

Michael Callahan(RS) Associates, LLC.

Green Association Sample

AnyCity, AnyState
Account Sample - Version 1
January 1, 2019



Michael Callahan(RS) & Associates, LLC.

Toll Free 1.877.357.2322

Local 1.603.944.0903

Fax 1.603.749.3807

Email mcallahanrs@gmail.com

TABLE OF CONTENTS

Green Association Sample

PART I • INFORMATION ABOUT YOUR RESERVE STUDY

Important Information	1-1
Introduction	1-1
Funding Options	1-1
Types of Reserve Studies	1-2
Physical Analysis	1-2
Developing a Component List	1-2
Operational Expenses	1-3
Reserve Expenses	1-3
Budgeting is Normally Excluded For:	1-3
Financial Analysis	1-4
Preparing the Reserve Study	1-4
Funding Methods	1-4
Funding Strategies	1-4
Component Funding Model Distribution of Accumulated Reserves	1-5
Funding Reserves	1-6
User's Guide to Your Reserve Analysis Study	1-7
Report Summaries	1-7
Index Reports	1-7
Detail Reports	1-7
Projections	1-7
Definitions	1-7
A Multi-Purpose Tool	1-10
Designation/Award	1-10
Consultant Certifies That	1-11

PART II • RESERVE STUDY

Current Assessment Funding Model Summary (Cash Flow)	2-1
Current Assessment Funding Model Projection	2-2
Current Assessment Funding Model VS Fully Funded Chart	2-3
Current Assessment Annual Expenditure Chart	2-4
Current Assessment Spread Sheet	2-5
Distribution of Accumulated Reserves	2-7

TABLE OF CONTENTS
Green Association Sample

Annual Expenditure Detail	2-8
Detail Report by Category	2-10
Category Detail Index	2-28
Asset Summary Report	2-29

Important Information

This document has been provided pursuant to an agreement containing restrictions on its use. No part of this document may be copied or distributed, in any form or by any means, nor disclosed to third parties without the expressed written permission of Michael Callahan & Associates, LLC. The client shall have the right to reproduce and distribute copies of this report, or the information contained within, as may be required for compliance with all applicable regulations.

This reserve analysis study and the parameters under which it has been completed are based upon information provided to us in part by representatives of the association, its contractors, assorted vendors, specialist and independent contractors, the Community Association Institute, and various construction pricing and scheduling manuals including, but not limited to: Marshall & Swift Valuation Service, RS Means Facilities Maintenance & Repair Cost Data, RS Means Repair & Remodeling Cost Data, National Construction Estimator, National Repair & Remodel Estimator, Dodge Cost Manual and McGraw-Hill Professional. Additionally, costs are obtained from numerous vendor catalogues, actual quotations or historical costs, and our own experience in the field of property management and reserve study preparation.

It has been assumed, unless otherwise noted in this report, that all assets have been designed and constructed properly and that each estimated useful life will approximate that of the norm per industry standards and/or manufacturer's specifications. In some cases, estimates may have been used on assets, which have an indeterminable but potential liability to the association. The decision for the inclusion of these as well as all assets considered is left to the client.

We recommend that your reserve analysis study be updated every two-three years due to fluctuating interest rates, inflationary changes, and the unpredictable nature of the lives of many of the assets under consideration. All of the information collected during our inspection of the association and computations made subsequently in preparing this reserve analysis study are retained in our computer files. Therefore, annual updates may be completed quickly and inexpensively each year.

Michael Callahan & Associates, LLC. would like to thank you for using our services. We invite you to call us at any time, should you have questions, comments or need assistance. In addition, any of the parameters and estimates used in this study may be changed at your request, after which we will provide a revised study.

This reserve analysis study is provided as an aid for planning purposes and not as an accounting tool. Since it deals with events yet to take place, there is no assurance that the results enumerated within it will, in fact, occur as described.

Part I

Introduction

Preparing the annual budget and overseeing the organization's finances are perhaps the most important responsibilities of board members. The annual operating and reserve budgets reflect the planning and goals of the organization and set the level and quality of service for all of the association's activities.

Funding Options

When a major repair or replacement is required in a community, an organization has essentially three options available to address the expenditure:

The first, and only logical means that the Board has to ensure its ability to maintain the assets for which it

is obligated, is by **assessing an adequate level of reserves**.

Whereas, if the organization was setting aside reserves for this purpose, using the vehicle of the regularly assessed monthly fees, it would have had the full term of the life of the roof, for example, to accumulate the necessary moneys.

The second option is for the organization to **acquire a loan** from a lending institution in order to effect the required repairs. In many cases, banks will lend to an organization. With this method, the current board is pledging the future assets of an organization.

The third option, too often used, is simply to **defer the required repair or replacement**. This option, which is not recommended, can create an environment of declining property values due to expanding lists of deferred maintenance items and the organization's financial inability to keep pace with the normal aging process of the common area components. This, in turn, can have a seriously negative impact on maintaining the organization by making it difficult, or even impossible, for potential buyers to obtain financing from lenders. Increasingly, lending institutions are requesting copies of the association's most recent reserve study before granting loans, either for the association itself, a prospective purchaser, or for an individual within such an association.

Types of Reserve Studies

Most reserve studies fit into one of three categories:

Full Reserve Study;

Update with site inspection; and

Update without site inspection.

In a **Full Reserve Study**, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a "fund status" and "funding plan".

In an **Update with site inspection**, the reserve provider conducts a component inventory (verification only, not quantification unless new components have been added to the inventory), a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both the "fund status and "funding plan."

In an **Update without site inspection**, the reserve provider conducts life and valuation estimates to determine the "fund status" and "funding plan."

The Reserve Study: A Physical and a Financial Analysis

There are two components of a reserve study: a physical analysis and a financial analysis.

Physical Analysis

During the physical analysis, a reserve study provider evaluates information regarding the physical status and repair/replacement cost of the organization's major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates.

Developing a Component List

The budget process begins with full inventory of all the major components for which the organization is responsible. The determination of whether an expense should be labeled as operational, reserve, or excluded altogether is sometimes subjective. Since this labeling may have a major impact on the financial plans of the organization, subjective determinations should be minimized. We suggest the following considerations when labeling an expense.

Operational Expenses

Occur at least annually, no matter how large the expense, and can be budgeted for effectively each year. They are characterized as being reasonably predictable, both in terms of frequency and cost. Operational expenses include all minor expenses, which would not otherwise adversely affect an operational budget from one year to the next. Examples of *operational expenses* include:

Utilities:

Electricity

Gas

Water

Telephone

Cable TV

Bank Service Charges

Dues & Publications

Licenses, Permits & Fees

Insurance(s)

Services:

Landscaping

Accounting

Painting

Repair Expenses:

Roof Repairs

Equipment Repairs

Minor Concrete Repairs

Operating Contingency

Administrative:

Supplies

Reserve Expenses

These are major expenses that occur other than annually, and which must be budgeted for in advance in order to ensure the availability of the necessary funds in time for their use. Reserve expenses are reasonably predictable both in terms of frequency and cost. However, they may include significant assets that have an indeterminable but potential liability that may be demonstrated as a likely occurrence. They are expenses that, when incurred, would have a significant effect on the smooth operation of the budgetary process from one year to the next, if they were not reserved for in advance. Examples of reserve expenses include:

Roof Replacements

Reserve Study

Deck Resurfacing

Fencing Replacement

Asphalt Seal Coating

Asphalt Repairs

Asphalt Overlays

Interior Furnishings

Lighting Replacement

Equipment Replacement

Budgeting is Normally Excluded for:

Repairs or replacements of assets which are deemed to have an estimated useful life equal to or exceeding the estimated useful life of the facility or community itself, or exceeding the legal life of the community as defined in an organization's governing documents. Examples include the complete replacement of foundations, wiring (electrical services) and plumbing (water & Sewer services). Also excluded are insignificant expenses that may be covered either by an operating or reserve contingency, or otherwise in a general maintenance fund. Expenses that are necessitated by acts of nature, accidents or other occurrences that are more properly insured for, rather than reserved for, are also excluded.

Financial Analysis

The financial analysis assesses the organization's reserve balance or "fund status" (measured in cash or as percent fully funded) to determine a recommendation for the appropriate reserve contribution rate in the

future, known as the “funding plan”.

