

# Michael Callahan(RS) Associates, LLC.

High Rise Sample I

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



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# TABLE OF CONTENTS

## High Rise Sample I

### 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 .....	2-9

**TABLE OF CONTENTS**  
**High Rise Sample I**

Annual Expenditure Detail .....	2-11
Detail Report by Category .....	2-14
Category Detail Index .....	2-43
Asset Summary Report .....	2-44

# 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:

<b>Utilities:</b>	Bank Service Charges	Accounting
Electricity	Dues & Publications	Painting
Gas	Licenses, Permits & Fees	<b>Repair Expenses:</b>
Water	Insurance(s)	Roof Repairs
Telephone	<b>Services:</b>	Equipment Repairs
Cable TV	Landscaping	Minor Concrete Repairs
<b>Administrative:</b>		Operating Contingency
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	Lighting Replacement
Reserve Study	Equipment Replacement
Deck Resurfacing	
Fencing Replacement	
Asphalt Seal Coating	
Asphalt Repairs	
Asphalt Overlays	
Interior Furnishings	

## 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 31<sup>st</sup>, 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.

**High Rise Sample I**  
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	2.00%
Version	1	Interest Rate on Reserve Deposit	1.00%
Budget Year Beginning	January 1, 2019	Tax Rate on Interest	30.00%
Budget Year Ending	December 31, 2019	Contingency	1.00%
Total Units	134	2019 Beginning Balance	\$93,967
Phase Development	1 of 1		

High Rise Sample I is located in AnyCity AnyState the property consists of residential unit.

For budgeting purposes Michael Callahan & Associates, LLC. will use January, 1 1982 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 March, 28 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: \$93,967

**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.

<i>Current Assessment Funding Model Summary of Calculations</i>	
Required Annual Contribution	\$216,552.00
<i>\$1,616.06 per unit annually</i>	
Average Net Annual Interest Earned	<u>\$838.03</u>
Total Annual Allocation to Reserves	\$217,390.03
<i>\$1,622.31 per unit annually</i>	

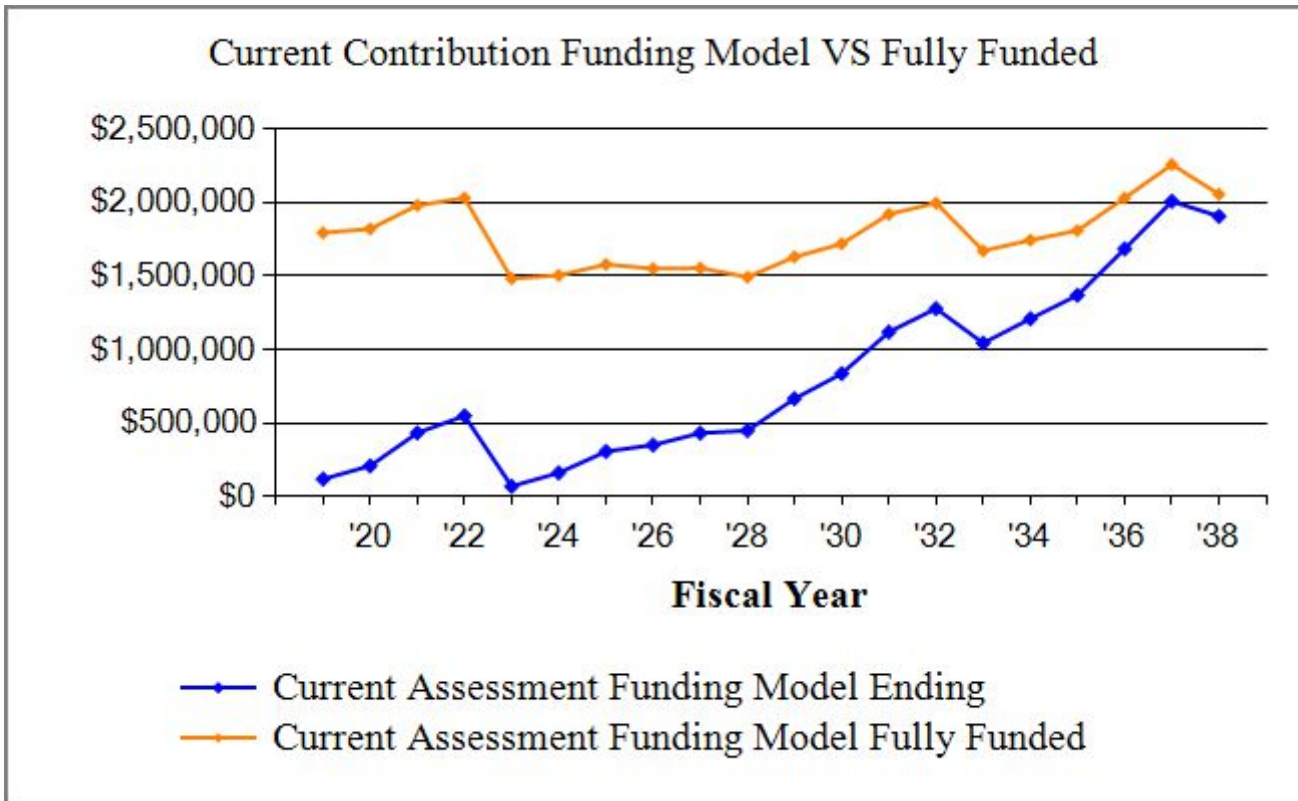


**High Rise Sample I**  
**MCA Current Assessment Funding Model Projection**

Beginning Balance: \$93,967

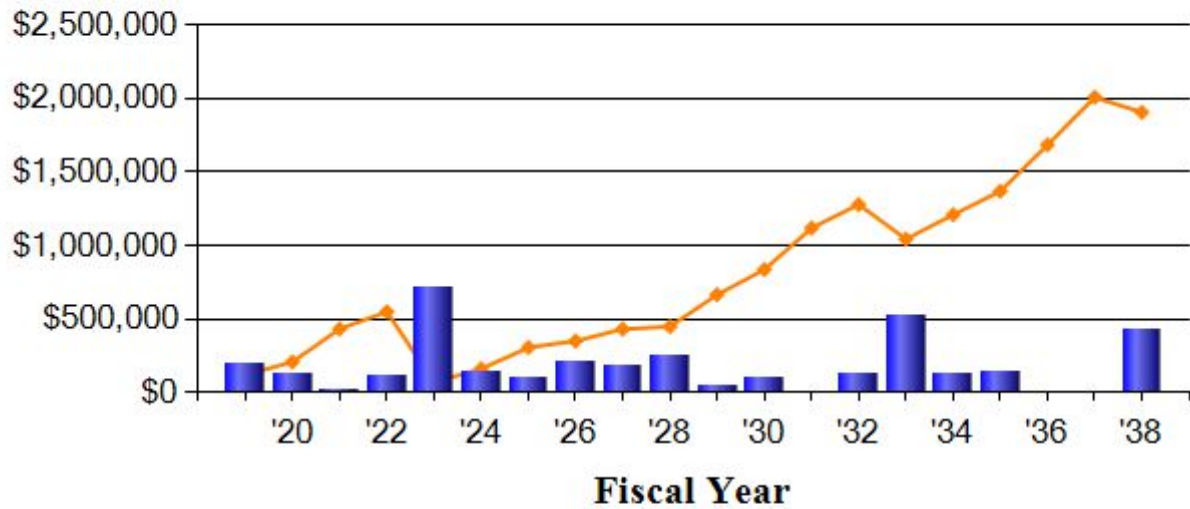
Year	Current Cost	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2019	2,989,138	216,552	838	190,800	120,557	1,795,050	7%
2020	3,048,921	220,883	1,462	132,600	210,302	1,821,044	12%
2021	3,109,899	225,301	3,019	4,370	434,252	1,980,969	22%
2022	3,172,097	229,807	3,825	117,616	550,268	2,031,140	27%
2023	3,235,539	234,403	495	713,945	71,220	1,482,983	5%
2024	3,300,250	239,091	1,135	148,189	163,257	1,505,445	11%
2025	3,366,255	243,873	2,140	101,355	307,916	1,579,523	19%
2026	3,433,580	248,750	2,449	206,763	352,352	1,550,513	23%
2027	3,502,252	253,725	3,008	176,368	432,718	1,554,932	28%
2028	3,572,297	258,800	3,132	244,031	450,619	1,493,490	30%
2029	3,643,743	263,976	4,640	51,807	667,427	1,630,650	41%
2030	3,716,617	269,255	5,826	104,443	838,064	1,720,068	49%
2031	3,790,950	274,640	7,789		1,120,494	1,921,073	58%
2032	3,866,769	280,133	8,897	129,619	1,279,904	1,997,219	64%
2033	3,944,104	285,736	7,265	527,792	1,045,114	1,672,151	63%
2034	4,022,986	291,450	8,414	134,587	1,210,391	1,745,117	69%
2035	4,103,446	297,279	9,525	147,012	1,370,184	1,810,404	76%
2036	4,185,515	303,225	11,714		1,685,123	2,030,557	83%
2037	4,269,225	309,290	13,961		2,008,373	2,258,791	89%
2038	4,354,610	315,475	13,255	430,333	1,906,770	2,056,402	93%

