replace	2002	2027	25	2		30 ea		\$325.00	100.0%	\$9,750	1.8%
4290	Heaters (wall fan) - Replace	2002	2027	25	2		4 ea		\$750.00	100.0%	\$3,000	0.5%
5280	Backflow Valve (domestic water) -	2002	2027	25	2		1 ea		\$3,750.00	100.0%	\$3,750	0.7%
5290	Backflow Valve (fire system) -	2002	2027	25	2		1 ea		\$4,250.00	100.0%	\$4,250	0.8%
5360	Drain/Waste/Supply Lines - Replace	2002	2057	55	32		5,100 sf		\$8.50	100.0%	\$43,350	7.9%
5400	Hot Water Heater - Replace	2015	2030	15	5		1 ea		\$2,750.00	100.0%	\$2,750	0.5%
5440	Sewer Lateral Lines - Replace	2002	2057	55	32		50 lf		\$120.00	100.0%	\$6,000	1.1%
5490	Water Lateral Lines - Replace	2002	2057	55	32		50 lf		\$120.00	100.0%	\$6,000	1.1%
>> Site Components <<												
1140	Asphalt - Overlay/Resurface	2002	2027	25	2		7,500 sf		\$2.95	100.0%	\$22,125	4.0%
1160	Asphalt - Seal Coat	2022	2027	5	2		7,500 sf		\$0.38	100.0%	\$2,850	0.5%
2160	Concrete Sidewalks (public) - 15%	2002	2027	5	20	2	304 sf		\$21.00	15.0%	\$958	0.2%
2220	Concrete Surfaces (private) - 15%	2002	2027	5	20	2	1,247 sf		\$21.00	15.0%	\$3,928	0.7%
3370	Fence (wood 6') - Replace	2002	2027	25	2		275 lf		\$63.00	100.0%	\$17,325	3.1%
3390	Fence (wood) - Paint/Stain	2022	2027	5	2		275 lf		\$11.50	100.0%	\$3,163	0.6%
4020	Gate (pedestrian) - Replace	2002	2042	40	17		1 ea		\$5,015.38	100.0%	\$5,015	0.9%
4530	Irrigation Piping - Replace	2002	2042	40	17		1,260 sf		\$2.40	100.0%	\$3,024	0.5%
4620	Landscape Site Drainage - Replace	2002	2025	20	0		1 ls		\$4,500.00	100.0%	\$4,500	0.8%
4640	Landscaping - Refurbish	2022	2042	20	17		1,260 sf		\$4.00	100.0%	\$5,040	0.9%
4950	Mailbox Cluster - Replace	2002	2027	25	2		1 ea		\$3,250.00	100.0%	\$3,250	0.6%

Component % Significance



The above chart illustrates the current cost breakdown (by percent) of the Component that are included in the mathematical models. 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 Funding Model Projections and the Expenditure Spreadsheet elements of this study for the projected timeline of expected expenditures.

*Note that the Current Model has it's own chart later in this reserve study.

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.

Long Life Components

If properly constructed the below components are long life components which, currently, have no predictable useful life, predictable remaining useful life, or predictable associated replacement costs. As these components age and a history of repair/replacement needs becomes evident or there are failures then we suggest reevaluating these systems and having them inspected by qualified vendors. Future updates to the reserve study should be revised accordingly.

- > Retaining Walls - Rockeries & Concrete

Operating Account Expenses

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

- > Storm Water System Maintenance - We recommend setting up an annual contract with a Vendor.
- > Ongoing Landscaping & Tree Care
- > Minor Irrigation System Repairs (e.g., sprinkler heads, valve replacement, controllers/timers)

Maintenance & Inspections

The Client stated that they have been working with the Vendors for ongoing maintenance of components. Note that a lack of ongoing maintenance at any point in the past or future can significantly reduce the useful life of components. It is assumed that all proper maintenance has and will be completed per the component specific Vendor's recommendations (unless otherwise noted). It is assumed all inspections will be completed per local statute and are assumed to be paid for from the operational account, as reported by the Client (unless otherwise noted).

Fully Funded Balance, Age Adjustments, Delay Funding, Repeat Function, Percent Replace & Risk Indicator Comments

Fully Funded Balance

The Fully Funded balance age calculations for each component has been adjusted if a component has been superseded by another component, received a positive or negative life adjustment, been set to delayed. These adjustments are needed so that the fully funded balance mathematical calculation for each component is accurate and appropriately contributes to the total fully balance calculation (located on the executive summary, projection and fully funded balance calculations pages) for all components in this reserve study.

Install / Allocation / Delay Year

In this reserve study you will find reference to a heading which shows Allocation/Delay Year. This refers to the date that allocation to this component was started (typically the approximate year it was last built and/or replaced). However sometimes allocation towards a component is not based on the install date and may be a date that is based on a future year (often so that projects coincide with one another) regardless of when they were last constructed or if the last replacement date is not known. If the delay function is utilized the allocation towards the component is not started until after the date listed in this column (i.e., the fully funded balance has been set to zero through the year listed - see below "Delay Funding" comments).

Age Adjustments

Age adjustment may be utilized for a variety of scenarios including; a component is deteriorating faster or slower than is typical and/or initially projected, to align projects dates so that they may coincide with one another for cost efficiencies, to align the reserve study with budgeting decisions, etc.

Delay Funding

When the delayed funding function has been used for any specific component the corresponding fully funded balance is set to zero in subsequent years until funding is to begin. Note that delaying a components funding in the reserve account is typically done so that projects are not being double funded in any specific time period (e.g., paying for immature tree care from the operational account until they reach an age and size that their expense is large enough to cause issues budgeting for them operationally).

Repeat Function

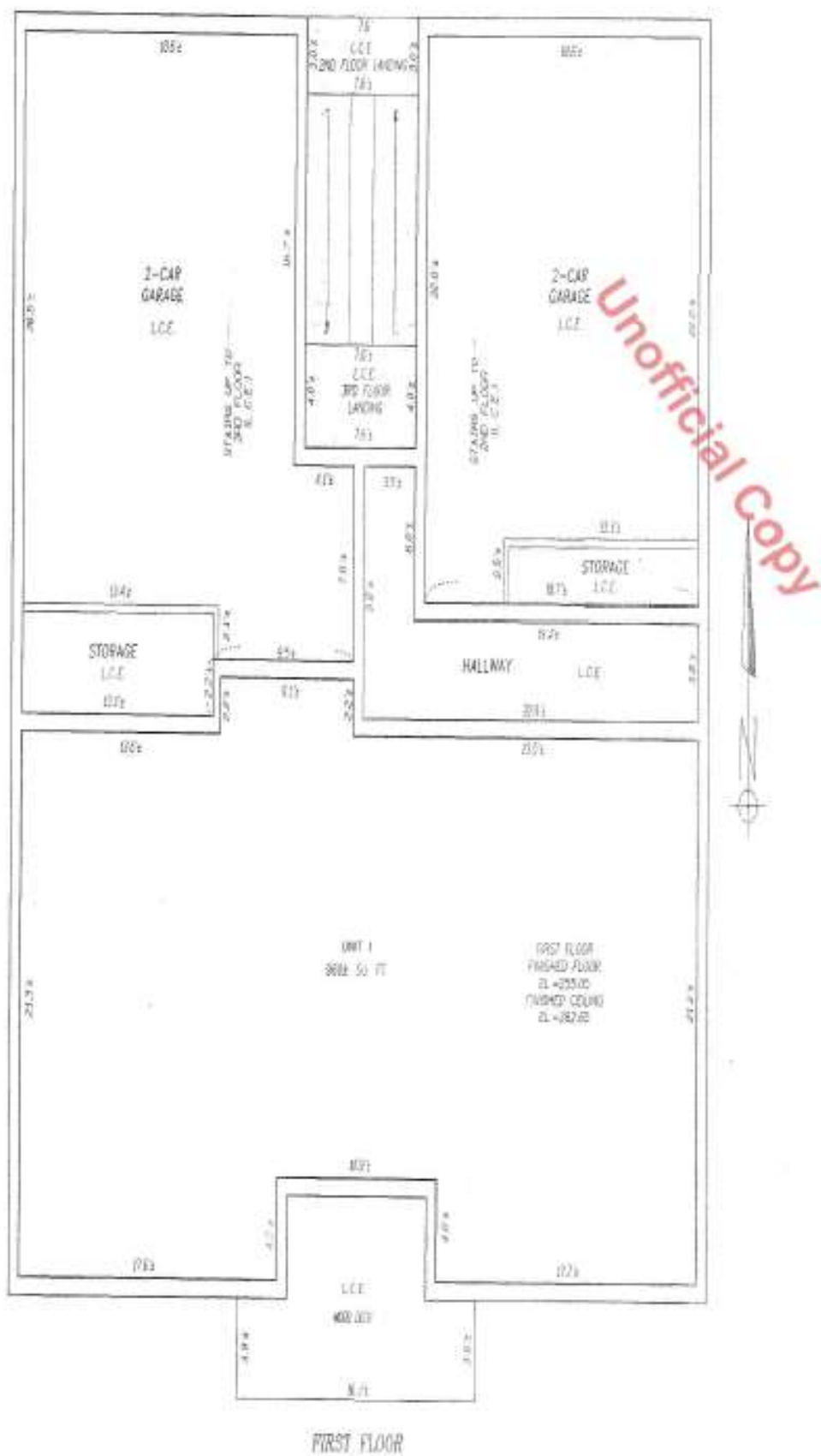
The repeat function is most often utilized when we are seeking to limit the number of cycles a component has in the future. This can be due to decommissioning a component at a particular date, a repair component date that comes before a replacement component date, when we are seeking to target a specific time period for funding but which ends after completion (e.g., a tree removal project over numerous years but that ends at a particular date).

Percent Replace

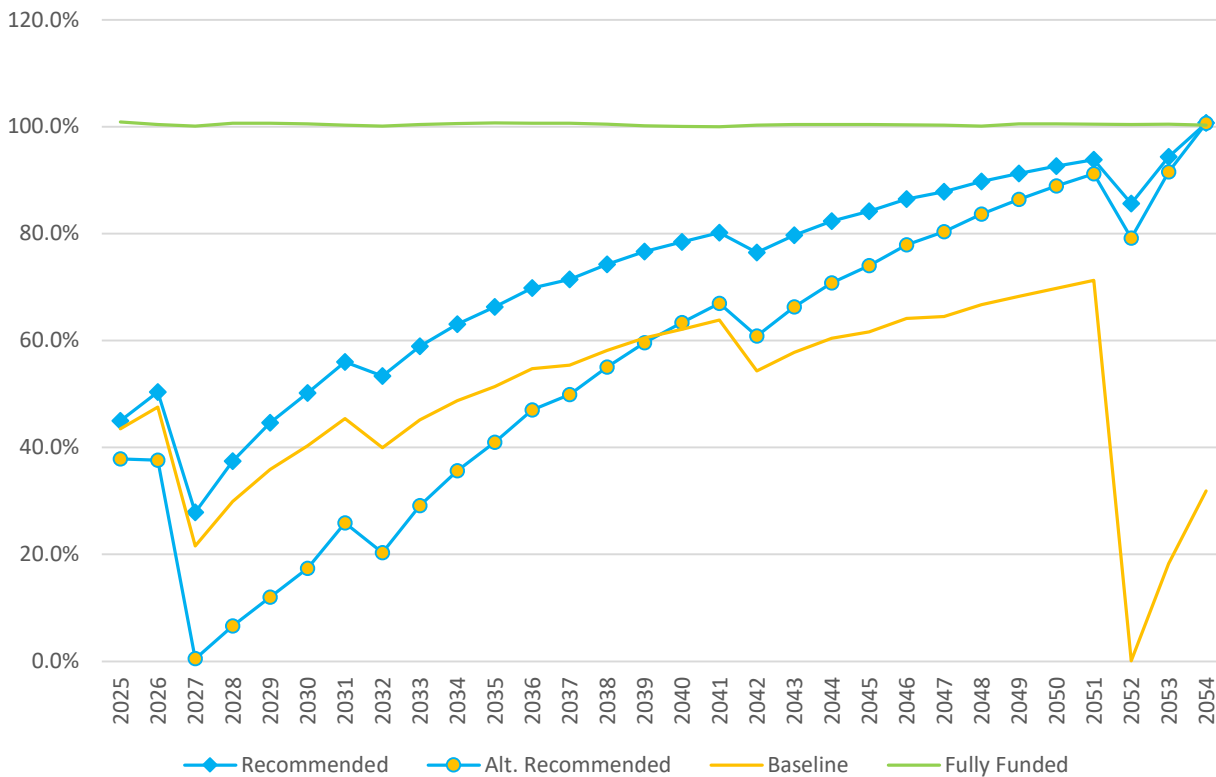
The percent replace option is utilized when we recommend funding for something other than total replacement. This is most often done with components which do not tend to all fail in a similar time frame (e.g., concrete sidewalks which are most often damaged by underlying root intrusion and drainage issues than actual deterioration. Problem areas tend to be a reoccurring problem while others areas have little to no need to fund for replacement.) We will also utilize the percent replace option if the Client is responsible for less than 100% of the project cost (e.g., a shared fence where costs for replacement are being split with a neighboring parcel 50%-50%).

Risk Indicator

We utilize a risk indicator on the Executive Summary page which is an average Percent Funded over the initial 10 years of the reserve study. We have found an average over time to be a more accurate reflection of risk in the near future than just the Percent Funded calculation. While Percent Funded is a very reliable indicator of risk in the fiscal year the study has been developed for it can often be misleading as the years pass. Examples of this would be a community which has a good funded level but which has an allocation rate that is too low; the Percent Funded calculation can fall into the low funded range in a very short time period. Conversely a community can rapidly go from a low funded level to a good funded level in a short time period with significant changes to their reserve budgeting.



