Reserve Analysis Report

Boston Condominium Trust
Boston, Massachusetts
Version 1
June 19, 2018

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Boston Condominium Trust

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Preface

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

♦ ♦ ♦ ♦ INTRODUCTION TO RESERVE BUDGETING ♦ ♦ ♦ ♦

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

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

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

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

♦ ♦ ♦ ♦ UNDERSTANDING THE RESERVE ANALYSIS ♦ ♦ ♦ ♦

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

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

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

Percent Funded
Measure of the reserve fund “health” (expressed as a percentage) as of the beginning of the fiscal year for which the

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

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

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

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

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

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

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

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

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

♦ ♦ ♦ ♦ RESERVE FUNDING CALCULATION METHODS ♦ ♦ ♦ ♦

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

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

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

Step 1: Calculation of fully funded balance for each component

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

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

Step 2: Distribution of current reserve funds

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

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

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

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

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

Step 3: Developing a funding plan

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

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

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

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

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

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

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

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

Cash Flow Calculation Method

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

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

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

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

Preface

♦ ♦ ♦ ♦ READING THE RESERVE ANALYSIS ♦ ♦ ♦ ♦

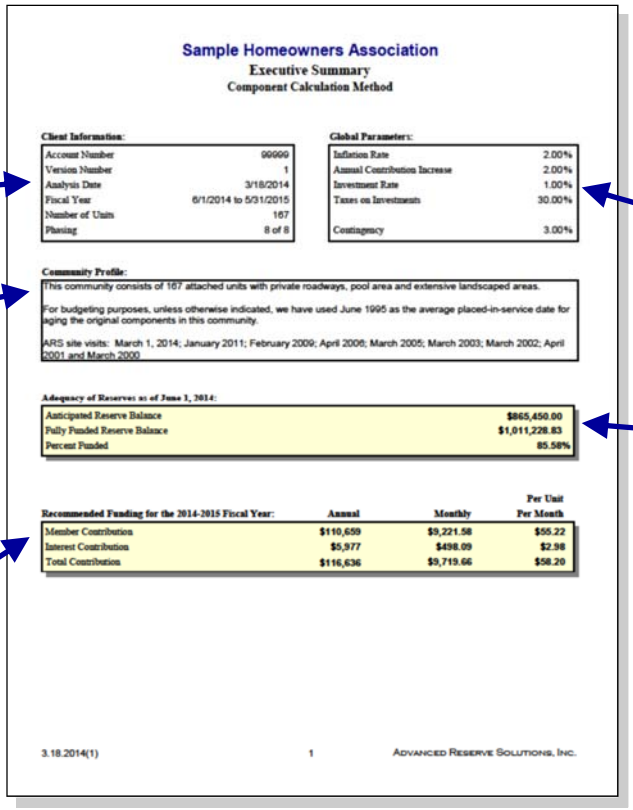
In some cases, the reserve analysis may be a lengthy document of one hundred pages or more. A complete and thorough review of the reserve analysis is always a good idea. However, if time is limited, it is suggested that a thorough review of the summary pages be made. If a "red flag" is raised in this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

Executive Summary

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

Client Information
Provides various client information including fiscal year for which the reserve analysis was prepared, number of units, phasing, etc.

Global Parameters
Displays the calculation parameters that were used to calculate the reserve analysis including inflation, annual contribution increase, investment rate, tax rate and contingency.



Sample Homeowners Association
Executive Summary
Component Calculation Method

Client Information:

Account Number	99999
Version Number	1
Analysis Date	3/18/2014
Fiscal Year	6/1/2014 to 5/31/2015
Number of Units	167
Phasing	8 of 8

Global Parameters:

Inflation Rate	2.00%
Annual Contribution Increase	2.00%
Investment Rate	1.00%
Taxes on Investments	30.00%
Contingency	3.00%

Community Profile:
This community consists of 167 attached units with private roadways, pool area and extensive landscaped areas.

For budgeting purposes, unless otherwise indicated, we have used June 1995 as the average placed-in-service date for aging the original components in this community.

ARS site visits: March 1, 2014; January 2011; February 2009; April 2006; March 2005; March 2003; March 2002; April 2001 and March 2000

Adequacy of Reserves as of June 1, 2014:

Anticipated Reserve Balance	$865,450.00
Fully Funded Reserve Balance	$1,011,228.83
Percent Funded	85.58%

Recommended Funding for the 2014-2015 Fiscal Year:	Annual	Monthly	Per Unit Per Month
Member Contribution	$110,659	$9,221.58	$55.22
Interest Contribution	$5,977	$498.09	$2.98
Total Contribution	$116,636	$9,719.66	$58.20

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Community Profile
Provides brief description of the community, as well as other "global" type comments.

Budget
Provides recommended funding for the fiscal year for which the reserve analysis was prepared. Indicates the reserve funding from the membership, anticipated interest contribution and the total contribution

Adequacy of Reserves
Displays the results of calculations with regard to the "health" of the reserve fund as of the beginning of the fiscal year for which the reserve analysis was prepared. Provides the anticipated reserve balance, fully funded reserve balance and the percent funded.