Preparing the Reserve Study

Once the reserve assets have been identified and quantified, their respective replacement costs, useful lives and remaining lives must be assigned so that a funding schedule can be constructed. Replacement costs and useful lives can be found in published manuals such as construction estimators, appraisal handbooks, and valuation guides. Remaining lives are calculated from the useful lives and ages of assets and adjusted according to conditions such as design, manufactured quality, usage, exposure to the elements and maintenance history.

By following the recommendations of an effective reserve study, the organization should avoid any major shortfalls. However, to remain accurate, the report should be updated every two – three years to reflect such changes as shifts in economic parameters, additions of phases or assets, or expenditures of reserve funds. The organization can assist in simplifying the reserve analysis update process by keeping accurate records of these changes throughout the year.

Funding Methods

From the simplest to the most complex, reserve analysis providers use many different computational processes to calculate reserve requirements. However, there are two basic processes identified as industry standards: the cash flow method and the component method.

The cash flow method develops a reserve-funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the actual anticipated schedule of reserve expenses until the desired funding goal is achieved. This method sets up a “window” in which all future anticipated replacement costs are computed, based upon the individual lives of the components under consideration. The Michael Callahan & Associates, LLC. Threshold and the Michael Callahan & Associates, LLC. Current Assessment funding models are based upon the cash flow method.

The component method develops a reserve-funding plan where the total contribution is based upon the sum of contributions for individual components. The component method is the more conservative of the two funding options, and assures that the association will achieve and maintain an ideal level of reserve over time. This method also allows for computations on individual components in the analysis. The Michael Callahan & Associates, LLC. Component Funding model is based upon the component methodology.

Funding Strategies

Once an organization has established its funding goals, the organization can select an appropriate funding plan. There are four basic strategies from which most organizations select. It is recommended that the organization consult professionals to determine the best strategy or combination of plans that best suit the organization’s need. Additionally, organizations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consultation with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements is advisable. The four funding plans and descriptions of each are detailed below. Organizations will have to update their reserve studies more or less frequently depending on the funding strategy they select.

Full Funding---Given that the basis of funding for reserves is to distribute the costs of the replacements over the lives of the components in question, it follows that the ideal level of reserves would be proportionately related to those lives and costs. If an organization has a component with an expected estimated useful life of ten years, it would set aside approximately one-tenth of the replacement cost each year. At the end of three years, one would expect three-tenths of the replacement cost to have accumulated, and if so, that component would be “fully-funded.” This model is important in that it is a

measure of the adequacy of an organization's reserves at any one point of time, and is independent of any particular method which may have been used for past funding or may be under consideration for future funding. This formula represents a snapshot in time and is based upon current replacement cost, independent of future inflationary or investment factors:

Fully Funded Reserves = **Age** divided by **Useful Life** the results multiplied by **Current Replacement Cost**

When an organization's total accumulated reserves for all components meet this criterion, its reserves are considered "fully-funded."

The Michael Callahan & Associates, LLC. **Threshold Funding Model (Minimum Funding)**. The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance overall does not drop below zero during the projected period. An organization using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance.

The Michael Callahan & Associates, LLC. **Threshold Funding Model**. This method is based upon the cash flow funding concept. The minimum reserve cash balance in threshold funding, however, is set at a predetermined dollar amount (other than \$0).

The Michael Callahan & Associates, LLC. **Current Assessment Funding Model**. This method is also based upon the cash flow funding concept. The initial reserve assessment is set at the organization's current fiscal year funding level and a timeframe (yrs) projection is calculated to illustrate the adequacy of the current funding over time.

The Michael Callahan & Associates, LLC. **Recommended Assessment Funding Model**. This method is also based upon the cash flow funding concept. The reserve assessment is set (directed) at a level that will properly fund the reserves over a timeframe (yrs) projections and is calculated to illustrate the needed funding over time.

The Michael Callahan & Associates, LLC. **Component Funding Model**. This is a straight-line funding model. It distributes the cash reserves to individual reserve components and then calculates what the reserve assessment and interest contribution (minus taxes) should be, again by each reserve component. The current annual assessment is then determined by summing all the individual component assessments, hence the name "Component Funding Model". This is the most conservative funding model. It leads to or maintains the fully funded reserve position. The following details this calculation process.

Component Funding Model Distribution of Accumulated Reserves

The "Distribution of Accumulated Reserves Report" is a "Component Funding Model" calculation. This distribution **does not** apply to the cash flow funding models.

When calculating reserves based upon the component methodology, a beginning reserve balance must be allocated for each of the individual components considered in the analysis, before the individual calculations can be completed. When this distribution is not available, or of sufficient detail, the following method is suggested for allocating reserves:

The first step the program performs in this process is subtracting, from the total accumulated reserves, any amounts for assets that have predetermined (fixed) reserve balances. The user can "fix" the accumulated reserve balance within the program on the individual asset's detail page. If, by error, these amounts total more than the amount of funds available, then the remaining assets are adjusted accordingly. A provision for a contingency reserve is then deducted by the determined percentage used, and if there are sufficient remaining funds available.

The second step is to identify the ideal level of reserves for each asset. As indicated in the prior section,

this is accomplished by evaluating the component's age proportionate to its estimated useful life and current replacement cost. Again, the equation used is as follows:

$$\text{Fully Funded Reserves} = (\text{Age/Useful Life}) \times \text{Current Replacement Cost}$$

The Michael Callahan & Associates, LLC. software program performs the above calculations to the actual month the component was placed-in-service. The program projects that the accumulation of necessary reserves for repairs or replacements will be available on the first day of the fiscal year in which they are scheduled to occur.

The next step the program performs is to arrange all of the assets used in the study in ascending order by remaining life, and alphabetically within each grouping of remaining life items. These assets are then assigned their respective ideal level of reserves until the amount of funds available is depleted, or until all assets are appropriately funded. If any assets are assigned a zero remaining life (scheduled for replacement in the current fiscal year), then the amount assigned equals the current replacement cost and funding begins for the next cycle of replacement. If there are insufficient funds available to accomplish this, then the software automatically adjusts the zero remaining life items to one year, and that asset assumes its new grouping position alphabetically in the final printed report.

If, at the completion of this task, there are additional moneys that have not been distributed, the remaining reserves are then assigned, in ascending order, to a level equal to, but not exceeding, the current replacement cost for each component. If there are sufficient moneys available to fund all assets at their current replacement cost levels, then any excess funds are designated as such and are not factored into any of the report computations. If, at the end of this assignment process there are designated excess funds, they can be used to offset the monthly contribution requirements recommended, or used in any other manner the client may desire.

Assigning the reserves in this manner defers the make-up period for any under-funding over the longest remaining life of all assets under consideration, thereby minimizing the impact of any deficiency. For example, if the report indicates an under funding of \$50,000, this under-funding will be assigned to components with the longest remaining lives in order to give more time to "replenish" the account. If the \$50,000 under-funding were to be assigned to short remaining life items, the impact would be felt immediately.

If the reserves are under-funded, the monthly contribution requirements, as outlined in this report, can be expected to be higher than normal. In future years, as individual assets are replaced, the funding requirements will return to their normal levels.

Funding Reserves

Three assessment and contribution figures are provided in the report, the "Monthly Reserve Assessment Required", the "Average Net Monthly Interest Earned" contribution and the "Total Monthly Allocation to Reserves." The organization should allocate the "Monthly Reserve Assessment Required" amount to reserves each month when the interest earned on the reserves is left in the reserve accounts as part of the contribution. Any interest earned on reserve deposits, must be left in reserves and only amounts set aside for taxes should be removed.

The second alternative is to allocate the "Total Monthly Allocation" to reserves (this is the member assessment plus the anticipated interest earned for the fiscal year). This method assumes that all interest earned will be assigned directly as operating income. This allocation takes into consideration the anticipated interest earned on accumulated reserves regardless of whether or not it is actually earned. When taxes are paid, the amount due will be taken directly from the organization's operating accounts as the reserve accounts are allocated only those moneys net of taxes.

Users' Guide to your Reserve Analysis Study

Part II of your Michael Callahan & Associates, LLC. Report contains the reserve analysis study for your organization. There are seven types of reports in the study as described below.

