

2020 Reserve Study, Revised



ReserveStudyCarolinas.com



June 21, 2019

Dear Holly,

Please find attached our final reserve study draft for Lake Vista Property Owners Association, Inc. The reserve level on 7/1/20, the beginning of the fiscal year is expected to be \$734,070.00, which constitutes 118.34% of full funded reserves, a very strong level of reserves. Please keep in mind that a number of expensive items that may likely be in the future have been excluded in the study. These include, but aren't limited to repairing the dam's banks and replacing the pool shell.

No site visit was performed. Per your request, we have excluded the following items from this revision: pool shell replacement, shed replacement, garage equipment replacement, work vehicle replacement, tree removal, and adjusted the replacement date of windows and doors.

This report represents our best attempt to accurately represent the future financial needs of the association based upon the information available to us at the time of preparation. We hope that you find our report format both informative and useful. All of us at Reserve Professional have enjoyed serving you and providing the most detailed, comprehensive and useful reserve analysis study available.

Since a reserve analysis includes a only visual observation it is impossible to accurately identify, measure or quantify, estimated useful life or cost for any assets that are partially or fully concealed or buried. Examples include, but are not limited to water, sewer, and storm lines, manholes, and storm boxes. Although these items may be included in the reserve analysis, discrepancies may exist between the study and actual conditions. For this same reason an omission of such items may also exist.

Thank you for utilizing our services and please consider referring us to your colleagues and friends. We do not advertise and rely on referrals, which helps to keep your costs down.

We rely on referrals, not advertising. We believe in solid work at fair prices.

Respectfully,



Alex Liu, PRA, RS President Reserve Professionals 919-758-9788 205 S. Academy St. #3851 Cary, NC 27519 ReserveStudyCarolinas.com



Professional Designations:

Professional Reserve Analyst (PRA): Ass. of Professional Reserve Analysts, Certificate #2333 Reserve Specialist (RS): Community Associations Institute, Certification # 276 Stormwater BMP Inspection & Maintenance Professional, NC Coop Ext, Certification # 3164 BS, Construction Management: East Carolina University NC Home Inspector, License # 2972 (inactive) NC General Contractor, License # 66871 HOA Board President, 12 years (Retired)

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This preface is intended to provide an introduction to the enclosed reserve analysis as well as detailed information regarding the reserve analysis report format, reserve fund goals/objectives and calculation methods. The following sections are included in this preface:

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◆ ◆ ◆ ◆ INTRODUCTION TO RESERVE BUDGETING ◆ ◆ ◆ ◆

The Board of Directors of an association has a legal and fiduciary duty to maintain the community in a good state of repair. Individual unit property values are significantly impacted by the level of maintenance and upkeep provided by the association as well as the amount of the regular assessment charged to each owner.

A prudent plan must be implemented to address the issues of long-range maintenance, repair and replacement of the common areas. Additionally, the plan should recognize that the value of each unit is affected by the amount of the regular assessment charged to each unit.

There is a fine line between "not enough," "just right" and "too much." Each member of an association should contribute to the reserve fund for their proportionate amount of "depreciation" (or "use") of the reserve components. Through time, if each owner contributes his "fair share" into the reserve fund for the depreciation of the reserve components, then the possibility of large increases in regular assessments or special assessments will be minimized.

An accurate reserve analysis and a "healthy" reserve fund are essential to protect and maintain the association's common areas and the property values of the individual unit owners. A comprehensive reserve analysis is one of the most significant elements of any association's long-range plan and provides the critical link between sound business judgment and good fiscal planning. The reserve analysis provides a "financial blueprint" for the future of an association.

In order for the reserve analysis to be useful, it must be understandable by a variety of individuals. Board members (from seasoned, experienced Board members to new Board members), property managers, accountants, attorneys and even homeowners may ultimately review the reserve analysis. The reserve analysis must be detailed enough to provide a comprehensive analysis, yet simple enough to enable less experienced individuals to understand the results.

There are four key bits of information that a comprehensive reserve analysis should provide: Budget, Percent Funded, Projections and Inventory. This information is described as follows:

Budget

Amount recommended to be transferred into the reserve account for the fiscal year for which the reserve analysis was prepared. In some cases, the reserve analysis may present two or more funding plans based on different goals/ objectives. The Board should have a clear understanding of the differences among these funding goals/objectives prior to implementing one of them in the annual budget.

Percent Funded

Measure of the reserve fund "health" (expressed as a percentage) as of the beginning of the fiscal year for which the

reserve analysis was prepared. This figure is the ratio of the actual reserve fund on hand to the fully funded balance. A reserve fund that is "100% funded" means the association has accumulated the proportionately correct amount of money, to date, for the reserve components it maintains.

Projections

Indicate the "level of service" the association will provide the membership as well as a "road map" for the fiscal future of the association. The projections define the timetables for repairs and replacements, such as when the buildings will be painted or when the asphalt will be seal coated. The projections also show the financial plan for the association – when an underfunded association will "catch up" or how a properly funded association will remain fiscally "healthy."

Inventory

Complete listing of the reserve components. Key bits of information are available for each reserve component, including placed-in-service date, useful life, remaining life, replacement year, quantity, current cost of replacement, future cost of replacement and analyst's comments.

♦ ♦ ♦ RESERVE FUNDING GOALS / OBJECTIVES ♦ ♦ ♦ ♦

There are four reserve funding goals/objectives which may be used to develop a reserve funding plan that corresponds with the risk tolerance of the association: Full Funding, Baseline Funding, Threshold Funding and Statutory Funding. These goals/objectives are described as follows:

Full Funding

Describes the goal/objective to have reserves on hand equivalent to the value of the deterioration of the each reserve component. The objective of this funding goal is to achieve and/or maintain a 100% percent funded reserve fund. The component calculation method or cash flow calculation method is typically used to develop a full funding plan.

Baseline Funding

Describes the goal/objective to have sufficient reserves on hand to never completely run out of money. The objective of this funding goal is to simply pay for all reserve expenses as they come due without regard to the association's percent funded. The cash flow calculation method is typically used to develop a baseline funding plan.

Threshold Funding

Describes the goal/objective other than the 100% level (full funding) or just staying cash-positive (baseline funding). This threshold goal/objective may be a specific percent funded target or a cash balance target. Threshold funding is often a value chosen between full funding and baseline funding. The cash flow calculation method is typically used to develop a threshold funding plan.

Statutory Funding

Describes the pursuit of an objective as described or required by local laws or codes. The component calculation method or cash flow calculation method is typically used to develop a statutory funding plan.

♦ ♦ ♦ RESERVE FUNDING CALCULATION METHODS

There are two funding methods which can be used to develop a reserve funding plan based on a reserve funding goal/ objective: Component Calculation Method and Cash Flow Calculation Method. These calculation methods are described as follows:

Component Calculation Method

This calculation method develops a funding plan for each individual reserve component. The sum of the funding plan for each component equals the total funding plan for the association. This method is often referred to as the "straight line"

method and is widely believed to be the most conservative reserve funding method. This method structures a funding plan that enables the association to pay all reserve expenditures as they come due, enables the association to achieve the ideal level of reserves in time, and then enables the association to maintain the ideal level of reserves through time. The following is a detailed description of the component calculation method:

Step 1: Calculation of fully funded balance for each component

The fully funded balance is calculated for each component based on its age, useful life and current cost. The actual formula is as follows:

Fully Funded Balance = $\frac{Age}{Useful Life}$ X Current Cost

Step 2: Distribution of current reserve funds

The association's current reserve funds are assigned to (or distributed amongst) the reserve components based on each component's remaining life and fully funded balance as follows:

Pass 1: Components are organized in remaining life order, from least to greatest, and the current reserve funds are assigned to each component up to its fully funded balance, until reserves are exhausted.

Pass 2: If all components are assigned their fully funded balance and additional funds exist, they are assigned in a "second pass." Again, the components are organized in remaining life order, from least to greatest, and the remaining current reserve funds are assigned to each component up to its current cost, until reserves are exhausted.

Pass 3: If all components are assigned their current cost and additional funds exist, they are assigned in a "third pass." Components with a remaining life of zero years are assigned double their current cost.

Distributing, or assigning, the current reserve funds in this manner is the most efficient use of the funds on hand – it defers the make-up period of any underfunded reserves over the lives of the components with the largest remaining lives.

Step 3: Developing a funding plan

After step 2, all components have a "starting" balance. A calculation is made to determine what funding would be required to get from the starting balance to the future cost over the number of years remaining until replacement. The funding plan incorporates the annual contribution increase parameter to develop a "stair stepped" contribution.

For example, if an association needs to accumulate \$100,000 in ten years, \$10,000 could be contributed each year. Alternatively, the association could contribute \$8,723 in the first year and increase the contribution by 3% each year thereafter until the tenth year.

In most cases, this rate should match the inflation parameter. Matching the annual contribution increase parameter to the inflation parameter indicates, in theory, that member contributions should increase at the same rate as the cost of living (inflation parameter). Due to the "time value of money," this creates the most equitable distribution of member contributions through time.

Using an annual contribution increase parameter that is greater than the inflation parameter will reduce the burden to the current membership at the expense of the future membership. Using an annual contribution increase parameter that is less than the inflation parameter will increase the burden to the current membership to the benefit of the future membership. The following chart shows a comparison:

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

This parameter is used to develop a funding plan only; it does not mean that the reserve contributions must be raised each year. There are far more significant factors that will contribute to a total reserve contribution increase or decrease from year to year than this parameter.

One of the major benefits of using this calculation method is that for any single component (or group of components), the accumulated balance and reserve funding can be precisely calculated. For example, using this calculation method, the reserve analysis can indicate the exact amount of current reserve funds "in the bank" for the roofs and the amount of money being funded towards the roofs each month. This information is displayed on the Management / Accounting Summary and Charts as well as elsewhere within the report.

The component calculation method is typically used for well-funded associations (greater that 65% funded) with a goal/ objective of full funding.

Cash Flow Calculation Method

This calculation method develops a funding plan based on current reserve funds and projected expenditures during a specific timeframe (typically 30 years). This funding method structures a funding plan that enables the association to pay for all reserve expenditures as they come due, but is not necessarily concerned with the ideal level of reserves through time.

This calculation method tests reserve contributions against reserve expenditures through time to determine the minimum contribution necessary (baseline Funding) or some other defined goal/objective (full funding, threshold funding or statutory funding).

Unlike the component calculation method, this calculation method cannot precisely calculate the reserve funding for any single component (or group of components). In order to work-around this issue to provide this bookkeeping information, a formula has been applied to component method results to calculate a reasonable breakdown. This information is displayed on the Management / Accounting Summary and Charts as well as elsewhere within the report.

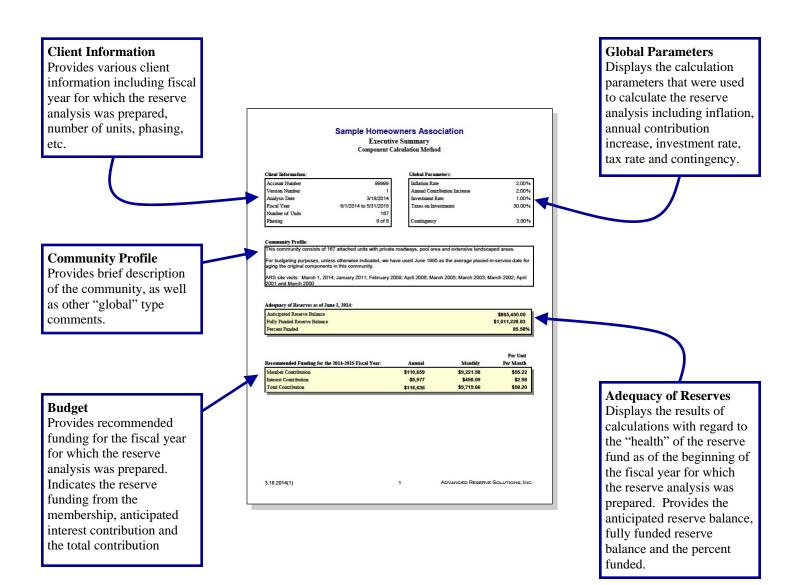
The cash flow calculation method is typically used for under-funded associations (less than 65% funded) with a goal/ objective of full funding, threshold funding, baseline funding or statutory funding.

♦ ♦ ♦ READING THE RESERVE ANALYSIS

In some cases, the reserve analysis may be a lengthy document of one hundred pages or more. A complete and thorough review of the reserve analysis is always a good idea. However, if time is limited, it is suggested that a thorough review of the summary pages be made. If a "red flag" is raised in this review, the reader should then check the detail information, of the component in question, for all relevant information. In this section, a description of most of the summary or report sections is provided along with comments regarding what to look for and how to use each section.

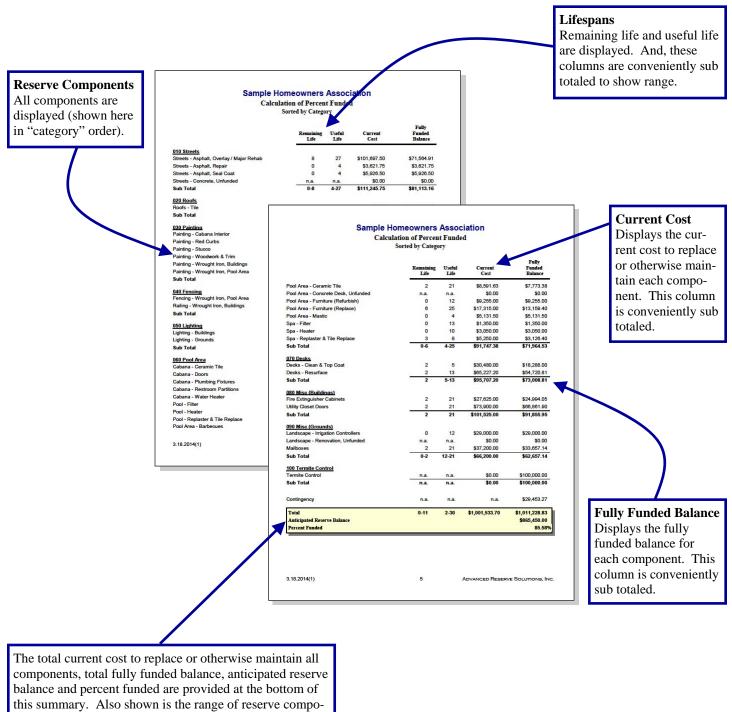
Executive Summary

Provides general information about the client, global parameters used in the calculation of the reserve analysis as well as the core results of the reserve analysis.