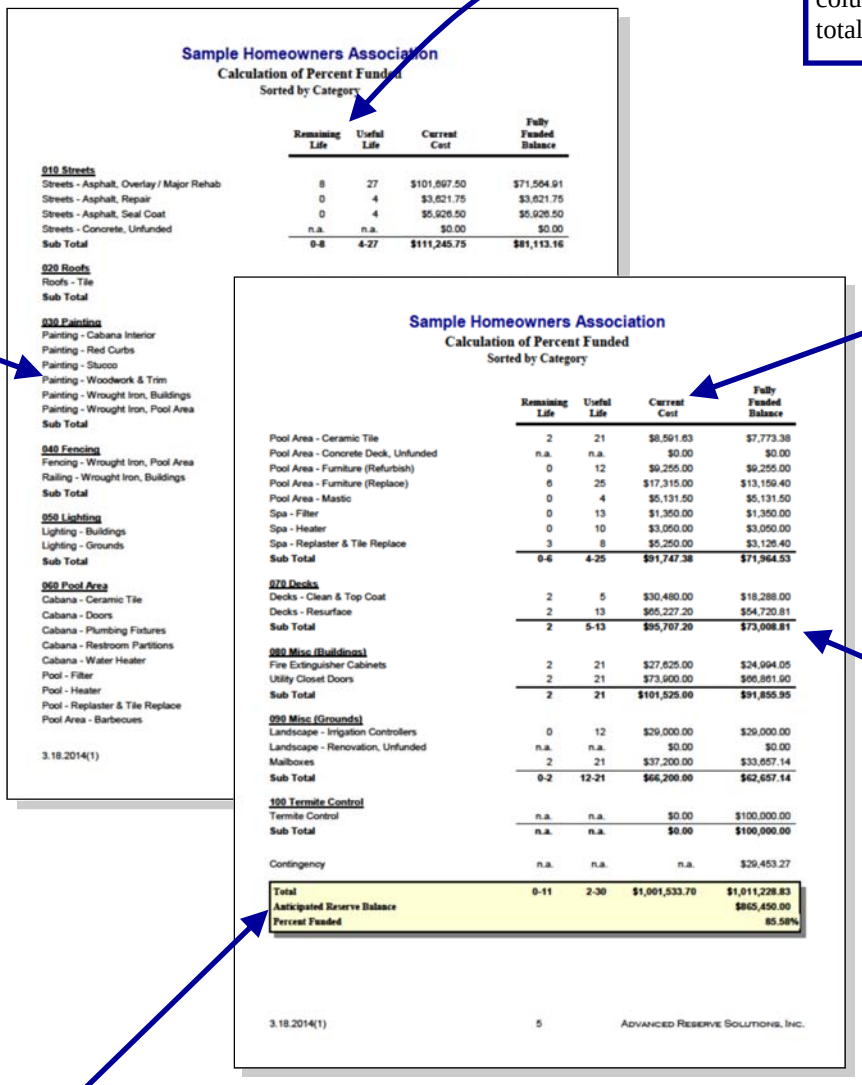
Preface

Calculation of Percent Funded

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

Lifespans
Remaining life and useful life are displayed. And, these columns are conveniently sub totaled to show range.

Reserve Components
All components are displayed (shown here in "category" order).



Sample Homeowners Association
Calculation of Percent Funded
Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
010 Streets				
Streets - Asphalt, Overlay / Major Rehab	8	27	$101,697.50	$71,564.91
Streets - Asphalt, Repair	0	4	$3,621.75	$3,621.75
Streets - Asphalt, Seal Coat	0	4	$5,926.50	$5,926.50
Streets - Concrete, Unfunded	n.a.	n.a.	$0.00	$0.00
Sub Total	**0-8**	**4-27**	**$111,245.75**	**$81,113.16**
020 Roofs				
Roofs - Tile				
Sub Total				
030 Painting				
Painting - Cabana Interior				
Painting - Red Curbs				
Painting - Stucco				
Painting - Woodwork & Trim				
Painting - Wrought Iron, Buildings				
Painting - Wrought Iron, Pool Area				
Sub Total				
040 Fencing				
Fencing - Wrought Iron, Pool Area				
Railing - Wrought Iron, Buildings				
Sub Total				
050 Lighting				
Lighting - Buildings				
Lighting - Grounds				
Sub Total				
060 Pool Area				
Cabana - Ceramic Tile				
Cabana - Doors				
Cabana - Plumbing Fixtures				
Cabana - Restroom Partitions				
Cabana - Water Heater				
Pool - Filter				
Pool - Heater				
Pool - Replaster & Tile Replace				
Pool Area - Barbecues				