Report Summaries

The Report Summary for all funding models lists all of the parameters that were used in calculating the report as well as the summary of your reserve analysis study.

Index Reports

The **Distribution of Accumulated Reserves** report lists all assets in remaining life order. It also identifies the ideal level of reserves that should have accumulated for the organization as well as the actual reserves available. This information is valid only for the "Component Funding Model" calculation.

The **Component Listing/Summary** lists all assets by category (i.e. roofing, painting, lighting, etc.) together with their remaining life, current cost, monthly reserve contribution, and net monthly allocation.

Detail Reports

The Detail Report itemizes each asset and lists all measurements, current and future costs, and calculations for that asset. Provisions for percentage replacements, salvage values, and one-time replacements can also be utilized. These reports can be sorted by category or group.

The numerical listings for each asset are enhanced by extensive narrative detailing factors such as design, manufactured quality, usage, exposure to elements and maintenance history.

The Michael Callahan & Associates, LLC. Detail Index is an alphabetical listing of all assets, together with the page number of the asset's detail report, the projected replacement year, and the asset number.

Projections

Twenty-year or Thirty-year projections add to the usefulness of your reserve analysis study.

Definitions

Report I.D.

Includes the Report Date (example: November 15, 1992), Account Number (example: 9773), and Version (example: 1.0). Please use this information (displayed on the summary page) when referencing your report.

Budget Year Beginning/Ending

The budgetary year for which the report has been prepared for organizations with fiscal years ending December 31st, the monthly contribution figures indicated are for the 12-month period beginning 1/1/20xx and ending 12/31/20xx.

Number of Units and/or Phases

If applicable, the number of units and/or phases have been included in this version of the report.

Inflation

This figure is used to approximate the future cost to repair or replace each component in the report. The current cost for each component is compounded on an annual basis by the number of remaining years to replacement, and the total is used in calculating the monthly reserve contribution that will be necessary to accumulate the required funds in time for replacement.

Annual Assessment Increase

This represents the percentage rate at which the organization will increase its assessment to reserves at the end of each year. For example, in order to accumulate \$10,000 in 10 years, you could set aside

\$1,000 per year. As an alternative, you could set aside \$795 the first year and increase that amount by 5% each year until the year of replacement. In either case you arrive at the same amount. The idea is that you start setting aside a lower amount and increase that number each year in accordance with the planned percentage. Ideally this figure should be equal to the rate of inflation. It can, however, be used to aide those organizations that have not set aside appropriate reserves in the past, by making the initial year's allocation less formidable.

Investment Yield Before Taxes

The average interest rate anticipated by the organization based upon its current investment practices.

Taxes on Interest Yield

The estimated percentage of interest income that will be set aside to pay income taxes on the interest earned.

Projected Reserve Balance

The anticipated reserve balance on the first day of the fiscal year for which this report has been prepared based upon information provided and not audited.

Percent Fully Funded

The ratio, at the beginning of the fiscal year, of the actual (or projected) reserve balance to the calculated fully funded balance, expressed as a percentage.

Phase Increment Detail and/or Age

Comments made regarding aging of the components on the basis of construction date or date of acceptance by the organization.

Monthly Assessment

The assessment to reserves required by the organization each month.

Interest Contribution (After Taxes)

The interest that should be earned on the reserves, net of taxes, based upon their beginning reserve balance and monthly contributions for one year. This figure is averaged for budgeting purposes.

Total Monthly Allocation

The sum of the monthly assessment and interest contribution figures.

Group and Category

The report may be prepared and sorted either by group (location, building, phase, etc.) or by category (roofing, painting, etc.). The standard report printing format is by category.

Percentage of Replacement or Repairs

In some cases, an asset may not be replaced in its entirety or the cost may be shared with a second party. Examples are budgeting for a percentage of replacement of streets over a period of time, or sharing the expense to replace a common wall with a neighboring party.

Placed-In-Service Date

The month and year that the asset was placed-in-service. This may be the construction date, the first escrow closure date in a given phase, or the date of the last servicing or replacement.

Estimated Useful Life

The estimated useful life of an asset based upon industry standards, manufacturer specifications, visual inspection, location, usage, organization standards and prior history. All of these factors are taken into consideration when tailoring the estimated useful life to the particular asset. For example, the carpeting in a hallway or elevator (a heavy traffic area) will not have the same life as the identical carpeting in a seldom-used meeting room or office.

Adjustment to Useful Life

Once the useful life is determined, it may be adjusted, up or down, by this separate figure for the current cycle of replacement. This will allow for a current period adjustment without affecting the estimated replacement cycles for future replacements.

Estimated Remaining Life

This calculation is completed internally based upon the report's fiscal year date and the date the asset was placed-in-service.

Replacement Year

The year that the asset is scheduled to be replaced. The appropriate funds will be available by the first day of the fiscal year for which replacement is anticipated.

Annual Fixed Reserves

An optional figure which, if used, will override the normal process of allocating reserves to each asset.

Fixed Assessment

An optional figure which, if used, will override all calculations and set the assessment at this amount. This assessment can be set for monthly, quarterly or annually as necessary.

Salvage Value

The salvage value of the asset at the time of replacement, if applicable.

One-Time Replacement

Notation if the asset is to be replaced on a one-time basis.

Current Replacement Cost

The estimated replacement cost effective at the beginning of the fiscal year for which the report is being prepared

Future Replacement Cost

The estimated cost to repair or replace the asset at the end of its estimated useful life based upon the current replacement cost and inflation.

Component Inventory

The task of selecting and qualifying reserve components. This task can be accomplished through on-site visual, review of organization design and organizational documents, a review of established organization precedents, and discussion with appropriate organization representative(s).

A Multi-Purpose Tool

Your Michael Callahan & Associates, LLC. Report is an important part of your organization's budgetary process. Following its recommendations should ensure the organization's smooth budgetary transitions from one fiscal year to the next. In addition Michael Callahan & Associates, LLC. reserve study serves a variety of useful purposes:

- Following the recommendations of a reserve study performed by a professional consultant can protect the Board of Directors in a community from personal liability concerning reserve components and reserve funding.
- A reserve analysis study is required by your accountant during the preparation of the organization's annual audit.
- The Michael Callahan & Associates, LLC. reserve study is often requested by lending institutions during the process of loan applications, both for the community and, in many cases, the individual owners.
- Your Michael Callahan & Associates, LLC. Report is also a detailed inventory of the organization's major assets and serves as a management tool for scheduling, coordinating and planning future repairs and replacements.
- Your Michael Callahan & Associates, LLC. Report is a tool that can assist the Board in fulfilling its legal and fiduciary obligations for maintaining the community in a state of good repair.
- Since the Michael Callahan & Associates, LLC. reserve analysis study includes measurements and cost estimates of the client's assets, the detail reports may be used to evaluate the accuracy and price of contractor bids when assets are due to be repaired or replaced.
- Your Michael Callahan & Associates, LLC. Report provides a record of the time, cost, and quantities of past reserve replacements. At times the organization's management company and board of directors are transitory which may result in the loss of these important records.

Designation/Award

In March 2000, Michael Callahan was awarded the Reserve Specialist (RS) designation from Community Associations Institute (CAI). Mr. Callahan was the 48th person in the United States to receive this professional designation.

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.

In 1999 Michael Callahan, RS was awarded the CAI-Community Association Professional of the Year Award. In 2003 Michael Callahan, RS was awarded the CAI-Association Professional Service Award.

Consultant certifies that:

- 1) Consultant has no other involvement with association which could result in actual or perceived

conflicts of interest.

2) Component conditional assessments were developed by actual field observation.

3) Financial assumptions used in this analysis are listed on the Funding Assessment Summary.

4) Consultant is a Reserve Specialist (RS) designee.

5) Future updates of this report performed by Michael Callahan & Associates, LLC. would range in cost from 1/3 to 1/2 the original cost to perform the reserve analysis. The Association is entitled to one set of free revisions to the original report. A revision is not an update. A revision is to make changes adjustments to the original report after the client has had time to review the report. The changes/adjustments must be made available to MCA within 90 days of receiving the first draft of the report. Revision changes/adjustments must be for past repairs/replacements, future repair/replacement adjustments/changes are considered an update if they are for the current fiscal year or future fiscal years.