Calculation of percent funded

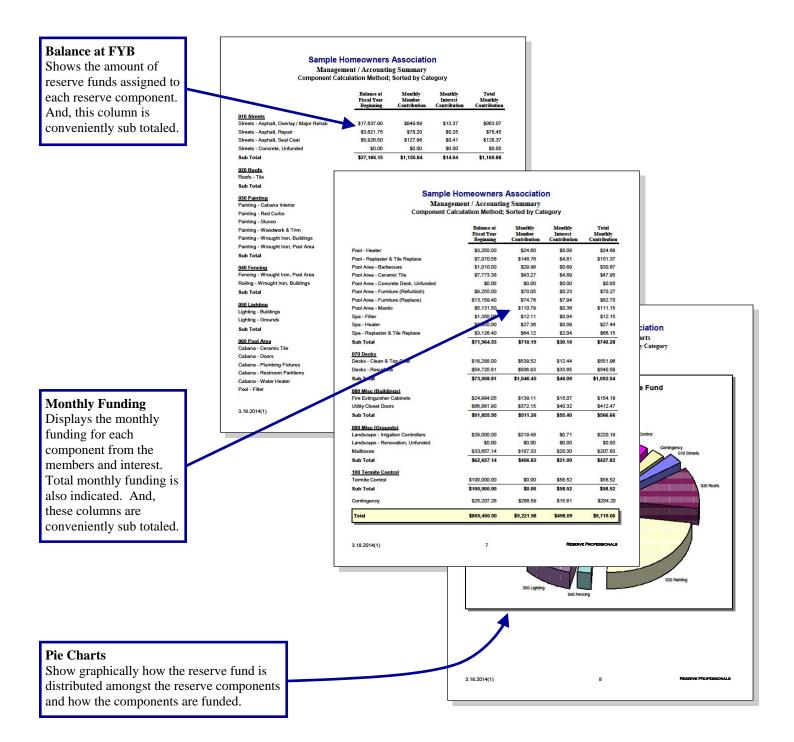
Summary displays all reserve components, shown here in "category" order. Provides the remaining life, useful life, current cost and the fully funded balance at the beginning of the fiscal year for which the reserve analysis was prepared.



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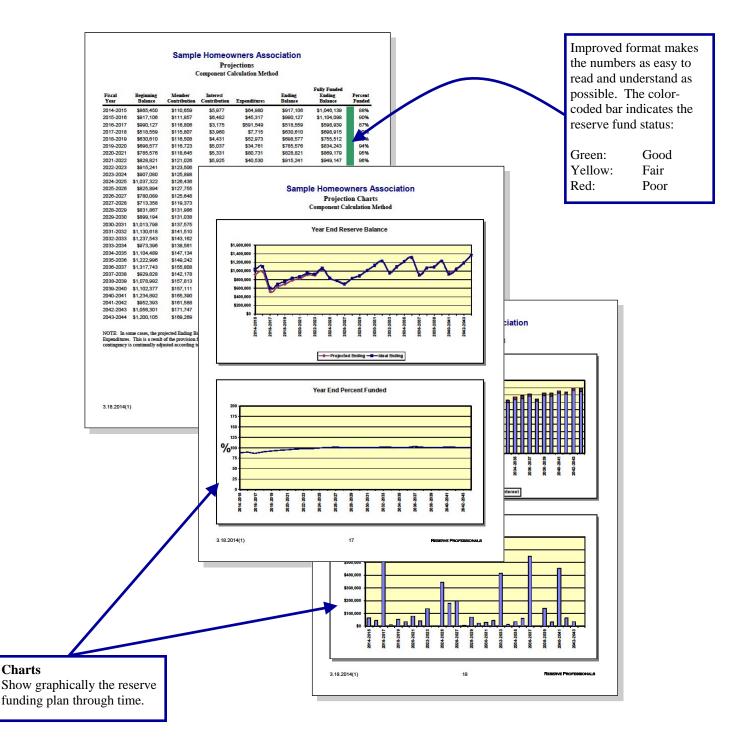
Management / Accounting Summary and Charts

Summary displays all reserve components, shown here in "category" order. Provides the assigned reserve funds at the beginning of the fiscal year for which the reserve analysis was prepared along with the monthly member contribution, interest contribution and total contribution for each component and category. Pie charts show graphically how the total reserve fund is distributed amongst the reserve component categories and how each category is funded on a monthly basis.



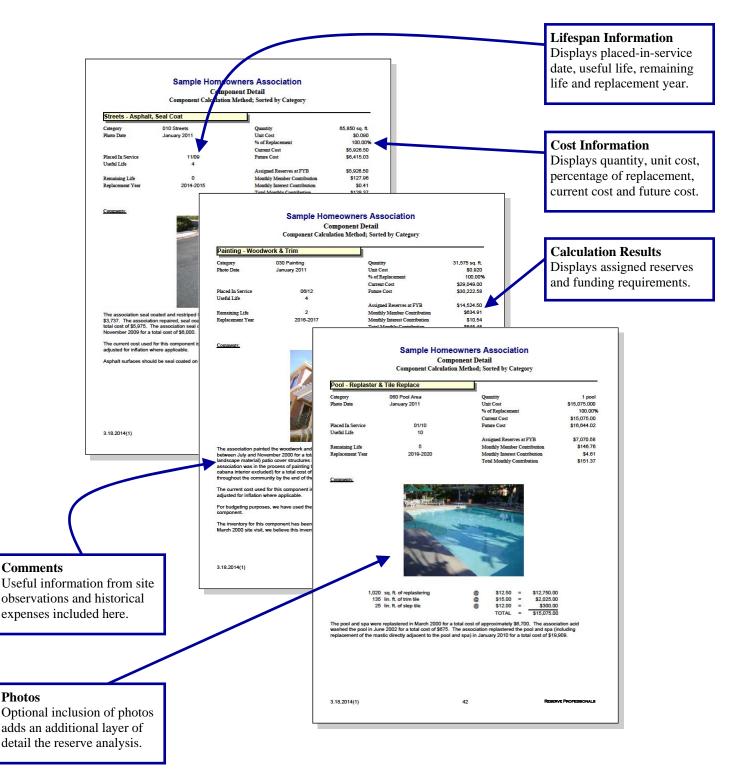
Projections and Charts

Summary displays projections of beginning reserve balance, member contribution, interest contribution, expenditures and ending reserve balance for each year of the projection period (shown here for 30 years). The two columns on the right-hand side provide the fully funded ending balance and the percent funded for each year. Charts show the same information in an easy-to-understand graphic format.



Component Detail

Summary provides detailed information about each reserve component. These pages display all information about each reserve component as well as comments from site observations and historical information regarding replacement or other maintenance.



Annual Contribution Increase Parameter

The rate used in the calculation of the funding plan. This rate is used on an annual compounding basis. This rate represents, in theory, the rate the association expects to increase contributions each year.

In most cases, this rate should match the inflation parameter. Matching the annual contribution increase parameter to the inflation parameter indicates, in theory, that member contributions should increase at the same rate as the cost of living (inflation parameter). Due to the "time value of money," this creates the most equitable distribution of member contributions through time.

This parameter is used to develop a funding plan only; it does not mean that the reserve contributions must be raised each year. There are far more significant factors that will contribute to a total reserve contribution increase or decrease from year to year than this parameter. See the description of "reserve funding calculation methods" in this preface for more detail on this parameter.

Anticipated Reserve Balance (or Reserve Funds)

The amount of money, as of a certain point in time, held by the association to be used for the repair or replacement of reserve components. This figure is "anticipated" because it is calculated based on the most current financial information available as of the analysis date, which is almost always prior to the fiscal year beginning date for which the reserve analysis is prepared.

Assigned Funds (and "Fixed" Assigned Funds)

The amount of money, as of the fiscal year beginning date for which the reserve analysis is prepared, that a reserve component has been assigned.

The assigned funds are considered "fixed" when the normal calculation process is bypassed and a specific amount of money is assigned to a reserve component. For example, if the normal calculation process assigns \$10,000 to the roofs, but the association would like to show \$20,000 assigned to roofs, "fixed" funds of \$20,000 can be assigned.

Cash Flow Calculation Method

Reserve funding calculation method developed based on total annual expenditures. A more detailed description of the actual calculation process is included in the "reserve funding calculation methods" section of the preface.

Component Calculation Method

Reserve funding calculation method developed based on each individual component. A more detailed description of the actual calculation process is included in the "reserve funding calculation methods" section of the preface.

Contingency Parameter

The rate used as a built-in buffer in the calculation of the funding plan. This rate will assign a percentage of the reserve funds, as of the fiscal year beginning, as contingency funds and will also determine the level of funding toward the contingency each month.

Current Replacement Cost

The amount of money, as of the fiscal year beginning date for which the reserve analysis is prepared, that a reserve component is expected to cost to replace.

Fiscal Year

Indicates the budget year for the association for which the reserve analysis was prepared. The fiscal year beginning (FYB) is the first day of the budget year; the fiscal year end (FYE) is the last day of the budget year.

Fully Funded Reserve Balance (or Ideal Reserves)

The amount of money that should theoretically have accumulated in the reserve fund as of a certain point in time. Fully funded reserves are calculated for each reserve component based on the current replacement cost, age and useful life:

Fully Funded Reserves = $\frac{Age}{Useful Life}$ X Current Replacement Cost

The fully funded reserve balance is the sum of the fully funded reserves for each reserve component.

An association that has accumulated the fully funded reserve balance does not have all of the funds necessary to replace all of its reserve components immediately; it has the proportionately appropriate reserve funds for the reserve components it maintains, based on each component's current replacement cost, age and useful life.

Future Replacement Cost

The amount of money, as of the fiscal year during which replacement of a reserve component is scheduled, that a reserve component is expected to cost to replace. This cost is calculated using the current replacement cost compounded annually by the inflation parameter.

Global Parameters

The financial parameters used to calculate the reserve analysis. See also "inflation parameter," "annual contribution increase parameter," "investment rate parameter" and "taxes on investments parameter."

Inflation Parameter

The rate used in the calculation of future costs for reserve components. This rate is used on an annual compounding basis. This rate represents the rate the association expects to the cost of goods and services relating to their reserve components to increase each year.

Interest Contribution

The amount of money contributed to the reserve fund by the interest earned on the reserve fund and member contributions.

Investment Rate Parameter

The gross rate used in the calculation of interest contribution (interest earned) from the reserve balance and member contributions. This rate (net of the taxes on investments parameter) is used on a monthly compounding basis. This parameter represents the weighted average interest rate the association expects to earn on their reserve fund investments.

Membership Contribution

The amount of money contributed to the reserve fund by the association's membership.

Monthly Contribution (and "Fixed" Monthly Contribution)

The amount of money, for the fiscal year which the reserve analysis is prepared, that a reserve component will be funded.

The monthly contribution is considered "fixed" when the normal calculation process is bypassed and a specific amount of money is funded to a reserve component. For example, if the normal calculation process funds \$1,000 to the roofs each month, but the association would like to show \$500 funded to roofs each month, a "fixed" contribution of \$500 can be assigned.

Number of Units (or other assessment basis)

Indicates the number of units for which the reserve analysis was prepared. In "phased" developments (see phasing), this number represents the number of units, and corresponding common area components, that existed as of a certain point in time.

For some associations, assessments and reserve contributions are based on a unit of measure other than the number of units. Examples include time-interval weeks for timeshare resorts or lot acreage for commercial/industrial developments.

One-Time Replacement

Used for components that will be budgeted for only once.

Percent Funded

A measure, expressed as a percentage, of the association's reserve fund "health" as of a certain point in time. This number is the ratio of the anticipated reserve fund balance to the fully funded reserve balance:

Percent Funded = <u>Anticipated Reserve Fund Balance</u> Fully Funded Reserve Balance

An association that is 100% funded does not have all of the reserve funds necessary to replace all of its reserve components immediately; it has the proportionately appropriate reserve funds for the reserve components it maintains, based on each component's current replacement cost, age and useful life.

Percentage of Replacement

The percentage of the reserve component that is expected to be replaced.

For most reserve components, this percentage should be 100%. In some cases, this percentage may be more or less than 100%. For example, fencing which is shared with a neighboring community may be set at 50%.

Phasing

Indicates the number of phases for which the reserve analysis was prepared and the total number of phases expected at build-out (i.e. Phase 4 of 7). In phased developments, the first number represents the number of phases, and corresponding common area components, that existed as of a certain point in time. The second number represents the number of phases that are expected to exist at build-out.

Placed-In-Service Date

The date (month and year) that the reserve component was originally put into service or last replaced.

Remaining Life

The length of time, in years, until a reserve component is scheduled to be replaced.

Remaining Life Adjustment

The length of time, in years, that a reserve component is expected to last in excess (or deficiency) of its useful life for the current cycle of replacement.

If the current cycle of replacement for a reserve component is expected to be greater than or less than the "normal" life expectancy, the reserve component's life should be adjusted using a remaining life adjustment.

For example, if wood trim is painted normally on a 4 year cycle, the useful life should be 4 years. However, when it comes time to paint the wood trim and it is determined that it can be deferred for an additional year, the useful life should remain at 4 years and a remaining life adjustment of +1 year should be used.

Replacement Year

The fiscal year that a reserve component is scheduled to be replaced.

Reserve Components

Line items included in the reserve analysis.

Taxes on Investments Parameter

The rate used to offset the investment rate parameter in the calculation of the interest contribution. This parameter represents the marginal tax rate the association expects to pay on interest earned by the reserve funds and member contributions.

Total Contribution

The sum of the membership contribution and interest contribution.

<u>Useful Life</u>

The length of time, in years, that a reserve component is expected to last each time it is replaced. See also "remaining life adjustment."

◆ ◆ ◆ ◆ LIMITATIONS OF RESERVE ANALYSIS ◆ ◆ ◆ ◆

This reserve analysis is intended as a tool for the association's Board of Directors to be used in evaluating the association's current physical and financial condition with regard to reserve components. The results of this reserve analysis represent the independent opinion of the preparer. There is no implied warranty or guarantee of this work product.

For the purposes of this reserve analysis, it has been assumed that all components have been installed properly, no construction defects exist and all components are operational. Additionally, it has been assumed that all components will be maintained properly in the future.

The representations set forth in this reserve analysis are based on the best information and estimates of the preparer as of the date of this analysis. These estimates are subject to change. This reserve analysis includes estimates are projections of future events based on information currently available and are not necessarily indicative of the actual future outcome. The longer the time period between the estimate and the estimated event, the more likely the possibility or error and/or discrepancy. For example, some assumptions inevitably will not materialize and unanticipated events and circumstances many occur subsequent to the preparation of this reserve analysis. Therefore, the actual replacement costs and remaining lives may vary from this reserve analysis and the variation may be significant. Additionally, inflation and other economic events may impact this reserve analysis, particularly over an extended period of time and those events could have a significant and negative impact on the accuracy of this reserve analysis and, further, the funds available to meet the association's obligation for repair, replacement or other maintenance of major components during their estimated useful life. Furthermore, the occurrence of vandalism, severe weather conditions, earthquakes, floods, acts of nature or other unforeseen events cannot be predicted and/or accounted for and excluded when assessing life expectancy, repair and/or replacement costs of the components.