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Sample Homeowners Association
Calculation of Percent Funded
Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Pool Area - Ceramic Tile	2	21	$8,591.63	$7,773.38
Pool Area - Concrete Deck, Unfunded	n.a.	n.a.	$0.00	$0.00
Pool Area - Furniture (Refurbish)	0	12	$9,255.00	$9,255.00
Pool Area - Furniture (Replace)	6	25	$17,315.00	$13,159.40
Pool Area - Mastic	0	4	$5,131.50	$5,131.50
Spa - Filter	0	13	$1,350.00	$1,350.00
Spa - Heater	0	10	$3,050.00	$3,050.00
Spa - Replaster & Tile Replace	3	8	$5,250.00	$3,126.40
Sub Total	**0-6**	**4-25**	**$91,747.38**	**$71,964.53**
070 Decks				
Decks - Clean & Top Coat	2	5	$30,480.00	$18,288.00
Decks - Resurface	2	13	$65,227.20	$54,720.81
Sub Total	**2**	**5-13**	**$95,707.20**	**$73,008.81**
080 Misc (Buildings)				
Fire Extinguisher Cabinets	2	21	$27,625.00	$24,994.05
Utility Closet Doors	2	21	$73,900.00	$66,861.90
Sub Total	**2**	**21**	**$101,525.00**	**$91,855.95**
090 Misc (Grounds)				
Landscape - Irrigation Controllers	0	12	$29,000.00	$29,000.00
Landscape - Renovation, Unfunded	n.a.	n.a.	$0.00	$0.00
Mailboxes	2	21	$37,200.00	$33,657.14
Sub Total	**0-2**	**12-21**	**$66,200.00**	**$62,657.14**
100 Termite Control				
Termite Control	n.a.	n.a.	$0.00	$100,000.00
Sub Total	**n.a.**	**n.a.**	**$0.00**	**$100,000.00**
Contingency	n.a.	n.a.	n.a.	$29,453.27
Total	**0-11**	**2-30**	**$1,001,533.70**	**$1,011,228.83**
Anticipated Reserve Balance				**$865,450.00**
Percent Funded				**85.58%**

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Current Cost
Displays the current cost to replace or otherwise maintain each component. This column is conveniently sub totaled.

Fully Funded Balance
Displays the fully funded balance for each component. This column is conveniently sub totaled.

The total current cost to replace or otherwise maintain all components, total fully funded balance, anticipated reserve balance and percent funded are provided at the bottom of this summary. Also shown is the range of reserve component remaining lives and useful lives.

Preface

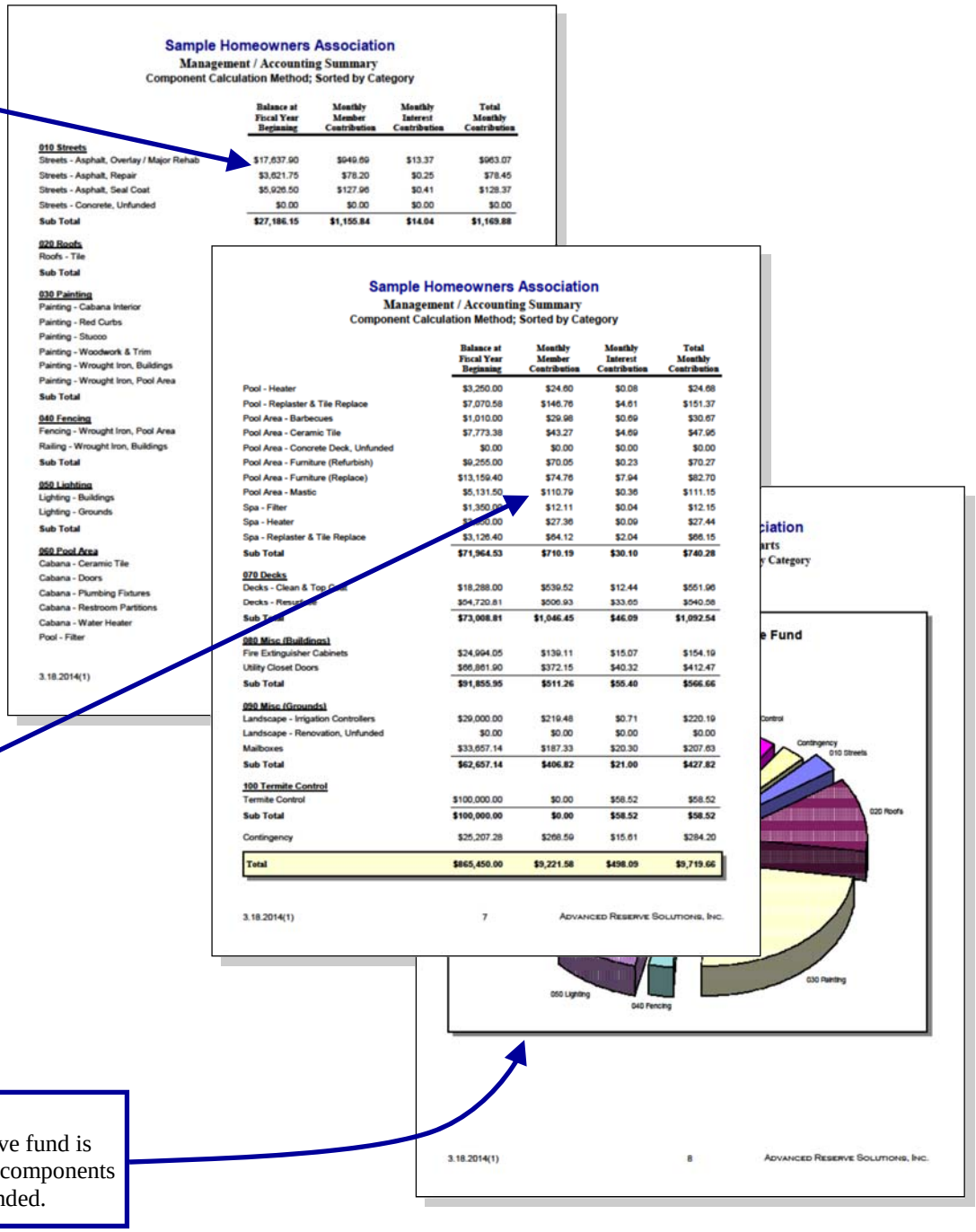
Management / Accounting Summary and Charts

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

Balance at FYB
Shows the amount of reserve funds assigned to each reserve component. And, this column is conveniently sub totaled.