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

7) It is assumed that all building assets/construction was built to code at the time of construction and was built with proper application, unless otherwise noted throughout the report and/or if information stating otherwise was provided to Michael Callahan & Associates, LLC. by the client. Michael Callahan & Associates, LLC. will not and did not do any testing for construction defects. No testing was done for any building codes.

8) The findings in this report are an opinion based on an actual visual on-site-inspection and from information provided to Michael Callahan & Associates, LLC. by the client. No testing of any kind was performed during the visual on-site-inspection. This report does not include destructive testing results. The visual on-site-inspection consists of a visual inspection of all accessible areas. Conditions or issues that could not be detected by a visual inspection are not the responsibility of Michael Callahan & Associates, LLC. or any consultant of Michael Callahan & Associates, LLC. Michael Callahan & Associates, LLC. is not required to report issues of any kind on any component.

9) No warranty, expressed or implied is made concerning services performed for this report, including the Consultant's findings, recommendations or professional advice.

10) 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 of replacement costs and life expectancies as well as assumptions regarding future events. Some 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 of error and/or discrepancy. For example, some assumptions inevitably will not materialize and unanticipated events and circumstances may 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.

Green Association Sample
AnyCity, AnyState
MCA Current Assessment Funding Model Summary (Cash Flow)

		<i>Report Parameters</i>	
Report Date	January 1, 2019	Inflation	2.00%
Account Number	Sample	Annual Assessment Increase	4.00%
Version	1	Interest Rate on Reserve Deposit	0.00%
Budget Year Beginning	January 1, 2019	Tax Rate on Interest	30.00%
Budget Year Ending	December 31, 2019	Contingency	1.00%
Total Units	36		
Phase Development	1 of 1	2019 Beginning Balance	\$192,544

Green Association Sample is located in AnyCity AnyState the property consists of 36 residential units.

For budgeting purposes Michael Callahan & Associates, LLC. will use January, 1 2012 for all original components. Components replaced since original will be noted throughout the report with the placed-in-service replacement date or an estimated replacement date.

The Official Michael Callahan & Associates, LLC. visual on-site-inspection was performed on September, 20 2018.

The detail section of this reserve study will have information on all assets included in this report. Some assets may be listed for inventory purposes only.

The anticipated reserve fund balance is based on current reserve fund & contribution information that was provided to MCA, LLC. by the client.

Fiscal Year January, 1 2019 Beginning Balance: \$192,544

Current Assessment Funding Model. This model type is also referred to as a Cash Flow model or Statutory Funding model. This analysis is based on the current annual assessment, parameters, and reserve fund balance. Because It is calculated using the current annual assessment, it will give an accurate projection of how well the association is funded for the next 20 years of planned reserve expenditures.

Asset repair & replacement costs are estimates based on National Data, Local Contractors, provided bid proposals from the client, and actual costs provided by the client.

Current Assessment Funding Model Summary of Calculations

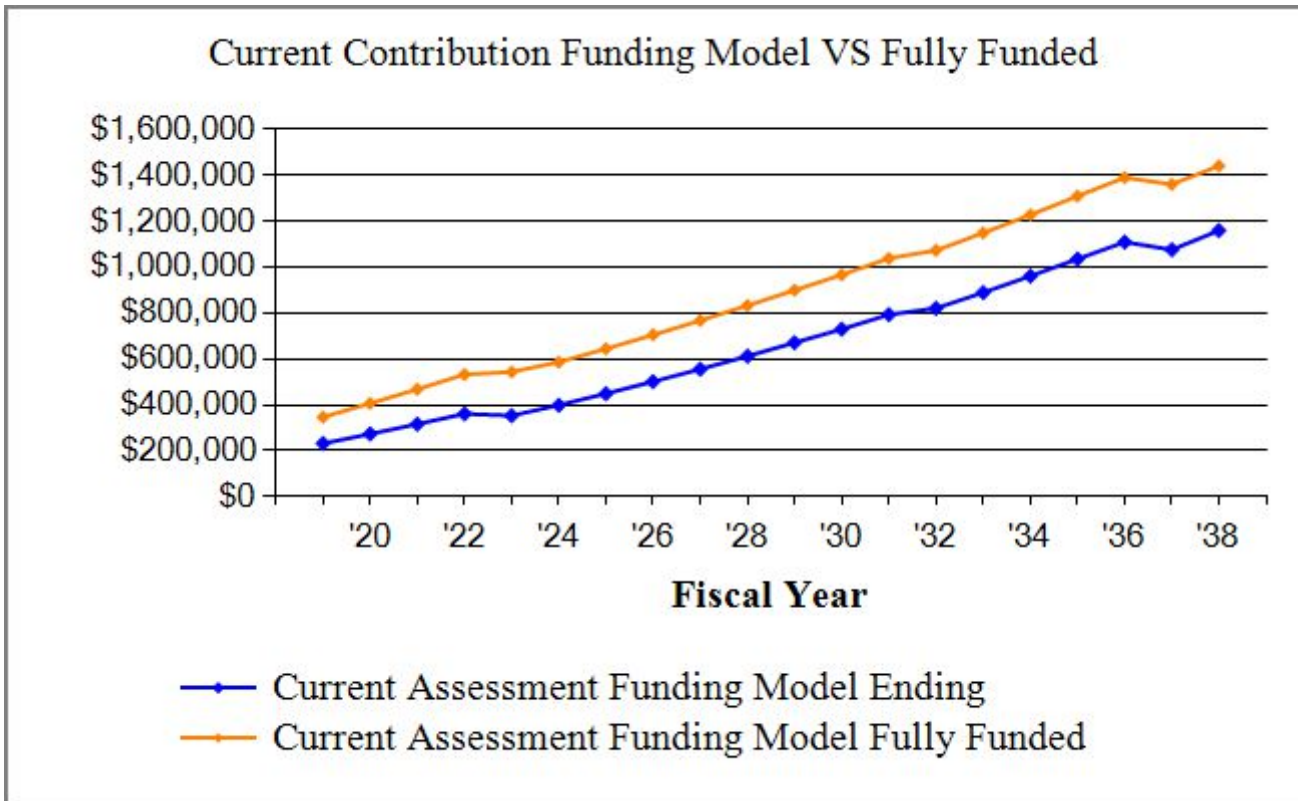
Required Month Contribution	\$3,305.42
Average Net Month Interest Earned	<u>\$0.00</u>
Total Month Allocation to Reserves	\$3,305.42

**Green Association Sample
MCA Current Assessment Funding Model Projection**

Beginning Balance: \$192,544

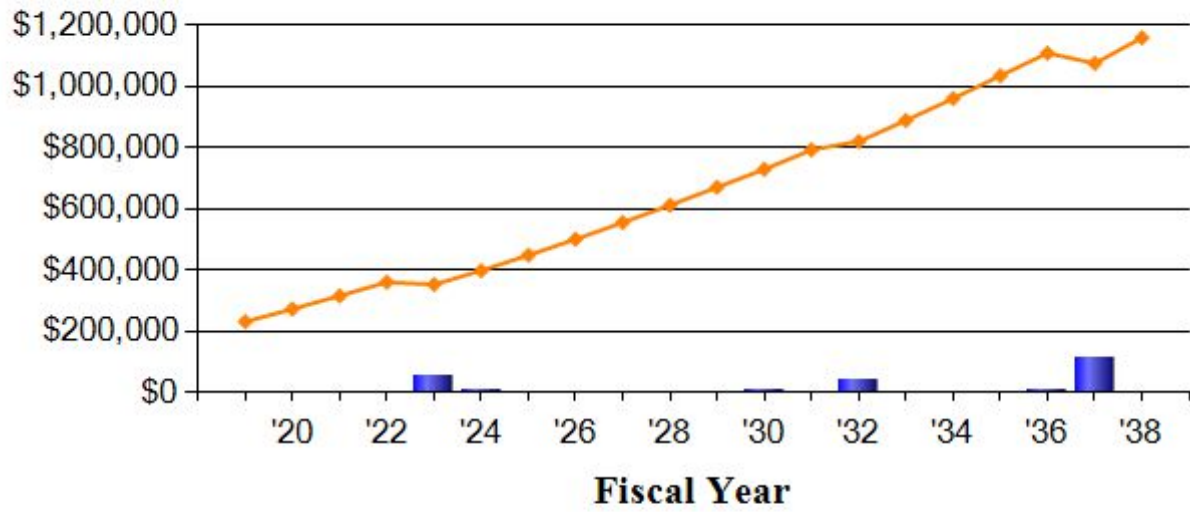
Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2019	1,452,012	39,665			232,209	346,966	67%
2020	1,481,052	41,252			273,461	406,466	67%
2021	1,510,673	42,902			316,362	468,208	68%
2022	1,540,887	44,618			360,980	532,257	68%
2023	1,571,704	46,402		54,122	353,261	543,477	65%
2024	1,547,935	48,259		2,650	398,870	586,015	68%
2025	1,578,893	50,189			449,058	644,280	70%
2026	1,610,471	52,196			501,255	704,642	71%
2027	1,642,681	54,284			555,539	767,160	72%
2028	1,675,534	56,456			611,995	831,897	74%
2029	1,709,045	58,714			670,709	898,917	75%
2030	1,743,226	61,062		2,487	729,284	965,748	76%
2031	1,778,090	63,505			792,789	1,037,481	76%
2032	1,813,652	66,045		38,808	820,026	1,072,112	76%
2033	1,849,925	68,687			888,713	1,148,089	77%
2034	1,886,924	71,434			960,148	1,226,677	78%
2035	1,924,662	74,292			1,034,439	1,307,948	79%
2036	1,963,155	77,263		3,361	1,108,342	1,388,552	80%
2037	2,002,418	80,354		113,903	1,074,794	1,359,173	79%
2038	1,955,058	83,568			1,158,362	1,439,435	80%