Percent Funded Chart



The above chart compares the funding models by the percentage funded levels over the timeframe of the projections, as calculated at the end of each fiscal year.

The **Recommended Funding Model** increases the Client's reserve account Percent Funded Level to 100% funding within the timeframe of the projections in this report. Once this 100% funded level is reached it is a good indicator that the reserve account is on track to meet its future obligations with minimal risk of reliance on emergency financing or having to defer projects that come due. Note that the Recommended Model is not necessarily a low risk, no risk or ideal model to follow. It simply has a goal of guiding the reserve account to a 100% funded level within the timeframe of projections.

The **Alt. Recommended Funding Model** has been included as an alternative to the regular Recommended Model (which utilizes an annual reserve contribution percentage increase rate that is similar to the inflation rate). This alternative model has a goal of reaching 100% funded by the end of a 30-year period but starts with a higher or lower reserve allocation rate and increases at a significantly higher or lower annual percentage increase (i.e., the annual reserve allocation percentage change is significantly higher or lower than the projected inflation rate) until the reserve account reaches the 100% funded level by the end of the 30-years of projections.

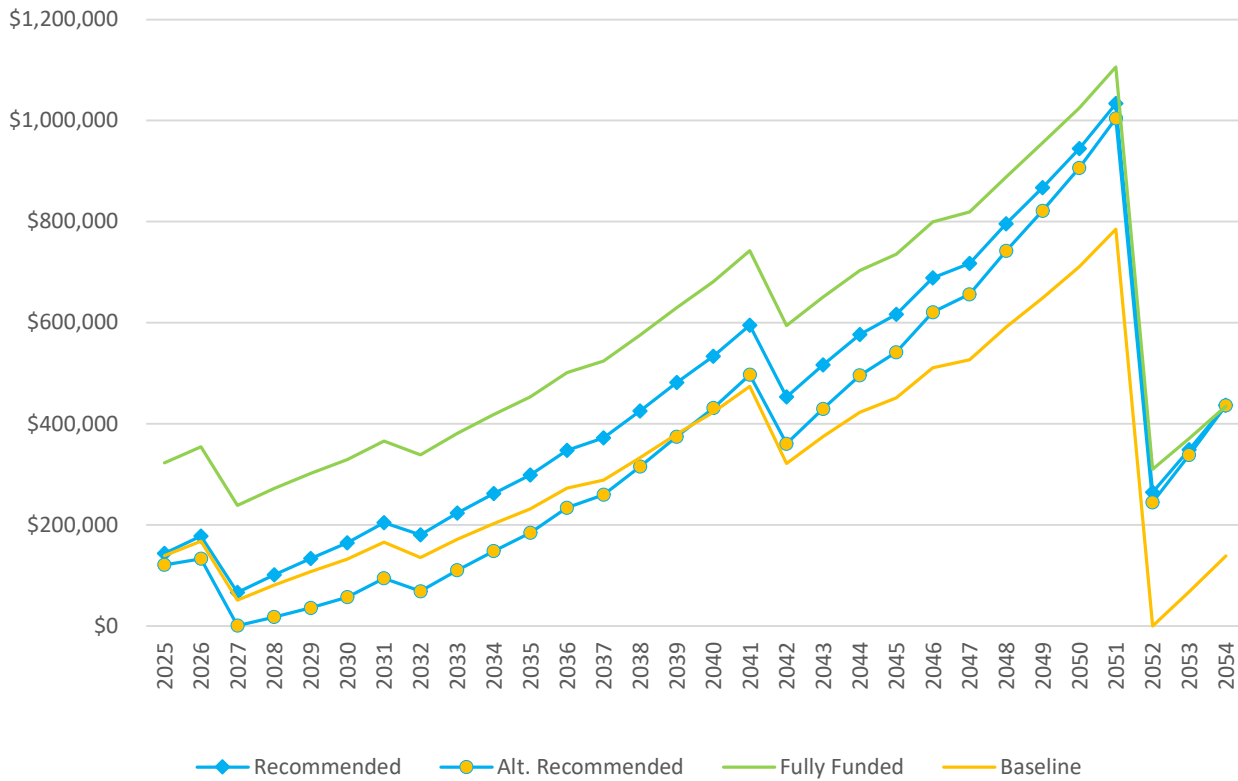
The **Baseline Funding Model** has a goal of only keeping the reserve account cash positive within the timeframe of the projections (i.e., at some point within the timeframe of the projections the reserve account is depleted to near \$0). This model carries significant risk for reliance on emergency 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 **Fully Funded Model** has a goal of maintaining the reserve account to a minimum of 100% Funded in each year of the projections. This model minimizes risk for reliance on emergency financing and deferred maintenance and places the reserve account on a low-risk path for budgeting of future reserve expenditures.

The **Current Funding Model** is based on the reserve allocation rate supplied by the Client as of the date of this study; it has not been independently verified and is assumed to be correct.

*Note that the Current Model has it's own chart later in this reserve study.

Reserve Balance Chart



The chart above compares the annual year-end balance of the reserve account for the respective funding models over the timeframe covered in in the projections. Projected reserve account balances (funding model lines) will often have large fluctuations from year to year due to projects occurring in any given year (red columns).

There is often an incorrect perception that the reserve account funds grow and just "sit" in the reserve account indefinitely. In actuality the reserve funds should be allowed to accumulate over time so that there are adequate funds when the reserve projects are projected to occur.

*Note that the Current Model has it's own chart later in this reserve study.

Full Funded Model

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

While being at a 100% funded level is considered ideal it has been our experience that it is frequently not realistic due to a lack of funds that would need to be deposited into the reserve account to elevate it to a 100% funded level in the initial year of the projections. The initial year allocation percentage increase/decrease is the change from the Client provided current reserve allocation amount.

	Total Asset Cost	Allocation Rate	Allocation % Change	Net Interest	Special Assessments	Annual Expenditures	Year End Account Balance	Year End FFB	Year End % Funded
2025	\$570,450	\$206,135	3485.0%	\$5,007		\$11,980	\$322,912	\$319,960	100.9%
2026	\$590,416	\$26,000	-87.4%	\$5,495		\$0	\$354,407	\$352,976	100.4%
2027	\$611,081	\$25,000	-3.8%	\$3,702		\$144,340	\$238,769	\$238,518	100.1%
2028	\$632,468	\$29,000	16.0%	\$4,217		\$0	\$271,987	\$270,238	100.6%
2029	\$654,605	\$29,000	0.0%	\$4,679		\$3,902	\$301,764	\$299,847	100.6%
2030	\$677,516	\$30,015	3.5%	\$5,106		\$7,577	\$329,308	\$327,535	100.5%
2031	\$701,229	\$31,066	3.5%	\$5,676		\$0	\$366,049	\$364,910	100.3%
2032	\$725,772	\$32,153	3.5%	\$5,254		\$64,615	\$338,841	\$338,567	100.1%
2033	\$751,174	\$36,000	12.0%	\$5,904		\$0	\$380,745	\$379,149	100.4%
2034	\$777,465	\$37,260	3.5%	\$6,487		\$6,133	\$418,359	\$415,810	100.6%
2035	\$804,676	\$38,564	3.5%	\$7,030		\$10,551	\$453,402	\$450,222	100.7%
2036	\$832,840	\$39,914	3.5%	\$7,770		\$0	\$501,086	\$497,837	100.7%
2037	\$861,989	\$41,311	3.5%	\$8,122		\$26,710	\$523,808	\$520,588	100.6%
2038	\$892,159	\$42,757	3.5%	\$8,923		\$0	\$575,488	\$572,934	100.4%
2039	\$923,385	\$44,253	3.5%	\$9,761		\$0	\$629,503	\$628,306	100.2%
2040	\$955,703	\$47,000	6.2%	\$10,559		\$6,082	\$680,980	\$680,559	100.1%
2041	\$989,153	\$50,000	6.4%	\$11,513		\$0	\$742,493	\$742,214	100.0%
2042	\$1,023,773	\$45,000	-10.0%	\$9,212		\$202,576	\$594,130	\$592,411	100.3%
2043	\$1,059,605	\$46,575	3.5%	\$10,091		\$0	\$650,796	\$648,216	100.4%
2044	\$1,096,691	\$48,205	3.5%	\$10,906		\$6,537	\$703,371	\$700,436	100.4%
2045	\$1,135,075	\$49,892	3.5%	\$11,402		\$29,310	\$735,356	\$732,185	100.4%
2046	\$1,174,803	\$51,639	3.5%	\$12,395		\$0	\$799,389	\$796,695	100.3%
2047	\$1,215,921	\$53,446	3.5%	\$12,698		\$46,630	\$818,903	\$816,563	100.3%
2048	\$1,258,478	\$55,316	3.5%	\$13,769		\$0	\$887,989	\$886,795	100.1%
2049	\$1,302,525	\$63,000	13.9%	\$14,816		\$10,275	\$955,530	\$950,310	100.5%
2050	\$1,348,114	\$62,000	-1.6%	\$15,891		\$8,579	\$1,024,843	\$1,019,312	100.5%
2051	\$1,395,298	\$64,170	3.5%	\$17,152		\$0	\$1,106,164	\$1,101,169	100.5%
2052	\$1,444,133	\$48,000	-25.2%	\$4,810		\$848,739	\$310,236	\$309,064	100.4%
2053	\$1,494,678	\$55,000	14.6%	\$5,752		\$0	\$370,989	\$369,352	100.4%
2054	\$1,546,991	\$56,925	3.5%	\$6,740		\$0	\$434,653	\$433,482	100.3%

Beginning Balance: \$123,750

Annual Inflation Rate: 3.50%

Interest Rate: 2.25%

Recommended Funding Model

We have developed a funding plan which will help steer the reserve account into a high funded range within the 30-year projection timeframe. This Recommended Funding Model requires the Client allocate the recommended allocation amount into the reserve account with annual increases thereafter to offset inflationary factors.

This Recommended Funding Plan Considers 4 Basic Principles; there are adequate reserves when needed, the budget should remain stable but increasing to offset inflationary factors, the costs are fairly distributed over time, and the funding plan must allow the Client to be fiscally responsible.

Note that the Recommended Model is not necessarily a low risk, no risk or ideal model to follow (especially if the reserve account is currently significantly underfunded). It simply has a goal of having the reserve account reach 100% funded by the end of a 30-year period. An "ideal" model to follow would be the 100% funded model as this model has the reserve account funded to a minimum 100% funded level each year of the study and there would be low risk for reliance on special assessments and/or loans even if unexpected occurrences came to fruition.

	Total Asset Cost	Allocation Rate	Allocation % Change	Net Interest	Special Assessments	Annual Expenditures	Year End Account Balance	Year End FFB	Year End % Funded
2025	\$570,450	\$29,950	420.9%	\$2,232		\$11,980	\$143,952	\$319,960	45.0%
2026	\$590,416	\$30,998	3.5%	\$2,755		\$0	\$177,706	\$352,976	50.3%
2027	\$611,081	\$32,083	3.5%	\$1,031		\$144,340	\$66,480	\$238,518	27.9%
2028	\$632,468	\$33,206	3.5%	\$1,570		\$0	\$101,256	\$270,238	37.5%
2029	\$654,605	\$34,368	3.5%	\$2,075		\$3,902	\$133,797	\$299,847	44.6%
2030	\$677,516	\$35,571	3.5%	\$2,548		\$7,577	\$164,339	\$327,535	50.2%
2031	\$701,229	\$36,816	3.5%	\$3,168		\$0	\$204,323	\$364,910	56.0%
2032	\$725,772	\$38,105	3.5%	\$2,801		\$64,615	\$180,614	\$338,567	53.3%
2033	\$751,174	\$39,438	3.5%	\$3,466		\$0	\$223,518	\$379,149	59.0%
2034	\$777,465	\$40,819	3.5%	\$4,067		\$6,133	\$262,270	\$415,810	63.1%
2035	\$804,676	\$42,247	3.5%	\$4,630		\$10,551	\$298,596	\$450,222	66.3%
2036	\$832,840	\$43,726	3.5%	\$5,392		\$0	\$347,714	\$497,837	69.8%
2037	\$861,989	\$45,257	3.5%	\$5,769		\$26,710	\$372,029	\$520,588	71.5%
2038	\$892,159	\$46,840	3.5%	\$6,597		\$0	\$425,467	\$572,934	74.3%
2039	\$923,385	\$48,480	3.5%	\$7,465		\$0	\$481,411	\$628,306	76.6%
2040	\$955,703	\$50,177	3.5%	\$8,277		\$6,082	\$533,783	\$680,559	78.4%
2041	\$989,153	\$51,933	3.5%	\$9,225		\$0	\$594,941	\$742,214	80.2%
2042	\$1,023,773	\$53,751	3.5%	\$7,026		\$202,576	\$453,142	\$592,411	76.5%
2043	\$1,059,605	\$55,632	3.5%	\$8,013		\$0	\$516,787	\$648,216	79.7%
2044	\$1,096,691	\$57,579	3.5%	\$8,943		\$6,537	\$576,773	\$700,436	82.3%
2045	\$1,135,075	\$59,594	3.5%	\$9,561		\$29,310	\$616,619	\$732,185	84.2%
2046	\$1,174,803	\$61,680	3.5%	\$10,683		\$0	\$688,982	\$796,695	86.5%
2047	\$1,215,921	\$63,839	3.5%	\$11,123		\$46,630	\$717,313	\$816,563	87.8%
2048	\$1,258,478	\$66,073	3.5%	\$12,338		\$0	\$795,725	\$886,795	89.7%
2049	\$1,302,525	\$68,386	3.5%	\$13,448		\$10,275	\$867,284	\$950,310	91.3%
2050	\$1,348,114	\$70,779	3.5%	\$14,639		\$8,579	\$944,124	\$1,019,312	92.6%
2051	\$1,395,298	\$73,256	3.5%	\$16,024		\$0	\$1,033,404	\$1,101,169	93.8%
2052	\$1,444,133	\$75,820	3.5%	\$4,103		\$848,739	\$264,588	\$309,064	85.6%
2053	\$1,494,678	\$78,474	3.5%	\$5,403		\$0	\$348,465	\$369,352	94.3%
2054	\$1,546,991	\$81,221	3.5%	\$6,768		\$0	\$436,454	\$433,482	100.7%

Beginning Balance:	\$123,750
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Annual Inflation Rate:	3.50%
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Interest Rate:	2.25%
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Alternate Recommended Funding Model

This funding model has been included as an alternative to the regular Recommended Model (which utilizes an annual reserve contribution percentage increase rate that is similar to the inflation rate). This alternative model has a goal of reaching 100% funded by the end of a 30-year period but starts with a higher or lower reserve allocation rate and increases at a significantly higher or lower annual percentage increase (i.e., the annual reserve allocation percentage change is significantly higher or lower than the projected inflation rate) until the reserve account reaches the 100% funded level by the end of the 30-years of projections.