Monthly Funding
Displays the monthly funding for each component from the members and interest. Total monthly funding is also indicated. And, these columns are conveniently sub totaled.

Pie Charts
Show graphically how the reserve fund is distributed amongst the reserve components and how the components are funded.



Sample Homeowners Association
Management / Accounting Summary
Component Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
010 Streets				
Streets - Asphalt, Overlay / Major Rehab	$17,637.90	$949.69	$13.37	$963.07
Streets - Asphalt, Repair	$3,621.75	$78.20	$0.25	$78.45
Streets - Asphalt, Seal Coat	$5,926.50	$127.96	$0.41	$128.37
Streets - Concrete, Unfunded	$0.00	$0.00	$0.00	$0.00
Sub Total	$27,186.15	$1,155.84	$14.04	$1,169.88
020 Roofs				
Roofs - Tile				
Sub Total				
030 Painting				
Painting - Cabana Interior				
Painting - Red Curbs				
Painting - Stucco				
Painting - Woodwork & Trim				
Painting - Wrought Iron, Buildings				
Painting - Wrought Iron, Pool Area				
Sub Total				
040 Fencing				
Fencing - Wrought Iron, Pool Area				
Railing - Wrought Iron, Buildings				
Sub Total				
050 Lighting				
Lighting - Buildings				
Lighting - Grounds				
Sub Total				
060 Pool Area				
Cabana - Ceramic Tile				
Cabana - Doors				
Cabana - Plumbing Fixtures				
Cabana - Restroom Partitions				
Cabana - Water Heater				
Pool - Filter				

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Sample Homeowners Association
Management / Accounting Summary
Component Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Pool - Heater	$3,250.00	$24.60	$0.08	$24.68
Pool - Replaster & Tile Replace	$7,070.58	$146.76	$4.61	$151.37
Pool Area - Barbecues	$1,010.00	$29.98	$0.69	$30.67
Pool Area - Ceramic Tile	$7,773.38	$43.27	$4.69	$47.95
Pool Area - Concrete Deck, Unfunded	$0.00	$0.00	$0.00	$0.00
Pool Area - Furniture (Refurbish)	$9,255.00	$70.05	$0.23	$70.27
Pool Area - Furniture (Replace)	$13,159.40	$74.76	$7.94	$82.70
Pool Area - Mastic	$5,131.50	$110.79	$0.36	$111.15
Spa - Filter	$1,350.00	$12.11	$0.04	$12.15
Spa - Heater	$3,060.00	$27.36	$0.09	$27.44
Spa - Replaster & Tile Replace	$3,126.40	$64.12	$2.04	$66.15
Sub Total	$71,964.53	$710.19	$30.10	$740.28
070 Decks				
Decks - Clean & Top Coat	$18,288.00	$539.52	$12.44	$551.96
Decks - Resurface	$54,720.81	$506.93	$33.65	$540.58
Sub Total	$73,008.81	$1,046.45	$46.09	$1,092.54
080 Misc (Buildings)				
Fire Extinguisher Cabinets	$24,994.05	$139.11	$15.07	$154.19
Utility Closet Doors	$66,861.90	$372.15	$40.32	$412.47
Sub Total	$91,855.95	$511.26	$55.40	$566.66
090 Misc (Grounds)				
Landscape - Irrigation Controllers	$29,000.00	$219.48	$0.71	$220.19
Landscape - Renovation, Unfunded	$0.00	$0.00	$0.00	$0.00
Mailboxes	$33,657.14	$187.33	$20.30	$207.63
Sub Total	$62,657.14	$406.82	$21.00	$427.82
100 Termite Control				
Termite Control	$100,000.00	$0.00	$58.52	$58.52
Sub Total	$100,000.00	$0.00	$58.52	$58.52
Contingency	$25,207.28	$268.59	$15.61	$284.20
Total	$865,450.00	$9,221.58	$498.09	$9,719.66