Green Association Sample
MCA Current Assessment Funding Model VS Fully Funded Chart



The Current Assessment Funding Model is based on the current annual assessment, parameters, and reserve fund balance. Because it is calculated using the current annual assessment, it will give the accurate projection of how well the association will be funded for the projected years of planned reserve expenditures.

Annual Expenditures



**Green Association Sample
MCA Current Assessment Spread Sheet**

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Beginning Balance	192,544	232,209	273,461	316,362	360,980	353,261	398,870	449,058	501,255	555,539
Annual Assessment	39,665	41,252	42,902	44,618	46,402	48,259	50,189	52,196	54,284	56,456
Interest Earned										
Expenditures					54,122	2,650				
Fully Funded Reserves	346,966	406,466	468,208	532,257	543,477	586,015	644,280	704,642	767,160	831,897
Percent Fully Funded	67%	67%	68%	68%	65%	68%	70%	71%	72%	74%
Ending Balance	232,209	273,461	316,362	360,980	353,261	398,870	449,058	501,255	555,539	611,995

Description

Asphalt Overlay - Replacement

Comments *Unfunded*

Common House - First Floor, Renovations

Common House - Second Floor, Renovations

Garage Door - Replacements

Hot Water Heater - Replacement, Common Hou.. 2,650

Playground Structure - Replacement

Pressure Tank - Replacements

Roofs - Metal Standing Seam, Coated

Roofs - Metal Standing Seam, Coated, Common..

Septic System - Leaching Field, Replacements 54,122

Siding - Replacement, Common House

Siding - Replacements, Bldgs. (3 Walls)

Siding - Replacements, Bldgs. (South Wall)

Stormwater Features - Upgrades

Window/Door - Replacements, Schedule #1

Window/Door - Replacements, Schedule #2

Window/Door - Replacements, Schedule #3

Window/Door - Replacements, Schedule #4

Year Total:

54,122 2,650

**Green Association Sample
MCA Current Assessment Spread Sheet**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beginning Balance	611,995	670,709	729,284	792,789	820,026	888,713	960,148	1,034,439	1,108,342	1,074,794
Annual Assessment	58,714	61,062	63,505	66,045	68,687	71,434	74,292	77,263	80,354	83,568
Interest Earned										
Expenditures		2,487		38,808				3,361	113,903	
Fully Funded Reserves	898,917	965,748	1,037,481	1,072,112	1,148,089	1,226,677	1,307,948	1,388,552	1,359,173	1,439,435
Percent Fully Funded	75%	76%	76%	76%	77%	78%	79%	80%	79%	80%
Ending Balance	670,709	729,284	792,789	820,026	888,713	960,148	1,034,439	1,108,342	1,074,794	1,158,362

Description

Asphalt Overlay - Replacement

Comments *Unfunded*

Common House - First Floor, Renovations

Common House - Second Floor, Renovations

Garage Door - Replacements 38,808

Hot Water Heater - Replacement, Common Hou.. 3,361

Playground Structure - Replacement 2,487

Pressure Tank - Replacements 28,208

Roofs - Metal Standing Seam, Coated

Roofs - Metal Standing Seam, Coated, Common..

Septic System - Leaching Field, Replacements

Siding - Replacement, Common House

Siding - Replacements, Bldgs. (3 Walls)

Siding - Replacements, Bldgs. (South Wall) 85,695

Stormwater Features - Upgrades

Window/Door - Replacements, Schedule #1

Window/Door - Replacements, Schedule #2

Window/Door - Replacements, Schedule #3

Window/Door - Replacements, Schedule #4

Year Total:

2,487

38,808

3,361

113,903

**Green Association Sample
MCA Distribution of Accumulated Reserves**

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Septic System - Leaching Field, Replacements	4	2023	F 10,000	10,000
Hot Water Heater - Replacement, Common ..	5	2024	1,400	1,400
Playground Structure - Replacement	11	2030	778	778
Garage Door - Replacements	13	2032	10,500	10,500
Pressure Tank - Replacements	18	2037	5,530	5,530
Siding - Replacements, Bldgs. (South Wall)	18	2037	16,800	16,800
Stormwater Features - Upgrades	23	2042	9,333	9,333
Common House - First Floor, Renovations	23	2042	14,000	14,000
Asphalt Overlay - Replacement	23	2042	17,500	17,500
Common House - Second Floor, Renovations	26	2045	5,333	5,333
Window/Door - Replacements, Schedule #1	28	2047	31,593	31,593
Window/Door - Replacements, Schedule #2	29	2048	30,715	30,715
Window/Door - Replacements, Schedule #3	30	2049	29,885	29,885
Window/Door - Replacements, Schedule #4	31	2050	29,099	29,099
Roofs - Metal Standing Seam, Coated, Com..	33	2052	3,058	3,058
Siding - Replacement, Common House	33	2052	4,025	4,025
Siding - Replacements, Bldgs. (3 Walls)	33	2052	* 10,337	31,500
Roofs - Metal Standing Seam, Coated	33	2052		38,593
Comments		Unfunded		
Total Asset Summary			<u>\$229,887</u>	<u>\$289,642</u>
Contingency at 1.00%			<u>\$2,322</u>	<u>\$2,926</u>
Summary Total			<u>\$232,209</u>	<u>\$292,568</u>

Percent Fully Funded	79%
Current Average Liability per Unit (Total Units: 36)	-\$1,677

'' Indicates Partially Funded*

'F' Indicates Fixed Reserve

**Green Association Sample
MCA Annual Expenditure Detail**

Description	Expenditures
<i>No Replacement in 2019</i>	
<i>No Replacement in 2020</i>	
<i>No Replacement in 2021</i>	
<i>No Replacement in 2022</i>	
Replacement Year 2023	
Septic System - Leaching Field, Replacements	54,122
Total for 2023	\$54,122
Replacement Year 2024	
Hot Water Heater - Replacement, Common House	2,650
Total for 2024	\$2,650
<i>No Replacement in 2025</i>	
<i>No Replacement in 2026</i>	
<i>No Replacement in 2027</i>	
<i>No Replacement in 2028</i>	
<i>No Replacement in 2029</i>	
Replacement Year 2030	
Playground Structure - Replacement	2,487
Total for 2030	\$2,487
<i>No Replacement in 2031</i>	
Replacement Year 2032	
Garage Door - Replacements	38,808
Total for 2032	\$38,808
<i>No Replacement in 2033</i>	
<i>No Replacement in 2034</i>	
<i>No Replacement in 2035</i>	
Replacement Year 2036	
Hot Water Heater - Replacement, Common House	3,361
Total for 2036	\$3,361
Replacement Year 2037	
Pressure Tank - Replacements	28,208

**Green Association Sample
MCA Annual Expenditure Detail**

Description	Expenditures
<i>Replacement Year 2037 continued...</i>	
Siding - Replacements, Bldgs. (South Wall)	85,695
Total for 2037	<u>\$113,903</u>

Green Association Sample MCA Detail Report by Category

Asphalt Overlay - Replacement - 2042

Asset ID	1047	1 Total	@ \$75,000.00
		Asset Cost	\$75,000.00
		Percent Replacement	100%
Placed in Service	Streets/Asphalt	Future Cost	\$118,267.44
Useful Life	January 2012	Assigned Reserves	\$17,500.00
Replacement Year	30		
Remaining Life	2042	Monthly Assessment	\$157.93
	23	Interest Contribution	\$0.00
		Reserve Allocation	\$157.93



The cost used for the future asphalt overlay replacement is based on the original installation cost provided to MCA by the client.