**High Rise Sample I**  
**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



—◆— Current Assessment Funding Model Ending  
■ Current Assessment Funding Model Expenditure

# High Rise Sample I

## MCA Current Assessment Spread Sheet

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
<b>Beginning Balance</b>	93,967	120,557	210,302	434,252	550,268	71,220	163,257	307,916	352,352	432,718
<b>Annual Assessment</b>	216,552	220,883	225,301	229,807	234,403	239,091	243,873	248,750	253,725	258,800
<b>Interest Earned</b>	838	1,462	3,019	3,825	495	1,135	2,140	2,449	3,008	3,132
<b>Expenditures</b>	190,800	132,600	4,370	117,616	713,945	148,189	101,355	206,763	176,368	244,031
<b>Fully Funded Reserves</b>	1,795,050	1,821,044	1,980,969	2,031,140	1,482,983	1,505,445	1,579,523	1,550,513	1,554,932	1,493,490
<b>Percent Fully Funded</b>	7%	12%	22%	27%	5%	11%	19%	23%	28%	30%
<b>Ending Balance</b>	120,557	210,302	434,252	550,268	71,220	163,257	307,916	352,352	432,718	450,619

### Description

Acoustic Ceiling - (Fiberboard Panels)						48,883				
Asphalt Overlay - Replacement					299,590					
Comments	<i>Unfunded</i>									
Community Room - Renovations		102,000								
Equipment - Air Handler, (RTU)										
Equipment - Air Handler, (RTU), Club										
Equipment - Back Up Generator										
Equipment - Boiler (Armor)										
Equipment - Boiler (Knight)										
Equipment - Elevators, Cab Refurbishment					34,638					
Equipment - Elevators, Modernization										
Equipment - Fire Control Panel, Replacement										
Equipment - Fire Pump		30,600								
Equipment - Hot Water Storage										
Equipment - Keypad (Access)			4,370							
Equipment - Trash Compactor, Replacement										
Exterior - Brick/Masonry, Repairs										238,294
Exterior - Deck Railing (metal)				83,093						
Exterior - Entrance Doors				20,163						
Exterior - Pool Fencing (metal)				14,360						
Exterior - Windows										
Flooring - Carpet						56,533				
Kitchen - Renovations								34,461		
Laundry Room - Renovations								57,434		
Lighting - Interior (Hallway)						42,772				
Lobby - Renovations								114,869		

**High Rise Sample I**  
**MCA Current Assessment Spread Sheet**

<b>Description</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Mailbox - Replacements										
Pool - Filter										5,736
Pool - Replacement (Aluminium Tub)							101,355			
Restroom/Shower Area - Renovations					270,608					
Roof - Flat, Rubber Membrane					109,109					
Roof - Flat, Rubber Membrane, 2007									176,368	
Roof - Pool Deck Area										
Wall Covering - Wallpaper	190,800									
<b>Year Total:</b>	<b>190,800</b>	<b>132,600</b>	<b>4,370</b>	<b>117,616</b>	<b>713,945</b>	<b>148,189</b>	<b>101,355</b>	<b>206,763</b>	<b>176,368</b>	<b>244,031</b>

# **High Rise Sample I** **MCA Current Assessment Spread Sheet**

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
<b>Beginning Balance</b>	450,619	667,427	838,064	1,120,494	1,279,904	1,045,114	1,210,391	1,370,184	1,685,123	2,008,373
<b>Annual Assessment</b>	263,976	269,255	274,640	280,133	285,736	291,450	297,279	303,225	309,290	315,475
<b>Interest Earned</b>	4,640	5,826	7,789	8,897	7,265	8,414	9,525	11,714	13,961	13,255
<b>Expenditures</b>	51,807	104,443		129,619	527,792	134,587	147,012			430,333
<b>Fully Funded Reserves</b>	1,630,650	1,720,068	1,921,073	1,997,219	1,672,151	1,745,117	1,810,404	2,030,557	2,258,791	2,056,402
<b>Percent Fully Funded</b>	41%	49%	58%	64%	63%	69%	76%	83%	89%	93%
<b>Ending Balance</b>	667,427	838,064	1,120,494	1,279,904	1,045,114	1,210,391	1,370,184	1,685,123	2,008,373	1,906,770

## **Description**

Acoustic Ceiling - (Fiberboard Panels)										
Asphalt Overlay - Replacement										
Comments	<i>Unfunded</i>									
Community Room - Renovations						134,587				
Equipment - Air Handler, (RTU)										
Equipment - Air Handler, (RTU), Club										
Equipment - Back Up Generator										
Equipment - Boiler (Armor)		69,629								
Equipment - Boiler (Knight)		34,814								
Equipment - Elevators, Cab Refurbishment										
Equipment - Elevators, Modernization					527,792					
Equipment - Fire Control Panel, Replacement										139,854
Equipment - Fire Pump										
Equipment - Hot Water Storage							90,604			
Equipment - Keypad (Access)										
Equipment - Trash Compactor, Replacement	31,694									
Exterior - Brick/Masonry, Repairs										290,479
Exterior - Deck Railing (metal)										
Exterior - Entrance Doors										
Exterior - Pool Fencing (metal)										
Exterior - Windows				129,619						
Flooring - Carpet										
Kitchen - Renovations										
Laundry Room - Renovations										
Lighting - Interior (Hallway)										
Lobby - Renovations										

**High Rise Sample I**  
**MCA Current Assessment Spread Sheet**

<b>Description</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>
Mailbox - Replacements	20,113									
Pool - Filter										
Pool - Replacement (Aluminium Tub)										
Restroom/Shower Area - Renovations										
Roof - Flat, Rubber Membrane										
Roof - Flat, Rubber Membrane, 2007										
Roof - Pool Deck Area							56,408			
Wall Covering - Wallpaper										
<b>Year Total:</b>	<b>51,807</b>	<b>104,443</b>		<b>129,619</b>	<b>527,792</b>	<b>134,587</b>	<b>147,012</b>			<b>430,333</b>