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Fund

Contingency
010 Streets
020 Roofs
030 Painting
040 Fencing
050 Lighting

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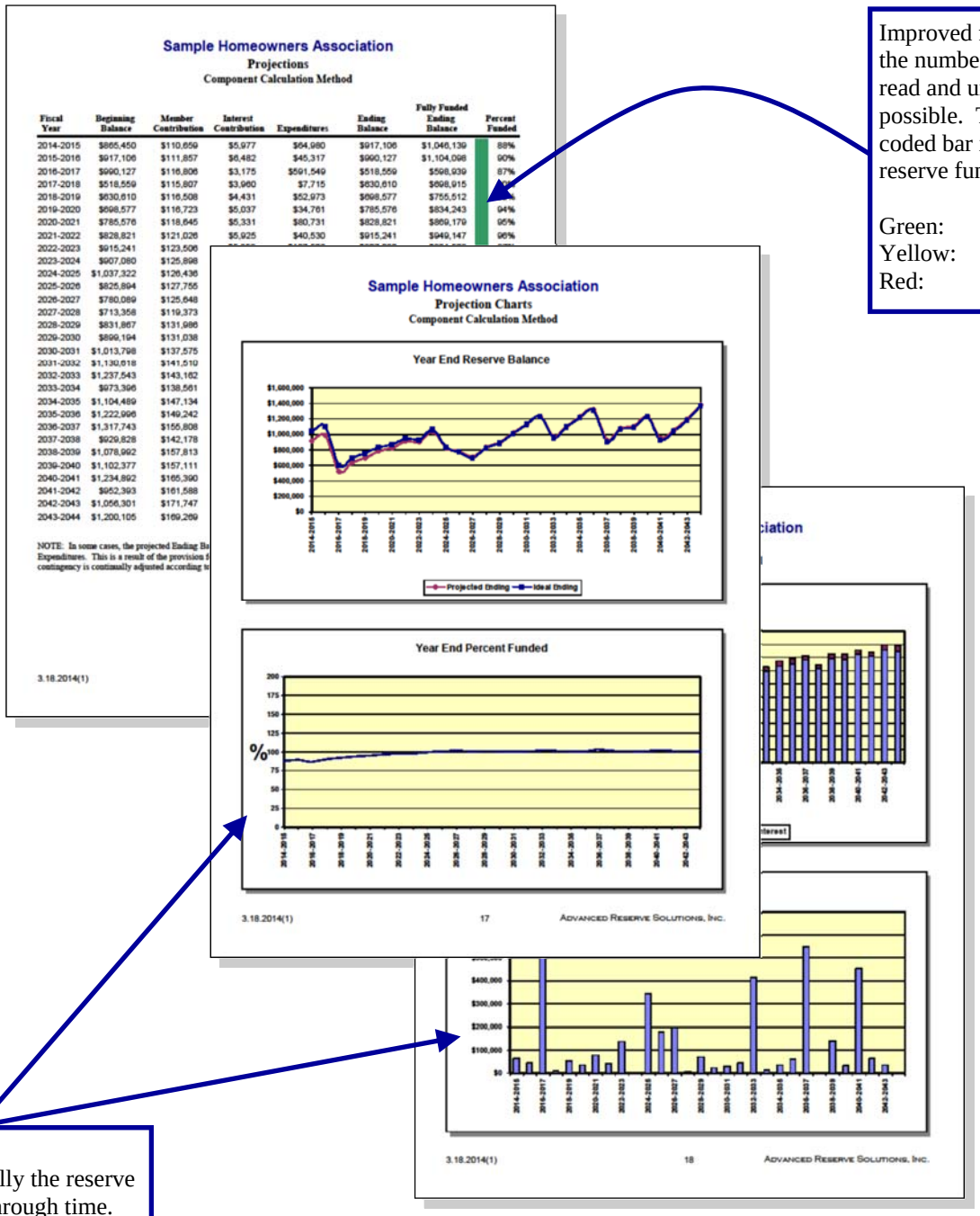
Projections and Charts

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



Improved format makes the numbers as easy to read and understand as possible. The color-coded bar indicates the reserve fund status:

Green:	Good
Yellow:	Fair
Red:	Poor

Charts
Show graphically the reserve funding plan through time.

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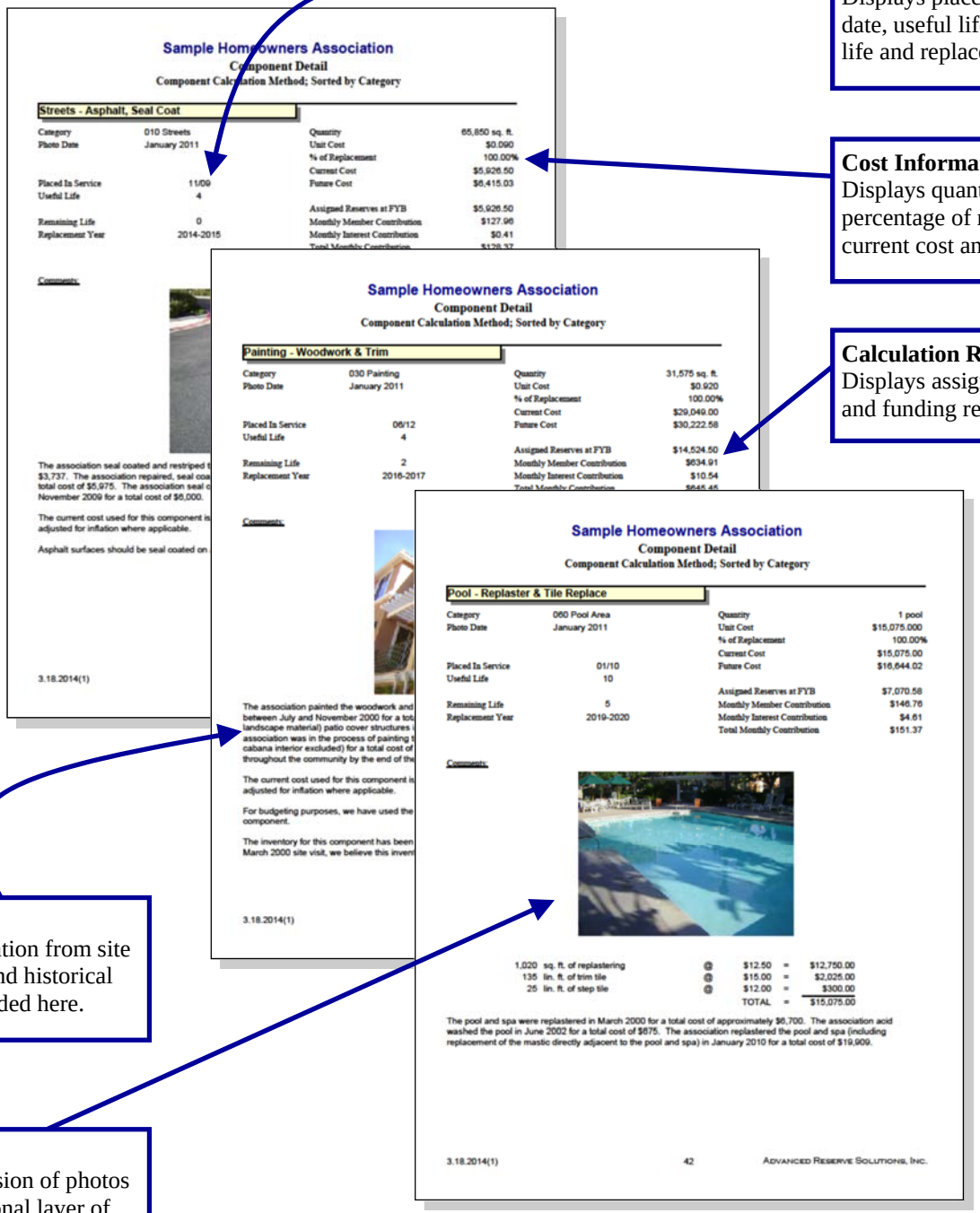
Component Detail