A good maintenance cycle along with 'as-needed' repairs and/or replacement to the asphalt overlay will help the overlay to last the estimated 20-30 year Useful Life. In most cases repairs and/or replacements to areas of the asphalt overlay will not increase the overall Useful Life of the asphalt overlay.

The estimated cost used is for an asphalt overlay replacement. It does not include a complete foundation replacement. Any areas of the foundation that require repairs and/or replacements should be addressed at the time of the overlay replacement. The overall condition of the asphalt overlay and the foundation should be monitored over time. If the foundation starts to show major failure, the funding for the asphalt overlay replacement should be adjusted to cover foundation work also.

Typically an overlay application' has a much shorter Useful Life than an asphalt 'overlay replacement'. Most asphalt pavements are built on a gravel base which is generally at least as thick as the asphalt layer, although some 'full depth' pavements are built directly on the native sub grade. In areas with very soft or expansive sub grades such as clay or peat, thick gravel bases or stabilization of the sub grade with Portland cement or lime can be required. The actual material used in paving is termed HMA (Hot Mix Asphalt), and it is usually applied using a free floating screed.

Advantages of asphalt roadways include relatively low noise, relatively low cost compared with other paving methods, and ease of repair. Disadvantages include less durability than other paving methods, less tensile strength than concrete, the tendency to become slick and soft in hot

**Green Association Sample
MCA Detail Report by Category**

Asphalt Overlay - Replacement continued...

weather and a certain amount of hydrocarbon pollution to soil and groundwater or waterways.

Although asphalt has been around for millions of years in crude oil, it doesn't last forever when used for paving roads. Few of us can have missed jolting over cracks and ruts in heavily trafficked roads. A number of factors impinge on the performance of asphalt. These include its composition, the crude oil source, the type and amount of aggregate used, the presence of moisture, the method of road construction, temperature and, of course, the volume of traffic.

Ideally, asphalt used for paving roads should remain consistent in all weather conditions. However, many asphalt roads soften in summer and suffer from rutting or permanent deformation, as it is also called. At low temperatures, neutral molecules in asphalt arrange themselves into more organized structural forms. As a result, the material hardens, becomes brittle and cracks under the stress of heavy traffic loads. This is known as thermal and fatigue cracking.

Asphalts also lose their plasticity and therefore harden and crack or crumble when they lose their more volatile lower molecular weight constituents or when these constituents are oxidized. This process is known as aging. Moisture from rain and other sources can also invade and damage asphalts, particularly aged or oxidized asphalts. Most asphalt areas can be expected to last approximately 20-30 years before it will become necessary for an overlay to be applied. This can double the life of the surface upon application. It will be necessary to adjust manhole and valve covers at the time the overlay is 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 estimated remaining life before the overlay is required.

In addition to this service, a consultant may be obtained to prepare the application specifications and to work with the contractor during actual installation. It is recommended that the client obtain bids for such a consultation near the end of the estimated useful life. 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.

As pavement systems primarily fail due to fatigue (in a manner similar to metals). Several pavement design methods have been developed to determine the thickness and composition of pavement required to carry predicted traffic loads for a given period of time. Pavement design methods are continuously evolving. Heavily loaded trucks can do more than 10,000 times the damage done by a normal passenger car. Passenger cars are considered to have no practical effect on a pavement's service life.

Streets/Asphalt - Total Current Cost	\$75,000
Assigned Reserves	\$17,500
Fully Funded Reserves	\$17,500

**Green Association Sample
MCA Detail Report by Category**

Roofs - Metal Standing Seam, Coated - 2052

Asset ID	1155	1 Total	@ \$220,530.00
		Asset Cost	\$220,530.00
		Percent Replacement	100%
		Future Cost	\$423,909.69
Placed in Service	January 2012	Assigned Reserves	<i>none</i>
Useful Life	40		
Replacement Year	2052	Monthly Assessment	\$463.06
Remaining Life	33	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$463.06



The estimated cost used is for a quality 40 year rated metal standing seam roof system, all new underlayment, flashing and drip edge. A provision should be included in any work contract for the replacement of sheathing. Most likely some of the sheathing will require replacement. However, until the roofing system is removed from the roof deck it is next to impossible to know how much if any of the sheathing will require replacement.

1 - roof (900A duplex)	@ \$9,920.00 =	\$9,920.00
1 - roof (1500 duplex)	@ 10,895.00 =	10,895.00
1 - roof (500 quad)	@ 9,500.00 =	9,500.00
1 - roof (500 quad)	@ 9,500.00 =	9,500.00
1 - roof (900A duplex)	@ 9,920.00 =	9,920.00
1 - roof (1500 duplex)	@ 12,000.00 =	12,000.00
1 - roof (1500 duplex)	@ 10,895.00 =	10,895.00
1 - roof (1500 duplex)	@ 10,895.00 =	10,895.00
1 - roof (1500 duplex)	@ 10,895.00 =	10,895.00
1 - roof (1500 duplex)	@ 10,895.00 =	10,895.00
1 - roof (900B duplex)	@ 11,645.00 =	11,645.00
1 - roof (1300 duplex)	@ 9,595.00 =	9,595.00
1 - roof (900B duplex)	@ 11,645.00 =	11,645.00
1 - roof (500 triplex)	@ 10,340.00 =	10,340.00
1 - roof (900B duplex)	@ 11,645.00 =	11,645.00
1 - roof (900B duplex)	@ 11,645.00 =	11,645.00
1 - roof (1300 duplex)	@ 9,595.00 =	9,595.00
5 - garages	@ 10,000.00 =	<u>50,000.00</u>

**Green Association Sample
MCA Detail Report by Category**

Roofs - Metal Standing Seam, Coated continued...

Total = \$220,530.00

Roofs - Metal Standing Seam, Coated, Common House - 2052

Asset ID	1268	1 Total	@ \$17,475.00
		Asset Cost	\$17,475.00
		Percent Replacement	100%
	Roofing	Future Cost	\$33,590.99
Placed in Service	January 2012	Assigned Reserves	\$3,058.12
Useful Life	40		
Replacement Year	2052	Monthly Assessment	\$33.35
Remaining Life	33	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$33.35



The estimated cost used is for a quality 40 year rated metal standing seam roof system, all new underlayment, flashing and drip edge. A provision should be included in any work contract for the replacement of sheathing. Most likely some of the sheathing will require replacement. However, until the roofing system is removed from the roof deck it is next to impossible to know how much if any of the sheathing will require replacement.