**High Rise Sample I**  
**MCA Distribution of Accumulated Reserves**

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Wall Covering - Wallpaper	0	2019	190,800	190,800
Equipment - Fire Pump	1	2020	29,211	29,211
Community Room - Renovations	1	2020	* 87,403	92,857
Equipment - Keypad (Access)	2	2021		3,985
Exterior - Pool Fencing (metal)	3	2022		12,517
Exterior - Entrance Doors	3	2022		17,575
Exterior - Deck Railing (metal)	3	2022		72,427
Equipment - Elevators, Cab Refurbishment	4	2023		25,600
Roof - Flat, Rubber Membrane	4	2023		84,672
Restroom/Shower Area - Renovations	4	2023		225,610
Asphalt Overlay - Replacement	4	2023		249,773
Lighting - Interior (Hallway)	5	2024		34,128
Flooring - Carpet	5	2024		36,981
Acoustic Ceiling - (Fiberboard Panels)	5	2024		39,004
Pool - Replacement (Aluminium Tub)	6	2025		79,200
Kitchen - Renovations	7	2026		19,500
Laundry Room - Renovations	7	2026		32,500
Lobby - Renovations	7	2026		65,000
Roof - Flat, Rubber Membrane, 2007	8	2027		90,317
Pool - Filter	9	2028		1,200
Exterior - Brick/Masonry, Repairs	9	2028		19,939
Mailbox - Replacements	10	2029		12,989
Equipment - Trash Compactor, Replacement	10	2029		20,468
Equipment - Boiler (Knight)	11	2030		12,600
Equipment - Boiler (Armor)	11	2030		25,200
Exterior - Windows	13	2032		74,148
Equipment - Elevators, Modernization	14	2033		213,333
Equipment - Hot Water Storage	16	2035		7,333
Roof - Pool Deck Area	16	2035		8,218
Equipment - Fire Control Panel, Replacement	19	2038		4,800
Equipment - Air Handler, (RTU)	27	2046		12,000
Equipment - Back Up Generator	27	2046		12,500
Equipment - Air Handler, (RTU), Club	28	2047		4,000
Comments		Unfunded		



**High Rise Sample I**  
**MCA Distribution of Accumulated Reserves**

Description	Remaining Life	Replacement Year	Assigned Reserves	Fully Funded Reserves
Total Asset Summary			\$307,414	\$1,830,385
Contingency at 1.00%			\$3,105	\$18,489
Summary Total			\$310,519	\$1,848,874

	Percent Fully Funded	17%
Current Average Liability per Unit (Total Units: 134)		-\$11,480

'\*\*' Indicates Partially Funded

**High Rise Sample I**  
**MCA Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2019</b>	
Wall Covering - Wallpaper	190,800
<b>Total for 2019</b>	<b>\$190,800</b>
<b>Replacement Year 2020</b>	
Community Room - Renovations	102,000
Equipment - Fire Pump	30,600
<b>Total for 2020</b>	<b>\$132,600</b>
<b>Replacement Year 2021</b>	
Equipment - Keypad (Access)	4,370
<b>Total for 2021</b>	<b>\$4,370</b>
<b>Replacement Year 2022</b>	
Exterior - Deck Railing (metal)	83,093
Exterior - Entrance Doors	20,163
Exterior - Pool Fencing (metal)	14,360
<b>Total for 2022</b>	<b>\$117,616</b>
<b>Replacement Year 2023</b>	
Asphalt Overlay - Replacement	299,590
Equipment - Elevators, Cab Refurbishment	34,638
Restroom/Shower Area - Renovations	270,608
Roof - Flat, Rubber Membrane	109,109
<b>Total for 2023</b>	<b>\$713,945</b>
<b>Replacement Year 2024</b>	
Acoustic Ceiling - (Fiberboard Panels)	48,883
Flooring - Carpet	56,533
Lighting - Interior (Hallway)	42,772
<b>Total for 2024</b>	<b>\$148,189</b>
<b>Replacement Year 2025</b>	
Pool - Replacement (Aluminium Tub)	101,355
<b>Total for 2025</b>	<b>\$101,355</b>
<b>Replacement Year 2026</b>	
Kitchen - Renovations	34,461

**High Rise Sample I**  
**MCA Annual Expenditure Detail**

Description	Expenditures
<b><i>Replacement Year 2026 continued...</i></b>	
Laundry Room - Renovations	57,434
Lobby - Renovations	114,869
<b>Total for 2026</b>	<b>\$206,763</b>
<b>Replacement Year 2027</b>	
Roof - Flat, Rubber Membrane, 2007	176,368
<b>Total for 2027</b>	<b>\$176,368</b>
<b>Replacement Year 2028</b>	
Exterior - Brick/Masonry, Repairs	238,294
Pool - Filter	5,736
<b>Total for 2028</b>	<b>\$244,031</b>
<b>Replacement Year 2029</b>	
Equipment - Trash Compactor, Replacement	31,694
Mailbox - Replacements	20,113
<b>Total for 2029</b>	<b>\$51,807</b>
<b>Replacement Year 2030</b>	
Equipment - Boiler (Armor)	69,629
Equipment - Boiler (Knight)	34,814
<b>Total for 2030</b>	<b>\$104,443</b>
<i>No Replacement in 2031</i>	
<b>Replacement Year 2032</b>	
Exterior - Windows	129,619
<b>Total for 2032</b>	<b>\$129,619</b>
<b>Replacement Year 2033</b>	
Equipment - Elevators, Modernization	527,792
<b>Total for 2033</b>	<b>\$527,792</b>
<b>Replacement Year 2034</b>	
Community Room - Renovations	134,587
<b>Total for 2034</b>	<b>\$134,587</b>

**High Rise Sample I**  
**MCA Annual Expenditure Detail**

Description	Expenditures
<b>Replacement Year 2035</b>	
Equipment - Hot Water Storage	90,604
Roof - Pool Deck Area	56,408
<b>Total for 2035</b>	<b>\$147,012</b>
<i>No Replacement in 2036</i>	
<i>No Replacement in 2037</i>	
<b>Replacement Year 2038</b>	
Equipment - Fire Control Panel, Replacement	139,854
Exterior - Brick/Masonry, Repairs	290,479
<b>Total for 2038</b>	<b>\$430,333</b>

# High Rise Sample I

## MCA Detail Report by Category

### Asphalt Overlay - Replacement - 2023

Asset ID	1159	1 Total	@ \$276,775.00
		Asset Cost	\$276,775.00
		Percent Replacement	100%
		Future Cost	\$299,590.16
		Assigned Reserves	<i>none</i>
Placed in Service	Streets/Asphalt January 1982	Annual Assessment	\$34,631.27
Useful Life	30	Interest Contribution	<u>\$242.42</u>
Adjustment	11	Reserve Allocation	\$34,873.69
Replacement Year	2023		
Remaining Life	4		



50,600 - sq.ft. of asphalt overlay (big parking lot) @ \$4.75 = \$240,350.00  
 8,300 - sq.ft. of asphalt overlay (small parking lot) @ 4.75 = 39,425.00  
 Total = \$279,775.00

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

## High Rise Sample I 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.

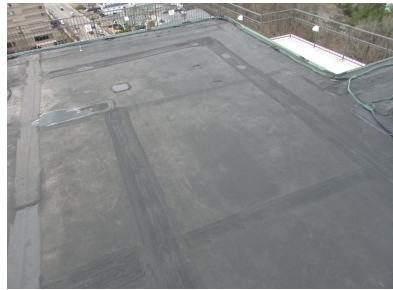
As pavement systems primarily fail due to fatigue (in a manner similar to metals). Several pavement design methods have been developed to determine the thickness and composition of pavement required to carry predicted traffic loads for a given period of time. Pavement design methods are continuously 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.