Executive Summary Directed Cash Flow Calculation Method

Client Information:

Account Number	1196
Version Number	1
Analysis Date	05/13/2020
Fiscal Year	7/1/2020 to 6/30/2021
Number of Lots	485
Phasing	1 of 1

Global Parameters:

Inflation Rate	2.50 %
Annual Contribution Increase	2.50 %
Investment Rate	1.01 %
Taxes on Investments	18.00 %
Contingency	3.00 %

Community Profile:

The community consists of 485 lots with poolhouse, swimming pool, bridges, gazebo, and asphalt pathways.

Unless otherwise indicated, we have used the date 1/1989, as the basis for aging of all original components. Level of Study: Update withOUT Site Inspection Calculation Method Used: Cash Flow Funding Strategy: Full Funding Site Inspection Date: Not Applicable

Adequacy of Reserves as of July 1, 2020:

Anticipated Reserve Balance	\$734,070.00
Fully Funded Reserve Balance	\$620,509.56
Percent Funded	118.30%

			Per Lot
Recommended Funding for the 2020-2021 Fiscal Year:	Annual	Monthly	Per Month
Member Contribution	\$64,000	\$5,333.33	\$11.00
Interest Contribution	\$4,095	\$341.21	\$0.70
Total Contribution	\$68,095	\$5,674.55	\$11.70

Preparer's Disclosure Statement

Alexander Liu was awarded the Reserve Specialist (RS) designation from Community Associations Institute (CAI). The RS designation was developed by CAI for professional reserve analysts who wish to confirm to their peers and/or clients that they have demonstrated a basic level of competency within the industry. The RS designation is awarded to reserve analysts who are dedicated to the highest standards of professionalism and reserve analysis preparation. Additionally, he has been award the Professional Reserve Analyst (PRA) designation from the Association of Professional Reserve Analysts (APRA).

Consultant certifies that:

1) Consultant has no other involvement with association which could result in actual or perceived conflicts of interest.

2) Component inventories were developed by actual field inventory, representative sampling, take-offs of scaled plans, provided by the association's previous reserve analysis prepared by another firm or provided by the association.

Component conditional assessments were developed by actual field observation and representative sampling.

3) Financial assumptions used in this analysis are listed on the Executive Summary and further explained in the Preface of this report.

4) Consultant is a Reserve Specialist (RS) designee with CAI and Professional Reserve Analyst (PRA) with APRA.

5) There are no material issues known to consultant at this time which would cause a distortion of the association's situation.

6) The scope of Reserve Professionals' service does not include forensic, invasive or destructive testing or analysis of an engineering or architectural nature. Reserve Component condition assessments are based on visual observation. The Reserve Professionals reserve study specifically is neither a Building Inspection nor an engineering or architectural evaluation of the suitability, quality or integrity of the design, construction or manufacture quality of the facilities, infrastructure and other components comprising Client's project. A reserve study is not intended to be used to perform an audit, an analysis of quality, a forensic study or a background check of historical records. A site visit conducted in conjunction with a reserve study should not be deemed to be a project audit or quality inspection. The physical analysis performed during this site visit is not intended to be exhaustive in nature and may include representative sampling.

7) Since a reserve analysis is limited to a visual observation it is impossible to accurately identify, measure or quantify, estimate useful life or cost for any assets that are partially or fully concealed or buried. Although such items may be included in the reserve analysis, Reserve Professionals is not responsible for any discrepancies in material quantities, unit costs, or total costs that may exist between the study and actual conditions or responsible for an omission of such item. Additionally, the extent of the future repairs can't be ascertained by a visual observation. Additionally predicting when the repairs will be needed is not possible by visual observation. A more detailed inspection maybe possible, but is not within the scope of this study. Therefore, it is important for the client to understand that the cost and timing of repairs or replacement is in fact, speculation. Assets include, but are not limited to irrigation, sprinkler, water, sewer, and storm piping, electrical wiring and equipment, building water damage, bodies of water, site and building drainage, tree removal, landscaping projects.

8) In many instances actual costs and timing for repairs may vary significantly. This reserve study may not fund for the worst case scenario. We believe this is to the benefit of the client by not tying up funds for repair/replacement events that may not happen for 20, 30 or more years than the worst case scenario.

9) We make every attempt to notify the Client when we notice a potential safety issue, however a reserve study is not intended to identify safety issues. We take no responsibility for identifying or communicating any safety issues including, but not limited to fall hazards of people or structures, structural concerns, electrical shock.

10) It is important to be aware that the useful life of an asset may not indicate that the repair/replacement date will occur at that date, but rather that a certain amount of fund might be expended by this date. In other words, an asset with a 20

Preparer's Disclosure Statement

year useful life may have had repairs performed 4 or 5 times in that 20 year period. A reserve study, which looks out 30 years is not flexible enough to take into account all the smaller activities that would fall outside of maintenance, but still would occur outside a regular predictable schedule. Additionally, some assets fail unexpectedly without providing any sign of distress in advance. In these instances, a useful life would indicate not that a component should be replaced at the end of this period, but rather that funds should be accumulated by the end of this period for when the item will need to be replaced.

11) Often, similar components have differing ages or costs. In an effort to alleviate unnecessary complexity, the study may use an average or median useful life, age, or cost for all of similarly grouped components.

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

13) The results of this study are based on the independent opinion of the preparer and his experience and research during the course of his career in preparing Reserve Studies. In addition the opinions of experts on certain components have been gathered through research within their industry and with client's actual vendors. There is no implied warranty or guarantee regarding our life and cost estimates/predictions. There is no implied warranty or guarantee in any of our work product. Our results and findings will vary from another preparer's results and findings. A Reserve Study is necessarily a work in progress and subsequent Reserve Studies will vary from prior studies.

14) This Reserve Study assumes that all construction assemblies and components identified herein are built properly and are free from defects in materials and/or workmanship. Defects can lead to reduced useful life and premature failure. It was not the intent of this Reserve Study to inspect for or to identify defects. If defects exist, repairs should be made so that the construction components and assemblies at the community reach their full and expected useful lives.

15) We have assumed any and all components have been properly built and will reach normal, typical life expectancies. In general a reserve study is not intended to identify or fund for construction defects. We did not and will not look for or identify construction defects during our site visit.

16) The costs and timing associated with any repairs listed in the study are speculative. The extent of the repairs is unknown. How a repair will be performed can vary significantly, which will affect the cost. Additionally, costs have not taken into account upgrades required to bring the current construction up to current code.

17) A reserve study is based on the aggregate cost and replacement schedule of the client's assets. It would be inappropriate to consider any asset's funding in isolation. Aggregating costs creates a safety net for any cost discrepancies. It is highly likely that some assets will cost more than predicted, and others less. The differences between predicted and actual costs are meant to offset each other. Thus, any cost savings reaped when an asset is repaired or replaced should remain in reserves and not distributed for other purposes.

18) Maintenance responsibility of water, sewer, and storm systems varies by municipality. Even within individual municipalities this responsibility can vary significantly due to negotiations between a developer and planning developments. We have not contacted any government agency to confirm maintenance responsibility, nor have pertinent public records been reviewed. As a result, quantities of water, sewer, and storm lines and boxes may be inaccurate. Generally speaking, we include water and sewer mains when streets are private and simply measure the linear feet of the road as a basis for this quantity since actual location is unknown in most instances. If a community has public streets, we have excluded all items within the right of way.

19) Storm water systems are difficult to locate. Area drains located in the turfed or landscaped areas have been excluded, unless specifically noted. Unless noted, storm line quantities include only inflow and outflow pipe to retention ponds where roads are public, and also pipe in roads where roads are private. Any storm pipe located in other areas has not been accounted for. If such pipe does exist in your community the quantities may not be accurate. Culverts under public roads are assumed to be publicly maintained.

Preparer's Disclosure Statement

20) There maybe community assets listed in the study, like painting, that the IRS considers a non-capital expense. It is important to consult with an accountant since this will have tax implications. If the board wishes, these items can be removed from the reserve study. It is important to recognize that the reserve study simply is a budgeting tool for large future expenses, and doesn't differentiate between capital and non-capital expenses or account for IRS tax rules.

21) This reserve study follows the guidelines established by APRA Standards of Practice and CAI's National Reserve Study Standards. A copy of either is available upon request.

Site Visits: If a site visit has been performed during the preparation of this reserve study, no invasive testing was performed. The physical analysis performed during the site visit was not intended to be exhaustive in nature and may have included representative sampling.

Update Reserve Studies: Level II Studies: Quantities of major components as reported in previous reserve studies are deemed to be accurate and reliable. The reserve study relies upon the validity of previous reserve studies. Level III Studies: In addition to the above we have not visited the property when completing a Level III, No Site Visit, study. Therefore we have not verified the current condition of the common area components.

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
010 Paving				
Asphalt Paving - Repairs	1	10	\$17,013.45	\$15,222.56
Asphalt Paving - Repaving	1	20	\$109,342.62	\$103,735.31
Asphalt Paving - Sealing	0	4	\$9,539.22	\$9,539.22
Site Concrete - Pavers, Repair or Replace	19	25	\$13,262.00	\$2,977.18
Site Concrete - Sidewalks, Repairs	11	15	\$2,047.38	\$494.20
Sub Total	0-19	4-25	\$151,204.67	\$131,968.46
020 Utilities & Drainage				
Pond - Dredging and Maintenance	0	32	\$250,000.00	\$250,000.00
Storm System - Repairs	1	5	\$25,000.00	\$19,444.44
Sub Total	0-1	5-32	\$275,000.00	\$269,444.44
030 Site				
Fencing - Pool, Replace	12	30	\$18,609.36	\$11,039.45
Landscaping - Refurbish	3	5	\$6,265.36	\$1,842.75
Outdoor Lighting - Replace	11	30	\$22,000.00	\$13,796.61
Pond Evaluation	1	5	\$2,000.00	\$1,555.56
Retaining Walls - Modular Block, Repair	31	40	\$21,492.80	\$4,625.03
Signage - Miscellaneous, Replace	11	20	\$9,000.00	\$3,923.08
Signage - Monument, Replace	11	40	\$13,000.00	\$9,379.75
Site Furniture - Replace	6	20	\$5,500.00	\$3,807.69
Sub Total	1-31	5-40	\$97,867.52	\$49,969.92
040 Recreation				
Fencing - Chain Link, Tennis Courts	25	30	\$16,872.24	\$2,573.73
Pool - Cover, Safety	10	12	\$12,160.00	\$1,586.09
Pool - Filter	17	20	\$8,100.00	\$1,038.46
Pool - Miscellaneous	10	18	\$4,000.00	\$1,714.29
Pool - Replaster & Tile Replacement	9	12	\$21,050.01	\$4,576.09
Pool Area - Furniture	9	12	\$13,000.00	\$2,826.09
Site Concrete - Pool Deck, Replace	7	25	\$27,898.00	\$19,927.14
Tennis Court - Reconstruction	20	25	\$51,226.56	\$9,408.96
Tennis Court - Windscreen	5	10	\$2,500.00	\$1,184.21
Tennis Courts - Resurfacing	1	6	\$6,403.32	\$5,239.08
Sub Total	1-25	6-30	\$163,210.13	\$50,074.14
050 Miscellaneous Structures				
Gazebo - Replace	6	25	\$16,000.00	\$12,081.63

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Wood Structures - Boat Racks & Bridges, Replace	16	18	\$39,500.00	\$3,385.71
Sub Total	6-16	18-25	\$55,500.00	\$15,467.35
060 Roofs				
Roofs - Shingle, Replace	16	18	\$20,227.50	\$1,733.79
Sub Total	16	18	\$20,227.50	\$1,733.79
070 Exterior				
Brick - Clean, Seal and Point Up	11	40	\$5,000.00	\$3,607.59
Pool Lighting - Replace	12	30	\$6,400.00	\$3,796.61
Siding - Vinyl	19	35	\$13,083.20	\$5,877.96
Window and Door Replacement	23	30	\$56,250.00	\$12,394.07
Wood Trim - Repairs	0	4	\$3,200.00	\$3,200.00
Sub Total	0-23	4-40	\$83,933.20	\$28,876.23
080 Interior				
Community Center - Renovation	0	10	\$8,100.00	\$8,100.00
Electrical & Lighting - Replace, Interior	26	35	\$35,000.00	\$8,623.19
Floor Cover - Ceramic Tile	23	30	\$12,214.62	\$2,691.36
Floor Cover - Wood, Replacement	23	30	\$12,700.80	\$2,798.48
Furniture - Clubhouse	13	15	\$33,000.00	\$3,413.79
Kitchen Renovation - Residential Grade	5	20	\$10,500.00	\$7,807.69
Restroom Fixtures - Replace	26	35	\$26,000.00	\$6,405.80
Sub Total	0-26	10-35	\$137,515.42	\$39,840.31
090 Equipment				
Access Control - FOB Reader, Pool Gate	1	6	\$2,500.00	\$2,045.45
Access Control - Surveillance System	1	10	\$7,000.00	\$6,263.16
HVAC - Split System	10	12	\$8,200.00	\$911.11
Pumps - Pool, Replace	2	10	\$7,400.00	\$5,842.11
Sub Total	1-10	6-12	\$25,100.00	\$15,061.83
100 Miscellaneous				
Excluded	n.a.	n.a.	\$0.00	\$0.00
Sub Total	n.a.	n.a.	\$0.00	\$0.00

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Contingency	n.a.	n.a.	n.a.	\$18,073.09
Total Anticipated Reserve Balance Percent Funded	0-31	4-40	\$1,009,558.44	\$620,509.56 \$734,070.00 118.30%

Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
010 Paving				
Asphalt Paving - Repairs	\$17,013.45	\$32.94	\$12.08	\$45.02
Asphalt Paving - Repaving	\$109,342.62	\$211.68	\$77.64	\$289.32
Asphalt Paving - Sealing	\$9,539.22	\$290.62	\$0.80	\$291.42
Site Concrete - Pavers, Repair or Replace	\$2,977.18	\$80.08	\$2.32	\$82.40
Site Concrete - Sidewalks, Repairs	\$2,047.38	\$3.96	\$1.45	\$5.42
Sub Total	\$140,919.85	\$619.28	\$94.30	\$713.58
020 Utilities & Drainage				
Pond - Dredging and Maintenance	\$250,000.00	\$1,729.56	\$4.79	\$1,734.35
Storm System - Repairs	\$25,000.00	\$48.40	\$17.75	\$66.15
Sub Total	\$275,000.00	\$1,777.96	\$22.54	\$1,800.50
030 Site				
Fencing - Pool, Replace	\$12,722.44	\$88.38	\$9.21	\$97.58
Landscaping - Refurbish	\$6,265.36	\$12.13	\$4.45	\$16.57
Outdoor Lighting - Replace	\$22,000.00	\$42.59	\$15.62	\$58.21
Pond Evaluation	\$2,000.00	\$3.87	\$1.42	\$5.30
Retaining Walls - Modular Block, Repair	\$4,625.03	\$90.84	\$3.51	\$94.35
Signage - Miscellaneous, Replace	\$9,000.00	\$17.42	\$6.39	\$23.81
Signage - Monument, Replace	\$13,000.00	\$25.17	\$9.23	\$34.39
Site Furniture - Replace	\$5,500.00	\$10.65	\$3.91	\$14.55
Sub Total	\$75,112.84	\$291.05	\$53.73	\$344.77
040 Recreation				
Fencing - Chain Link, Tennis Courts	\$2,573.73	\$87.23	\$2.05	\$89.28
Pool - Cover, Safety	\$12,160.00	\$23.54	\$8.64	\$32.18
Pool - Filter	\$1,038.46	\$58.16	\$0.90	\$59.05
Pool - Miscellaneous	\$4,000.00	\$7.74	\$2.84	\$10.58
Pool - Replaster & Tile Replacement	\$21,050.01	\$40.75	\$14.94	\$55.69
Pool Area - Furniture	\$13,000.00	\$25.17	\$9.23	\$34.39
Site Concrete - Pool Deck, Replace	\$27,898.00	\$54.01	\$19.80	\$73.81
Tennis Court - Reconstruction	\$9,408.96	\$307.52	\$7.49	\$315.01
Tennis Court - Windscreen	\$2,500.00	\$4.84	\$1.78	\$6.62
Tennis Courts - Resurfacing	\$6,403.32	\$12.40	\$4.55	\$16.94
Sub Total	\$100,032.48	\$621.35	\$72.21	\$693.56

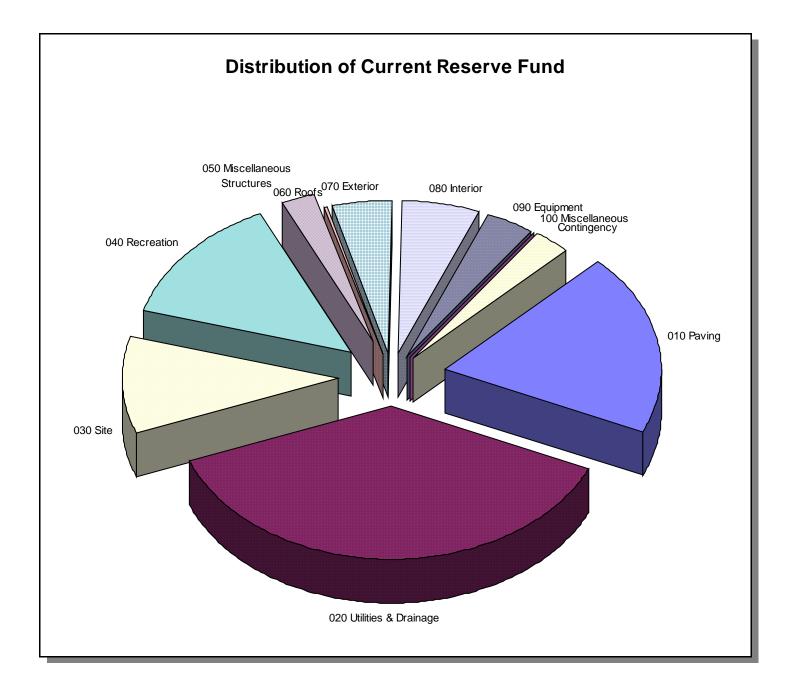
Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
050 Miscellaneous Structures				
Gazebo - Replace	\$16,000.00	\$30.97	\$11.36	\$42.34
Wood Structures - Boat Racks & Bridges, Repla	\$3,385.71	\$309.27	\$3.24	\$312.51
Sub Total	\$19,385.71	\$340.24	\$14.61	\$354.85
060 Roofs				
Roofs - Shingle, Replace	\$1,733.79	\$158.37	\$1.66	\$160.03
Sub Total	\$1,733.79	\$158.37	\$1.66	\$160.03
070 Exterior				
Brick - Clean, Seal and Point Up	\$5,000.00	\$9.68	\$3.55	\$13.23
Pool Lighting - Replace	\$6,400.00	\$12.39	\$4.55	\$16.94
Siding - Vinyl	\$5,877.96	\$63.44	\$4.31	\$67.76
Window and Door Replacement	\$12,394.07	\$294.01	\$9.55	\$303.56
Wood Trim - Repairs	\$3,200.00	\$97.49	\$0.27	\$97.76
Sub Total	\$32,872.03	\$477.01	\$22.24	\$499.25
080 Interior				
Community Center - Renovation	\$8,100.00	\$103.59	\$0.28	\$103.88
Electrical & Lighting - Replace, Interior	\$8,623.19	\$163.69	\$6.53	\$170.22
Floor Cover - Ceramic Tile	\$2,691.36	\$63.84	\$2.08	\$65.92
Floor Cover - Wood, Replacement	\$2,798.48	\$66.39	\$2.16	\$68.54
Furniture - Clubhouse	\$3,413.79	\$304.70	\$3.24	\$307.94
Kitchen Renovation - Residential Grade	\$10,500.00	\$20.33	\$7.46	\$27.78
Restroom Fixtures - Replace	\$6,405.80	\$121.60	\$4.85	\$126.45
Sub Total	\$42,532.62	\$844.14	\$26.60	\$870.74
090 Equipment				
Access Control - FOB Reader, Pool Gate	\$2,500.00	\$4.84	\$1.78	\$6.62
Access Control - Surveillance System	\$7,000.00	\$13.55	\$4.97	\$18.53
HVAC - Split System	\$8,200.00	\$15.87	\$5.82	\$21.69
Pumps - Pool, Replace	\$7,400.00	\$14.33	\$5.26	\$19.58
Sub Total	\$25,100.00	\$48.59	\$17.83	\$66.42
100 Miscellaneous				
Excluded	\$0.00	\$0.00	\$0.00	\$0.00
Sub Total	\$0.00	\$0.00	\$0.00	\$0.00

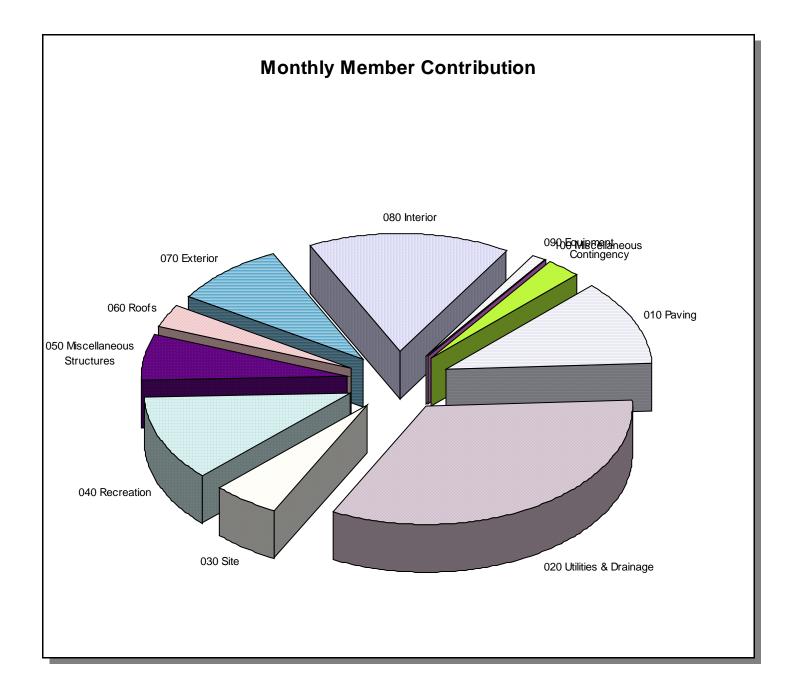
Management / Accounting Summary Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Contingency	\$21,380.68	\$155.34	\$15.50	\$170.84
Total	\$734,070.00	\$5,333.33	\$341.21	\$5,674.55

Management / Accounting Charts Directed Cash Flow Calculation Method; Sorted by Category



Management / Accounting Charts Directed Cash Flow Calculation Method; Sorted by Category



Annual Expenditure Detail

2020-2021 Fiscal Year	A A A A A A A A A A
Asphalt Paving - Sealing	\$9,539.22
Community Center - Renovation	\$8,100.00
Pond - Dredging and Maintenance	\$250,000.00
Wood Trim - Repairs	\$3,200.00
Sub Total	\$270,839.22
2021-2022 Fiscal Year	
Access Control - FOB Reader, Pool Gate	\$2,562.50
Access Control - Surveillance System	\$7,175.00
Asphalt Paving - Repairs	\$17,438.78
Asphalt Paving - Repaving	\$112,076.19
Pond Evaluation	\$2,050.00
Storm System - Repairs	\$25,625.00
Tennis Courts - Resurfacing	\$6,563.40
Sub Total	\$173,490.87
2022-2023 Fiscal Year	
Pumps - Pool, Replace	\$7,774.63
Sub Total	\$7,774.63
2023-2024 Fiscal Year	
Landscaping - Refurbish	\$6,747.11
Sub Total	\$6,747.11
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2024-2025 Fiscal Year	
Asphalt Paving - Sealing	\$10,529.51
Wood Trim - Repairs	\$3,532.20
Sub Total	\$14,061.72
2025-2026 Fiscal Year	• • • • • • • •
Kitchen Renovation - Residential Grade	\$11,879.79
Tennis Court - Windscreen	\$2,828.52
Sub Total	\$14,708.31
2026-2027 Fiscal Year	
Gazebo - Replace	\$18,555.09
Pond Evaluation	\$2,319.39
Site Furniture - Replace	\$6,378.31
Storm System - Repairs	\$28,992.34
	φ20,002.04

Annual Expenditure Detail

Sub Total	\$56,245.13
2027-2028 Fiscal Year	
Access Control - FOB Reader, Pool Gate	\$2,971.71
Site Concrete - Pool Deck, Replace	\$33,161.96
Tennis Courts - Resurfacing	\$7,611.54
Sub Total	\$43,745.20
2028-2029 Fiscal Year	
Asphalt Paving - Sealing	\$11,622.61
Landscaping - Refurbish	\$7,633.74
Wood Trim - Repairs	\$3,898.89
Sub Total	\$23,155.24
2029-2030 Fiscal Year	
Pool - Replaster & Tile Replacement	\$26,288.58
Pool Area - Furniture	\$16,235.22
Sub Total	\$42,523.80
2030-2031 Fiscal Year	
Community Center - Renovation	\$10,368.68
HVAC - Split System	\$10,496.69
Pool - Cover, Safety	\$15,565.83
Pool - Miscellaneous	\$5,120.34
Sub Total	\$41,551.54
2031-2032 Fiscal Year	
Access Control - Surveillance System	\$9,184.61
Asphalt Paving - Repairs	\$22,323.12
Brick - Clean, Seal and Point Up	\$6,560.43
Outdoor Lighting - Replace	\$28,865.91
Pond Evaluation	\$2,624.17
Signage - Miscellaneous, Replace	\$11,808.78
Signage - Monument, Replace	\$17,057.13
Site Concrete - Sidewalks, Repairs	\$2,686.34
Storm System - Repairs	\$32,802.17
Sub Total	\$133,912.65
2032-2033 Fiscal Year	
Asphalt Paving - Sealing	\$12,829.19
Fencing - Pool, Replace	\$25,027.52

Annual Expenditure Detail

Pool Lighting - Replace	\$8,607.29
Pumps - Pool, Replace	\$9,952.18
Wood Trim - Repairs	\$4,303.64
Sub Total	\$60,719.82
2033-2034 Fiscal Year	
Access Control - FOB Reader, Pool Gate	\$3,446.28
Furniture - Clubhouse	\$45,490.86
Landscaping - Refurbish	\$8,636.87
Tennis Courts - Resurfacing	\$8,827.05
Sub Total	\$66,401.06
2035-2036 Fiscal Year	
Tennis Court - Windscreen	\$3,620.75
Sub Total	\$3,620.75
2036-2037 Fiscal Year	
Asphalt Paving - Sealing	\$14,161.03
Pond Evaluation	\$2,969.01
Roofs - Shingle, Replace	\$30,027.84
Storm System - Repairs	\$37,112.64
Wood Structures - Boat Racks & Bridges, Replace	\$58,637.97
Wood Trim - Repairs	\$4,750.42
Sub Total	\$147,658.90
2037-2038 Fiscal Year	
Pool - Filter	\$12,325.11
Sub Total	\$12,325.11
2038-2039 Fiscal Year	
Landscaping - Refurbish	\$9,771.83
Sub Total	\$9,771.83
2039-2040 Fiscal Year	
Access Control - FOB Reader, Pool Gate	\$3,996.63
Siding - Vinyl	\$20,915.46
Site Concrete - Pavers, Repair or Replace	\$21,201.30
Tennis Courts - Resurfacing	\$10,236.67
Sub Total	\$56,350.05

Annual Expenditure Detail

2040-2041 Fiscal Year			
Asphalt Paving - Sealing	\$15,631.12		
Community Center - Renovation	\$13,272.79		
Pond - Dredging and Maintenance	\$409,654.11		
Tennis Court - Reconstruction	\$83,940.68		
Wood Trim - Repairs	\$5,243.57		
Sub Total	\$527,742.28		
2041-2042 Fiscal Year			
Access Control - Surveillance System	\$11,757.07		
Asphalt Paving - Repairs	\$28,575.48		
Asphalt Paving - Repaving	\$183,649.88		
Pond Evaluation	\$3,359.16		
Pool - Replaster & Tile Replacement	\$35,355.21		
Pool Area - Furniture	\$21,834.56		
Storm System - Repairs	\$41,989.55		
Sub Total	\$326,520.92		
2042-2043 Fiscal Year			
HVAC - Split System	\$14,116.89		
Pool - Cover, Safety	\$20,934.31		
Pumps - Pool, Replace	\$12,739.63		
Sub Total	\$47,790.82		
2043-2044 Fiscal Year			
Floor Cover - Ceramic Tile	\$21,554.04		
Floor Cover - Wood, Replacement	\$22,411.97		
Landscaping - Refurbish	\$11,055.93		
Window and Door Replacement	\$99,259.35		
Sub Total	\$154,281.29		
2044-2045 Fiscal Year			
Asphalt Paving - Sealing	\$17,253.83		
Wood Trim - Repairs	\$5,787.92		
Sub Total	\$23,041.76		
2045-2046 Fiscal Year			
Access Control - FOB Reader, Pool Gate	\$4,634.86		
Fencing - Chain Link, Tennis Courts	\$31,280.19		
Kitchen Renovation - Residential Grade	\$19,466.41		
Tennis Court - Windscreen	\$4,634.86		