It is important to note that there is not a "right or wrong" Recommended Funding Model as mathematically it is a sliding scale between the reserve contribution rate and the annual increase/decrease percent (i.e., a higher initial annual reserve allocation rate will require a lower annual percentage increase and vice versa - a lower initial annual reserve allocation rate will require a higher annual percentage increase rate to the model to meet the same goal, in this case to be 100% funded by the end of a 30-year period). This type of funding model does not necessarily consider fairness to the membership as a projected allocation rate significantly different than the projected inflation rate, over time, will not follow the actual purchasing power of the dollar in any specific period.

	Total Asset Cost	Allocation Rate	Allocation % Change	Net Interest	Special Assessments	Annual Expenditures	Year End Account Balance	Year End FFB	Year End % Funded
2025	\$570,450	\$7,475	30.0%	\$1,878		\$11,980	\$121,123	\$319,960	37.9%
2026	\$590,416	\$9,718	30.0%	\$2,061		\$0	\$132,901	\$352,976	37.7%
2027	\$611,081	\$12,633	30.0%	\$19		\$144,340	\$1,213	\$238,518	0.5%
2028	\$632,468	\$16,423	30.0%	\$278		\$0	\$17,913	\$270,238	6.6%
2029	\$654,605	\$21,349	30.0%	\$557		\$3,902	\$35,918	\$299,847	12.0%
2030	\$677,516	\$27,754	30.0%	\$883		\$7,577	\$56,978	\$327,535	17.4%
2031	\$701,229	\$36,080	30.0%	\$1,466		\$0	\$94,524	\$364,910	25.9%
2032	\$725,772	\$37,884	5.0%	\$1,068		\$64,615	\$68,861	\$338,567	20.3%
2033	\$751,174	\$39,779	5.0%	\$1,711		\$0	\$110,351	\$379,149	29.1%
2034	\$777,465	\$41,768	5.0%	\$2,299		\$6,133	\$148,284	\$415,810	35.7%
2035	\$804,676	\$43,856	5.0%	\$2,860		\$10,551	\$184,449	\$450,222	41.0%
2036	\$832,840	\$46,049	5.0%	\$3,630		\$0	\$234,128	\$497,837	47.0%
2037	\$861,989	\$48,351	5.0%	\$4,028		\$26,710	\$259,798	\$520,588	49.9%
2038	\$892,159	\$50,769	5.0%	\$4,891		\$0	\$315,458	\$572,934	55.1%
2039	\$923,385	\$53,307	5.0%	\$5,808		\$0	\$374,573	\$628,306	59.6%
2040	\$955,703	\$55,973	5.0%	\$6,685		\$6,082	\$431,149	\$680,559	63.4%
2041	\$989,153	\$58,211	4.0%	\$7,707		\$0	\$497,068	\$742,214	67.0%
2042	\$1,023,773	\$60,453	3.9%	\$5,590		\$202,576	\$360,535	\$592,411	60.9%
2043	\$1,059,605	\$62,568	3.5%	\$6,664		\$0	\$429,768	\$648,216	66.3%
2044	\$1,096,691	\$64,758	3.5%	\$7,686		\$6,537	\$495,675	\$700,436	70.8%
2045	\$1,135,075	\$67,025	3.5%	\$8,401		\$29,310	\$541,792	\$732,185	74.0%
2046	\$1,174,803	\$69,371	3.5%	\$9,626		\$0	\$620,788	\$796,695	77.9%
2047	\$1,215,921	\$71,799	3.5%	\$10,174		\$46,630	\$656,131	\$816,563	80.4%
2048	\$1,258,478	\$74,312	3.5%	\$11,504		\$0	\$741,947	\$886,795	83.7%
2049	\$1,302,525	\$76,913	3.5%	\$12,735		\$10,275	\$821,320	\$950,310	86.4%
2050	\$1,348,114	\$79,605	3.5%	\$14,054		\$8,579	\$906,400	\$1,019,312	88.9%
2051	\$1,395,298	\$82,391	3.5%	\$15,573		\$0	\$1,004,364	\$1,101,169	91.2%
2052	\$1,444,133	\$85,274	3.5%	\$3,794		\$848,739	\$244,694	\$309,064	79.2%
2053	\$1,494,678	\$88,259	3.5%	\$5,244		\$0	\$338,197	\$369,352	91.6%
2054	\$1,546,991	\$91,348	3.5%	\$6,765		\$0	\$436,310	\$433,482	100.7%

Beginning Balance: \$123,750

Annual Inflation Rate: 3.50%

Interest Rate: 2.25%

Baseline Funding Model

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 the projections and does not take into consideration projected expenses that fall outside of the 30-year timeframe of the projections (i.e., longer life components are simply ignored like they do not exist).

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 the projections their projected expenditures will have a significant impact on the allocation requirements to keep the reserve account cash positive going forward.

Should the Client have an interest in not funding for longer life component projects (i.e., projects that are set to occur after the 30-year projections) at this time then we suggest setting a goal of at least funding to the Baseline Funding Model which has the goal of only staying cash positive for the 30-year timeframe of the projections.

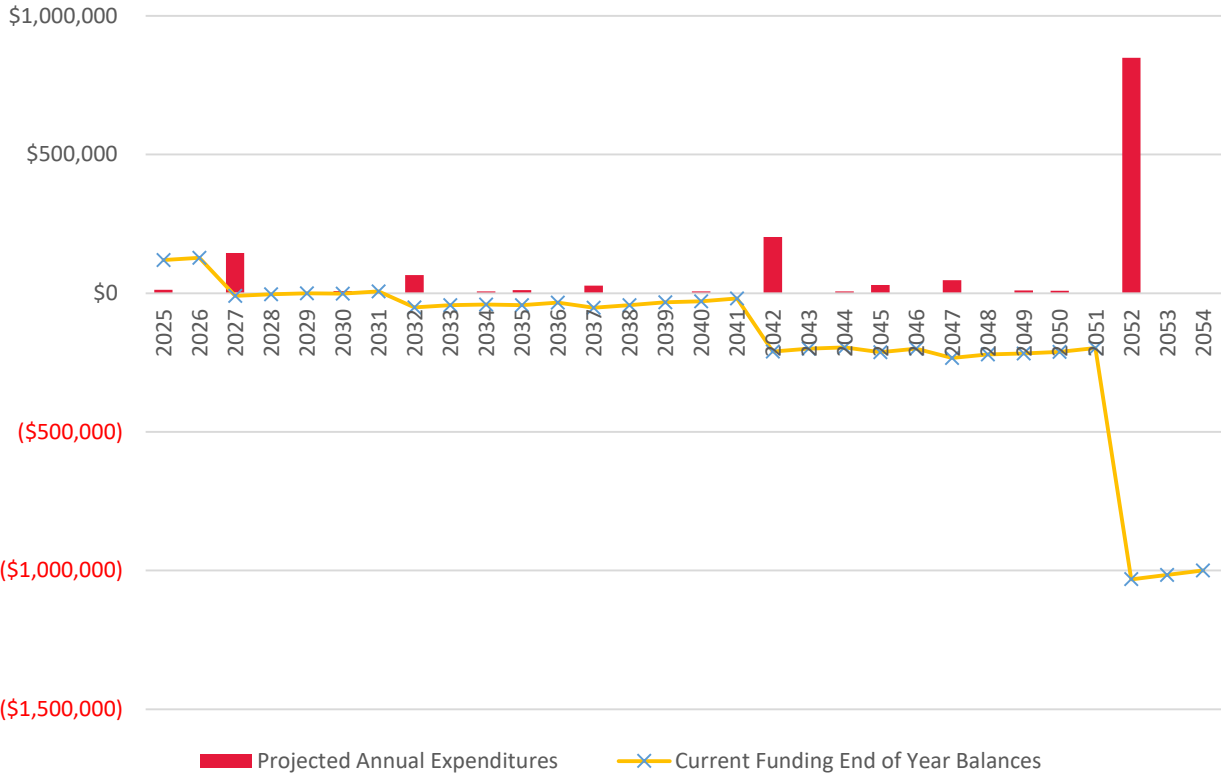
	Total Asset Cost	Allocation Rate	Allocation % Change	Net Interest	Special Assessments	Annual Expenditures	Year End Account Balance	Year End FFB	Year End % Funded
2025	\$570,450	\$25,275	339.6%	\$2,158		\$11,980	\$139,203	\$319,960	43.5%
2026	\$590,416	\$26,160	3.5%	\$2,604		\$0	\$167,968	\$352,976	47.6%
2027	\$611,081	\$27,075	3.5%	\$799		\$144,340	\$51,501	\$238,518	21.6%
2028	\$632,468	\$28,023	3.5%	\$1,253		\$0	\$80,776	\$270,238	29.9%
2029	\$654,605	\$29,004	3.5%	\$1,668		\$3,902	\$107,546	\$299,847	35.9%
2030	\$677,516	\$30,019	3.5%	\$2,047		\$7,577	\$132,035	\$327,535	40.3%
2031	\$701,229	\$31,069	3.5%	\$2,569		\$0	\$165,673	\$364,910	45.4%
2032	\$725,772	\$32,157	3.5%	\$2,098		\$64,615	\$135,313	\$338,567	40.0%
2033	\$751,174	\$33,282	3.5%	\$2,655		\$0	\$171,251	\$379,149	45.2%
2034	\$777,465	\$34,447	3.5%	\$3,143		\$6,133	\$202,708	\$415,810	48.8%
2035	\$804,676	\$35,653	3.5%	\$3,588		\$10,551	\$231,398	\$450,222	51.4%
2036	\$832,840	\$36,901	3.5%	\$4,226		\$0	\$272,524	\$497,837	54.7%
2037	\$861,989	\$38,192	3.5%	\$4,473		\$26,710	\$288,479	\$520,588	55.4%
2038	\$892,159	\$39,529	3.5%	\$5,166		\$0	\$333,174	\$572,934	58.2%
2039	\$923,385	\$40,913	3.5%	\$5,892		\$0	\$379,979	\$628,306	60.5%
2040	\$955,703	\$42,344	3.5%	\$6,556		\$6,082	\$422,797	\$680,559	62.1%
2041	\$989,153	\$43,826	3.5%	\$7,349		\$0	\$473,973	\$742,214	63.9%
2042	\$1,023,773	\$45,360	3.5%	\$4,989		\$202,576	\$321,747	\$592,411	54.3%
2043	\$1,059,605	\$46,948	3.5%	\$5,807		\$0	\$374,502	\$648,216	57.8%
2044	\$1,096,691	\$48,591	3.5%	\$6,561		\$6,537	\$423,117	\$700,436	60.4%
2045	\$1,135,075	\$50,292	3.5%	\$6,995		\$29,310	\$451,094	\$732,185	61.6%
2046	\$1,174,803	\$52,052	3.5%	\$7,925		\$0	\$511,071	\$796,695	64.1%
2047	\$1,215,921	\$53,874	3.5%	\$8,163		\$46,630	\$526,479	\$816,563	64.5%
2048	\$1,258,478	\$55,760	3.5%	\$9,170		\$0	\$591,408	\$886,795	66.7%
2049	\$1,302,525	\$57,711	3.5%	\$10,062		\$10,275	\$648,906	\$950,310	68.3%
2050	\$1,348,114	\$59,731	3.5%	\$11,026		\$8,579	\$711,085	\$1,019,312	69.8%
2051	\$1,395,298	\$61,822	3.5%	\$12,173		\$0	\$785,080	\$1,101,169	71.3%
2052	\$1,444,133	\$63,985	3.5%	\$5		\$848,739	\$331	\$309,064	0.1%
2053	\$1,494,678	\$66,225	3.5%	\$1,048		\$0	\$67,604	\$369,352	18.3%
2054	\$1,546,991	\$68,543	3.5%	\$2,144		\$0	\$138,291	\$433,482	31.9%

Beginning Balance: \$123,750

Annual Inflation Rate: 3.50%

Interest Rate: 2.25%

Current Funding Model Chart



The above chart provides a visual of the Client Current Funding Model's reserve account projected year end balance and the projected annual 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.

If applicable any negative account balance shown is for visual representation of deficiency over time.

Current Funding Model

The Current Funding Model is based on the reserve allocation rate supplied by the Client as of the date of this study; it has not been independently verified and is assumed to be correct.