<b>Streets/Asphalt - Total Current Cost</b>	<b>\$276,775</b>
<b>Assigned Reserves</b>	<b>\$0</b>
<b>Fully Funded Reserves</b>	<b>\$249,773</b>

# High Rise Sample I

## MCA Detail Report by Category

Roof - Flat, Rubber Membrane - 2023		1 Total	@ \$100,800.00
Asset ID	1117	Asset Cost	\$100,800.00
		Percent Replacement	100%
		Future Cost	\$109,109.16
		Assigned Reserves	<i>none</i>
Placed in Service	Roofing January 1998	Annual Assessment	\$12,612.53
Useful Life	20	Interest Contribution	<u>\$88.29</u>
Adjustment	5	Reserve Allocation	\$12,700.81
Replacement Year	2023		
Remaining Life	4		



3,600 - sq.ft. of roofing area @ \$28.00 = \$100,800.00  
Total = \$100,800.00

Typically, flat rubber membrane roofs come with a 20yr. Limited Warranty.

Flat roof systems work by providing a waterproof membrane over a building. They consist of one or more layers of hydrophobic material placed over a structural deck with a vapor barrier typically placed between the deck and roof membrane. Flashing, thin strips of material such as copper, intersect with the membrane and other building components (such as parapet walls) to prevent water infiltration. Water is directed to drains, downspouts, and gutters by the slight pitch of the roof.

The work includes but is not limited to the installation of:

- Substrate Preparation
- Roof Drains
- Vapor Barrier
- Wood Blocking
- Insulation
- Separation Layers
- Roof Membrane
- Fasteners

# High Rise Sample I

## MCA Detail Report by Category

*Roof - Flat, Rubber Membrane continued...*

- Adhesive for Flashings
- Roof Membrane Flashings
- Metal Flashings
- Sealant

A RTU HVAC common area units are located on the flat roofing.

### Roof - Flat, Rubber Membrane, 2007 - 2027

Asset ID	1177	1 Total	@ \$150,528.00
		Asset Cost	\$150,528.00
		Percent Replacement	100%
	Roofing	Future Cost	\$176,367.54
Placed in Service	January 2007	Assigned Reserves	<i>none</i>
Useful Life	20		
Replacement Year	2027	Annual Assessment	\$10,051.44
Remaining Life	8	Interest Contribution	<u>\$70.36</u>
		Reserve Allocation	\$10,121.80
5,376 - sq.ft. of roofing area		@ \$28.00 =	\$150,528.00
		Total =	\$150,528.00

### Roof - Pool Deck Area - 2035

Asset ID	1178	1 Total	@ \$41,090.00
		Asset Cost	\$41,090.00
		Percent Replacement	100%
	Roofing	Future Cost	\$56,407.76
Placed in Service	January 2015	Assigned Reserves	<i>none</i>
Useful Life	20		
Replacement Year	2035	Annual Assessment	\$1,562.54
Remaining Life	16	Interest Contribution	<u>\$10.94</u>
		Reserve Allocation	\$1,573.48



**High Rise Sample I**  
**MCA Detail Report by Category**

*Roof - Pool Deck Area continued...*



2,935 - sq.ft. of topcoat

@ \$14.00 = \$41,090.00  
Total = \$41,090.00

<b>Roofing - Total Current Cost</b>	<b>\$292,418</b>
<b>Assigned Reserves</b>	<b>\$0</b>
<b>Fully Funded Reserves</b>	<b>\$183,207</b>

# **High Rise Sample I** **MCA Detail Report by Category**

## **Pool - Filter - 2028**

Asset ID	1170	1 Total Asset Cost	@ \$4,800.00
		Percent Replacement	100%
Placed in Service	Recreation/Pool	Future Cost	\$5,736.44
Useful Life	January 2016	Assigned Reserves	<i>none</i>
Replacement Year	12	Annual Assessment	\$289.58
Remaining Life	2028	Interest Contribution	<u>\$2.03</u>
	9	Reserve Allocation	\$291.61



## **Pool - Replacement (Aluminium Tub) - 2025**

Asset ID	1169	1 Total Asset Cost	@ \$90,000.00
		Percent Replacement	100%
Placed in Service	Recreation/Pool	Future Cost	\$101,354.62
Useful Life	January 1975	Assigned Reserves	<i>none</i>
Adjustment	40	Annual Assessment	\$7,756.15
Replacement Year	10	Interest Contribution	<u>\$54.29</u>
Remaining Life	2025	Reserve Allocation	\$7,810.44
	6		



The pool is located on the roof of the building. The pool is a aluminium tub style pool. The

**High Rise Sample I**  
**MCA Detail Report by Category**

*Pool - Replacement (Aluminium Tub) continued...*

pool has been re-surfaced (painted).

At the time of the site visit no leaking was indicated by the client.

1 - pool (aluminium tub)	@ 50,000.00 =	50,000.00
1 - pool removal/installation	@ 40,000.00 =	<u>40,000.00</u>
	Total =	\$90,000.00

<b>Recreation/Pool - Total Current Cost</b>	<b>\$94,800</b>
<b>Assigned Reserves</b>	<b>\$0</b>
<b>Fully Funded Reserves</b>	<b>\$80,400</b>

# High Rise Sample I

## MCA Detail Report by Category

### Acoustic Ceiling - (Fiberboard Panels) - 2024

Asset ID	1129	1 Total	@ \$44,275.00
		Asset Cost	\$44,275.00
		Percent Replacement	100%
Interior Furnishings		Future Cost	\$48,883.18
Placed in Service	January 1982	Assigned Reserves	<i>none</i>
Useful Life	20		
Adjustment	22	Annual Assessment	\$4,504.72
Replacement Year	2024	Interest Contribution	<u>\$31.53</u>
Remaining Life	5	Reserve Allocation	\$4,536.25
6,325 - sq.ft. of acoustic fiberboard panels		@	\$7.00 = <u>\$44,275.00</u>
		Total =	\$44,275.00

### Community Room - Renovations - 2020

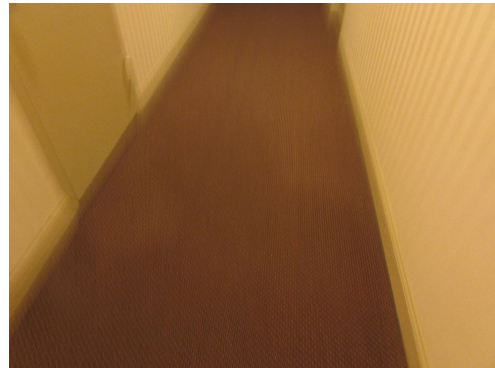
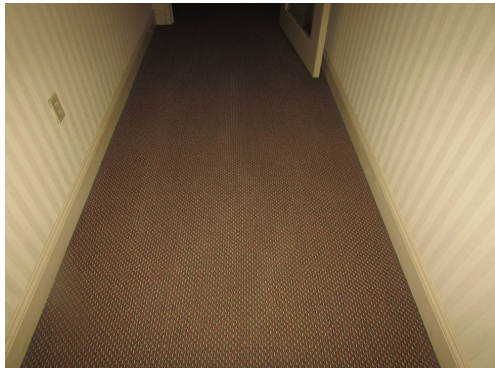
Asset ID	1174	1 Total	@ \$100,000.00
		Asset Cost	\$100,000.00
		Percent Replacement	100%
Interior Furnishings		Future Cost	\$102,000.00
Placed in Service	January 2006	Assigned Reserves	\$87,403.28
Useful Life	14		
Replacement Year	2020	Annual Assessment	\$6,534.58
Remaining Life	1	Interest Contribution	<u>\$657.56</u>
		Reserve Allocation	\$7,192.14