Annual Expenditure Detail

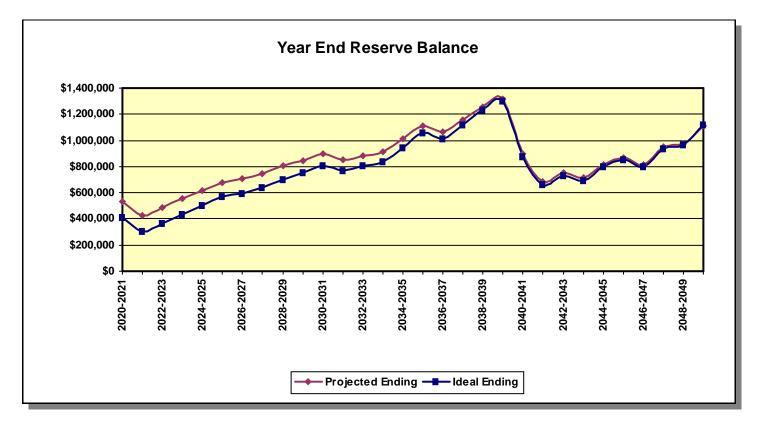
Tennis Courts - Resurfacing	\$11,871.40		
Sub Total	\$71,887.72		
2046-2047 Fiscal Year			
Electrical & Lighting - Replace, Interior	\$66,510.24		
Pond Evaluation	\$3,800.59		
Restroom Fixtures - Replace	\$49,407.61		
Site Concrete - Sidewalks, Repairs	\$3,890.63		
Site Furniture - Replace	\$10,451.61		
Storm System - Repairs	\$47,507.32		
Sub Total	\$181,567.99		
2048-2049 Fiscal Year			
Asphalt Paving - Sealing	\$19,045.01		
Furniture - Clubhouse	\$65,884.34		
Landscaping - Refurbish	\$12,508.77		
Pool - Miscellaneous	\$7,985.98		
Wood Trim - Repairs	\$6,388.78		
Sub Total	\$111,812.87		

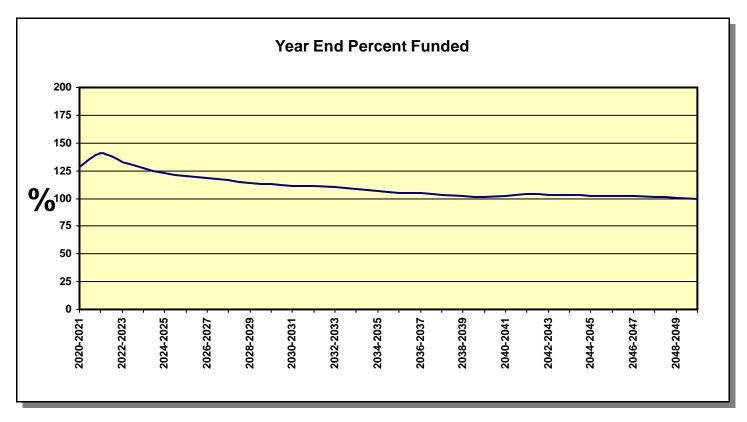
Projections Directed Cash Flow Calculation Method

Fiscal Year	Beginning Balance	Member Contribution	Interest Contribution	Expenditures	Ending Balance	Fully Funded Ending Balance	Percent Funded
2020-2021	\$734,070	\$64,000	\$4,095	\$270,839	\$531,325	\$413,171	129%
2021-2022	\$531,325	\$65,600	\$3,224	\$173,491	\$426,659	\$303,919	140%
2022-2023	\$426,659	\$67,240	\$3,738	\$7,775	\$489,863	\$368,436	133%
2023-2024	\$489,863	\$68,921	\$4,279	\$6,747	\$556,315	\$437,027	127%
2024-2025	\$556,315	\$70,644	\$4,777	\$14,062	\$617,674	\$501,274	123%
2025-2026	\$617,674	\$72,410	\$5,288	\$14,708	\$680,664	\$568,117	120%
2026-2027	\$680,664	\$74,220	\$5,473	\$56,245	\$704,113	\$594,499	118%
2027-2028	\$704,113	\$76,076	\$5,779	\$43,745	\$742,223	\$636,499	117%
2028-2029	\$742,223	\$77,978	\$6,275	\$23,155	\$803,320	\$703,119	114%
2029-2030	\$803,320	\$79,927	\$6,629	\$42,524	\$847,353	\$752,672	113%
2030-2031	\$847,353	\$81,925	\$7,011	\$41,552	\$894,737	\$806,283	111%
2031-2032	\$894,737	\$83,974	\$6,645	\$133,913	\$851,443	\$765,643	111%
2032-2033	\$851,443	\$86,073	\$6,901	\$60,720	\$883,697	\$803,254	110%
2033-2034	\$883,697	\$88,225	\$7,130	\$66,401	\$912,651	\$837,762	109%
2034-2035	\$912,651	\$90,430	\$7,931	\$0	\$1,011,013	\$945,349	107%
2035-2036	\$1,011,013	\$92,691	\$8,728	\$3,621	\$1,108,811	\$1,053,969	105%
2036-2037	\$1,108,811	\$95,008	\$8,352	\$147,659	\$1,064,512	\$1,015,308	105%
2037-2038	\$1,064,512	\$97,384	\$9,118	\$12,325	\$1,158,688	\$1,120,814	103%
2038-2039	\$1,158,688	\$99,818	\$9,931	\$9,772	\$1,258,666	\$1,233,982	102%
2039-2040	\$1,258,666	\$102,314	\$10,385	\$56,350	\$1,315,014	\$1,303,163	101%
2040-2041	\$1,315,014	\$104,871	\$6,944	\$527,742	\$899,088	\$878,775	102%
2041-2042	\$899,088	\$107,493	\$5,169	\$326,521	\$685,229	\$658,721	104%
2042-2043	\$685,229	\$110,181	\$5,719	\$47,791	\$753,337	\$730,003	103%
2043-2044	\$753,337	\$112,935	\$5,410	\$154,281	\$717,401	\$693,186	103%
2044-2045	\$717,401	\$115,758	\$6,213	\$23,042	\$816,331	\$796,700	102%
2045-2046	\$816,331	\$118,652	\$6,640	\$71,888	\$869,736	\$853,977	102%
2046-2047	\$869,736	\$121,619	\$6,184	\$181,568	\$815,970	\$799,671	102%
2047-2048	\$815,970	\$124,659	\$7,258	\$0	\$947,887	\$938,600	101%
2048-2049	\$947,887	\$127,776	\$7,437	\$111,813	\$971,287	\$965,928	101%
2049-2050	\$971,287	\$130,970	\$8,573	\$0	\$1,110,830	\$1,115,034	100%

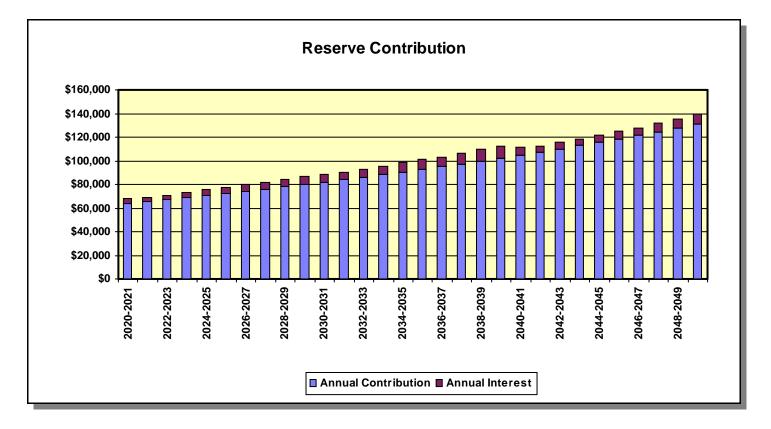
NOTE: In some cases, the projected Ending Balance may exceed the Fully Funded Ending Balance in years following high Expenditures. This is a result of the provision for contingency in this analysis, which in these projections is never expended. The contingency is continually adjusted according to need and any excess is redistributed among all components included.

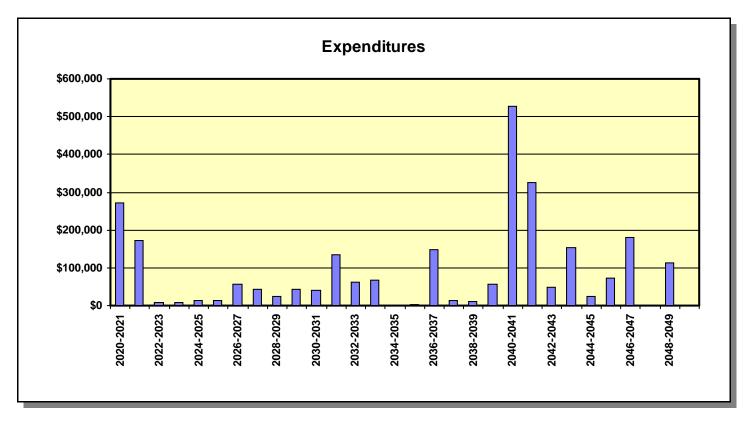
Projection Charts Directed Cash Flow Calculation Method





Projection Charts Directed Cash Flow Calculation Method





Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Asphalt Paving -	Repairs		
Category	010 Paving	Quantity	5,514 sq. yds.
		Unit Cost	\$61.710
		% of Replacement	5.00%
		Current Cost	\$17,013.45
Placed In Service	01/12	Future Cost	\$17,438.78
Useful Life	10		
		Assigned Reserves at FYB	\$17,013.45
Remaining Life	1	Monthly Member Contribution	\$32.94
Replacement Year	2021-2022	Monthly Interest Contribution	\$12.08
		Total Monthly Contribution	\$45.02
Comments:			
	community center parking	2,427 sq. yds.	
	Hutter Lake trail	<u>3,087</u> sq. yds.	
		5,514 sq. yds.	
Asphalt Paving -	Repaving		
Category	010 Paving	Quantity	5,514 sq. yds.
	C C	Unit Cost	\$19.830
		% of Replacement	100.00%
		Current Cost	\$109,342.62
Placed In Service	01/02	Future Cost	\$112,076.19
Useful Life	20		•
		Assigned Reserves at FYB	\$109,342.62
Remaining Life	1	Monthly Member Contribution	\$211.68
Replacement Year	2021-2022	Monthly Interest Contribution	\$77.64
-		Total Monthly Contribution	\$289.32

Comments:

More information about this asset and comments listed here can be found at the back of the report under Materials Summary.

Waterview Circle is funded outside of normal reserves.

community center parking	2,427	sq. yds.
Hutter Lake trail	3,087	sq. yds.
	5,514	sq. yds.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Asphalt Paving - Sealing			
Category	010 Paving	Quantity	5,514 sq. yds.
		Unit Cost	\$1.730
		% of Replacement	100.00%
		Current Cost	\$9,539.22
Placed In Service	01/17	Future Cost	\$10,529.51
Useful Life	4		
		Assigned Reserves at FYB	\$9,539.22
Remaining Life	0	Monthly Member Contribution	\$290.62
Replacement Year	2020-2021	Monthly Interest Contribution	\$0.80
		Total Monthly Contribution	\$291.42

Comments:

More information about this asset and comments listed here can be found at the back of the report under Materials Summary.

community center parking	2,427	sq. yds.
Hutter Lake trail	3,087	sq. yds.
	5,514	sq. yds.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Site Concrete - Pavers, Repair or Replace			
Category	010 Paving	Quantity	1,396 sq. ft.
		Unit Cost	\$9.500
		% of Replacement	100.00%
		Current Cost	\$13,262.00
Placed In Service	01/15	Future Cost	\$21,201.30
Useful Life	25		
		Assigned Reserves at FYB	\$2,977.18
Remaining Life	19	Monthly Member Contribution	\$80.08
Replacement Year	2039-2040	Monthly Interest Contribution	\$2.32
		Total Monthly Contribution	\$82.40

Comments:

The cost of this allowance is based on the replacement value of a percentage of the total site concrete; however, the actual means of remedying any deficiencies is not limited to simply replacing concrete. Although excluded, the community maybe financially responsible for repairs of sidewalk located along a publicly maintained road,

Concrete repairs are rarely urgent, and many communities can wait extended period of time without having to address concrete issues. One aspect that should be addressed are tripping hazards. Most municipalities allow a maximum of a 1" difference in elevation from the edge of one sidewalk panel to the next. Anything greater constitutes a tripping hazard and should be corrected.

Sidewalk or curb that have shifted more than 1" relative to another section, can be ground down, although the result is not visually appealing. Another option in correcting elevation issues involves pumping either urethane foam or a concrete slurry below the lower panel, forcing it to rise. More expensive is the demolition and replacement of sidewalk or curb, but the new concrete will not match existing concrete.

Spalling occurs when moisture gets into the concrete and the ice expands busting through to the surface. It is common to see the entire surface of a sidewalk panel disintegrate. Pitting is similar to spalling, but looks like you would imagine. Both are common in sidewalk that was over finished, but there can be multiple culprits. Air entrained concrete meant to prevent spalling, may not have been used by the original contractor. There are a number of products designed to patch spalled concrete including polymer-modified cement and epoxy. Surface preparation is critical for overlaying the damaged sidewalk, and if moisture is still present the overlay will fail.

Many minor cracks should simply be left alone or caulked if wide enough.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Site Concrete - Sidewalks, Repairs			
Category	010 Paving	Quantity	1,482 total
		Unit Cost	\$9.210
		% of Replacement	15.00%
		Current Cost	\$2,047.38
Placed In Service	01/17	Future Cost	\$2,686.34
Useful Life	15		
		Assigned Reserves at FYB	\$2,047.38
Remaining Life	11	Monthly Member Contribution	\$3.96
Replacement Year	2031-2032	Monthly Interest Contribution	\$1.45
		Total Monthly Contribution	\$5.42

Comments:

The cost of this allowance is based on the replacement value of a percentage of the total site concrete; however, the actual means of remedying any deficiencies is not limited to simply replacing concrete. Although excluded, the community maybe financially responsible for repairs of sidewalk located along a publicly maintained road,

Concrete repairs are rarely urgent, and many communities can wait extended period of time without having to address concrete issues. One aspect that should be addressed are tripping hazards. Most municipalities allow a maximum of a 1" difference in elevation from the edge of one sidewalk panel to the next. Anything greater constitutes a tripping hazard and should be corrected.

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Many minor cracks should simply be left alone or caulked if wide enough.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Pond - Dredging and Maintenance			
Category	020 Utilities & Drainage	Quantity	1 allowance
		Unit Cost	\$250,000.000
		% of Replacement	100.00%
		Current Cost	\$250,000.00
Placed In Service	01/89	Future Cost	\$409,654.11
Useful Life	20		
Adjustment	+12	Assigned Reserves at FYB	\$250,000.00
Remaining Life	0	Monthly Member Contribution	\$1,729.56
Replacement Year	2020-2021	Monthly Interest Contribution	\$4.79
		Total Monthly Contribution	\$1,734.35

Comments:

Per inspection of Lake Vista, the outflow pipe is roughly 160 lin. ft., 32" HDPE pipe, which was installed inside an existing corrugate metal pipe in 2011.