Roofing - Total Current Cost	\$238,005
Assigned Reserves	\$3,058
Fully Funded Reserves	\$41,651

**Green Association Sample
MCA Detail Report by Category**

Common House - First Floor, Renovations - 2042

Asset ID	1267	1 Total	@ \$60,000.00
		Asset Cost	\$60,000.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	\$94,613.95
Placed in Service	January 2012	Assigned Reserves	\$14,000.00
Useful Life	30		
Replacement Year	2042	Monthly Assessment	\$126.35
Remaining Life	23	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$126.35



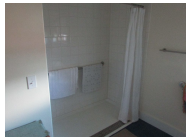
This line item is for the future renovations of the Common House first floor. The renovations may include but not limited to the following:

- plumbing fixtures
- light fixtures
- heaters
- fire alarm
- fire doors
- interior trim
- flooring
- interior doors
- kitchen appliances
- kitchen cabinets/counter tops

**Green Association Sample
MCA Detail Report by Category**

Common House - Second Floor, Renovations - 2045

Asset ID	1241	1 Total	@ \$40,000.00
		Asset Cost	\$40,000.00
		Percent Replacement	100%
Interior Furnishings		Future Cost	\$66,936.72
Placed in Service	January 2015	Assigned Reserves	\$5,333.33
Useful Life	30		
Replacement Year	2045	Monthly Assessment	\$85.41
Remaining Life	26	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$85.41



This line item is for the future renovations of the Common House second floor. The renovations may include but not limited to the following:

- plumbing fixtures
- light fixtures
- heaters
- fire alarm
- fire doors
- interior trim
- flooring
- interior doors

Interior Furnishings - Total Current Cost	\$100,000
Assigned Reserves	\$19,333
Fully Funded Reserves	\$19,333

**Green Association Sample
MCA Detail Report by Category**

Hot Water Heater - Replacement, Common House - 2024

Asset ID	1270	1 Total Asset Cost	@ \$2,400.00
		Percent Replacement	100%
Placed in Service	Equipment January 2012	Future Cost	\$2,649.79
Useful Life	12	Assigned Reserves	\$1,400.00
Replacement Year	2024	Monthly Assessment	\$9.01
Remaining Life	5	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$9.01



Pressure Tank - Replacements - 2037

Asset ID	1271	1 Total Asset Cost	@ \$19,750.00
		Percent Replacement	100%
Placed in Service	Equipment January 2012	Future Cost	\$28,207.86
Useful Life	25	Assigned Reserves	\$5,530.00
Replacement Year	2037	Monthly Assessment	\$45.42
Remaining Life	18	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$45.42



32 - pressure tanks @ \$500.00 = \$16,000.00

**Green Association Sample
MCA Detail Report by Category**

Pressure Tank - Replacements continued...

5 - pressure tanks (pump house & Quad)	@	750.00 =	<u>3,750.00</u>
		Total =	\$19,750.00

Equipment - Total Current Cost	\$22,150
Assigned Reserves	\$6,930
Fully Funded Reserves	\$6,930

**Green Association Sample
MCA Detail Report by Category**

Garage Door - Replacements - 2032

Asset ID	1273	20 garage doors	@ \$1,500.00
		Asset Cost	\$30,000.00
		Percent Replacement	100%
Building Components		Future Cost	\$38,808.20
Placed in Service	January 2012	Assigned Reserves	\$10,500.00
Useful Life	20		
Replacement Year	2032	Monthly Assessment	\$78.50
Remaining Life	13	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$78.50



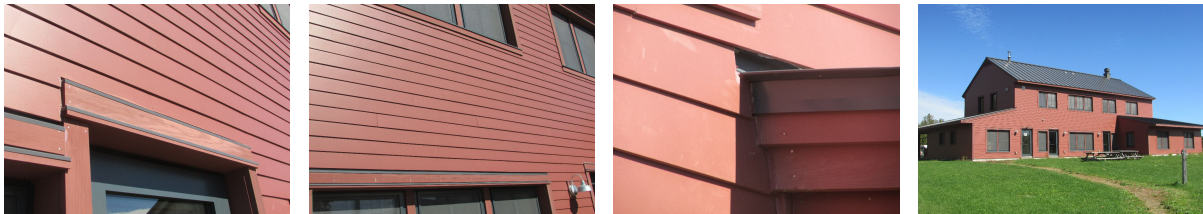
This line item is for the replacement of the garage doors.

Siding - Replacement, Common House - 2052

Asset ID	1269	1 Total	@ \$23,000.00
		Asset Cost	\$23,000.00
		Percent Replacement	100%
Building Components		Future Cost	\$44,211.32
Placed in Service	January 2012	Assigned Reserves	\$4,025.00
Useful Life	40		
Replacement Year	2052	Monthly Assessment	\$43.90
Remaining Life	33	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$43.90

Green Association Sample MCA Detail Report by Category

Siding - Replacement, Common House continued...



This line item is for the replacement of the composite siding/trim.

Siding - Replacements, Bldgs. (3 Walls) - 2052

Asset ID	1275	1 Total @ \$180,000.00	
		Asset Cost	\$180,000.00
		Percent Replacement	100%
Building Components		Future Cost	\$346,001.65
Placed in Service	January 2012	Assigned Reserves	\$10,337.41
Useful Life	40		
Replacement Year	2052	Monthly Assessment	\$366.67
Remaining Life	33	Interest Contribution	\$0.00
		Reserve Allocation	\$366.67



This line item is set up for the future replacement of the north, east, and west walls on all of the buildings (excludes the Common House)

The set up is based on an estimated cost to replace all of the three wall areas.

It is likely that some repairs and/or area replacements will be required prior to the actual scheduled replacement cycle. All damaged areas should be addressed immediately.

**Green Association Sample
MCA Detail Report by Category**

Siding - Replacements, Bldgs. (South Wall) - 2037

Asset ID	1272	1 Total	@ \$60,000.00
		Asset Cost	\$60,000.00
		Percent Replacement	100%
Building Components		Future Cost	\$85,694.77
Placed in Service	January 2012	Assigned Reserves	\$16,800.00
Useful Life	25		
Replacement Year	2037	Monthly Assessment	\$137.97
Remaining Life	18	Interest Contribution	\$0.00
		Reserve Allocation	\$137.97

This line item is set up for the future replacment of the southern walls on all of the buildings (excludes the Common House)

The set up is based on an estimated cost to replace all of the southern wall areas.

It is likely that some repairs and/or area replacements will be required prior to the actual scheduled replacement cycle. All damaged areas should be addressed immediately.

Window/Door - Replacements, Schedule #1 - 2047

Asset ID	1261	1 Total	@ \$631,857.00
		Asset Cost	\$157,964.25
		Percent Replacement	25%
Building Components		Future Cost	\$275,019.58
Placed in Service	January 2012	Assigned Reserves	\$31,592.85
Useful Life	35		
Replacement Year	2047	Monthly Assessment	\$313.39
Remaining Life	28	Interest Contribution	\$0.00
		Reserve Allocation	\$313.39



The window and exterior door replacements have been set up under four scheduled replacements. Each scheduled replacements represents twenty-five percent of the total original cost to install the windows and exterior doors.

**Green Association Sample
MCA Detail Report by Category**

Window/Door - Replacements, Schedule #2 - 2048

Asset ID	1262	1 Total	@ \$631,857.00
		Asset Cost	\$157,964.25
		Percent Replacement	25%
Building Components		Future Cost	\$280,519.97
Placed in Service	January 2012	Assigned Reserves	\$30,715.27
Useful Life	35		
Adjustment	1	Monthly Assessment	\$310.51
Replacement Year	2048	Interest Contribution	<u>\$0.00</u>
Remaining Life	29	Reserve Allocation	\$310.51

The window and exterior door replacements have been set up under four scheduled replacements. Each scheduled replacements represents twenty-five percent of the total original cost to install the windows and exterior doors.

Window/Door - Replacements, Schedule #3 - 2049

Asset ID	1263	1 Total	@ \$631,857.00
		Asset Cost	\$157,964.25
		Percent Replacement	25%
Building Components		Future Cost	\$286,130.37
Placed in Service	January 2012	Assigned Reserves	\$29,885.13
Useful Life	35		
Adjustment	2	Monthly Assessment	\$307.90
Replacement Year	2049	Interest Contribution	<u>\$0.00</u>
Remaining Life	30	Reserve Allocation	\$307.90

The window and exterior door replacements have been set up under four scheduled replacements. Each scheduled replacements represents twenty-five percent of the total original cost to install the windows and exterior doors.

Window/Door - Replacements, Schedule #4 - 2050

Asset ID	1264	1 Total	@ \$631,857.00
		Asset Cost	\$157,964.25
		Percent Replacement	25%
Building Components		Future Cost	\$291,852.98
Placed in Service	January 2012	Assigned Reserves	\$29,098.68
Useful Life	35		
Adjustment	3	Monthly Assessment	\$305.54
Replacement Year	2050	Interest Contribution	<u>\$0.00</u>
Remaining Life	31	Reserve Allocation	\$305.54

The window and exterior door replacements have been set up under four scheduled replacements. Each scheduled replacements represents twenty-five percent of the total original

**Green Association Sample
MCA Detail Report by Category**

Window/Door - Replacements, Schedule #4 continued...

cost to install the windows and exterior doors.