	Total Asset Cost	Allocation Rate	Allocation % Change	Net Interest	Special Assessments	Annual Expenditures	Year End Account Balance	Year End FFB	Year End % Funded
2025	\$570,450	\$5,951	3.5%	\$1,854		\$11,980	\$119,575	\$319,960	37.4%
2026	\$590,416	\$6,160	3.5%	\$1,980		\$0	\$127,715	\$352,976	36.2%
2027	\$611,081	\$6,375	3.5%	\$0		\$144,340	-\$10,250	\$238,518	
2028	\$632,468	\$6,598	3.5%	\$0		\$0	-\$3,652	\$270,238	
2029	\$654,605	\$6,829	3.5%	\$0		\$3,902	-\$724	\$299,847	
2030	\$677,516	\$7,068	3.5%	\$0		\$7,577	-\$1,233	\$327,535	
2031	\$701,229	\$7,316	3.5%	\$96		\$0	\$6,178	\$364,910	1.7%
2032	\$725,772	\$7,572	3.5%	\$0		\$64,615	-\$50,865	\$338,567	
2033	\$751,174	\$7,837	3.5%	\$0		\$0	-\$43,029	\$379,149	
2034	\$777,465	\$8,111	3.5%	\$0		\$6,133	-\$41,051	\$415,810	
2035	\$804,676	\$8,395	3.5%	\$0		\$10,551	-\$43,207	\$450,222	
2036	\$832,840	\$8,689	3.5%	\$0		\$0	-\$34,519	\$497,837	
2037	\$861,989	\$8,993	3.5%	\$0		\$26,710	-\$52,236	\$520,588	
2038	\$892,159	\$9,307	3.5%	\$0		\$0	-\$42,928	\$572,934	
2039	\$923,385	\$9,633	3.5%	\$0		\$0	-\$33,295	\$628,306	
2040	\$955,703	\$9,970	3.5%	\$0		\$6,082	-\$29,406	\$680,559	
2041	\$989,153	\$10,319	3.5%	\$0		\$0	-\$19,087	\$742,214	
2042	\$1,023,773	\$10,681	3.5%	\$0		\$202,576	-\$210,982	\$592,411	
2043	\$1,059,605	\$11,054	3.5%	\$0		\$0	-\$199,928	\$648,216	
2044	\$1,096,691	\$11,441	3.5%	\$0		\$6,537	-\$195,023	\$700,436	
2045	\$1,135,075	\$11,842	3.5%	\$0		\$29,310	-\$212,491	\$732,185	
2046	\$1,174,803	\$12,256	3.5%	\$0		\$0	-\$200,235	\$796,695	
2047	\$1,215,921	\$12,685	3.5%	\$0		\$46,630	-\$234,179	\$816,563	
2048	\$1,258,478	\$13,129	3.5%	\$0		\$0	-\$221,050	\$886,795	
2049	\$1,302,525	\$13,589	3.5%	\$0		\$10,275	-\$217,736	\$950,310	
2050	\$1,348,114	\$14,064	3.5%	\$0		\$8,579	-\$212,251	\$1,019,312	
2051	\$1,395,298	\$14,557	3.5%	\$0		\$0	-\$197,694	\$1,101,169	
2052	\$1,444,133	\$15,066	3.5%	\$0		\$848,739	-\$1,031,367	\$309,064	
2053	\$1,494,678	\$15,593	3.5%	\$0		\$0	-\$1,015,774	\$369,352	
2054	\$1,546,991	\$16,139	3.5%	\$0		\$0	-\$999,635	\$433,482	

Beginning Balance: \$123,750

Annual Inflation Rate: 3.50%

Interest Rate: 2.25%

Full Funded Balance Calculations (Beginning FY)

Version: Final

ID	Component Description	<i>Current Cost</i>	X	<i>Effective Age</i>	/	<i>Useful Life</i>	=	<i>FFB</i>
							Total FFB	\$300,753
>> Building Exterior Components <<								
1770	Building Exteriors (metal) - Paint & Seal	\$23,204	X	3	/	10	=	\$6,961
1780	Building Exteriors (metal) - Replace	\$83,045	X	23	/	50	=	\$38,201
1940	Building Exteriors (wood) - Paint & Seal	\$4,594	X	3	/	5	=	\$2,757
1950	Building Exteriors (wood) - Replace	\$25,389	X	23	/	50	=	\$11,679
2340	Deck Railings (metal) - Paint	\$1,282	X	3	/	10	=	\$385
2350	Deck Railings (metal) - Replace	\$12,784	X	23	/	40	=	\$7,351
2400	Decks (composite) - Refurbish	\$4,368	X	23	/	25	=	\$4,019
2410	Decks (comp./superstructure) - Rebuild	\$9,360	X	23	/	50	=	\$4,306
2420	Decks (mem./superstructure) - Rebuild	\$18,720	X	23	/	40	=	\$10,764
2450	Decks (membrane) - Replace	\$8,736	X	0	/	20	=	\$0
2470	Decks (membrane) - Topcoat & Non-skid	\$2,184	X	3	/	5	=	\$1,310
2740	Doors (garage double) - Paint	\$8,438	X	0	/	10	=	\$0
2750	Doors (exterior) - Replace	\$21,000	X	3	/	50	=	\$1,260
2790	Doors (garage double) - Replace	\$7,500	X	23	/	30	=	\$5,750
4800	Lights (double security) - Replace	\$4,200	X	3	/	25	=	\$504
6970	Roof (asph.shingle) - Replace	\$16,875	X	23	/	25	=	\$15,525
7310	Roof Gutters & Downs. - Replace	\$4,031	X	23	/	25	=	\$3,709
7360	Roof Skylights - Replace	\$1,200	X	23	/	25	=	\$1,104
7751	Staircases (metal) - Paint/Coat	\$1,125	X	3	/	10	=	\$338
7760	Staircases (metal) - Replace	\$24,000	X	23	/	50	=	\$11,040
8400	Windows (vinyl) - Replace	\$39,375	X	23	/	50	=	\$18,113
>> Building Interior Components <<								
2710	Door Operators (garage) - Replace	\$3,400	X	11	/	15	=	\$2,493
2840	Doors (storage) - Replace	\$19,350	X	23	/	50	=	\$8,901
3820	Flooring (pedestrian coat) - Recoat	\$3,630	X	5	/	5	=	\$3,630
3900	Flooring (vinyl sheet) - Replace	\$1,512	X	23	/	25	=	\$1,391
4430	Interior Surfaces - Paint	\$3,850	X	10	/	10	=	\$3,850

Full Funded Balance Calculations (Beginning FY)

Version: Final

ID	Component Description	<i>Current Cost</i>		<i>Effective Age</i>		<i>Useful Life</i>		<i>FFB</i>
4820	Lights (exterior) - Replace	\$1,881	X	23	/	25	=	\$1,730
4830	Lights (interior) - Replace	\$1,400	X	23	/	25	=	\$1,288
>> Electrical / Plumbing / Fire <<								
3010	Electrical System (outside) - Modernize	\$17,850	X	23	/	40	=	\$10,264
3090	Entry Access Panel - Replace	\$4,500	X	6	/	15	=	\$1,800
3410	Fire Annunciation Panel - Replace	\$1,850	X	23	/	25	=	\$1,702
3420	Fire BDA System - Replace	\$15,000	X	23	/	25	=	\$13,800
3430	Fire Control Panel - Replace	\$5,500	X	23	/	25	=	\$5,060
3530	Fire Peripherals (interior) - Replace	\$9,750	X	23	/	25	=	\$8,970
4290	Heaters (wall fan) - Replace	\$3,000	X	23	/	25	=	\$2,760
5280	Backflow Valve (domestic water) - Replace	\$3,750	X	23	/	25	=	\$3,450
5290	Backflow Valve (fire system) - Refurbish	\$4,250	X	23	/	25	=	\$3,910
5360	Drain/Waste/Supply Lines - Replace	\$43,350	X	23	/	55	=	\$18,128
5400	Hot Water Heater - Replace	\$2,750	X	10	/	15	=	\$1,833
5440	Sewer Lateral Lines - Replace	\$6,000	X	23	/	55	=	\$2,509
5490	Water Lateral Lines - Replace	\$6,000	X	23	/	55	=	\$2,509
>> Site Components <<								
1140	Asphalt - Overlay/Resurface	\$22,125	X	23	/	25	=	\$20,355
1160	Asphalt - Seal Coat	\$2,850	X	3	/	5	=	\$1,710
2160	Concrete Sidewalks (public) - 15% Replace	\$958	X	3	/	5	=	\$575
2220	Concrete Surfaces (private) - 15% Replace	\$3,928	X	3	/	5	=	\$2,357
3370	Fence (wood 6') - Replace	\$17,325	X	23	/	25	=	\$15,939
3390	Fence (wood) - Paint/Stain	\$3,163	X	3	/	5	=	\$1,898
4020	Gate (pedestrian) - Replace	\$5,015	X	23	/	40	=	\$2,884
4530	Irrigation Piping - Replace	\$3,024	X	23	/	40	=	\$1,739
4620	Landscape Site Drainage - Replace	\$4,500	X	20	/	20	=	\$4,500
4640	Landscaping - Refurbish	\$5,040	X	3	/	20	=	\$756
4950	Mailbox Cluster - Replace	\$3,250	X	23	/	25	=	\$2,990

Projected Expenditures List

2037	
Total:	\$26,710
Building Exteriors (wood) - Paint & Seal	\$6,942
Decks (membrane) - Topcoat & Non-skid	\$3,300
Asphalt - Seal Coat	\$4,307
Concrete Sidewalks (public) - 15% Replace	\$1,447
Concrete Surfaces (private) - 15% Replace	\$5,936
Fence (wood) - Paint/Stain	\$4,779

2038	
Total:	\$0

2039	
Total:	\$0

Projected Expenditures List

2052	
<i>Total:</i>	\$848,739
Building Exteriors (metal) - Replace	\$210,234
Building Exteriors (wood) - Paint & Seal	\$11,631
Building Exteriors (wood) - Replace	\$64,274
Decks (composite) - Refurbish	\$11,058
Decks (comp./superstructure) - Rebuild	\$23,695
Decks (membrane) - Topcoat & Non-skid	\$5,529
Roof (asph.shingle) - Replace	\$42,720
Roof Gutters & Downs. - Replace	\$10,205
Roof Skylights - Replace	\$3,038
Staircases (metal) - Replace	\$60,758
Windows (vinyl) - Replace	\$99,680
Doors (storage) - Replace	\$48,986
Flooring (vinyl sheet) - Replace	\$3,828
Lights (exterior) - Replace	\$4,761
Lights (interior) - Replace	\$3,544
Fire Annunciation Panel - Replace	\$4,683
Fire BDA System - Replace	\$37,974
Fire Control Panel - Replace	\$13,924
Fire Peripherals (interior) - Replace	\$24,683
Heaters (wall fan) - Replace	\$7,595
Backflow Valve (domestic water) - Replace	\$9,493
Backflow Valve (fire system) - Refurbish	\$10,759
Asphalt - Overlay/Resurface	\$56,011
Asphalt - Seal Coat	\$7,215
Concrete Sidewalks (public) - 15% Replace	\$2,424
Concrete Surfaces (private) - 15% Replace	\$9,944
Fence (wood 6') - Replace	\$43,859
Fence (wood) - Paint/Stain	\$8,006
Mailbox Cluster - Replace	\$8,228

2053	
<i>Total:</i>	\$0

2054	
<i>Total:</i>	\$0

Projected Expenditure Spreadsheet

					Projected Annual Totals		\$11,980	\$0	\$144,340	\$0	\$3,902	\$7,577	\$0
Component Description	Asset ID	Useful Life	Remain. UL	Current Cost	2025	2026	2027	2028	2029	2030	2031		
>> Building Exterior Components <<													
Building Exteriors (metal) - Paint & Seal	1770	10	7	\$23,204									
Building Exteriors (metal) - Replace	1780	50	27	\$83,045									
Building Exteriors (wood) - Paint & Seal	1940	5	2	\$4,594			\$4,921						
Building Exteriors (wood) - Replace	1950	50	27	\$25,389									
Deck Railings (metal) - Paint	2340	10	7	\$1,282									
Deck Railings (metal) - Replace	2350	40	17	\$12,784									
Decks (composite) - Refurbish	2400	25	2	\$4,368			\$4,679						
Decks (comp./superstructure) - Rebuild	2410	50	27	\$9,360									
Decks (mem./superstructure) - Rebuild	2420	40	17	\$18,720									
Decks (membrane) - Replace	2450	20	37	\$8,736									
Decks (membrane) - Topcoat & Non-skid	2470	5	2	\$2,184			\$2,340						
Doors (garage double) - Paint	2740	10	17	\$8,438									
Doors (exterior) - Replace	2750	50	47	\$21,000									
Doors (garage double) - Replace	2790	30	7	\$7,500									
Lights (double security) - Replace	4800	25	22	\$4,200									
Roof (asph.shingle) - Replace	6970	25	2	\$16,875			\$18,077						
Roof Gutters & Downs. - Replace	7310	25	2	\$4,031			\$4,318						
Roof Skylights - Replace	7360	25	2	\$1,200			\$1,285						
Staircases (metal) - Paint/Coat	7751	10	7	\$1,125									
Staircases (metal) - Replace	7760	50	27	\$24,000									
Windows (vinyl) - Replace	8400	50	27	\$39,375									
>> Building Interior Components <<													
Door Operators (garage) - Replace	2710	15	4	\$3,400					\$3,902				
Doors (storage) - Replace	2840	50	27	\$19,350									
Flooring (pedestrian coat) - Recoat	3820	5	0	\$3,630	\$3,630						\$4,311		
Flooring (vinyl sheet) - Replace	3900	25	2	\$1,512			\$1,620						
Interior Surfaces - Paint	4430	10	0	\$3,850	\$3,850								
Lights (exterior) - Replace	4820	25	2	\$1,881			\$2,015						
Lights (interior) - Replace	4830	25	2	\$1,400			\$1,500						
>> Electrical / Plumbing / Fire <<													
Electrical System (outside) - Modernize	3010	40	17	\$17,850									
Entry Access Panel - Replace	3090	15	9	\$4,500									
Fire Annunciation Panel - Replace	3410	25	2	\$1,850			\$1,982						
Fire BDA System - Replace	3420	25	2	\$15,000			\$16,068						
Fire Control Panel - Replace	3430	25	2	\$5,500			\$5,892						
Fire Peripherals (interior) - Replace	3530	25	2	\$9,750			\$10,444						
Heaters (wall fan) - Replace	4290	25	2	\$3,000			\$3,214						
Backflow Valve (domestic water) - Replace	5280	25	2	\$3,750			\$4,017						
Backflow Valve (fire system) - Refurbish	5290	25	2	\$4,250			\$4,553						
Drain/Waste/Supply Lines - Replace	5360	55	32	\$43,350									
Hot Water Heater - Replace	5400	15	5	\$2,750						\$3,266			
Sewer Lateral Lines - Replace	5440	55	32	\$6,000									