An allowance has been provided. Actual cost and schedule of dredging is outside scope of reserve study. For a more accurate schedule and cost, contact your pond maintenance contractor. Any further information provided by contractor can be incorporated into this study.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Storm System - Repairs			
Category	020 Utilities & Drainage	Quantity	1 total
		Unit Cost	\$25,000.000
		% of Replacement	100.00%
		Current Cost	\$25,000.00
Placed In Service	01/17	Future Cost	\$25,625.00
Useful Life	5		
		Assigned Reserves at FYB	\$25,000.00
Remaining Life	1	Monthly Member Contribution	\$48.40
Replacement Year	2021-2022	Monthly Interest Contribution	\$17.75
		Total Monthly Contribution	\$66.15

Comments:

This asset refers to storm system located along the streets or parking lot. Due to the difficulty with locating and identifying drainage systems around buildings or in natural areas, an allowance maybe included in a separate asset.

This allowance funds for relining storm pipe with an epoxy coated liner (popularly called Cured In Place Pipe), replacement of pipe sections, or some method of repairing the pipe. Does not include retention pond risers, or storm boxes. This allowance include storm pipe or pond outflow pipe that is outside of the right of way.

This asset is partially or fully, buried or concealed. Since a reserve analysis includes a visual observation only it is impossible to accurately identify, measure or quantify, estimated useful life or cost for any assets that are partially or fully concealed or buried. Although these items may be included in the reserve analysis, Reserve Professionals is not responsible for any discrepancies that may exist between the study and actual conditions or responsible for an omission of such item.

We have included an allowance for this asset, which can be adjusted as the board wishes. Depending on the quality of material and installation, and site conditions, there may be more or no repairs required. The quantities and cost are estimates only. The actual amount of pipe that may need to be relined is difficult to determine and outside the scope of a reserve study. If properly connected, bedded and backfilled pipe can last a considerable amount of time. If the pipe rests on a stone base, ground water maybe utilizing the stone as a pathway, possibly eroding this subbase. Additionally, the soil conditions can affect the rate which the pipe corrodes.

Relining a pipe involves running an epoxy coated sleeve through the existing pipe. Pressurized air pumped through the sleeve forces the sleeve to expand. The sleeve sticks to the inside wall of the existing pipe. The pipe will cure and create a new liner. The cost is typically less that pipe replacement and eliminates the need for excavation or tearing up roads or other hardscapes.

Curb inlets and area drains are either precast or built with brick and mortar. Depending on the type of brick and mortar and the quality of construction, brick and mortar boxes are more likely to fail. The floor of the storm boxes should be level with

Keep vegetation, leaves, and other debris clear of inlet or grate. Fallen leaves have a habit of clogging area drains. The best time to inspect the storm drains is after a storm. Any localized flooding should be investigated further.

Contractor should protect surrounding landscaping and reseed disturbed areas. Replacing damaged or removed asphalt should be included in the contract. Don't let contractor convince you that a cold patch is acceptable.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Fencing - Poc	ol, Replace		
Category	030 Site	Quantity	1 total
		Unit Cost	\$18,609.360
		% of Replacement	100.00%
		Current Cost	\$18,609.36
Placed In Service	01/03	Future Cost	\$25,027.52
Useful Life	30		
		Assigned Reserves at FYB	\$12,722.44
Remaining Life	12	Monthly Member Contribution	\$88.38
Replacement Year	2032-2033	Monthly Interest Contribution	\$9.21
		Total Monthly Contribution	\$97.58
Finish has oxidize Cost is for full rep	ed in locations. lacement, not repainting of fencing.		
	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain	@ \$17.16 = \$1,201.20	
Cost is for full rep	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain	@ \$17.16 = \$1,201.20	1 total
Cost is for full rep	 lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 	@ \$17.16 = <u>\$1,201.20</u> TOTAL = \$18,609.36	1 total \$6,265.363
Cost is for full rep	 lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 	@ \$17.16 = \$1,201.20 TOTAL = \$18,609.36 Quantity Unit Cost % of Replacement	
Cost is for full rep Landscaping Category	 lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 	@ $$17.16 = $1,201.20$ TOTAL = $$18,609.36$ Quantity Unit Cost	\$6,265.363
Cost is for full rep	 lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 	@ \$17.16 = \$1,201.20 TOTAL = \$18,609.36 Quantity Unit Cost % of Replacement	\$6,265.363 100.00%
Cost is for full rep Landscaping Category	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 030 Site	@ \$17.16 = \$1,201.20 TOTAL = \$18,609.36 Quantity Unit Cost % of Replacement Current Cost	\$6,265.363 100.00% \$6,265.36
Cost is for full rep Landscaping Category Placed In Service	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 030 Site 04/19	@ \$17.16 = \$1,201.20 TOTAL = \$18,609.36 Quantity Unit Cost % of Replacement Current Cost	\$6,265.363 100.00% \$6,265.36
Cost is for full rep Landscaping Category Placed In Service	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 030 Site 04/19	@ \$17.16 = \$1,201.20 TOTAL = \$18,609.36 Quantity Unit Cost % of Replacement Current Cost Future Cost Future Cost	\$6,265.363 100.00% \$6,265.36 \$6,747.11
Cost is for full rep Landscaping Category Placed In Service Useful Life	lacement, not repainting of fencing. 396 lin. ft. 6' high fencing, aluminum 70 lin. ft. of 4' fencing, chain - Refurbish 030 Site 04/19 5		\$6,265.363 100.00% \$6,265.36 \$6,747.11 \$6,265.36

Comments:

This is an allowance which may be adjusted as the board wishes. The allowance for repairs will need to increase as time passes. If the community has an irrigation system exists, it is assumed that it will not need to be replaced

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Outdoor Lighting - Replace			
Category	030 Site	Quantity	1 total
		Unit Cost	\$22,000.000
		% of Replacement	100.00%
		Current Cost	\$22,000.00
Placed In Service	01/02	Future Cost	\$28,865.91
Useful Life	30		
		Assigned Reserves at FYB	\$22,000.00
Remaining Life	11	Monthly Member Contribution	\$42.59
Replacement Year	2031-2032	Monthly Interest Contribution	\$15.62
		Total Monthly Contribution	\$58.21

Comments:

Pond Evaluation			
Category	030 Site	Quantity	1 total
		Unit Cost	\$2,000.000
		% of Replacement	100.00%
		Current Cost	\$2,000.00
Placed In Service	01/17	Future Cost	\$2,050.00
Useful Life	5		
		Assigned Reserves at FYB	\$2,000.00
Remaining Life	1	Monthly Member Contribution	\$3.87
Replacement Year	2021-2022	Monthly Interest Contribution	\$1.42
		Total Monthly Contribution	\$5.30

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Retaining Walls - Modular Block, Repair			
Category	030 Site	Quantity	1,120 sq. ft.
		Unit Cost	\$38.380
		% of Replacement	50.00%
		Current Cost	\$21,492.80
Placed In Service	01/12	Future Cost	\$46,209.67
Useful Life	20		
Adjustment	+20	Assigned Reserves at FYB	\$4,625.03
Remaining Life	31	Monthly Member Contribution	\$90.84
Replacement Year	2051-2052	Monthly Interest Contribution	\$3.51
		Total Monthly Contribution	\$94.35

Comments:

Signage - Miscellaneous, Replace			
Category	030 Site	Quantity	1 allowance
		Unit Cost	\$9,000.000
		% of Replacement	100.00%
		Current Cost	\$9,000.00
Placed In Service	01/12	Future Cost	\$11,808.78
Useful Life	20		
		Assigned Reserves at FYB	\$9,000.00
Remaining Life	11	Monthly Member Contribution	\$17.42
Replacement Year	2031-2032	Monthly Interest Contribution	\$6.39
		Total Monthly Contribution	\$23.81

Comments:

Paint sign as needed. Urethane can last a long time, but is brittle and will damage easily.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Signage - Monument, Replace			
Category	030 Site	Quantity	1 allowance
		Unit Cost	\$13,000.000
		% of Replacement	100.00%
		Current Cost	\$13,000.00
Placed In Service	01/92	Future Cost	\$17,057.13
Useful Life	40		
		Assigned Reserves at FYB	\$13,000.00
Remaining Life	11	Monthly Member Contribution	\$25.17
Replacement Year	2031-2032	Monthly Interest Contribution	\$9.23
		Total Monthly Contribution	\$34.39

Comments:

Paint sign as needed. Urethane can last a long time, but is brittle and will damage easily.

Site Furniture - Replace			
Category	030 Site	Quantity	1 allowance
		Unit Cost	\$5,500.000
		% of Replacement	100.00%
		Current Cost	\$5,500.00
Placed In Service	01/07	Future Cost	\$6,378.31
Useful Life	20		
		Assigned Reserves at FYB	\$5,500.00
Remaining Life	6	Monthly Member Contribution	\$10.65
Replacement Year	2026-2027	Monthly Interest Contribution	\$3.91
		Total Monthly Contribution	\$14.55

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Fencing - Chain	Link, Tennis Courts		
Category	040 Recreation	Quantity	462 lin. ft.
		Unit Cost	\$36.520
		% of Replacement	100.00%
		Current Cost	\$16,872.24
Placed In Service	01/16	Future Cost	\$31,280.19
Useful Life	30		
		Assigned Reserves at FYB	\$2,573.73
Remaining Life	25	Monthly Member Contribution	\$87.23
Replacement Year	2045-2046	Monthly Interest Contribution	\$2.05
		Total Monthly Contribution	\$89.28

Comments:

Finish has oxidized. Some rusting noted. Cost is for full replacement.

Pool - Cover, Safety			
Category	040 Recreation	Quantity	3,800 sq. ft.
		Unit Cost	\$3.200
		% of Replacement	100.00%
		Current Cost	\$12,160.00
Placed In Service	01/19	Future Cost	\$15,565.83
Useful Life	12		
		Assigned Reserves at FYB	\$12,160.00
Remaining Life	10	Monthly Member Contribution	\$23.54
Replacement Year	2030-2031	Monthly Interest Contribution	\$8.64
		Total Monthly Contribution	\$32.18

Comments:

Due to safety concerns, safety cover should be replaced if straps are frayed, threads are coming apart, or appears worn or weathered. Proper care of safety cover involves draining and drying out, folding and storing on a palette to allow air circulation. Avoid dragging the cover to avoid creating holes in fabric.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Pool - Filter			
Category	040 Recreation	Quantity	3 total
		Unit Cost	\$2,700.000
		% of Replacement	100.00%
		Current Cost	\$8,100.00
Placed In Service	01/18	Future Cost	\$12,325.11
Useful Life	20		
		Assigned Reserves at FYB	\$1,038.46
Remaining Life	17	Monthly Member Contribution	\$58.16
Replacement Year	2037-2038	Monthly Interest Contribution	\$0.90
		Total Monthly Contribution	\$59.05

Comments:

Pool - Miscellaneous			
Category	040 Recreation	Quantity	1 total
		Unit Cost	\$4,000.000
		% of Replacement	100.00%
		Current Cost	\$4,000.00
Placed In Service	01/13	Future Cost	\$5,120.34
Useful Life	18		
		Assigned Reserves at FYB	\$4,000.00
Remaining Life	10	Monthly Member Contribution	\$7.74
Replacement Year	2030-2031	Monthly Interest Contribution	\$2.84
		Total Monthly Contribution	\$10.58

<u>Comments:</u> Ladders and handrailings.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Pool - Replaster	& Tile Replacement		
Category	040 Recreation	Quantity	1 pool
		Unit Cost	\$21,050.010
		% of Replacement	100.00%
		Current Cost	\$21,050.01
Placed In Service	01/18	Future Cost	\$26,288.58
Useful Life	12		
		Assigned Reserves at FYB	\$21,050.01
Remaining Life	9	Monthly Member Contribution	\$40.75
Replacement Year	2029-2030	Monthly Interest Contribution	\$14.94
		Total Monthly Contribution	\$55.69

Comments:

It is assumed that the pool shell will last indefinitely, although pool shells are occassionally replaced at great expense. Please advise if the board would like to include shell replacement in the study.

3,800	sq. ft. of replastering	@	\$5.24	=	\$19,912.00
31	lin. ft. coping tile (10%)	@	\$36.71	=	\$1,138.01
			TOTAL	=	\$21,050.01

Useful life of plaster is directly dependent on quality of maintenance and careful calibration of chemicals. Care should be taken to provide sufficient calcium to pool water to prevent the pool from eating tile grout. Replace any hollow sounding tile at time of replaster.

Pool Area - Furniture			
Category	040 Recreation	Quantity	1 total
		Unit Cost	\$13,000.000
		% of Replacement	100.00%
		Current Cost	\$13,000.00
Placed In Service	01/18	Future Cost	\$16,235.22
Useful Life	12		
		Assigned Reserves at FYB	\$13,000.00
Remaining Life	9	Monthly Member Contribution	\$25.17
Replacement Year	2029-2030	Monthly Interest Contribution	\$9.23
		Total Monthly Contribution	\$34.39

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Site Concrete - P	ool Deck, Replace		
Category	040 Recreation	Quantity	5,200 total
		Unit Cost	\$10.730
		% of Replacement	50.00%
		Current Cost	\$27,898.00
Placed In Service	01/03	Future Cost	\$33,161.96
Useful Life	25		
		Assigned Reserves at FYB	\$27,898.00
Remaining Life	7	Monthly Member Contribution	\$54.01
Replacement Year	2027-2028	Monthly Interest Contribution	\$19.80
		Total Monthly Contribution	\$73.81

Comments:

The cost of this allowance is based on the replacement value of a percentage of the total site concrete; however, the actual means of remedying any deficiencies is not limited to simply replacing concrete. Although excluded, the community maybe financially responsible for repairs of sidewalk located along a publicly maintained road,

Concrete repairs are rarely urgent, and many communities can wait extended period of time without having to address concrete issues. One aspect that should be addressed are tripping hazards. Most municipalities allow a maximum of a 1" difference in elevation from the edge of one sidewalk panel to the next. Anything greater constitutes a tripping hazard and should be corrected.