**High Rise Sample I**  
**MCA Detail Report by Category**

**Flooring - Carpet - 2024**

Asset ID	1007	1 Total	@ \$51,204.00
		Asset Cost	\$51,204.00
		Percent Replacement	100%
Interior Furnishings		Future Cost	\$56,533.35
Placed in Service	January 2006	Assigned Reserves	<i>none</i>
Useful Life	18		
Replacement Year	2024	Annual Assessment	\$5,209.70
Remaining Life	5	Interest Contribution	<u>\$36.47</u>
		Reserve Allocation	\$5,246.17



753 - sq.yds. of carpet

@ \$68.00 = \$51,204.00  
Total = \$51,204.00

**Kitchen - Renovations - 2026**

Asset ID	1164	1 Total	@ \$30,000.00
		Asset Cost	\$30,000.00
		Percent Replacement	100%
Interior Furnishings		Future Cost	\$34,460.57
Placed in Service	January 2006	Assigned Reserves	<i>none</i>
Useful Life	20		
Replacement Year	2026	Annual Assessment	\$2,252.43
Remaining Life	7	Interest Contribution	<u>\$15.77</u>
		Reserve Allocation	\$2,268.20

# **High Rise Sample I** **MCA Detail Report by Category**

## *Kitchen - Renovations continued...*



### **Laundry Room - Renovations - 2026**

Asset ID	1173	1 Total	@ \$50,000.00
		Asset Cost	\$50,000.00
		Percent Replacement	100%
		Future Cost	\$57,434.28
		Assigned Reserves	<i>none</i>
Placed in Service	January 2006	Annual Assessment	\$3,754.06
Useful Life	20	Interest Contribution	<u>\$26.28</u>
Replacement Year	2026	Reserve Allocation	\$3,780.33
Remaining Life	7		



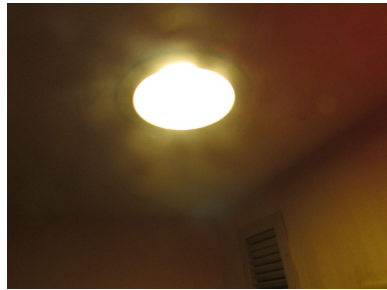


# High Rise Sample I

## MCA Detail Report by Category

### Lighting - Interior (Hallway) - 2024

Asset ID	1009	1 Total	@ \$38,740.00
		Asset Cost	\$38,740.00
		Percent Replacement	100%
		Future Cost	\$42,772.09
		Assigned Reserves	<i>none</i>
Placed in Service	Interior Furnishings January 1982	Annual Assessment	\$3,941.56
Useful Life	30	Interest Contribution	<u>\$27.59</u>
Adjustment	12	Reserve Allocation	\$3,969.16
Replacement Year	2024		
Remaining Life	5		



44 - ceiling fixtures	@	\$185.00 =	\$8,140.00
120 - recessed light fixtures	@	210.00 =	25,200.00
24 - EXIT signs	@	225.00 =	5,400.00
		Total =	\$38,740.00

### Lobby - Renovations - 2026

Asset ID	1175	1 Total	@ \$100,000.00
		Asset Cost	\$100,000.00
		Percent Replacement	100%
		Future Cost	\$114,868.57
		Assigned Reserves	<i>none</i>
Placed in Service	Interior Furnishings January 2006	Annual Assessment	\$7,508.11
Useful Life	20	Interest Contribution	<u>\$52.56</u>
Replacement Year	2026	Reserve Allocation	\$7,560.67
Remaining Life	7		

# High Rise Sample I

## MCA Detail Report by Category

*Lobby - Renovations continued...*



### Mailbox - Replacements - 2029

Asset ID	1133	1 Total	@ \$16,500.00
		Asset Cost	\$16,500.00
		Percent Replacement	100%
		Future Cost	\$20,113.41
		Assigned Reserves	<i>none</i>
Placed in Service	Interior Furnishings		
	January 1982		
Useful Life	30		
Adjustment	17	Annual Assessment	\$910.59
Replacement Year	2029	Interest Contribution	<u>\$6.37</u>
Remaining Life	10	Reserve Allocation	\$916.97



5 - sets of 30 mailboxes (wall clusters) @ \$3,300.00 = \$16,500.00  
Total = \$16,500.00



# High Rise Sample I

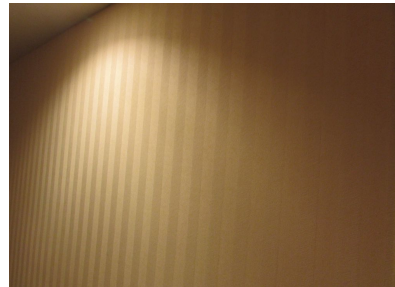
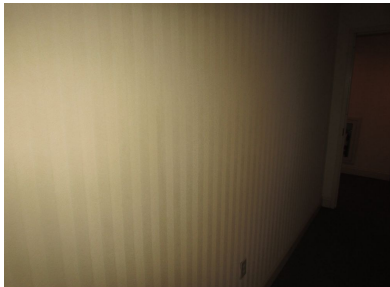
## MCA Detail Report by Category

### Restroom/Shower Area - Renovations - 2023

Asset ID	1176	1 Total	@ \$250,000.00
		Asset Cost	\$250,000.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	\$270,608.04
Placed in Service	January 1982	Assigned Reserves	<i>none</i>
Useful Life	30		
Adjustment	11	Annual Assessment	\$31,281.07
Replacement Year	2023	Interest Contribution	<u>\$218.97</u>
Remaining Life	4	Reserve Allocation	\$31,500.03

### Wall Covering - Wallpaper - 2019

Asset ID	1185	1 Total	@ \$190,800.00
		Asset Cost	\$190,800.00
		Percent Replacement	100%
	Interior Furnishings	Future Cost	\$190,800.00
Placed in Service	January 1982	Assigned Reserves	\$190,800.00
Useful Life	30		
Replacement Year	2019	Annual Assessment	\$4,856.26
Remaining Life	0	Interest Contribution	<u>\$33.99</u>
		Reserve Allocation	\$4,890.25



21,200 - sq.ft. of wallpaper @ \$9.00 = \$190,800.00  
Total = \$190,800.00

<b>Interior Furnishings - Total Current Cost</b>	<b>\$871,519</b>
<b>Assigned Reserves</b>	<b>\$278,203</b>
<b>Fully Funded Reserves</b>	<b>\$749,369</b>

# High Rise Sample I

## MCA Detail Report by Category

Equipment - Air Handler, (RTU) - 2046		1 Total	@ \$120,000.00
Asset ID	1030	Asset Cost	\$120,000.00
		Percent Replacement	100%
		Future Cost	\$204,826.38
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 2016		
Replacement Year	30	Annual Assessment	\$3,232.63
Remaining Life	2046	Interest Contribution	<u>\$22.63</u>
	27	Reserve Allocation	\$3,255.26



This line item is for the future replacment of the Roof Top Unit Air Handler. Services the common area/hallways.

1 - RTU	@\$80,000.00 =	\$80,000.00
1 - removal/install	@ 40,000.00 =	40,000.00
	Total =	\$120,000.00

An air handler, is a device used to condition and circulate air as part of a heating, ventilating, and air-conditioning system. Usually, an air handler is a large metal box containing a blower, heating and/or cooling elements, filter racks or chambers, sound attenuators, and dampers. Air handlers usually connect to ductwork that distributes the conditioned air through the building, and returns it to the AHU. Sometimes AHUs discharge (supply) and admit (return) air directly to and from the space served, without ductwork.

Air handlers typically employ a large squirrel cage blower driven by an induction motor to move the air. The blower may operate at a single speed, offer a variety of pre-set speeds, or be driven by a variable drive so as to allow a wide range of air flow rates. Flow rate may also be controlled by inlet vanes or outlet dampers on the fan.