Projected Expenditure Spreadsheet

	\$64,615	\$0	\$6,133	\$10,551	\$0	\$26,710	\$0	\$0	\$6,082	\$0	\$202,576
Component Description	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
>> Building Exterior Components <<											
Building Exteriors (metal) - Paint & Seal	\$29,522										\$41,643
Building Exteriors (metal) - Replace											
Building Exteriors (wood) - Paint & Seal	\$5,845					\$6,942					\$8,245
Building Exteriors (wood) - Replace											
Deck Railings (metal) - Paint	\$1,631										
Deck Railings (metal) - Replace											\$22,943
Decks (composite) - Refurbish											
Decks (comp./superstructure) - Rebuild											
Decks (mem./superstructure) - Rebuild											\$33,596
Decks (membrane) - Replace											
Decks (membrane) - Topcoat & Non-skid	\$2,779					\$3,300					\$3,920
Doors (garage double) - Paint											\$15,143
Doors (exterior) - Replace											
Doors (garage double) - Replace	\$9,542										
Lights (double security) - Replace											
Roof (asph.shingle) - Replace											
Roof Gutters & Downs. - Replace											
Roof Skylights - Replace											
Staircases (metal) - Paint/Coat	\$1,431										\$2,019
Staircases (metal) - Replace											
Windows (vinyl) - Replace											
>> Building Interior Components <<											
Door Operators (garage) - Replace											
Doors (storage) - Replace											
Flooring (pedestrian coat) - Recoat				\$5,120					\$6,082		
Flooring (vinyl sheet) - Replace											
Interior Surfaces - Paint				\$5,431							
Lights (exterior) - Replace											
Lights (interior) - Replace											
>> Electrical / Plumbing / Fire <<											
Electrical System (outside) - Modernize											\$32,035
Entry Access Panel - Replace			\$6,133								
Fire Annunciation Panel - Replace											
Fire BDA System - Replace											
Fire Control Panel - Replace											
Fire Peripherals (interior) - Replace											
Heaters (wall fan) - Replace											
Backflow Valve (domestic water) - Replace											
Backflow Valve (fire system) - Refurbish											
Drain/Waste/Supply Lines - Replace											
Hot Water Heater - Replace											
Sewer Lateral Lines - Replace											

Projected Expenditure Spreadsheet

	\$0	\$6,537	\$29,310	\$0	\$46,630	\$0	\$10,275	\$8,579	\$0	\$848,739	\$0
Component Description	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
>> Building Exterior Components <<											
Building Exteriors (metal) - Paint & Seal											
Building Exteriors (metal) - Replace										\$210,234	
Building Exteriors (wood) - Paint & Seal					\$9,793					\$11,631	
Building Exteriors (wood) - Replace										\$64,274	
Deck Railings (metal) - Paint											
Deck Railings (metal) - Replace											
Decks (composite) - Refurbish										\$11,058	
Decks (comp./superstructure) - Rebuild										\$23,695	
Decks (mem./superstructure) - Rebuild											
Decks (membrane) - Replace											
Decks (membrane) - Topcoat & Non-skid					\$4,655					\$5,529	
Doors (garage double) - Paint											
Doors (exterior) - Replace											
Doors (garage double) - Replace											
Lights (double security) - Replace					\$8,952						
Roof (asph.shingle) - Replace										\$42,720	
Roof Gutters & Downs. - Replace										\$10,205	
Roof Skylights - Replace										\$3,038	
Staircases (metal) - Paint/Coat											
Staircases (metal) - Replace										\$60,758	
Windows (vinyl) - Replace										\$99,680	
>> Building Interior Components <<											
Door Operators (garage) - Replace		\$6,537									
Doors (storage) - Replace										\$48,986	
Flooring (pedestrian coat) - Recoat			\$7,223					\$8,579			
Flooring (vinyl sheet) - Replace										\$3,828	
Interior Surfaces - Paint			\$7,661								
Lights (exterior) - Replace										\$4,761	
Lights (interior) - Replace										\$3,544	
>> Electrical / Plumbing / Fire <<											
Electrical System (outside) - Modernize											
Entry Access Panel - Replace							\$10,275				
Fire Annunciation Panel - Replace										\$4,683	
Fire BDA System - Replace										\$37,974	
Fire Control Panel - Replace										\$13,924	
Fire Peripherals (interior) - Replace										\$24,683	
Heaters (wall fan) - Replace										\$7,595	
Backflow Valve (domestic water) - Replace										\$9,493	
Backflow Valve (fire system) - Refurbish										\$10,759	
Drain/Waste/Supply Lines - Replace											
Hot Water Heater - Replace			\$5,472								
Sewer Lateral Lines - Replace											

	\$0
Component Description	2054
>> Building Exterior Components <<	
Building Exteriors (metal) - Paint & Seal	
Building Exteriors (metal) - Replace	
Building Exteriors (wood) - Paint & Seal	
Building Exteriors (wood) - Replace	
Deck Railings (metal) - Paint	
Deck Railings (metal) - Replace	
Decks (composite) - Refurbish	
Decks (comp./superstructure) - Rebuild	
Decks (mem./superstructure) - Rebuild	
Decks (membrane) - Replace	
Decks (membrane) - Topcoat & Non-skid	
Doors (garage double) - Paint	
Doors (exterior) - Replace	
Doors (garage double) - Replace	
Lights (double security) - Replace	
Roof (asph.shingle) - Replace	
Roof Gutters & Downs. - Replace	
Roof Skylights - Replace	
Staircases (metal) - Paint/Coat	
Staircases (metal) - Replace	
Windows (vinyl) - Replace	
>> Building Interior Components <<	
Door Operators (garage) - Replace	
Doors (storage) - Replace	
Flooring (pedestrian coat) - Recoat	
Flooring (vinyl sheet) - Replace	
Interior Surfaces - Paint	
Lights (exterior) - Replace	
Lights (interior) - Replace	
>> Electrical / Plumbing / Fire <<	
Electrical System (outside) - Modernize	
Entry Access Panel - Replace	
Fire Annunciation Panel - Replace	
Fire BDA System - Replace	
Fire Control Panel - Replace	
Fire Peripherals (interior) - Replace	
Heaters (wall fan) - Replace	
Backflow Valve (domestic water) - Replace	
Backflow Valve (fire system) - Refurbish	
Drain/Waste/Supply Lines - Replace	
Hot Water Heater - Replace	
Sewer Lateral Lines - Replace	

Projected Expenditure Spreadsheet

Component Description	Asset ID	Useful Life	Remain. UL	Current Cost	2025	2026	2027	2028	2029	2030	2031
Water Lateral Lines - Replace	5490	55	32	\$6,000							
>> Site Components <<											
Asphalt - Overlay/Resurface	1140	25	2	\$22,125			\$23,701				
Asphalt - Seal Coat	1160	5	2	\$2,850			\$3,053				
Concrete Sidewalks (public) - 15% Replace	2160	5	2	\$958			\$1,026				
Concrete Surfaces (private) - 15% Replace	2220	5	2	\$3,928			\$4,208				
Fence (wood 6') - Replace	3370	25	2	\$17,325			\$18,559				
Fence (wood) - Paint/Stain	3390	5	2	\$3,163			\$3,388				
Gate (pedestrian) - Replace	4020	40	17	\$5,015							
Irrigation Piping - Replace	4530	40	17	\$3,024							
Landscape Site Drainage - Replace	4620	20	0	\$4,500	\$4,500						
Landscaping - Refurbish	4640	20	17	\$5,040							
Mailbox Cluster - Replace	4950	25	2	\$3,250			\$3,481				

Projected Expenditure Spreadsheet

Component Description	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Water Lateral Lines - Replace											
>> Site Components <<											
Asphalt - Overlay/Resurface											
Asphalt - Seal Coat	\$3,626					\$4,307					\$5,115
Concrete Sidewalks (public) - 15% Replace	\$1,218					\$1,447					\$1,719
Concrete Surfaces (private) - 15% Replace	\$4,998					\$5,936					\$7,050
Fence (wood 6') - Replace											
Fence (wood) - Paint/Stain	\$4,024					\$4,779					\$5,676
Gate (pedestrian) - Replace											\$9,001
Irrigation Piping - Replace											\$5,427
Landscape Site Drainage - Replace											
Landscaping - Refurbish											\$9,045
Mailbox Cluster - Replace											

Projected Expenditure Spreadsheet

Component Description	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Water Lateral Lines - Replace											
>> Site Components <<											
Asphalt - Overlay/Resurface										\$56,011	
Asphalt - Seal Coat					\$6,075					\$7,215	
Concrete Sidewalks (public) - 15% Replace					\$2,041					\$2,424	
Concrete Surfaces (private) - 15% Replace					\$8,373					\$9,944	
Fence (wood 6') - Replace										\$43,859	
Fence (wood) - Paint/Stain					\$6,741					\$8,006	
Gate (pedestrian) - Replace											
Irrigation Piping - Replace											
Landscape Site Drainage - Replace			\$8,954								
Landscaping - Refurbish											
Mailbox Cluster - Replace										\$8,228	

Component Description	2054
Water Lateral Lines - Replace	
>> Site Components <<	
Asphalt - Overlay/Resurface	
Asphalt - Seal Coat	
Concrete Sidewalks (public) - 15% Replace	
Concrete Surfaces (private) - 15% Replace	
Fence (wood 6') - Replace	
Fence (wood) - Paint/Stain	
Gate (pedestrian) - Replace	
Irrigation Piping - Replace	
Landscape Site Drainage - Replace	
Landscaping - Refurbish	
Mailbox Cluster - Replace	

Building Exteriors (metal) - Paint & Seal

Asset ID	1770	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	2
Category	Building Exteriors	Next Replacement Year	2032
Install / Delay Year	2022	Units	4885 sf
Useful Life (UL)	10	Unit Cost	\$4.75
Remaining UL	7	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$23,204

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$9,606	\$12,428	\$15,436	\$18,639	\$22,047	\$25,671	\$29,522	\$3,055	\$6,325	\$9,819

Photo Inventory



Comments

Exterior paint appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly and touch up/repair locally as needed using operating funds. Removal and replacement of sealants where applicable with high quality product is important part of surface preparation. Repair areas as needed prior to painting.

To retain the aesthetic appeal and marketability of the building we recommend budgeting for painting of metal exterior surfaces after 20 years of age when metal will typically have faded and become chalky. Once the manufacturer's paint has been coated we recommend budgeting for paint cycles of every 10 years thereafter as new site installed coatings will not typically last as long as the initial manufacturer's coating.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2032	\$29,522
2042	\$41,643

*Next replacement then only within timeframe of this study.

Building Exteriors (metal) - Replace

Asset ID	1780	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Building Exteriors	Next Replacement Year	2052
Install / Delay Year	2002	Units	4885 sf
Useful Life (UL)	50	Unit Cost	\$17.00
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$83,045

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$41,257	\$44,480	\$47,878	\$51,460	\$55,234	\$59,208	\$63,394	\$67,800	\$72,436	\$77,314

Photo Inventory



Comments
<p>Metal siding appear to be deteriorating at a rate typical of its age. This component is included for replacement of the metal siding which will eventually deteriorate even though it is considered a long life exterior product; additionally, the underlying WRB (water resistant barrier / weather resistant barrier) will deteriorate and need replacement along with the siding. Larger replacement project should be anticipated and appropriately budgeted for.</p> <p>Note that cost estimate does not take into account any underlying rot/mold issues that may be present and in need of repair before new siding can be installed.</p> <p>This component has been set to cycle 2 times (repeat limit) before the siding is projected to replaced at 50 years of age. Metal siding is typically coated by the manufacturer.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$210,234

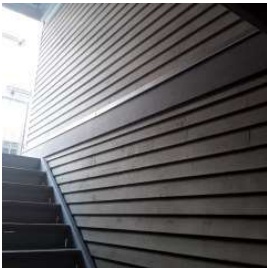
*Next replacement then only within timeframe of this study.

Building Exteriors (wood) - Paint & Seal

Asset ID	1940	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Building Exteriors	Next Replacement Year	2027
Install / Delay Year	2022	Units	1612 sf
Useful Life (UL)	5	Unit Cost	\$2.85
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,594

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$3,804	\$4,921	\$1,019	\$2,109	\$3,274	\$4,518	\$5,845	\$1,210	\$2,505	\$3,888

Photo Inventory



Comments
Exterior paint appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly and touch up/repair locally as needed using operating funds. Typical paint cycles for wood surfaces are between five to seven years depending upon surface preparation, material quality, application methods, site and weather conditions. Removal and replacement of sealants where applicable with high quality product is important part of surface preparation. Repair areas as needed prior to painting.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,921
2032	\$5,845
2037	\$6,942
2042	\$8,245
2047	\$9,793

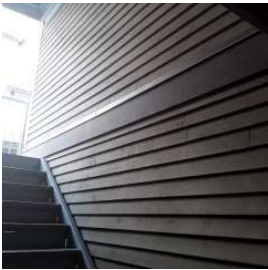
*Next replacement then only within timeframe of this study.