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



Lifespan Information
Displays placed-in-service date, useful life, remaining life and replacement year.

Cost Information
Displays quantity, unit cost, percentage of replacement, current cost and future cost.

Calculation Results
Displays assigned reserves and funding requirements.

Comments
Useful information from site observations and historical expenses included here.

Photos
Optional inclusion of photos adds an additional layer of detail to the reserve analysis.

Preface

♦ ♦ ♦ ♦ GLOSSARY OF KEY TERMS ♦ ♦ ♦ ♦

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

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

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

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

Assigned Funds (and "Fixed" Assigned Funds)
The amount of money, as of the fiscal year beginning date for which the reserve analysis is prepared, that a reserve component has been assigned.

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

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

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

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

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

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

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

Preface

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

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

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

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

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

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

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

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

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

Monthly Contribution (and "Fixed" Monthly Contribution)
The amount of money, for the fiscal year which the reserve analysis is prepared, that a reserve component will be funded.

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

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

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

One-Time Replacement
Used for components that will be budgeted for only once.

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

$$\text{Percent Funded} = \frac{\text{Anticipated Reserve Fund Balance}}{\text{Fully Funded Reserve Balance}}$$

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

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

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

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

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

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

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

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

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

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

Reserve Components
Line items included in the reserve analysis.

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

Total Contribution
The sum of the membership contribution and interest contribution.

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

♦ ♦ ♦ ♦ LIMITATIONS OF RESERVE ANALYSIS ♦ ♦ ♦ ♦

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

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

The representations set forth in this reserve analysis are based on the best information and estimates of the preparer as of the date of this analysis. These estimates are subject to change. This reserve analysis includes estimates 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 or 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 are excluded when assessing life expectancy, repair and/or replacement costs of the components.

Boston Condominium Trust

Executive Summary

Directed Cash Flow Calculation Method

Client Information:

Account Number	20021
Version Number	1
Analysis Date	06/19/2018
Fiscal Year	1/1/2019 to 12/31/2019
Number of 139	139
Phasing	1 of 1

Global Parameters:

Inflation Rate	3.00%
Annual Contribution Increase	3.00%
Investment Rate	0.50%
Taxes on Investments	30.00%
Contingency	3.00%

Community Profile:

Boston Condominium consists of three residential buildings located in Boston, Massachusetts. The V and H are 7-stories tall and considered high rises. E is 6-stories tall. All buildings have top floor mechanical and outdoor terrace levels and in aggregate contain 139 residential units. Commercial spaces on the first floor of the buildings are excluded from the study. Construction of the buildings was completed in 2006.

The site consists of the three buildings and a parking garage between V and E. There are unit terraces and a common courtyard on the roof of the parking garage.

ARS site visits: March 30, 2018, May 7, 2018, May 16, 2018

Adequacy of Reserves as of January 1, 2019:

Anticipated Reserve Balance	**$1,570,621.00**
Fully Funded Reserve Balance	**$3,380,099.83**
Percent Funded	**46.47%**

Recommended Funding for the 2019 Fiscal Year:	Annual	Monthly	Per 139 Per Month
Member Contribution	**$384,000**	**$32,000.00**	**$230.22**
Interest Contribution	**$5,996**	**$499.70**	**$3.59**
Total Contribution	**$389,996**	**$32,499.70**	**$233.81**

Boston Condominium Trust

Preparer's Disclosure Statement

Paul Huijing, P.E. completed this reserve study. Consultant certifies that:

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

2) Consultant made site visits to this community on March 30, 2018, May 7, 2018, and May 16, 2018.

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

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

5) This is a "Level 1" full reserve study with a site visit.

6) Exterior unit windows and doors are responsibility of unit owners per condominium documents. Unit doors to common hallway are responsibility of unit owners per condominium documents.

7) Numerous areas takeoffs made from building plans provided by property manager. Some plan details do not reflect as-built construction.