In large commercial air handling units, multiple blowers may be present, typically placed at the end of the AHU and the beginning of the supply ductwork (therefore also called "supply fans"). They are often augmented by fans in the return air duct ("return fans"), pushing the air into the AHU.

Depending on the location and the application, air handlers may need to provide heating, or cooling, or both to change the supply air temperature.

Large commercial air handling units contain coils that circulate hot water or steam for heating,

## High Rise Sample I MCA Detail Report by Category

### *Equipment - Air Handler, (RTU) continued...*

and chilled water for cooling. The hot water or steam is provided by a central boiler, and the chilled water is provided by a central chiller.

Air filtration is almost always present in order to provide clean dust-free air to the building occupants.

Humidification is often necessary in colder climates where continuous heating will make the air drier, resulting in uncomfortable air quality and increased static electricity. Various types of humidification may be used: -Evaporative: dry air blown over a reservoir will evaporate some of the water. The rate of evaporation can be increased by spraying the water onto baffles in the air stream.

-Vaporizer: steam or vapour from a boiler is blown directly into the air stream.

-Spray mist: water is diffused either by a nozzle or other mechanical means into fine droplets and carried by the air.

In order to maintain indoor air quality, air handlers commonly have provisions to allow the introduction of outside air into, and the exhausting of air from the building. In temperate climates, mixing the right amount of cooler outside air with warmer return air can be used to approach the desired supply air temperature. A mixing chamber is therefore used which has dampers controlling the ratio between the return, outside, and exhaust air. A heat recovery heat exchanger, of many types, may be fitted to the air handler for energy savings and increasing capacity.

Controls are necessary to regulate every aspect of an air handler, such as: rate of air flow, supply air temperature, mixed air temperature, humidity, air quality.

The blowers in an air handler can create substantial vibration and the large area of the duct system would transmit this noise and vibration to the occupants of the building. To avoid this, vibration isolators (flexible sections) are normally inserted into the duct immediately before and after the air handler and often also between the fan compartment and the rest of the AHU.

#### Equipment - Air Handler, (RTU), Club - 2047

Asset ID	1179	1 Total	@ \$60,000.00
		Asset Cost	\$60,000.00
		Percent Replacement	100%
	Equipment	Future Cost	\$104,461.45
Placed in Service	January 2017	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2047	Annual Assessment	\$1,584.05
Remaining Life	28	Interest Contribution	<u>\$11.09</u>
		Reserve Allocation	\$1,595.14

# High Rise Sample I

## MCA Detail Report by Category

*Equipment - Air Handler, (RTU), Club continued...*



This line item is for the future replacment of the Roof Top Unit Air Handler. Services the club area.

1 - RTU	@\$40,000.00 =	\$40,000.00
1 - removal/install	@ 20,000.00 =	<u>20,000.00</u>
	Total =	\$60,000.00

### Equipment - Back Up Generator - 2046

Asset ID	1182	1 Total	@ \$125,000.00
		Asset Cost	\$125,000.00
		Percent Replacement	100%
		Future Cost	\$213,360.81
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 2016		
Replacement Year	30	Annual Assessment	\$3,367.33
Remaining Life	2046	Interest Contribution	<u>\$23.57</u>
	27	Reserve Allocation	\$3,390.90



1 - back up generator	@\$125,000.00 =	<u>\$125,000.00</u>
	Total =	\$125,000.00

**High Rise Sample I**  
**MCA Detail Report by Category**

**Equipment - Boiler (Armor) - 2030**

Asset ID	1180	1 Total	@ \$56,000.00
		Asset Cost	\$56,000.00
		Percent Replacement	100%
		Future Cost	\$69,628.96
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 2010		
Replacement Year	20	Annual Assessment	\$2,855.63
Remaining Life	2030	Interest Contribution	<u>\$19.99</u>
	11	Reserve Allocation	\$2,875.62



2 - boilers

@\$28,000.00 = \$56,000.00  
Total = \$56,000.00

**Equipment - Boiler (Knight) - 2030**

Asset ID	1135	1 Total	@ \$28,000.00
		Asset Cost	\$28,000.00
		Percent Replacement	100%
		Future Cost	\$34,814.48
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 2010		
Replacement Year	20	Annual Assessment	\$1,427.82
Remaining Life	2030	Interest Contribution	<u>\$9.99</u>
	11	Reserve Allocation	\$1,437.81

# **High Rise Sample I** **MCA Detail Report by Category**

*Equipment - Boiler (Knight) continued...*



1 - boiler

@ \$28,000.00 = \$28,000.00  
 Total = \$28,000.00

## **Equipment - Elevators, Cab Refurbishment - 2023**

Asset ID	1014	2 cabs	@ \$16,000.00
		Asset Cost	\$32,000.00
		Percent Replacement	100%
		Future Cost	\$34,637.83
Placed in Service	January 2003	Assigned Reserves	<i>none</i>
Useful Life	20		
Replacement Year	2023	Annual Assessment	\$4,003.98
Remaining Life	4	Interest Contribution	<u>\$28.03</u>
		Reserve Allocation	\$4,032.00

This line item is for the refurbishment of the elevator cabs (flooring, wall panels, ceiling panels, lighting), it does not include the replacement of any of the controls or mechanicals of the elevators.

## **Equipment - Elevators, Modernization - 2033**

Asset ID	1015	1 Total	@ \$400,000.00
		Asset Cost	\$400,000.00
		Percent Replacement	100%
		Future Cost	\$527,791.50
Placed in Service	January 2003	Assigned Reserves	<i>none</i>
Useful Life	30		
Replacement Year	2033	Annual Assessment	\$16,827.88
Remaining Life	14	Interest Contribution	<u>\$117.80</u>
		Reserve Allocation	\$16,945.67



## High Rise Sample I MCA Detail Report by Category

*Equipment - Elevators, Modernization continued...*



2 - elevators

@\$200,000.00 = \$400,000.00  
Total = \$400,000.00

### Equipment - Fire Control Panel, Replacement - 2038

Asset ID	1016	1 panel	@ \$96,000.00
		Asset Cost	\$96,000.00
		Percent Replacement	100%
		Future Cost	\$139,853.87
		Assigned Reserves	<i>none</i>
Placed in Service	Equipment		
Useful Life	January 2018		
Replacement Year	20		
Remaining Life	2038	Annual Assessment	\$3,227.73
	19	Interest Contribution	<u>\$22.59</u>
		Reserve Allocation	\$3,250.32



The estimated cost is for the replacement of the main fire control panel and software upgrade only. The estimated cost does not include any other part of the fire control system (pull stations, smoke detectors, emergency lights, valves, pumps, motors).

Fire control systems must always be kept in a good state of repair/working.

# **High Rise Sample I** **MCA Detail Report by Category**

*Equipment - Fire Control Panel, Replacement continued...*

Testing is required. Any system failures would need to be addressed immediately.

## **Equipment - Fire Pump - 2020**

Asset ID	1136	1 Total	@ \$30,000.00
		Asset Cost	\$30,000.00
		Percent Replacement	100%
	Equipment	Future Cost	\$30,600.00
Placed in Service	January 1982	Assigned Reserves	\$29,210.53
Useful Life	30		
Adjustment	8	Annual Assessment	\$553.70
Replacement Year	2020	Interest Contribution	<u>\$208.35</u>
Remaining Life	1	Reserve Allocation	\$762.05



1 - fire pump

@\$30,000.00 = \$30,000.00  
Total = \$30,000.00

## **Equipment - Hot Water Storage - 2035**

Asset ID	1181	1 Total	@ \$66,000.00
		Asset Cost	\$66,000.00
		Percent Replacement	100%
	Equipment	Future Cost	\$90,603.86
Placed in Service	January 2017	Assigned Reserves	<i>none</i>
Useful Life	18		
Replacement Year	2035	Annual Assessment	\$2,509.80
Remaining Life	16	Interest Contribution	<u>\$17.57</u>
		Reserve Allocation	\$2,527.37



# High Rise Sample I

## MCA Detail Report by Category

*Equipment - Hot Water Storage continued...*



3 - 300gal.