Building Exteriors (wood) - Replace

Asset ID	1950	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Building Exteriors	Next Replacement Year	2052
Install / Delay Year	2002	Units	1612 sf
Useful Life (UL)	50	Unit Cost	\$15.75
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$25,389

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$12,613	\$13,599	\$14,638	\$15,733	\$16,886	\$18,102	\$19,381	\$20,728	\$22,146	\$23,637

Photo Inventory



Comments
<p>Exterior wood building surfaces appear to be deteriorating at a rate typical of their age. This component is included for replacement of the wood siding and trim which will deteriorate and need replacement along with the underlying weather resistant barrier.</p> <p>Regular paint cycles and sealing (caulking) where necessary will maximize the useful life of this component as paint/sealing prevents moisture intrusion.</p> <p>Note that cost estimate does not take into account any underlying rot/mold issues that may be present and in need of repair before new siding can be installed.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$64,274

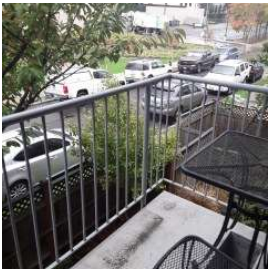
*Next replacement then only within timeframe of this study.

Deck Railings (metal) - Paint

Asset ID	2340	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	1
Category	Deck Systems	Next Replacement Year	2032
Install / Delay Year	2022	Units	68 lf
Useful Life (UL)	10	Unit Cost	\$18.85
Remaining UL	7	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,282

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$531	\$687	\$853	\$1,030	\$1,218	\$1,418	\$1,631			

Photo Inventory



Comments
<p>Paint on metal railing appears to be deteriorating at a rate typical of its age. We suggest painting these railing along with the regular paint cycles of the building and touching up annually, as needed, paid for the Operating Account.</p> <p>Set to cycle at 10 year increments and only after 20 years of age (original manufactures coating typically last longer than subsequent coats).</p> <p>This component has been set to cycle 1 time (repeat limit) before the railings are projected to replaced at 40 years of age (metal railing are coated by the manufacturer).</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2032	\$1,631

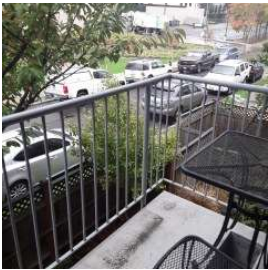
*Next replacement then only within timeframe of this study.

Deck Railings (metal) - Replace

Asset ID	2350	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2042
Install / Delay Year	2002	Units	68 lf
Useful Life (UL)	40	Unit Cost	\$188.00
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$12,784

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$7,939	\$8,559	\$9,213	\$9,902	\$10,628	\$11,393	\$12,199	\$13,046	\$13,939	\$14,877

Photo Inventory



Comments
Appears to be deteriorating at a rate typical of its age. As part of ongoing maintenance program, inspect regularly for any damage/deterioration and repair promptly as needed from operating budget. Clean regularly for appearance, maximum design life and to ensure adequate footing.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$22,943

*Next replacement then only within timeframe of this study.

Decks (composite) - Refurbish

Asset ID	2400	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2027
Install / Delay Year	2002	Units	104 sf
Useful Life (UL)	25	Unit Cost	\$42.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,368

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$4,340	\$4,679	\$194	\$401	\$623	\$859	\$1,111	\$1,380	\$1,667	\$1,972

Photo Inventory



Comments
<p>Composite decks appear to be deteriorating at a rate typical of their age. As part of ongoing maintenance program, inspect regularly for any damage/deterioration and repair promptly as needed from operating budget. Clean regularly for appearance, maximum design life and to ensure adequate footing. We recommend budgeting for full replacement of these exposed decks due to constant exposure to the elements.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,679
2052	\$11,058

*Next replacement then only within timeframe of this study.

Decks (comp./superstructure) - Rebuild

Asset ID	2410	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2052
Install / Delay Year	2002	Units	104 sf
Useful Life (UL)	50	Unit Cost	\$90.00
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$9,360

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$4,650	\$5,013	\$5,396	\$5,800	\$6,225	\$6,673	\$7,145	\$7,642	\$8,164	\$8,714

Photo Inventory



Comments

Composite decks appear to be deteriorating at a rate typical of their age. As part of ongoing maintenance program, inspect regularly for any damage/deterioration and repair promptly as needed from operating budget. Clean regularly for appearance, maximum design life and to ensure adequate footing. We recommend budgeting for full replacement of these exposed decks due to constant exposure to the elements.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$23,695

*Next replacement then only within timeframe of this study.

Decks (mem./superstructure) - Rebuild

Asset ID	2420	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2042
Install / Delay Year	2002	Units	208 sf
Useful Life (UL)	40	Unit Cost	\$90.00
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$18,720

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$11,625	\$12,533	\$13,491	\$14,500	\$15,563	\$16,683	\$17,863	\$19,104	\$20,411	\$21,785

Photo Inventory



Comments
<p>We recommend budgeting for rebuilding of the decking system which includes all the superstructure of the deck and the railing/wall at each deck. Note that some of the decks will likely require rebuilding before the useful life given which is considered an average life expectancy, while others will likely last longer. Use patterns and maintenance (lack of maintenance) over the years impacts the overall life expectancy of the deck systems on site.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$33,596

*Next replacement then only within timeframe of this study.

Decks (membrane) - Replace

Asset ID	2450	Age Adjust +/-	
Funded?	Yes	Delay Funding?	Yes
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2062
Install / Delay Year	2041	Units	208 sf
Useful Life (UL)	20	Unit Cost	\$42.00
Remaining UL	37	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$8,736

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	Delayed

Photo Inventory



Comments

Resurfacing & refurbishing the decks involves removing the waterproof deck system and installing a new system, making any necessary repairs to the beams and sheathing. Most manufactures recommend resurfacing after approximately 20-25 years in service; assuming regular cycles of inspections, top coating and maintenance are performed. Local repairs to the deck sheathing and supports beams would also be included in this project as-needed and have been considered in this cost estimate.

Funding for this component has been delayed until after the deck rebuild component. Delaying funding has been done so it is not being double funded (membrane and rebuild) in the overall budget.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2062	\$31,196

*Next replacement then only within timeframe of this study.

Decks (membrane) - Topcoat & Non-skid

Asset ID	2470	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Deck Systems	Next Replacement Year	2027
Install / Delay Year	2022	Units	208 sf
Useful Life (UL)	5	Unit Cost	\$10.50
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$2,184

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,808	\$2,340	\$484	\$1,002	\$1,556	\$2,148	\$2,779	\$575	\$1,191	\$1,848

Photo Inventory



Comments

This membrane surface with non-skid material needs to be top coated periodically for waterproof integrity, protection of surrounding structure, appearance and non-skid properties. 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.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$2,340
2032	\$2,779
2037	\$3,300
2042	\$3,920
2047	\$4,655

*Next replacement then only within timeframe of this study.

Doors (garage double) - Paint

Asset ID	2740	Age Adjust +/-	
Funded?	Yes	Delay Funding?	Yes
Group	Building Exterior Components	Repeat Count Limit	2
Category	Doors	Next Replacement Year	2042
Install / Delay Year	2031	Units	1250 sf
Useful Life (UL)	10	Unit Cost	\$6.75
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$8,438

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	Delayed	\$1,111	\$2,300	\$3,571

Photo Inventory



Comments
<p>Exterior metal garage door paint appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly and touch up locally as needed using operating funds.</p> <p>Funding for this component has been delayed until after the garage door replacement component. Delaying funding has been done so it is not being double funded (paint and replace) in the overall budget as metal garage doors are initially painted by the manufacturer.</p> <p>The component has also been set cycle 2 times (repeat limit) as the garage doors are then projected to be replaced and pre-painted by the manufacture.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$15,143
2052	\$21,360

*Next replacement then only within timeframe of this study.

Doors (exterior) - Replace

Asset ID	2750	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Doors	Next Replacement Year	2072
Install / Delay Year	2022	Units	12 ea
Useful Life (UL)	50	Unit Cost	\$1,750.00
Remaining UL	47	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$21,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,739	\$2,250	\$2,794	\$3,374	\$3,991	\$4,647	\$5,344	\$6,084	\$6,869	\$7,702

Photo Inventory



Comments

Exterior doors appear to be deteriorating at a rate typical of their age. Inspect regularly, repair hardware as needed from maintenance budget. Reserve funding recommended at level indicated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2072	\$105,783

*Next replacement then only within timeframe of this study.

Doors (garage double) - Replace

Asset ID	2790	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Doors	Next Replacement Year	2032
Install / Delay Year	2002	Units	2 ea
Useful Life (UL)	30	Unit Cost	\$3,750.00
Remaining UL	7	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$7,500

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$6,210	\$6,695	\$7,207	\$7,746	\$8,314	\$8,912	\$9,542	\$329	\$681	\$1,058

Photo Inventory



Comments

Garage doors appear to be deteriorating at a rate typical of their age. If not damaged or abused garage doors will last the estimated useful life indicated; repair as needed from operating funds. Clean and paint along with other exterior building surfaces. Best to plan for eventual replacement due to constant usage and wear over time.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2032	\$9,542

*Next replacement then only within timeframe of this study.

Lights (double security) - Replace

Asset ID	4800	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Lighting	Next Replacement Year	2047
Install / Delay Year	2022	Units	8 ea
Useful Life (UL)	25	Unit Cost	\$525.00
Remaining UL	22	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,200

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$696	\$900	\$1,118	\$1,349	\$1,596	\$1,859	\$2,137	\$2,433	\$2,748	\$3,081

Photo Inventory



Comments

Security lights appear to be deteriorating at a rate typical of their age. As routine maintenance, clean by wiping down with an appropriate cleaner, change bulbs and repair as needed. Best to plan for replacement at roughly the time frame indicated for periodic aesthetic updating, cost efficiency and consistent quality/appearance.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2047	\$8,952

*Next replacement then only within timeframe of this study.

Roof (asph.shingle) - Replace

Asset ID	6970	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Roofing System	Next Replacement Year	2027
Install / Delay Year	2002	Units	25 sq
Useful Life (UL)	25	Unit Cost	\$675.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$16,875

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$16,767	\$18,077	\$748	\$1,549	\$2,405	\$3,319	\$4,294	\$5,333	\$6,440	\$7,617

Photo Inventory



Comments
<p>Appears to be deteriorating at a rate typical of its age based on our limited scope visual inspection. As routine maintenance, we recommend professional inspections at least twice annually and after windstorms. Promptly replace any damaged/missing shingles or any other repair needed to ensure waterproof integrity of roof. Keep gutters and downspouts clear and free of debris. Plan for replacement at roughly the time frame indicated. Cost estimates include removal of old roofing materials and replacement of flashing.</p> <p>Underlying rot/mold issues that may be present have not been considered in the cost estimate as it will not be known until the roof is removed, the extent of this damage (if any). Roof Vendors will typically include verbiage in their bid/estimate that the cost does not include any necessary repairs to sheathing that may be found. A common budgeting mistake we see is pushing out the roof replacement project well past the Roof Vendor's recommended replacement date only to have a much higher cost related to moisture intrusion issues (e.g., mold, rot) when the roof is eventually replaced.</p> <p>1 square (sq) = 100 square feet</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$18,077
2052	\$42,720

*Next replacement then only within timeframe of this study.

Roof Gutters & Downs. - Replace

Asset ID	7310	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Roofing System	Next Replacement Year	2027
Install / Delay Year	2002	Units	278 lf
Useful Life (UL)	25	Unit Cost	\$14.50
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,031

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$4,005	\$4,318	\$179	\$370	\$575	\$793	\$1,026	\$1,274	\$1,538	\$1,820

Photo Inventory



Comments

Appear to be deteriorating at a rate typical of their age based our limited scope visual inspection. As routine maintenance, inspect regularly, keep gutters and downspouts free of debris. Repair locally as needed from general operating funds.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,318
2052	\$10,205

*Next replacement then only within timeframe of this study.

Roof Skylights - Replace

Asset ID	7360	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Roofing System	Next Replacement Year	2027
Install / Delay Year	2002	Units	16 sf
Useful Life (UL)	25	Unit Cost	\$75.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,200

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,192	\$1,285	\$53	\$110	\$171	\$236	\$305	\$379	\$458	\$542

Photo Inventory



Comments

Appear to be deteriorating at a rate typical of their age and no visible leaks readily apparent. No widespread problems indicated. Inspect regularly, repair/replace individually as needed to maintain water proof integrity of building envelope. Best to plan for widespread replacement at the same time as roof cycles to ensure quality weatherproofing is maintained.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$1,285
2052	\$3,038

*Next replacement then only within timeframe of this study.

Staircases (metal) - Paint/Coat

Asset ID	7751	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	2
Category	Building Exteriors	Next Replacement Year	2032
Install / Delay Year	2022	Units	150 sf
Useful Life (UL)	10	Unit Cost	\$7.50
Remaining UL	7	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,125

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$466	\$603	\$748	\$904	\$1,069	\$1,245	\$1,431	\$148	\$307	\$476

Photo Inventory



Comments
<p>Paint at the metal staircases appears to be deteriorating at a rate typical of its age. We suggest painting these areas along with the regular paint cycles of the building and touching up annually, as needed, paid for the Operating Account.</p> <p>This component has been set to cycle 2 times (repeat limit) before the staircase is projected to be replaced at 50 years of age. Metal staircases are typically coated by the manufacturer.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2032	\$1,431
2042	\$2,019

*Next replacement then only within timeframe of this study.

Staircases (metal) - Replace

Asset ID	7760	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Building Exteriors	Next Replacement Year	2052
Install / Delay Year	2002	Units	150 sf
Useful Life (UL)	50	Unit Cost	\$160.00
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$24,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$11,923	\$12,855	\$13,837	\$14,872	\$15,963	\$17,111	\$18,321	\$19,594	\$20,934	\$22,344

Photo Inventory



Comments

Staircases, railings and landings appear to be deteriorating at a rate typical of their age. As routine maintenance, we recommend regular professional inspections to ensure stability; perform any needed repairs promptly. Ensure that tread connections are tight and secure. Refinish components regularly along with building exteriors.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$60,758

*Next replacement then only within timeframe of this study.