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Many minor cracks should simply be left alone or caulked if wide enough.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Tennis Court - Reconstruction			
Category	040 Recreation	Quantity	13,068 sq. ft.
		Unit Cost	\$3.920
		% of Replacement	100.00%
		Current Cost	\$51,226.56
Placed In Service	01/16	Future Cost	\$83,940.68
Useful Life	25		
		Assigned Reserves at FYB	\$9,408.96
Remaining Life	20	Monthly Member Contribution	\$307.52
Replacement Year	2040-2041	Monthly Interest Contribution	\$7.49
		Total Monthly Contribution	\$315.01

Comments:

Tennis Court - Windscreen			
Category	040 Recreation	Quantity	1 total
		Unit Cost	\$2,500.000
		% of Replacement	100.00%
		Current Cost	\$2,500.00
Placed In Service	01/16	Future Cost	\$2,828.52
Useful Life	10		
		Assigned Reserves at FYB	\$2,500.00
Remaining Life	5	Monthly Member Contribution	\$4.84
Replacement Year	2025-2026	Monthly Interest Contribution	\$1.78
		Total Monthly Contribution	\$6.62

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Tennis Courts - Resurfacing			
Category	040 Recreation	Quantity	13,068 total
		Unit Cost	\$0.490
		% of Replacement	100.00%
		Current Cost	\$6,403.32
Placed In Service	01/16	Future Cost	\$6,563.40
Useful Life	6		
		Assigned Reserves at FYB	\$6,403.32
Remaining Life	1	Monthly Member Contribution	\$12.40
Replacement Year	2021-2022	Monthly Interest Contribution	\$4.55
		Total Monthly Contribution	\$16.94

Comments:

Gazebo - Replace			
Category	050 Miscellaneous Structures	Quantity	1 total
		Unit Cost	\$16,000.000
		% of Replacement	100.00%
		Current Cost	\$16,000.00
Placed In Service	01/02	Future Cost	\$18,555.09
Useful Life	25		
		Assigned Reserves at FYB	\$16,000.00
Remaining Life	6	Monthly Member Contribution	\$30.97
Replacement Year	2026-2027	Monthly Interest Contribution	\$11.36
		Total Monthly Contribution	\$42.34

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Wood Structures - Boat Racks & Bridges, Replace

Category	050 Miscellaneous Structures	Quantity	1 total
		Unit Cost	\$39,500.000
		% of Replacement	100.00%
		Current Cost	\$39,500.00
Placed In Service	01/19	Future Cost	\$58,637.97
Useful Life	18		
		Assigned Reserves at FYB	\$3,385.71
Remaining Life	16	Monthly Member Contribution	\$309.27
Replacement Year	2036-2037	Monthly Interest Contribution	\$3.24
		Total Monthly Contribution	\$312.51

Comments:

Cost is based on the \$26,000 spent on boat rack repairs and 1 bridge in 2020, plus the proposal to complete remaining bridges at \$13,500.

Roofs - Shingle, Replace			
Category	060 Roofs	Quantity	4,495 sq. ft.
		Unit Cost	\$4.500
		% of Replacement	100.00%
		Current Cost	\$20,227.50
Placed In Service	01/19	Future Cost	\$30,027.84
Useful Life	18		
		Assigned Reserves at FYB	\$1,733.79
Remaining Life	16	Monthly Member Contribution	\$158.37
Replacement Year	2036-2037	Monthly Interest Contribution	\$1.66
		Total Monthly Contribution	\$160.03

Comments:

More information about this asset and comments listed here can be found at the back of the report under Materials Summary.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Brick - Clean, Seal and Point Up			
Category	070 Exterior	Quantity	1 total
		Unit Cost	\$5,000.000
		% of Replacement	100.00%
		Current Cost	\$5,000.00
Placed In Service	01/92	Future Cost	\$6,560.43
Useful Life	40		
		Assigned Reserves at FYB	\$5,000.00
Remaining Life	11	Monthly Member Contribution	\$9.68
Replacement Year	2031-2032	Monthly Interest Contribution	\$3.55
		Total Monthly Contribution	\$13.23

Comments:

Some wall sections, especially, retaining walls will experience staining and discoloring prior to scheduled date.

This asset is partially or fully, buried or concealed. Since a reserve analysis includes a visual observation only it is impossible to accurately identify, measure or quantify, estimated useful life or cost for any assets that are partially or fully concealed or buried. Although these items may be included in the reserve analysis, Reserve Professionals is not responsible for any discrepancies that may exist between the study and actual conditions or responsible for an omission of such item.

Pool Lighting - Replace			
Category	070 Exterior	Quantity	2 total
		Unit Cost	\$3,200.000
		% of Replacement	100.00%
		Current Cost	\$6,400.00
Placed In Service	01/03	Future Cost	\$8,607.29
Useful Life	30		
		Assigned Reserves at FYB	\$6,400.00
Remaining Life	12	Monthly Member Contribution	\$12.39
Replacement Year	2032-2033	Monthly Interest Contribution	\$4.55
		Total Monthly Contribution	\$16.94

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Siding - Vinyl			
Category	070 Exterior	Quantity	2,720 sq. ft.
		Unit Cost	\$4.810
		% of Replacement	100.00%
		Current Cost	\$13,083.20
Placed In Service	01/05	Future Cost	\$20,915.46
Useful Life	35		
		Assigned Reserves at FYB	\$5,877.96
Remaining Life	19	Monthly Member Contribution	\$63.44
Replacement Year	2039-2040	Monthly Interest Contribution	\$4.31
		Total Monthly Contribution	\$67.76

Comments:

Replace individual pieces of siding as needed. After major wind event, check to make sure no sections have been pried loose. If possible coordinate with gutter and downspout replacement or repairs.

More information about this asset and comments listed here can be found at the back of the report under Materials Summary.

Window and Do	oor Replacement		
Category	070 Exterior	Quantity	1 total
		Unit Cost	\$56,250.000
		% of Replacement	100.00%
		Current Cost	\$56,250.00
Placed In Service	01/14	Future Cost	\$99,259.35
Useful Life	30		
		Assigned Reserves at FYB	\$12,394.07
Remaining Life	23	Monthly Member Contribution	\$294.01
Replacement Year	2043-2044	Monthly Interest Contribution	\$9.55
		Total Monthly Contribution	\$303.56
Comments:			
	22 exterior doors	@ \$875.00 = \$19,250.00)
	40 windows	@ \$925.00 = \$37,000.00)
		TOTAL = \$56,250.00	0

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Wood Trim - Repairs			
Category	070 Exterior	Quantity	1 total
		Unit Cost	\$3,200.000
		% of Replacement	100.00%
		Current Cost	\$3,200.00
Placed In Service	01/17	Future Cost	\$3,532.20
Useful Life	4		
		Assigned Reserves at FYB	\$3,200.00
Remaining Life	0	Monthly Member Contribution	\$97.49
Replacement Year	2020-2021	Monthly Interest Contribution	\$0.27
		Total Monthly Contribution	\$97.76

Comments:

Community Center - Renovation			
Category	080 Interior	Quantity	1,200 sq. ft.
		Unit Cost	\$6.750
		% of Replacement	100.00%
		Current Cost	\$8,100.00
Placed In Service	01/10	Future Cost	\$10,368.68
Useful Life	10		
		Assigned Reserves at FYB	\$8,100.00
Remaining Life	0	Monthly Member Contribution	\$103.59
Replacement Year	2020-2021	Monthly Interest Contribution	\$0.28
		Total Monthly Contribution	\$103.88

Comments:

Cost is for paint and replacement of carpet. Schedule for replacement is influenced by aesthetics and can vary significantly between communities or board member's opinions. If countertop is granite and not quartz, it should be sealed annually to prevent oil, water, alcohol, etc. stains.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Electrical & Lighting - Replace, Interior			
Category	080 Interior	Quantity	1 total
		Unit Cost	\$35,000.000
		% of Replacement	100.00%
		Current Cost	\$35,000.00
Placed In Service	01/12	Future Cost	\$66,510.24
Useful Life	35		
		Assigned Reserves at FYB	\$8,623.19
Remaining Life	26	Monthly Member Contribution	\$163.69
Replacement Year	2046-2047	Monthly Interest Contribution	\$6.53
		Total Monthly Contribution	\$170.22

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Floor Cover - Ceramic Tile			
Category	080 Interior	Quantity	657 sq. ft.
		Unit Cost	\$18.050
		% of Replacement	103.00%
		Current Cost	\$12,214.62
Placed In Service	01/14	Future Cost	\$21,554.04
Useful Life	30		
		Assigned Reserves at FYB	\$2,691.36
Remaining Life	23	Monthly Member Contribution	\$63.84
Replacement Year	2043-2044	Monthly Interest Contribution	\$2.08
		Total Monthly Contribution	\$65.92

Comments:

Clean and seal grout annually. Although tile is far less porous it also should also be periodically sealed. Clean grout with an alkaline cleaner and not an acid based, wax based, or oil based cleaner. Additionally avoid using abrasives, scouring powders, bleach, or ammonia based cleaners. Sweep and damp mop tile regularly to remove dirt that can adhere to surface. Steam cleaning may remove stubborn stains or regrout if all other methods have failed. While we do not recommend waxing tile floors due to ongoing maintenance of rewaxing, wax does create a shiny appearance.

Any through floor penetrations or other areas where water can get behind the tile should be caulked to prevent subsurface damage. If chipped, the glazed surface of ceramic tile will reveal the natural clay color. Chips can be epoxy painted to match the glaze.

The measurement indicated represents the actual area to be replaced. The percentage of replacement has been increased above 100% to allow for a waste factor which should be considered when replacing this component.

The cost for this component includes the removal and disposal of the existing material.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Floor Cover - Wood, Replacement			
Category	080 Interior	Quantity	432 sq. ft.
		Unit Cost	\$28.000
		% of Replacement	105.00%
		Current Cost	\$12,700.80
Placed In Service	01/14	Future Cost	\$22,411.97
Useful Life	30		
		Assigned Reserves at FYB	\$2,798.48
Remaining Life	23	Monthly Member Contribution	\$66.39
Replacement Year	2043-2044	Monthly Interest Contribution	\$2.16
		Total Monthly Contribution	\$68.54

Comments:

Although less expensive than solid wood, prefinished engineered floors have a thin veneer surface, which either limits or prevents refinishing. The actual thickness of this wearing surface can vary from .6-6 mm. Actual thickness of installed flooring is impossible to determine from visual inspection. Although engineered wood flooring with a thicker veneer may be refinished almost as often as solid wood and last 2 to 3 times longer than our estimated lifespan, the conservative approach assumes a thin veneer, in which case recoating is an option, but not refinishing. If the board is interested, contractor specializing in refinishing should be consulted to determine the feasibility of your floors. Clean hardwood floors regularly to remove dirt and grit from between the floor boards. Sweep or use vacuum with beater (bristle) bar turned off. Damp mop instead or wet mop, which can dull the finish. Do not steam clean. Avoid vinegar unless finish is known to be urethane, in which case avoid wax based cleaners. While site finished flooring may prevent to some degree water from passing to subfloor, prefinished flooring does not, and all liquid spills should be cleaned up immediately to prevent further damage.

Ultraviolet light from both sun and fluorescent lighting will oxidize both wood surface and finish. Oil based finishes tend to yellow, water based finishes darken, while the wood may lighten or darken. Replace any area rugs with at least same size rug to cover the transition between bleached and covered wood.

The measurement indicated represents the actual area to be replaced. The percentage of replacement has been increased above 100% to allow for a waste factor which should be considered when replacing this component.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Furniture - Clubr	nouse		
Category	080 Interior	Quantity	1 total
		Unit Cost	\$33,000.000
		% of Replacement	100.00%
		Current Cost	\$33,000.00
Placed In Service	01/19	Future Cost	\$45,490.86
Useful Life	15		
		Assigned Reserves at FYB	\$3,413.79
Remaining Life	13	Monthly Member Contribution	\$304.70
Replacement Year	2033-2034	Monthly Interest Contribution	\$3.24
		Total Monthly Contribution	\$307.94

Comments:

Schedule for replacement is influenced by aesthetics and can vary significantly between communities or board member's opinions.

Kitchen Renovat	ion - Residential Grade		
Category	080 Interior	Quantity	1 total
		Unit Cost	\$10,500.000
		% of Replacement	100.00%
		Current Cost	\$10,500.00
Placed In Service	01/06	Future Cost	\$11,879.79
Useful Life	20		
		Assigned Reserves at FYB	\$10,500.00
Remaining Life	5	Monthly Member Contribution	\$20.33
Replacement Year	2025-2026	Monthly Interest Contribution	\$7.46
		Total Monthly Contribution	\$27.78

Comments:

Schedule for replacement is influenced by aesthetics and can vary significantly between communities or board member's opinions. If countertop is granite and not quartz, it should be sealed annually to prevent oil, water, alcohol, etc. stains.

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Restroom Fixture	Restroom Fixtures - Replace		
Category	080 Interior	Quantity	1 total
		Unit Cost	\$26,000.000
		% of Replacement	100.00%
		Current Cost	\$26,000.00
Placed In Service	01/12	Future Cost	\$49,407.61
Useful Life	35		
		Assigned Reserves at FYB	\$6,405.80
Remaining Life	26	Monthly Member Contribution	\$121.60
Replacement Year	2046-2047	Monthly Interest Contribution	\$4.85
		Total Monthly Contribution	\$126.45

Comments:

Schedule for replacement is influenced by aesthetics and can vary significantly between communities or board member's opinions. If client currently has painted wood, we are recommending a laminate material, which is similar in price, but more contemporary. Unless noted, any "granite" stone counters listed are assumed to be cultured quartz, not granite.

Access Control - FOB Reader, Pool Gate			
Category	090 Equipment	Quantity	1 total
		Unit Cost	\$2,500.000
		% of Replacement	100.00%
		Current Cost	\$2,500.00
Placed In Service	01/16	Future Cost	\$2,562.50
Useful Life	6		
		Assigned Reserves at FYB	\$2,500.00
Remaining Life	1	Monthly Member Contribution	\$4.84
Replacement Year	2021-2022	Monthly Interest Contribution	\$1.78
		Total Monthly Contribution	\$6.62

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Access Control -	Surveillance System		
Category	090 Equipment	Quantity	1 total
		Unit Cost	\$7,000.000
		% of Replacement	100.00%
		Current Cost	\$7,000.00
Placed In Service	01/12	Future Cost	\$7,175.00
Useful Life	10		
		Assigned Reserves at FYB	\$7,000.00
Remaining Life	1	Monthly Member Contribution	\$13.55
Replacement Year	2021-2022	Monthly Interest Contribution	\$4.97
		Total Monthly Contribution	\$18.53

Comments:

HVAC - Split System			
Category	090 Equipment	Quantity	1 total
		Unit Cost	\$16,400.000
		% of Replacement	50.00%
		Current Cost	\$8,200.00
Placed In Service	04/19	Future Cost	\$10,496.69
Useful Life	12		
		Assigned Reserves at FYB	\$8,200.00
Remaining Life	10	Monthly Member Contribution	\$15.87
Replacement Year	2030-2031	Monthly Interest Contribution	\$5.82
		Total Monthly Contribution	\$21.69

2 HVAC split systems	@	\$6,800.00	=	\$13,600.00
2 wall units	@	\$1,400.00	=	\$2,800.00
		TOTAL	=	\$16,400.00

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Pumps - Pool, Ro	eplace		
Category	090 Equipment	Quantity	1 total
		Unit Cost	\$7,400.000
		% of Replacement	100.00%
		Current Cost	\$7,400.00
Placed In Service	01/13	Future Cost	\$7,774.63
Useful Life	10		
		Assigned Reserves at FYB	\$7,400.00
Remaining Life	2	Monthly Member Contribution	\$14.33
Replacement Year	2022-2023	Monthly Interest Contribution	\$5.26
		Total Monthly Contribution	\$19.58
Comments:			

1 - 7.5 hp pump	@	\$5,600.00	=	\$5,600.00
1 - 3/4 hp pump	@	\$1,800.00	=	\$1,800.00
		TOTAL	=	\$7,400.00

Component Detail

Directed Cashflow Calculation Method; Sorted by Category

Excluded			
Category	100 Miscellaneous	Quantity	
		Unit Cost	\$0.000
		% of Replacement	0.00%
		Current Cost	\$0.00
Placed In Service	01/20	Future Cost	\$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	\$0.00
Remaining Life	n.a.	Monthly Member Contribution	\$0.00
Replacement Year	n.a.	Monthly Interest Contribution	\$0.00
		Total Monthly Contribution	\$0.00

Comments:

The following itesm have been excluded. Please let us know if the board would like any of the items incorporated into the study.