Building Components - Total Current Cost	\$924,857
Assigned Reserves	\$162,954
Fully Funded Reserves	\$184,117

**Green Association Sample
MCA Detail Report by Category**

Playground Structure - Replacement - 2030

Asset ID	1274	1 Total	@ \$2,000.00
		Asset Cost	\$2,000.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$2,486.75
Placed in Service	January 2012	Assigned Reserves	\$777.78
Useful Life	18		
Replacement Year	2030	Monthly Assessment	\$5.60
Remaining Life	11	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$5.60



This line item is for possible upgrades/updating of the stormwater features.

Septic System - Leaching Field, Replacements - 2023

Asset ID	1265	1 Total	@ \$50,000.00
		Asset Cost	\$50,000.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$54,121.61
Placed in Service	January 2018	Fixed Assigned Reserves	\$9,665.00
Useful Life	5		
Replacement Year	2023	Monthly Assessment	\$397.62
Remaining Life	4	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$397.62

**Green Association Sample
MCA Detail Report by Category**

Stormwater Features - Upgrades - 2042			
Asset ID	1266	1 Total	@ \$40,000.00
		Asset Cost	\$40,000.00
		Percent Replacement	100%
Grounds Components		Future Cost	\$63,075.97
Placed in Service	January 2012	Assigned Reserves	\$9,333.33
Useful Life	30		
Replacement Year	2042	Monthly Assessment	\$84.23
Remaining Life	23	Interest Contribution	<u>\$0.00</u>
		Reserve Allocation	\$84.23

This line item is for possible upgrades/updating of the stormwater features.

Grounds Components - Total Current Cost	\$92,000
Assigned Reserves	\$20,111
Fully Funded Reserves	\$20,111

Green Association Sample MCA Detail Report by Category

Comments		1 Comment	
Asset ID	1257	Asset Cost	
		Percent Replacement	100%
	Comment	Future Cost	
Placed in Service	January 2018	Assigned Reserves	<i>none</i>
Useful Life	100		
Replacement Year	2118	Monthly Assessment	No Assessment
Remaining Life	99	Interest Contribution	\$0.00
		Reserve Allocation	

Concrete - Typically, budgeting for concrete repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs and/or replacements will be addressed immediately to avoid further damage and for safety concerns. Good maintenance would not allow the needs for repairs to accumulate to a point that the repairs would become a major expense. Minor repairs and/or area replacements, as needed, should be addressed immediately as a maintenance issue using the client's annual operational budget and/or reserve fund contingency funds.

Infrastructure Systems (Electrical, Water, and Sewer) - Typically, budgeting for the complete replacement of an infrastructure system throughout a building is excluded. It is anticipated that any needed repairs and/or replacements would be made on an 'as-needed' basis.

It is impossible to predict the Remaining Life of an infrastructure system in part or in whole. Most of the infrastructure systems are enclosed within the walls, ceilings, and floors of the building(s). The infrastructure systems are built and esigned to last the legal life of the Bldg. (75-100yrs.).

Most issues that require repairs and/or replacements are due to unforeseen issues, component defects, construction defects, and improper installation.

Painting - Painting is not considered a reserve funding component.

Wells/Pumps - These components must always be in a good state of repair (working). Repairs, replacements, and/or rebuilding would be done on an 'as-needed' basis at the time of a failure.

Sewer Tanks - Sewer tanks are typically a concrete chamber that would only require replacement at the time of a failure or unforeseen damage to the chamber. It is very difficult to predict the remaining life of a sewer tank (chamber). The chamber would not be replaced simply due to age. The chambers should be inspected over time in order to determine the condition.

**Green Association Sample
MCA Detail Report by Category**

Comment - Total Current Cost	\$0
Assigned Reserves	\$0
Fully Funded Reserves	\$0

**Green Association Sample
MCA Detail Report by Category**

Detail Report Summary

Total of All Assets

Assigned Reserves	\$229,886.91
Monthly Contribution	\$3,272.36
Monthly Interest	\$0.00
Monthly Allocation	\$3,272.36

Contingency at 1.00%

Assigned Reserves	\$2,322.09
Monthly Contribution	\$33.05
Monthly Interest	\$0.00
Monthly Allocation	\$33.05

Grand Total

Assigned Reserves	\$232,209.00
Monthly Contribution	\$3,305.42
Monthly Interest	\$0.00
Monthly Allocation	\$3,305.42

**Green Association Sample
MCA Category Detail Index**

Asset ID	Description	Replacement	Page
1047	Asphalt Overlay - Replacement	2042	2-10
1257	Comments	Unfunded	2-25
1267	Common House - First Floor, Renovations	2042	2-14
1241	Common House - Second Floor, Renovations	2045	2-15
1273	Garage Door - Replacements	2032	2-18
1270	Hot Water Heater - Replacement, Common House	2024	2-16
1274	Playground Structure - Replacement	2030	2-23
1271	Pressure Tank - Replacements	2037	2-16
1155	Roofs - Metal Standing Seam, Coated	2052	2-12
1268	Roofs - Metal Standing Seam, Coated, Common Ho..	2052	2-13
1265	Septic System - Leaching Field, Replacements	2023	2-23
1269	Siding - Replacement, Common House	2052	2-18
1275	Siding - Replacements, Bldgs. (3 Walls)	2052	2-19
1272	Siding - Replacements, Bldgs. (South Wall)	2037	2-20
1266	Stormwater Features - Upgrades	2042	2-24
1261	Window/Door - Replacements, Schedule #1	2047	2-20
1262	Window/Door - Replacements, Schedule #2	2048	2-21
1263	Window/Door - Replacements, Schedule #3	2049	2-21
1264	Window/Door - Replacements, Schedule #4	2050	2-21
	Total Funded Assets	18	
	Total Unfunded Assets	<u>1</u>	
	Total Assets	19	

**Green Association Sample
MCA Asset Summary Report**

Description	Asset ID	Date In Service	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
Streets/Asphalt									
Asphalt Overlay - Replacement	1047	2042	75,000	30	0	23	118,267	1 @	75,000.00
Roofing									
Roofs - Metal Standing Seam, Coated	1155	2052	220,530	40	0	33	423,910	1 @	220,530.00
Roofs - Metal Standing Seam, Coate..	1268	2052	17,475	40	0	33	33,591	1 @	17,475.00
Interior Furnishings									
Common House - First Floor, Renova..	1267	2042	60,000	30	0	23	94,614	1 @	60,000.00
Common House - Second Floor, Reno..	1241	2045	40,000	30	0	26	66,937	1 @	40,000.00
Equipment									
Hot Water Heater - Replacement, C..	1270	2024	2,400	12	0	5	2,650	1 @	2,400.00
Pressure Tank - Replacements	1271	2037	19,750	25	0	18	28,208	1 @	19,750.00
Building Components									
Garage Door - Replacements	1273	2032	30,000	20	0	13	38,808	20 @	1,500.00
Siding - Replacement, Common House	1269	2052	23,000	40	0	33	44,211	1 @	23,000.00
Siding - Replacements, Bldgs. (3 Wal..	1275	2052	180,000	40	0	33	346,002	1 @	180,000.00
Siding - Replacements, Bldgs. (South..	1272	2037	60,000	25	0	18	85,695	1 @	60,000.00
Window/Door - Replacements, Sched..	1261	2047	157,964	35	0	28	275,020	1 @	631,857.00
Window/Door - Replacements, Sched..	1262	2048	157,964	35	1	29	280,520	1 @	631,857.00
Window/Door - Replacements, Sched..	1263	2049	157,964	35	2	30	286,130	1 @	631,857.00
Window/Door - Replacements, Sched..	1264	2050	157,964	35	3	31	291,853	1 @	631,857.00
Grounds Components									
Playground Structure - Replacement	1274	2030	2,000	18	0	11	2,487	1 @	2,000.00
Septic System - Leaching Field, Repl..	1265	2023	50,000	5	0	4	54,122	1 @	50,000.00
Stormwater Features - Upgrades	1266	2042	40,000	30	0	23	63,076	1 @	40,000.00
Comment									
Comments	1257 Unfunded								