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

Boston Condominium Trust

Note Pad

Current reserve contribution: $172,443 annually plus additional $20,000 in recent years for a total of $192,443. This equates to about average of $115 per unit.

The 3% assumption for inflation and annual increases in reserve contributions is the new standard ARS is recommending. We recently increased this from 2% due to indications that inflation is rising.

Association Specific Comments:
Interior painting is covered from operating budget per property manager.

In addition to components listed individually, the following components are currently unfunded:
- Trash rooms
- Fire doors and stairwells
- Full replacement of interior and exterior flush steel doors
- Replacement of exterior cladding
- Coatings on concrete floors of garage
- Asphalt paving in front of upper garage entrance
- Unit hall doors and balcony doors are responsibility of unit owners per client

General unfunded components:
The following components are often repaired and/or replaced on an "as-needed" basis and not funded for a complete replacement at one time.

Concrete:
Typically, budgeting for concrete repairs as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. Minor repairs, as needed, should be addressed immediately as a maintenance issue using the client's operating and/or reserve contingency funds. Should the client desire, funding for this component can be included.

Areas include but not limited to:
- Foundation and retaining walls
- Walls (Exterior/Interior)
- Balcony structure
- Parking Deck/Entrance Area/Underground Parking

Plumbing Pipes: Complete replacement of the plumbing pipes is an expensive replacement that would require removal of walls, ceilings and floors. Typically, budgeting for plumbing pipes repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. There is no way to predict the remaining life of plumbing pipes. Most are completely enclosed in walls, ceilings and floors. Therefore, a complete visual inspection is not possible. Plumbing systems are built to last the legal life of a building. Most repairs and/or replacements are due to unforeseen issues, product defects, construction defects, improper installation, or from improper chemical treatments. Repairs to this type of system are done on an 'as-needed' basis. It is rare that a complete system of this type is replaced all at once.

Electrical Services (Lines/Meters): Complete replacement of the electrical service lines is costly and would require removal of walls, ceilings and floors. Typically, budgeting for electrical repairs and/or replacements as a reserve component is excluded as it is anticipated that any repairs required will be addressed immediately due to safety concerns. There is no way to predict the remaining life of electrical service lines. Most are completely enclosed in walls, ceilings and floors. Therefore a complete visual inspection is not possible. Electrical Service systems are built to last the legal life of a building. Most repairs and/or replacements are due to unforeseen issues, product defects, construction defects, or improper installation. Repairs to this type of system are done on an 'as-needed' basis. It is rare that a complete system of this type is replaced all at once. Electrical Meters are replaced on an 'as-needed' basis. The Electric Service provider would replace any damaged component of the system immediately and bill the client accordingly.

Landscaping: Landscaping is an annual maintenance expense.

Boston Condominium Trust

Note Pad

Unit Doors: Responsibility of unit owner.

Sidewalk/Patio: The walkways should be kept in a good state of repair at all times.

Storage lockers: Low use item that can be repaired on as-needed basis.

General Emergency Lighting: The emergency lighting should be tested periodically. Any damaged or not working units should be repaired/replaced immediately.

Boston Condominium Trust

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
010 Roof				
Roof - Courtyard, Copper	17	30	$6,800.00	$2,946.67
Roof - Courtyard, Main	7	20	$882,800.00	$573,820.00
Roof - E	7	20	$561,850.00	$365,202.50
Roof - H	7	20	$239,650.00	$155,772.50
Roof - V	7	20	$260,000.00	$169,000.00
Roof Canopy- Lobby Entrance	7	20	$10,000.00	$6,500.00
Sub Total	**7-17**	**20-30**	**$1,961,100.00**	**$1,273,241.67**
020 Building Exterior				
Exterior Cladding - Copper Sealant Repairs	11	15	$28,100.00	$7,493.33
Exterior Cladding - Inspection	0	3	$6,000.00	$6,000.00
Exterior Cladding - Minor Repairs, Unfunded	n.a.	n.a.	$0.00	$0.00
Exterior Cladding - Steel Siding Painting	2	15	$168,288.00	$145,849.60
Exterior Doors - Courtyard	12	25	$13,000.00	$6,760.00
Exterior Iron Pedestrian Gates	27	30	$8,350.00	$835.00
Exterior Railings	17	30	$57,400.00	$24,873.33
Exterior Steel Doors	3	3	$5,000.00	$0.00
Exterior Windows - Common Storefront Areas	5	5	$13,896.00	$0.00
Fence - H Courtyard	17	30	$12,200.00	$5,286.67
Garage - Concrete Slab Protection, Unfunded	n.a.	n.a.	$243,450.00	$31,968.18
Lighting - Courtyard	12	25	$4,125.00	$2,145.00
Lighting - Garage	12	25	$10,825.00	$5,629.00
Lighting - Street & Exterior	12	25	$46,100.00	$23,972.00
Terrace Fencing - E	17	30	$32,275.00	$13,985.83
Terrace Fencing - H	17	30	$13,400.00	$5,806.67
Terrace Fencing - V	17	30	$11,600.00	$5,026.67
Sub Total	**0-27**	**3-30**	**$674,009.00**	**$285,631.28**
030 Building Interior				
Ceiling - Suspended, Hallways	12	25	$28,440.00	$14,788.80
Ceiling - Suspended, Parking Garage	17	30	$20,087.50	$8,704.58
Floor - Carpet	4	12	$63,516.00	$42,344.00
Floor - Tile	12	25	$69,207.00	$35,987.64
Interior Steel Doors	3	3	$3,000.00	$0.00
Lighting - Hallway Interiors	12	25	$39,175.00	$20,371.00
Lighting - Lobby Interiors	12	25	$14,950.00	$7,774.00
Lighting - Stairwells	12	25	$14,850.00	$7,722.00