Repairs to dam walls - Dam spillways has had to be repaired due to unusually high flooding. It is impossible to determine future rainfalls, so estimating both future occurrences and costs are not possible, although it should be considered probably to occur at some point in the future. If the board wishes we can include an allowance for repair.

Pool shell - Per client request.

Shed - Per client request.

Garage equipment - Per client request.

Truck and and Bobcat tractor - Per client request.

Tree trimming and removal - Per client request.

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Wood Trim - Repairs

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Number of components included in this reserve analysis is 45.



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ASPHALT PAVING

REPAVING

Most asphalt surfaces can be expected to last approximately 20 to 25 years before it will become necessary for an overlay to be applied.

Deflection testing should be conducted by an independent consultant near the end of the estimated useful life to determine the condition of the asphalt and to determine if major rehabilitation is required. In addition to deflection testing, a consultant should be able to provide specifications, and testing to confirm actual installation meets the specifications. As costs vary, a provision for this consulting has not been included in this cost estimate. Should the client request, this cost can be incorporated into this analysis.



If properly built, the road or parking lot deteriorates from the top down, which only requires the replacement of a thin layer of asphalt, or preferably the application of a thin wearing layer on top of the existing asphalt. The asphalt overlay not only provides a new paving surface for a fraction of the cost of rebuilding the entire roadway, but it is the only preventive maintenance technique that adds structural value while extending a pavement's service life. According to a 2008 study by the National Asphalt Pavement Association (NAPA), thin overlays were more cost-effective options over a roadway's expected service life than chip seal, slurry seal and micro-surfacing.

Repairs and milling should be performed first. Adjusting manhole and valve covers should be performed at the same time. After the road or parking lot has been swept mechanically, a tack coat will be applied. If not properly maintained, the nozzles that spray the tack coat can become clogged, resulting in a poor application. Loose asphalt will be trucked in. Trucks leaving the area will create asphalt tracks outside the work area. This can't be helped and will soon fade. The asphalt temperature should be between 270 and 325 degrees Fahrenheit and should be tested at the site. The distance from the plant and weather, including wind, humidity and temperature can significantly affect this temperature, and if the driver stops to pick up some food the asphalt may need to be rejected. The proper temperature ensures enough time for the loose asphalt to be compacted sufficiently. Insufficient compaction will cause the newly placed wearing layer to quickly fail. The ground and existing asphalt temperature can also cool the asphalt

It is important to remember that over the last few years, the petroleum market has become much more volatile and price for liquid asphalt have seen exceptional jumps in very short periods of time. A reserve study can account for historical inflation, but can't predict future oil prices.

SEAL COATING

The primary reason to sealcoat 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 sealcoat provides a waterproof membrane which slows the oxidation process and helps the pavement shed water, preventing the water to infiltrate the base material.

Without regular applications of a seal coat, an asphalt parking lot might need an overlay in 15 years. If the lot is regularly sealed, a parking lot can last as much as 25-30 years, perhaps longer.

Seal coats should be installed on warm sunny day with low humidity with a minimum of 50 degrees Fahrenheit and rising. The seal coat should not be applied during wet conditions or within 8 hours of anticipated rain. Streets must be thoroughly cleaned; organic material removed, loose asphalt removed and voids and cracks repaired. Oil or grease also damage asphalt and such areas should be cleaned thoroughly and treated with an oil spot primer prior to sealer application. A minimum of 8 hours of sunlight is required for complete curing and before traffic is allowed.



Proper drainage is vital for the longevity of the road. Standing water can seep through the asphalt and get into the subbase and subgrade 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. Greying of recently applied sealcoating may indicate poor product, the outdoor temperature was not warm enough at the time of application, or simply that seal coat was exposed to water before it had cured.

ROOFS

ASPHALT SHINGLE ROOFING

Asphalt shingles contain granules which reflect the sunlight. Over time shingles lose these granules leaving the asphalt vulnerable to the sun and oxidation. Shingles will begin to dry up and lose plasticity evidenced by growing gaps between shingle tabs. Edge will curl and lift. Valleys tend to see greater granule loss due to increased water erosion.

The installation process should begin with proper fall protection. Old shingles are slippery; underlayment is notoriously slippery. Falls involve not only people, but tools and materials. Areas below work should be properly cordoned off. Demolition should include removal of old underlayment and rubber flashing. The roof should be thoroughly inspected, especially at likely problem areas. Any existing roofing nails should be removed. Sheathing should be flush. New underlayment should be installed taut to the sheathing. Roofing shingles are very frequently loaded at the peak of the roof, sometimes referred to as "breaking the bundle". This is a very poor practice, since the shingles are left bent for sometimes extended time. Even short periods of time can result in stress fractures and separations of the shingle laminates, reducing the lifespan of the shingle.

It is always advisable to tear-off an old roof and apply a new roof, rather than simply reroofing over an existing. While initially cheaper, the life expectancy of a 2 layer roof is significantly shorter, 10 - 15 years because the roof is not as efficient in cooling and because the flashing and underlayment is not replaced. Performing a tear-off also allows inspection of the sheathing or substrate. Over time, a 2 layer shingle roof is actually more expensive. Additionally, there are numerous roofs that aren't structurally sound enough to carry the additional and unnecessary weight. Lastly, shingles may not lay flat affecting the appearance.

Leaks typically occur at penetrations of the roof (common examples include chimneys, plumbing vent stacks, and exhaust fans), intersections of wall and roof, and where 2 different planes of roof meet (such as valleys). Additionally, shingles along the gable ridge are bent typically at acute angles and are much more likely to tear than at other locations where shingles typically lay flat. Rubber flashing is most



commonly used for pipe penetrations. Rubber flashing will eventually dry out and crack. During a reroofing process all pipe boots should be replaced. Although more expensive, lead flashing should be considered as this should never leak or deteriorate if installed properly. Drip edge flashing, installed along the rake and fascia edges of the roof, should be installed prior to shingle installation.

Never paint or coat a roof to change the color unless approved by the manufacturer. Keep roof surfaces and gutters clean using a leaf blower on low setting or soft-bristle broom so water will drain quickly and freely. The acidity that is created as the leaves rot will shorten the life of the roofing under it. Never allow water from a downspout to pour directly onto a roof below. Keep trees trimmed so they don't rub against the roof or any other building surface. Climbing plants should not reach the roof. Remove snow or ice carefully to prevent damage to the roof. Never climb onto a wet or snow covered roof. Walking on the roof should be kept to a minimum to limit liability and to preserve the roof granules. Antennas, satellite dishes, or anchors should be noncorrosive to prevent staining. Never pressure wash the roof. Each treatment will take three years off the life of the roof.

Attic ventilation is extremely important, but not something that can be inspected during a reserve study. Home inspections performed prior to a unit being purchased will be able to provide the best evidence of ventilation conditions. Ventilation items occurring on multiple inspections may be a good indicator of a community wide problem. Ventilation prevents the warm moist air from settling against the roof rafters and underside of sheathing, which will cause rot. Proper ventilation keeps the attic plenum cool in the summer preserving the useful life of shingles. In the winter, ventilation removes the heat that has escaped past the insulation from the building, keeping the roof cool. A warm roof under snow can cause ice dams, a buildup of water that has nowhere to go except under shingles and into the sheathing and structure. Vents are typically installed along the soffit and at the peaks of a building in the form of continuous ridge vent or louvers at top of the gable sides. It is beyond the scope of a reserve study to test the adequacy of ventilation, but most experts agree that continuous ridge vents are superior. The open vent area at the peak of a roof should equal the area of open vents at the soffit. Soffit vents are frequently buried under insulation, which is sometimes visible from the ground.

GUTTERS AND DOWNSPOUTS

Debris should be cleaned from gutters and downspouts frequently, especially in the spring and fall. In colder climates, clogged gutters with water will freeze. Strainers are available for downspouts to prevent debris being caught. There are several options to prevent debris from entering the gutter, all of which are relatively expensive. Replace or repair sagging or broken straps. Fill small holes epoxy resin and larger holds with adhesive back aluminum tape. Leaking joints can be sealed with silicone caulk.

CLADDING



EXTERIOR PAINTING

Walls should be periodically power washed on a low setting by an experienced professional to remove dirt and debris buildup. Clean and touch up spots and stains as needed.

This paragraph is specifically for communities with hardboard, wood siding, cedar shingles or wood trim. Determining the extent of rot can be quite difficult, and rot may occur beneath the surface. The end grains of trim, head jambs that are flat, and bottom laps of siding tend to rot first. Modern windows sills are meant to drain water, but rotted window moulding is still quite common. Boards with sections that have swelled- typically at the bottom, nails that have pulled through the board leaving a small hole, and flaking paint are all signs of rot or water damage.

Bids for paint may vary considerably since labor costs predominate, and a contractor without work may bid low just to keep crews busy, although the best contractors always seem to be busy. Since the material cost of paint is relatively small, the association should select the highest quality paint it can afford. Higher quality paint looks better and lasts longer. Quality caulk, dry weather, and properly prepped surfaces are all required for a quality job.

The contractor should power wash the building, then walk the building with association representative to identify which boards to replace. Ideally, the entire rotten or damaged siding and trim piece should be replaced, although it is common to replace only the damaged or rotten section. Ensure that window and door trim are replaced entirely.

It is important for the Association to be aware that the IRS has specific rules in determining whether or not paint is considered a capital expense or is in fact part of maintenance. This is in part or wholly determined by how the association files its taxes; whether the association files an 1120 or 1120 H. Please discuss further with the association's CPA and/or attorney to ensure proper tax compliance.

VINYL SIDING

The cost for this component includes the removal and disposal of the existing material.

Opinion differs greatly on the life expectancy of siding can vary greatly. The Home Builder's Association recently produced a report indicating that vinyl siding will last the lifetime of the building. 40 years is sometimes mentioned. Older vinyl siding was formulated differently and did not last as long as the product of today. Your community most likely has a "Builder's Grade" siding, which is relatively thin.

A 12-foot length of plastic siding can expand as much as 5/8 inch with seasonal temperature swings. If nailed tight to a wall, it can buckle on hot days. To ensure that the panel is free to move, the nailheads shouldn't contact the hem, but should be left about 1/32 inch proud. Additionally, nailing should be placed in the center of the slot, but also into the studs, not sheathing. Panels should not be butted too tightly to the trim otherwise the siding may buckle when it expands. Don't hesitate to ask potential



installers for their certifications as most of the large manufacturers certify installers in proper installation techniques.

All vinyl siding will fade somewhat. After 10 to 15 years, the change can be significant. Darker colors will be more noticeable, which is why most siding is of a lighter neutral color.

To keep vinyl siding looking its best, it should be washed periodically to remove the mold, mildew, dirt, and chalky oxidation that collects on the surface. Although methods typically employ powerwashing, some manufacturers don't want pressure washers used on their products at all. The Vinyl Siding Institute suggests a 30/70 mix of vinegar and water. If that doesn't do the job, the Vinyl Siding Institute suggests mixing 1/3 cup laundry detergent, 2/3 cup powdered household cleaner, 1 quart liquid laundry bleach, and 1 gallon water.

FLOORING

CERAMIC TILE

Clean and seal grout annually. Although tile is far less porous it also should also be periodically sealed. Clean grout with an alkaline cleaner and not an acid based, wax based, or oil based cleaner. Additionally avoid using abrasives, scouring powders, bleach, or ammonia based cleaners. Sweep and damp mop tile regularly to remove dirt that can adhere to surface. Steam cleaning may remove stubborn stains or regrout if all other methods have failed. While we do not recommend waxing tile floors due to ongoing maintenance of rewaxing, wax does create a shiny appearance.

EQUIPMENT

HVAC

Cost is for full replacement of the outdoor condenser unit and indoor air handler. The indoor air handler was not inspected. HVAC contractors frequently remark that newer systems are more efficient, but do not seem to last as long as older units do. Control wire for thermostats fail at some point, but there is spare wire in the wirestrand, so it usually unnecessary to pull new wire, which would involve cutting holes in walls.

Older compressors (the condenser's main component) suffer from loss of compression as valves wear, resulting in excessive electrical use and loss of comfort in interior spaces. Systems may be replaced



prior to complete failure. Replacement of the indoor evaporator coils may make economic sense in a newer system that has somehow failed, but rarely in older systems.

Keep vegetation, debris and mulch away from the outside (condenser) unit. The insulation on the suction line, which runs between the building and the condenser breaks down over time and should be replaced. The condensate line may simply terminate outside, where it is often clogged from mulch and other landscaping operations; it should be clearly marked and monitored to prevent being buried or damaged by lawn equipment.

Condenser unit should be level to maintain proper oil levels and to prevent liquid from entering the compressor. Unusual noise or vibrations may indicate imminent failure of the compressor, but may also be worn bearings, deteriorated vibration separators or pads. Continuous running on mild days or systems that start and stop frequently are reasons to call a professional. Short cycling or continuous running will shorten the life expectancy of the compressor. Any evidence of stains or leaks requires further investigation.

Filters should be replaced every 3 months or cleaned in the case of semi-permanent plastic filters. Filters are commonly located on the return grilles, but may also be located on the air handler. Once a year, the condenser and evaporator coils should be cleaned, and the condensate line should be blown or flushed to remove any particles that could be blocking the line. Keep the condensate tray, drip pan, and condensate pump (if one exists) free of debris. Minor repairs or maintenance include adjusting or replacing belts and/or pulleys that power the blower. Some motors may need to be lubricated.

The gas manifold should be clean, rust free, and the flame should only be blue with orange tip. Yellow flame or blue flame with yellow tips is a warning sign that carbon monoxide is present; a professional should be called immediately. Gas flame should be uniform, not erratic.