@\$22,000.00 = \$66,000.00  
Total = \$66,000.00

### Equipment - Keypad (Access) - 2021

Asset ID	1172	1 Total	@ \$4,200.00
		Asset Cost	\$4,200.00
		Percent Replacement	100%
		Future Cost	\$4,369.68
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 1982		
Adjustment	20	Annual Assessment	\$1,017.33
Replacement Year	19	Interest Contribution	<u>\$7.12</u>
Remaining Life	2021	Reserve Allocation	\$1,024.45
	2		



1 - access keypad

@\$4,200.00 = \$4,200.00  
Total = \$4,200.00

# **High Rise Sample I** **MCA Detail Report by Category**

## **Equipment - Trash Compactor, Replacement - 2029**

Asset ID	1081	1 Total	@ \$26,000.00
		Asset Cost	\$26,000.00
		Percent Replacement	100%
		Future Cost	\$31,693.85
Placed in Service	Equipment	Assigned Reserves	<i>none</i>
Useful Life	January 1982		
Adjustment	30		
Replacement Year	17	Annual Assessment	\$1,434.87
Remaining Life	2029	Interest Contribution	<u>\$10.04</u>
	10	Reserve Allocation	\$1,444.92



1 - trash compactor

@\$26,000.00 = \$26,000.00  
Total = \$26,000.00

<b>Equipment - Total Current Cost</b>	<b>\$1,043,200</b>
<b>Assigned Reserves</b>	<b>\$29,211</b>
<b>Fully Funded Reserves</b>	<b>\$371,030</b>

## High Rise Sample I MCA Detail Report by Category

### Exterior - Brick/Masonry, Repairs - 2028

Asset ID	1083	1 Total @	\$1,993,940.00
		Asset Cost	\$199,394.00
		Percent Replacement	10%
Building Components		Future Cost	\$238,294.29
Placed in Service	January 2018	Assigned Reserves	<i>none</i>
Useful Life	10		
Replacement Year	2028	Annual Assessment	\$12,029.32
Remaining Life	9	Interest Contribution	<u>\$84.21</u>
		Reserve Allocation	\$12,113.52



This line item is for the repairing of the brick/masonry/marble exterior areas. The total sq.ft. is for the entire bldg.. A percent of the total area has been used for funding purposes (10%). This percent can be and should be adjusted accordingly over time based on the actual history of needed maintenance (repairs).

The Useful Life is set at 10yrs. Maintenance (repairs) for brick/masonry/marble should be minimal during the first 30yrs.

Brick/masonry is expected to last 75-100 years because it withstands most of the forces which deteriorate exterior surfaces.

Typical maintenance includes repairing loose joints, the mortar will become brittle over time. This involves scraping out mortar in the joints and replacing it with new grout in the joints. Unfortunately, this process is intensive and very costly. This process is called repointing. Other forms of maintenance include moss control and water sealing (caulking of the joints).

There are many factors that can cause damage to the brick/masonry exterior surfaces:

- Areas that do not get enough sun can see moss/fungus growth if the areas are not powerwashed and treated on a regular set up cycle. Untreated areas of moss/fungus could see mortar failure. Once the mortar fails the potential for water leaks increases greatly, it can also be a safety hazard. Areas showing moss/fungus growth should be addressed immediately. A proper powerwashing, any needed repairs should be done followed by the application of a waterproofing solution. This will help reduce the growth. Typically the waterproofing solution is only good for about 5 years so this should be set up on a cycle.

- Areas that get too much sun can also have issues. Too much sun can dry out the mortar over time causing it to crumble and become weak allowing water to get behind the exterior surface.

# High Rise Sample I

## MCA Detail Report by Category

### Exterior - Brick/Masonry, Repairs continued...

Again causing the same kinds of damage as mentioned above. The same type of repair solution is recommended.

- Some trouble spots beyond the location of the brick/masonry on a building are transition areas, window sills, door jams, and transition connections. These areas should be monitored for any signs of damage.

76,690 - sq.ft. of brick siding @ 26.00 = 1,993,940.00  
Total = \$1,993,940.00

### Exterior - Deck Railing (metal) - 2022

Asset ID	1183	1 Total	@ \$78,300.00
		Asset Cost	\$78,300.00
		Percent Replacement	100%
Building Components		Future Cost	\$83,092.59
Placed in Service	January 1982	Assigned Reserves	<i>none</i>
Useful Life	40		
Replacement Year	2022	Annual Assessment	\$12,851.76
Remaining Life	3	Interest Contribution	<u>\$89.96</u>
		Reserve Allocation	\$12,941.73



1,350 - lin.ft. of metal railing @ \$58.00 = \$78,300.00  
Total = \$78,300.00

# High Rise Sample I

## MCA Detail Report by Category

### Exterior - Entrance Doors - 2022

Asset ID	1148	1 Total	@ \$19,000.00
		Asset Cost	\$19,000.00
		Percent Replacement	100%
Building Components		Future Cost	\$20,162.95
Placed in Service	January 1982	Assigned Reserves	<i>none</i>
Useful Life	40		
Replacement Year	2022	Annual Assessment	\$3,118.56
Remaining Life	3	Interest Contribution	<u>\$21.83</u>
		Reserve Allocation	\$3,140.39



5 - metal/glass doors @ \$3,800.00 = \$19,000.00  
Total = \$19,000.00

### Exterior - Pool Fencing (metal) - 2022

Asset ID	1184	1 Total	@ \$13,532.00
		Asset Cost	\$13,532.00
		Percent Replacement	100%
Building Components		Future Cost	\$14,360.27
Placed in Service	January 1982	Assigned Reserves	<i>none</i>
Useful Life	40		
Replacement Year	2022	Annual Assessment	\$2,221.07
Remaining Life	3	Interest Contribution	<u>\$15.55</u>
		Reserve Allocation	\$2,236.62



# High Rise Sample I

## MCA Detail Report by Category

*Exterior - Pool Fencing (metal) continued...*



199 - lin.ft. of metal railing

@ \$68.00 = \$13,532.00  
Total = \$13,532.00

### Exterior - Windows - 2032

Asset ID	1149
Building Components	
Placed in Service	January 1982
Useful Life	50
Replacement Year	2032
Remaining Life	13

1 Total	@ \$100,200.00
Asset Cost	\$100,200.00
Percent Replacement	100%
Future Cost	\$129,619.38
Assigned Reserves	none
Annual Assessment	\$4,466.43
Interest Contribution	<u>\$31.26</u>
Reserve Allocation	\$4,497.69



4 - sliders  
23 - picture windows

@ \$3,200.00 = \$12,800.00  
@ 3,800.00 = 87,400.00  
Total = \$100,200.00

**High Rise Sample I**  
**MCA Detail Report by Category**

<b>Building Components - Total Current Cost</b>	<b>\$410,426</b>
<b>Assigned Reserves</b>	<b>\$0</b>
<b>Fully Funded Reserves</b>	<b>\$196,607</b>

## High Rise Sample I MCA Detail Report by Category

Comments		1 Comment	
Asset ID	1105	Asset Cost	
		Percent Replacement	100%
	Comment	Future Cost	
Placed in Service	January 2008	Assigned Reserves	<i>none</i>
Useful Life	100		
Replacement Year	2108	Annual Assessment	No Assessment
Remaining Life	89	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.