Windows (vinyl) - Replace

Asset ID	8400	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Exterior Components	Repeat Count Limit	
Category	Windows	Next Replacement Year	2052
Install / Delay Year	2002	Units	525 sf
Useful Life (UL)	50	Unit Cost	\$75.00
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$39,375

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$19,562	\$21,090	\$22,701	\$24,399	\$26,188	\$28,073	\$30,058	\$32,147	\$34,345	\$36,658

Photo Inventory



Comments

The vinyl windows appear to be deteriorating at a rate typical of their age. No reported problems such as water intrusion. As routine maintenance, we recommend regular professional inspections and prompt repair as needed to ensure building waterproofing and help prevent structural damage. If properly installed without defect, plan to replace at roughly the time frame indicated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$99,680

*Next replacement then only within timeframe of this study.

Door Operators (garage) - Replace

Asset ID	2710	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Mechanical	Next Replacement Year	2029
Install / Delay Year	2014	Units	4 ea
Useful Life (UL)	15	Unit Cost	\$850.00
Remaining UL	4	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,400

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,815	\$3,157	\$3,518	\$3,902	\$269	\$557	\$865	\$1,194	\$1,545	\$1,918

Photo Inventory



Comments

Observed to be in functional condition with no evidence of damage or operational problems. As annual maintenance, regular professional inspections, maintenance and local repair as needed is recommended. Plan to replace at typical service life indicated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2029	\$3,902
2044	\$6,537

*Next replacement then only within timeframe of this study.

Doors (storage) - Replace

Asset ID	2840	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Doors	Next Replacement Year	2052
Install / Delay Year	2002	Units	9 ea
Useful Life (UL)	50	Unit Cost	\$2,150.00
Remaining UL	27	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$19,350

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$9,613	\$10,364	\$11,156	\$11,990	\$12,870	\$13,796	\$14,771	\$15,798	\$16,878	\$18,015

Photo Inventory



Comments
Storage doors appear to be deteriorating at a rate typical of their age. Inspect regularly, repair hardware as needed from maintenance budget.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2052	\$48,986

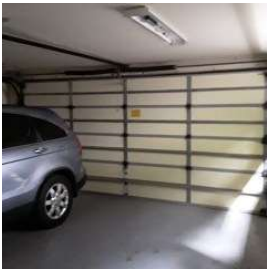
*Next replacement then only within timeframe of this study.

Flooring (pedestrian coat) - Recoat

Asset ID	3820	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Flooring	Next Replacement Year	2025
Install / Delay Year	2018	Units	330 sf
Useful Life (UL)	5	Unit Cost	\$11.00
Remaining UL		% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,630

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$751	\$1,555	\$2,415	\$3,332	\$4,311	\$892	\$1,847	\$2,868	\$3,958	\$5,120

Photo Inventory



Comments

The pedestrian coating and non skid appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly and touch up/repair locally as needed using operating funds. Typical coating cycles for these surfaces are between four to six years depending upon surface preparation, material quality, application methods, pedestrian traffic volume and site & weather conditions.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2025	\$3,630
2030	\$4,311
2035	\$5,120
2040	\$6,082
2045	\$7,223

*Next replacement then only within timeframe of this study.

Flooring (vinyl sheet) - Replace

Asset ID	3900	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Flooring	Next Replacement Year	2027
Install / Delay Year	2002	Units	108 sf
Useful Life (UL)	25	Unit Cost	\$14.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,512

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,502	\$1,620	\$67	\$139	\$215	\$297	\$385	\$478	\$577	\$683

Photo Inventory



Comments

Appears to be deteriorating at a rate typical of its age. As part of ongoing maintenance program mop and professionally clean as needed. Plan to replace at the time frame indicated, best timed after repainting. Wide variety of type and quality available; a mid-range funding allowance is factored for planning purposes.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$1,620
2052	\$3,828

*Next replacement then only within timeframe of this study.

Interior Surfaces - Paint

Asset ID	4430	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Building Interiors	Next Replacement Year	2025
Install / Delay Year	2012	Units	3500 sf
Useful Life (UL)	10	Unit Cost	\$1.10
Remaining UL		% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,850

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$398	\$825	\$1,281	\$1,767	\$2,286	\$2,840	\$3,429	\$4,056	\$4,722	\$5,431

Photo Inventory



Comments
Interior paint appears to be deteriorating at a rate typical of its age. Keep touchup paint on site for minor touch ups between the larger repainting projects. Plan to paint these areas on roughly the time frame indicated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2025	\$3,850
2035	\$5,431
2045	\$7,661
2055	\$10,806

*Next replacement then only within timeframe of this study.

Lights (exterior) - Replace

Asset ID	4820	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Lighting	Next Replacement Year	2027
Install / Delay Year	2002	Units	12 ea
Useful Life (UL)	25	Unit Cost	\$156.74
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,881

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,869	\$2,015	\$83	\$173	\$268	\$370	\$479	\$594	\$718	\$849

Photo Inventory



Comments

Exterior lights appear to be deteriorating at a rate typical of their age. Observed during daylight hours; assumed to be in functional operating condition. As routine maintenance, clean by wiping down with an appropriate cleaner, change bulbs and repair as needed. Best to plan for replacement at roughly the time frame indicated for periodic aesthetic updating, cost efficiency and consistent quality/appearance.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$2,015
2052	\$4,761

*Next replacement then only within timeframe of this study.

Lights (interior) - Replace

Asset ID	4830	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Building Interior Components	Repeat Count Limit	
Category	Lighting	Next Replacement Year	2027
Install / Delay Year	2002	Units	8 ea
Useful Life (UL)	25	Unit Cost	\$175.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,400

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,391	\$1,500	\$62	\$129	\$200	\$275	\$356	\$442	\$534	\$632

Photo Inventory



Comments

Interior lights appear to be deteriorating at a rate typical of their age. Observed during daylight hours; assumed to be in functional operating condition. As routine maintenance, clean by wiping down with an appropriate cleaner, change bulbs and repair as needed. Best to plan for replacement at roughly the time frame indicated for periodic aesthetic updating, cost efficiency and consistent quality/appearance.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$1,500
2052	\$3,544

*Next replacement then only within timeframe of this study.

Electrical System (outside) - Modernize

Asset ID	3010	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Electrical	Next Replacement Year	2042
Install / Delay Year	2002	Units	5100 sf
Useful Life (UL)	40	Unit Cost	\$3.50
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$17,850

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$11,085	\$11,951	\$12,864	\$13,826	\$14,840	\$15,908	\$17,033	\$18,216	\$19,462	\$20,773

Photo Inventory



Comments
<p>A condition evaluation of these systems is beyond the scope of a Reserve Study. We recommend that a qualified professional be consulted to evaluate these systems and determine the current condition and repair/modernization needs. The cost estimate was determined using the RS Means Square Footage Cost Handbook for electrical system install costs of similar style of buildings and which is in line with our experience with other similar sized buildings. Once a widespread replacement plan is implemented the reserve study will need to be adjusted to reflect scheduled modernization costs to elements of the system such as the switchgear, control panels, controllers, transformers, feeders, meter sockets, etc. Note that this component is not an estimate to rewire the whole building which is not typically needed if the electrical wiring was appropriately installed. The cost estimate does not include rewiring the building as wiring is typically considered a component which will last the life of the building if appropriately installed.</p> <p>Typically, if installed per architectural specifications and local building codes, there is no predictable time frame for large scale replacement due to failure, but these systems become outdated over time and do not meet the needs of the building & new technologies which require more modern electrical systems to function adequately and safely.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$32,035

*Next replacement then only within timeframe of this study.

Entry Access Panel - Replace

Asset ID	3090	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Security/Communication	Next Replacement Year	2034
Install / Delay Year	2019	Units	1 ea
Useful Life (UL)	15	Unit Cost	\$4,500.00
Remaining UL	9	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,500

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,174	\$2,571	\$2,994	\$3,443	\$3,919	\$4,425	\$4,962	\$5,531	\$6,133	\$423

Photo Inventory



Comments
Reportedly in operational condition. We recommend professional inspections and maintenance. Wipe down surfaces periodically with an appropriate cleaner, being careful to avoid control buttons. Plan for replacement at the typical life expectancy interval indicated, due to constant usage and exposure to weather elements.
Note that this component is only for replacement of the entry access panel. Should there be a desire or need to rewire the whole system at a later date (typically to upgrade to a more advanced system) the total cost can be incorporated into future reserve studies after a bid is obtained.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2034	\$6,133
2049	\$10,275

*Next replacement then only within timeframe of this study.

Fire Annunciation Panel - Replace

Asset ID	3410	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Fire Systems	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$1,850.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$1,850

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,838	\$1,982	\$82	\$170	\$264	\$364	\$471	\$585	\$706	\$835

Photo Inventory



Comments
Reportedly operational and inspected annually. Regular testing and inspection indicated. No known problems at this time. Fire panels may last for extended period barring unforeseen electrical event. In our experience, however, design obsolescence, parts availability and code/ technology advances dictate the need to plan for periodic replacement.
This cost estimate does not include rewiring of the system which can be very costly should it be required due to code compliance issues. We suggest ongoing consultation with the Vendor so that future code compliance and ongoing industry equipment/parts alterations can be budgeted for in advance of system failures.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$1,982
2052	\$4,683

*Next replacement then only within timeframe of this study.

Fire BDA System - Replace

Asset ID	3420	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Fire Systems	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$15,000.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$15,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$14,904	\$16,068	\$665	\$1,377	\$2,138	\$2,950	\$3,817	\$4,741	\$5,724	\$6,771

Photo Inventory



Comments
<p>No reported issues with the fire bi-directional amplifiers (BDA) system at this time. Inspect annually along with the rest of the fire systems. We recommend budgeting for replacement at the timeframe indicated as these systems become outdated and require periodic software/hardware upgrades to continue functioning as designed.</p> <p>This cost estimate does not include rewiring of the system which can be very costly should it be required due to code compliance issues. We suggest ongoing consultation with the Vendor so that future code compliance and ongoing industry equipment/parts alterations can be budgeted for in advance of system failures.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$16,068
2052	\$37,974

*Next replacement then only within timeframe of this study.

Fire Control Panel - Replace

Asset ID	3430	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Fire Systems	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$5,500.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$5,500

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$5,465	\$5,892	\$244	\$505	\$784	\$1,082	\$1,400	\$1,738	\$2,099	\$2,483

Photo Inventory



Comments

Reportedly operational and inspected annually. Regular testing and inspection indicated. No known problems at this time. Fire control panels may last for extended period barring unforeseen electrical event. In our experience, however, design obsolescence, parts availability and code/ technology advances dictate the need to plan for periodic replacement.

This cost estimate does not include rewiring of the system which can be very costly should it be required due to code compliance issues. We suggest ongoing consultation with the Vendor so that future code compliance and ongoing industry equipment/parts alterations can be budgeted for in advance of system failures.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$5,892
2052	\$13,924

*Next replacement then only within timeframe of this study.

Fire Peripherals (interior) - Replace

Asset ID	3530	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Fire Systems	Next Replacement Year	2027
Install / Delay Year	2002	Units	30 ea
Useful Life (UL)	25	Unit Cost	\$325.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$9,750

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$9,688	\$10,444	\$432	\$895	\$1,390	\$1,918	\$2,481	\$3,081	\$3,721	\$4,401

Photo Inventory



Comments

This component is for the replacement of the interior peripherals (pull stations, strobes, sensors, horns, detectors) at the time frame indicated. This cost estimate does not include rewiring of the system which can be very costly should it be required due to code compliance issues. We suggest ongoing consultation with the Vendor so that future code compliance can be budgeted for in advance of system failures.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$10,444
2052	\$24,683

*Next replacement then only within timeframe of this study.

Heaters (wall fan) - Replace

Asset ID	4290	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Mechanical	Next Replacement Year	2027
Install / Delay Year	2002	Units	4 ea
Useful Life (UL)	25	Unit Cost	\$750.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,981	\$3,214	\$133	\$275	\$428	\$590	\$763	\$948	\$1,145	\$1,354

Photo Inventory



Comments
Wall heater are reportedly in functional condition. We recommend funding for replacement of this component at the timeframe indicated as these types of wall heaters will typically fail at roughly the timeframe estimated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$3,214
2052	\$7,595

*Next replacement then only within timeframe of this study.

Backflow Valve (domestic water) - Replace

Asset ID	5280	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Plumbing	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$3,750.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,750

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$3,726	\$4,017	\$166	\$344	\$534	\$738	\$954	\$1,185	\$1,431	\$1,693

Photo Inventory

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

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,017
2052	\$9,493

*Next replacement then only within timeframe of this study.

Backflow Valve (fire system) - Refurbish

Asset ID	5290	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Plumbing	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$4,250.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,250

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$4,223	\$4,553	\$188	\$390	\$606	\$836	\$1,081	\$1,343	\$1,622	\$1,918

Photo Inventory

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

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,553
2052	\$10,759

*Next replacement then only within timeframe of this study.

Drain/Waste/Supply Lines - Replace

Asset ID	5360	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Plumbing	Next Replacement Year	2057
Install / Delay Year	2002	Units	5100 sf
Useful Life (UL)	55	Unit Cost	\$8.50
Remaining UL	32	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$43,350

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$19,578	\$21,108	\$22,721	\$24,420	\$26,211	\$28,097	\$30,084	\$32,174	\$34,375	\$36,690

Photo Inventory

Comments
<p>A condition evaluation of these systems is beyond the scope of a Reserve Study. We recommend that a qualified professional be consulted to evaluate these systems and determine the current condition and repair needs. Due to the age of the building and ongoing repair needs, a contingency has been included to supplement the Maintenance/Operating budget for larger repair needs. The repair contingency was determined using the RS Means Square Footage Cost Handbook for plumbing system install costs of similar style of buildings.</p> <p>The useful life for plumbing piping is often reported to be between 50 and 70 years but we recommend having the funds available for this component project before 70 years of age as it has been our experience that rarely do these systems last past 70 years. Once a widespread replacement plan is implemented the reserve study will need to be adjusted to reflect scheduled repairs.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2057	\$130,341

*Next replacement then only within timeframe of this study.

Hot Water Heater - Replace

Asset ID	5400	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Mechanical	Next Replacement Year	2030
Install / Delay Year	2015	Units	1 ea
Useful Life (UL)	15	Unit Cost	\$2,750.00
Remaining UL	5	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$2,750

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,087	\$2,357	\$2,642	\$2,945	\$3,266	\$225	\$467	\$724	\$999	\$1,293

Photo Inventory



Comments
Hot water heaters/tanks are assumed to be in operation condition. We recommend budgeting for replacement at the timeframe indicated and before total failure which can lead to damage if a leak develops. Annual inspections by a qualified professional suggested.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2030	\$3,266
2045	\$5,472

*Next replacement then only within timeframe of this study.

Sewer Lateral Lines - Replace

Asset ID	5440	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Plumbing	Next Replacement Year	2057
Install / Delay Year	2002	Units	50 lf
Useful Life (UL)	55	Unit Cost	\$120.00
Remaining UL	32	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$6,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,710	\$2,922	\$3,145	\$3,380	\$3,628	\$3,889	\$4,164	\$4,453	\$4,758	\$5,078

Photo Inventory

Comments
<p>Sewer lateral lines (piping connecting buildings to the main line also known as side sewer) on site are reportedly functioning as designed. We recommend budgeting for sewer lateral line replacement at the timeframe indicated due to the likelihood that these lines will require replacement at approximately the timeframe indicated per our experiences with similar style pipes.</p> <p>A condition evaluation of these systems is beyond the scope of a Reserve Study. We recommend that a qualified professional be consulted to evaluate these systems, after 30 years of age, to determine the condition and repair needs. Once a widespread replacement plan is implemented the reserve study will need to be adjusted to reflect scheduled repairs.</p> <p>No as-builts have been provided of the lateral line locations or quantity; we have made an assumption regarding the linear feet based on the location of the nearby road.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2057	\$18,040

*Next replacement then only within timeframe of this study.

Water Lateral Lines - Replace

Asset ID	5490	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Electrical / Plumbing / Mechanical / Fire Comp	Repeat Count Limit	
Category	Plumbing	Next Replacement Year	2057
Install / Delay Year	2002	Units	50 lf
Useful Life (UL)	55	Unit Cost	\$120.00
Remaining UL	32	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$6,000

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,710	\$2,922	\$3,145	\$3,380	\$3,628	\$3,889	\$4,164	\$4,453	\$4,758	\$5,078

Photo Inventory

Comments
<p>Water lateral lines (piping between main lines and the buildings) on site are reportedly functioning as designed. We recommend budgeting for water lateral line replacement at the timeframe indicated due to the age of the piping and the likelihood that these lines will require replacement at approximately the timeframe indicated per our experiences with similar style pipes.</p> <p>A condition evaluation of these systems is beyond the scope of a Reserve Study. We recommend that a qualified professional be consulted to evaluate these systems, after 30 years of age to determine the condition and repair needs. Once a widespread replacement plan is implemented the reserve study will need to be adjusted to reflect scheduled repairs.</p> <p>No as-builts have been provided of the lateral line locations or quantity; we have made an assumption regarding the linear feet based on the location of the nearby road.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2057	\$18,040

*Next replacement then only within timeframe of this study.

Asphalt - Overlay/Resurface

Asset ID	1140	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Asphalt Surfaces	Next Replacement Year	2027
Install / Delay Year	2002	Units	7500 sf
Useful Life (UL)	25	Unit Cost	\$2.95
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$22,125

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$21,983	\$23,701	\$981	\$2,031	\$3,153	\$4,352	\$5,630	\$6,992	\$8,443	\$9,987

Photo Inventory



Comments
<p>Appears to be deteriorating at a rate typical of its age. As routine maintenance, keep surface clean, ensure that drains are clean and free flowing, repair cracks and clean oils stains promptly. Best to plan for eventual intervals of resurfacing (overlay).</p> <p>If properly built, asphalt surfaces will deteriorate from the top down, which only requires the replacement of a layer of asphalt, or preferably the application of a layer on top of the existing asphalt (overlay). The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire surface, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life. Cost estimate assumes a 2 inch overlay over existing surfaces.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$23,701
2052	\$56,011

*Next replacement then only within timeframe of this study.

Asphalt - Seal Coat

Asset ID	1160	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Asphalt Surfaces	Next Replacement Year	2027
Install / Delay Year	2022	Units	7500 sf
Useful Life (UL)	5	Unit Cost	\$0.38
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$2,850

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,360	\$3,053	\$632	\$1,308	\$2,031	\$2,803	\$3,626	\$751	\$1,554	\$2,412

Photo Inventory



Comments

The primary reason to seal coat is to protect the pavement from the deteriorating effects of sun and water, which causes the asphalt to harden, or oxidize; the pavement turns brittle. The seal coat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Proper drainage is vital for the longevity of asphalt surfaces. Standing water can seep through the asphalt and get into the sub-base and sub-grade below, significantly weakening the structural integrity of the road and causing premature failure.

Oil spills eat through the asphalt seal and should be cleaned up between seal coats. Power washing is recommended annually where needed and treated as an operating expense.

Cost estimate includes crack filling and 2 coats are to be applied. In years when an Overlay/Replacement project is set to occur sealcoating will typically be applied as soon as possible to surfaces. We typically recommend funding for this component at the same time as the Overlay/Replacement project for cost efficiency with the Vendor.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$3,053
2032	\$3,626
2037	\$4,307
2042	\$5,115
2047	\$6,075

*Next replacement then only within timeframe of this study.

Concrete Sidewalks (public) - 15% Replace

Asset ID	2160	Age Adjust +/-	20
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Concrete Surfaces	Next Replacement Year	2027
Install / Delay Year	2002	Units	304 sf
Useful Life (UL)	5	Unit Cost	\$21.00
Remaining UL	2	% Replace	15.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$958

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$793	\$1,026	\$212	\$440	\$682	\$942	\$1,218	\$252	\$522	\$810

Photo Inventory



Comments
<p>Replacement contingency for the concrete public sidewalks. Amount and cycle to be reviewed annually. We recommend repairing trip hazards immediately to limit liability.</p> <p>The City has determined that the public sidewalks are the responsibility of the abutting lot owner.</p> <p>An age adjustment has been given so this component has been set to cycle at 5 year increments (15% per cycle) after 25 years of age, typically when we see concrete surfaces requiring periodic repair/replacement due to vehicle damage, root intrusion and deterioration.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$1,026
2032	\$1,218
2037	\$1,447
2042	\$1,719
2047	\$2,041

*Next replacement then only within timeframe of this study.

Concrete Surfaces (private) - 15% Replace

Asset ID	2220	Age Adjust +/-	20
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Concrete Surfaces	Next Replacement Year	2027
Install / Delay Year	2002	Units	1247 sf
Useful Life (UL)	5	Unit Cost	\$21.00
Remaining UL	2	% Replace	15.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,928

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$3,252	\$4,208	\$871	\$1,803	\$2,799	\$3,863	\$4,998	\$1,034	\$2,141	\$3,325

Photo Inventory



Comments

Replacement contingency for the concrete public sidewalks. Amount and cycle to be reviewed annually. We recommend repairing trip hazards immediately to limit liability.

The City has determined that the public sidewalks are the responsibility of the abutting lot owner.

An age adjustment has been given so this component has been set to cycle at 5 year increments (15% per cycle) after 25 years of age, typically when we see concrete surfaces requiring periodic repair/replacement due to vehicle damage, root intrusion and deterioration.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$4,208
2032	\$4,998
2037	\$5,936
2042	\$7,050
2047	\$8,373

*Next replacement then only within timeframe of this study.

Fence (wood 6') - Replace

Asset ID	3370	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Fencing	Next Replacement Year	2027
Install / Delay Year	2002	Units	275 lf
Useful Life (UL)	25	Unit Cost	\$63.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$17,325

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$17,214	\$18,559	\$768	\$1,590	\$2,469	\$3,407	\$4,408	\$5,475	\$6,611	\$7,820

Photo Inventory



Comments
Wood fencing appears to be deteriorating at a rate typical of its age. As routine maintenance, inspect regularly for any damage, repair as needed. Avoid contact with ground and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance and maximize life. Plan to replace at roughly the time frame indicated.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$18,559
2052	\$43,859

*Next replacement then only within timeframe of this study.

Fence (wood) - Paint/Stain

Asset ID	3390	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Fencing	Next Replacement Year	2027
Install / Delay Year	2022	Units	275 lf
Useful Life (UL)	5	Unit Cost	\$11.50
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,163

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$2,619	\$3,388	\$701	\$1,452	\$2,254	\$3,110	\$4,024	\$833	\$1,724	\$2,677

Photo Inventory



Comments
<p>Regular sealer applications (stain/paint, etc.) on the timeline indicated are strongly recommended for appearance and protection of wood fencing. Remove any contact with ground and surrounding landscape and sprinkler patterns, repair as needed and clean prior to sealer application. Life of finish will vary depending upon surface preparation, material quality, application method and weather conditions.</p> <p>Cost estimate assumes both sides of the fence will be coated to adequately protect from the elements.</p>

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$3,388
2032	\$4,024
2037	\$4,779
2042	\$5,676
2047	\$6,741

*Next replacement then only within timeframe of this study.

Gate (pedestrian) - Replace

Asset ID	4020	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Gate Systems	Next Replacement Year	2042
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	40	Unit Cost	\$5,015.38
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$5,015

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$3,115	\$3,358	\$3,614	\$3,885	\$4,170	\$4,470	\$4,786	\$5,118	\$5,468	\$5,837

Photo Inventory



Comments

Pedestrian gate appears to be deteriorating at a rate typical of its age. Complete touch up paint, maintenance and repairs (paid from Operating Account) to help extend useful life cycles. These types of metal gates are typically durable, however, we recommend setting aside funding for regular intervals of replacement due to constant usage, wear exposure to the elements.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$9,001

*Next replacement then only within timeframe of this study.

Irrigation Piping - Replace

Asset ID	4530	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Irrigation Systems	Next Replacement Year	2042
Install / Delay Year	2002	Units	1260 sf
Useful Life (UL)	40	Unit Cost	\$2.40
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,024

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,878	\$2,025	\$2,179	\$2,342	\$2,514	\$2,695	\$2,886	\$3,086	\$3,297	\$3,519

Photo Inventory



Comments

No reported problems with the irrigation distribution piping at this time. 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 larger scale refurbishing of irrigation systems (e.g., piping, valves, etc.), on a cyclical basis.

This component is for the replacement of the underground irrigation piping. Note that ongoing repairs and replacement of sprinkler heads are assumed to be paid from the Operating Account as needed.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$5,427

*Next replacement then only within timeframe of this study.

Landscape Site Drainage - Replace

Asset ID	4620	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Landscaping	Next Replacement Year	2025
Install / Delay Year	2002	Units	1 Is
Useful Life (UL)	20	Unit Cost	\$4,500.00
Remaining UL		% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$4,500

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$233	\$482	\$748	\$1,033	\$1,336	\$1,659	\$2,004	\$2,370	\$2,760	\$3,174

Photo Inventory



Comments

Assumed to have been properly designed with adequate provisions for the site drainage needs. This component is for a refurbishment of the current drainage system which will tend to clog and have root intrusion issues with time; these drainage systems typically require periodic refurbishment to adequately operate as designed. If after invasive testing is completed a larger scale replacement project is determined more appropriate then the costs can be included in future reserve studies. Cost estimate based on past experiences with similar sized communities.

No schematic of the drainage systems on site have been provided but we have used prior records of similar sized communities in similar geographical areas for an approximate count/cost. Note that drainage locations often get forgotten and/or covered with landscaping over time and their failure is often a reminder of where they are and how many locations are present on site.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2025	\$4,500
2045	\$8,954

*Next replacement then only within timeframe of this study.

Landscaping - Refurbish

Asset ID	4640	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Landscaping	Next Replacement Year	2042
Install / Delay Year	2022	Units	1260 sf
Useful Life (UL)	20	Unit Cost	\$4.00
Remaining UL	17	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$5,040

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$1,043	\$1,350	\$1,676	\$2,024	\$2,394	\$2,788	\$3,206	\$3,650	\$4,121	\$4,621

Photo Inventory



Comments

Although ongoing maintenance is funded from the Operating Account, this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as: weed barrier replacement, large scale plantings, common area drainage projects, resodding lawn areas, landscape improvement projects, etc.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2042	\$9,045

*Next replacement then only within timeframe of this study.

Mailbox Cluster - Replace

Asset ID	4950	Age Adjust +/-	
Funded?	Yes	Delay Funding?	No
Group	Site Components	Repeat Count Limit	
Category	Mailboxes	Next Replacement Year	2027
Install / Delay Year	2002	Units	1 ea
Useful Life (UL)	25	Unit Cost	\$3,250.00
Remaining UL	2	% Replace	100.0%
Cost Source	Reserve Analyst Research	Total Current Cost	\$3,250

Fully Funded Balance - 10 Year Projections (year end)									
2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
\$3,229	\$3,481	\$144	\$298	\$463	\$639	\$827	\$1,027	\$1,240	\$1,467

Photo Inventory



Comments

Appears to be deteriorating at a rate typical of its 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 operating budget. Best to plan for total replacement at roughly the time frame indicated due to constant usage and wear over time.

Client Provided Replacement History		
Year	Cost	Source
Comments On Replacement History		

*Projected Replacement Dates	
Year	Future Cost
2027	\$3,481
2052	\$8,228

*Next replacement then only within timeframe of this study.