Wear components should be replaced on an 'as-needed' basis. Any failures would require immediate repairs and/or replacements. Funding for these needed repairs and/or replacements should come from the Annual Operational Budget (maintenance line item).

**Painting** - Painting is not considered a Reserve Funding Expense. No reserve funding has been set up for painting. Typically, painting is funded for through the Annual Operational Budget and/or through a Paint Fund.

<b>Comment - Total Current Cost</b>	<b>\$0</b>
<b>Assigned Reserves</b>	<b>\$0</b>
<b>Fully Funded Reserves</b>	<b>\$0</b>



**High Rise Sample I**  
**MCA Detail Report by Category**

**Detail Report Summary**

**Total of All Assets**

Assigned Reserves	\$307,413.81
Annual Contribution	\$214,386.48
Annual Interest	\$2,317.00
Annual Allocation	\$216,703.48

**Contingency at 1.00%**

Assigned Reserves	\$3,105.19
Annual Contribution	\$2,165.52
Annual Interest	\$23.40
Annual Allocation	\$2,188.92

**Grand Total**

Assigned Reserves	\$310,519.00
Annual Contribution	\$216,552.00
Annual Interest	\$2,340.40
Annual Allocation	\$218,892.40

# **High Rise Sample I** **MCA Category Detail Index**

Asset ID	Description	Replacement	Page
1129	Acoustic Ceiling - (Fiberboard Panels)	2024	2-21
1159	Asphalt Overlay - Replacement	2023	2-14
1105	Comments	Unfunded	2-41
1174	Community Room - Renovations	2020	2-21
1030	Equipment - Air Handler, (RTU)	2046	2-27
1179	Equipment - Air Handler, (RTU), Club	2047	2-28
1182	Equipment - Back Up Generator	2046	2-29
1180	Equipment - Boiler (Armor)	2030	2-30
1135	Equipment - Boiler (Knight)	2030	2-30
1014	Equipment - Elevators, Cab Refurbishment	2023	2-31
1015	Equipment - Elevators, Modernization	2033	2-31
1016	Equipment - Fire Control Panel, Replacement	2038	2-32
1136	Equipment - Fire Pump	2020	2-33
1181	Equipment - Hot Water Storage	2035	2-33
1172	Equipment - Keypad (Access)	2021	2-34
1081	Equipment - Trash Compactor, Replacement	2029	2-35
1083	Exterior - Brick/Masonry, Repairs	2028	2-36
1183	Exterior - Deck Railing (metal)	2022	2-37
1148	Exterior - Entrance Doors	2022	2-38
1184	Exterior - Pool Fencing (metal)	2022	2-38
1149	Exterior - Windows	2032	2-39
1007	Flooring - Carpet	2024	2-22
1164	Kitchen - Renovations	2026	2-22
1173	Laundry Room - Renovations	2026	2-23
1009	Lighting - Interior (Hallway)	2024	2-24
1175	Lobby - Renovations	2026	2-24
1133	Mailbox - Replacements	2029	2-25
1170	Pool - Filter	2028	2-19
1169	Pool - Replacement (Aluminium Tub)	2025	2-19
1176	Restroom/Shower Area - Renovations	2023	2-26
1117	Roof - Flat, Rubber Membrane	2023	2-16
1177	Roof - Flat, Rubber Membrane, 2007	2027	2-17
1178	Roof - Pool Deck Area	2035	2-17
1185	Wall Covering - Wallpaper	2019	2-26
	Total Funded Assets	33	
	Total Unfunded Assets	<u>1</u>	
	Total Assets	34	

# High Rise Sample I

## MCA Asset Summary Report

Description	Asset ID	Date In Service	Current Cost	Useful Life	Adjustment	Remaining	Future Cost	Quantity	Unit Cost
<b>Streets/Asphalt</b>									
Asphalt Overlay - Replacement	1159	2023	276,775	30	11	4	299,590	1 @	276,775.00
<b>Roofing</b>									
Roof - Flat, Rubber Membrane	1117	2023	100,800	20	5	4	109,109	1 @	100,800.00
Roof - Flat, Rubber Membrane, 2007	1177	2027	150,528	20	0	8	176,368	1 @	150,528.00
Roof - Pool Deck Area	1178	2035	41,090	20	0	16	56,408	1 @	41,090.00
<b>Recreation/Pool</b>									
Pool - Filter	1170	2028	4,800	12	0	9	5,736	1 @	4,800.00
Pool - Replacement (Aluminium Tub)	1169	2025	90,000	40	10	6	101,355	1 @	90,000.00
<b>Interior Furnishings</b>									
Acoustic Ceiling - (Fiberboard Panels)	1129	2024	44,275	20	22	5	48,883	1 @	44,275.00
Community Room - Renovations	1174	2020	100,000	14	0	1	102,000	1 @	100,000.00
Flooring - Carpet	1007	2024	51,204	18	0	5	56,533	1 @	51,204.00
Kitchen - Renovations	1164	2026	30,000	20	0	7	34,461	1 @	30,000.00
Laundry Room - Renovations	1173	2026	50,000	20	0	7	57,434	1 @	50,000.00
Lighting - Interior (Hallway)	1009	2024	38,740	30	12	5	42,772	1 @	38,740.00
Lobby - Renovations	1175	2026	100,000	20	0	7	114,869	1 @	100,000.00
Mailbox - Replacements	1133	2029	16,500	30	17	10	20,113	1 @	16,500.00
Restroom/Shower Area - Renovations	1176	2023	250,000	30	11	4	270,608	1 @	250,000.00
Wall Covering - Wallpaper	1185	2019	190,800	30	0	0	190,800	1 @	190,800.00
<b>Equipment</b>									
Equipment - Air Handler, (RTU)	1030	2046	120,000	30	0	27	204,826	1 @	120,000.00
Equipment - Air Handler, (RTU), Cl..	1179	2047	60,000	30	0	28	104,461	1 @	60,000.00
Equipment - Back Up Generator	1182	2046	125,000	30	0	27	213,361	1 @	125,000.00
Equipment - Boiler (Armor)	1180	2030	56,000	20	0	11	69,629	1 @	56,000.00
Equipment - Boiler (Knight)	1135	2030	28,000	20	0	11	34,814	1 @	28,000.00
Equipment - Elevators, Cab Refurbis..	1014	2023	32,000	20	0	4	34,638	2 @	16,000.00
Equipment - Elevators, Modernizatio..	1015	2033	400,000	30	0	14	527,792	1 @	400,000.00
Equipment - Fire Control Panel, Rep..	1016	2038	96,000	20	0	19	139,854	1 @	96,000.00
Equipment - Fire Pump	1136	2020	30,000	30	8	1	30,600	1 @	30,000.00
Equipment - Hot Water Storage	1181	2035	66,000	18	0	16	90,604	1 @	66,000.00
Equipment - Keypad (Access)	1172	2021	4,200	20	19	2	4,370	1 @	4,200.00
Equipment - Trash Compactor, Repl..	1081	2029	26,000	30	17	10	31,694	1 @	26,000.00
<b>Building Components</b>									
Exterior - Brick/Masonry, Repairs	1083	2028	199,394	10	0	9	238,294	1 @	199,394.00
Exterior - Deck Railing (metal)	1183	2022	78,300	40	0	3	83,093	1 @	78,300.00
Exterior - Entrance Doors	1148	2022	19,000	40	0	3	20,163	1 @	19,000.00
Exterior - Pool Fencing (metal)	1184	2022	13,532	40	0	3	14,360	1 @	13,532.00
Exterior - Windows	1149	2032	100,200	50	0	13	129,619	1 @	100,200.00
<b>Comment</b>									
Comments	1105 Unfunded								