Boston Condominium Trust

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Mailboxes	17	30	$9,300.00	$4,030.00
Signage Allowance	17	30	$10,000.00	$4,333.33
Stairwells - Unfunded	n.a.	n.a.	$0.00	$0.00
Sub Total	**3-17**	**3-30**	**$272,525.50**	**$146,055.36**
040 Furnishings				
Furnishings - Common Courtyard	5	10	$8,300.00	$4,150.00
Furnishings - Entrance Lobbies	7	20	$12,625.00	$8,206.25
Sub Total	**5-7**	**10-20**	**$20,925.00**	**$12,356.25**
090 Equipment				
Caravan Boiler Water Circulation	2	15	$7,500.00	$6,500.00
Caravan Boilers	7	20	$260,000.00	$169,000.00
Combustion Air Supply Fan	12	25	$12,000.00	$6,240.00
Condenser Water Circulation - Cooling Tower	4	17	$78,000.00	$59,647.06
Condenser Water Heat Exchanger	7	20	$60,000.00	$39,000.00
Cooling Tower	6	19	$225,000.00	$153,947.37
Cooling Tower - Water Treatment	2	15	$9,900.00	$8,580.00
Domestic Water Pumps	0	13	$30,000.00	$30,000.00
Elevator Cab Refurbish	7	20	$120,000.00	$78,000.00
Elevator Machine Room PTAC	2	15	$9,000.00	$7,800.00
Elevator Modernization	17	30	$900,000.00	$390,000.00
Emergency Ventilation - Corridor Exhaust	17	30	$9,000.00	$3,900.00
Emergency Ventilation - Stairwell Pressurization	17	30	$54,000.00	$23,400.00
Emergency Ventilation - Vestibule Exhaust	17	30	$9,000.00	$3,900.00
Emergency Ventilation - Vestibule Supply	17	30	$9,000.00	$3,900.00
Entrance Door Unit Intercom Access	4	17	$13,200.00	$10,094.12
Fire Alarm	7	20	$75,500.00	$49,075.00
Fire Communication Antenna	7	20	$37,500.00	$24,375.00
Fire Sprinkler - Main Pumps	7	20	$75,000.00	$48,750.00
Fire Sprinkler- Jockey Pumps	7	20	$18,000.00	$11,700.00
Garage Carbon Monoxide Detection	2	15	$8,250.00	$7,150.00
Garage Iron Gate - Actuator	5	18	$5,000.00	$3,611.11
Garage Iron Gate - Lower Garage Ramp	5	18	$7,400.00	$5,344.44
Garage Overhead Door - Fire Separation, Unfunded	n.a.	n.a.	$0.00	$0.00
Garage Overhead Door - Rytec Upper Garage	5	18	$13,000.00	$9,388.89
Garage Pump Station	7	20	$10,000.00	$6,500.00
Garage Ventilation - Exhaust	7	20	$16,000.00	$10,400.00

Boston Condominium Trust

Calculation of Percent Funded

Sorted by Category

	Remaining Life	Useful Life	Current Cost	Fully Funded Balance
Garage Ventilation - Supply	7	20	$2,500.00	$1,625.00
Generator - H	17	30	$90,000.00	$39,000.00
Generator - V	17	30	$120,000.00	$52,000.00
Grill - Courtyard	4	15	$2,500.00	$1,833.33
Heat Pump - Lobbies	7	20	$30,000.00	$19,500.00
Heat Pump Water Circulation	2	15	$74,400.00	$64,480.00
Rooftop Unit - Common Hallways	7	20	$100,000.00	$65,000.00
Surveillance System	5	18	$20,000.00	$14,444.44
Unit Heaters - Allowance	3	3	$3,000.00	$0.00
Ventilation - Roof Exhaust	7	20	$98,000.00	$63,700.00
Water Heater - Circulation	2	15	$7,500.00	$6,500.00
Water Heater - Main	2	15	$75,000.00	$65,000.00
Water Heater - Storage Tanks	9	10	$10,800.00	$1,080.00
Sub Total	**0-17**	**3-30**	**$2,704,950.00**	**$1,564,365.77**
Contingency	n.a.	n.a.	n.a.	$98,449.51
Total	**0-27**	**3-30**	**$5,633,509.50**	**$3,380,099.83**
Anticipated Reserve Balance				**$1,570,621.00**
Percent Funded				**46.47%**

Boston Condominium Trust

Management / Accounting Summary

Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
010 Roof				
Roof - Courtyard, Copper	$0.00	$27.91	$0.07	$27.97
Roof - Courtyard, Main	$0.00	$7,775.92	$17.82	$7,793.74
Roof - E	$0.00	$4,948.91	$11.35	$4,960.26
Roof - H	$155,772.50	$967.60	$45.50	$1,013.10
Roof - V	$115,106.64	$1,445.32	$35.29	$1,480.61
Roof Canopy- Lobby Entrance	$6,500.00	$40.38	$1.90	$42.28
Sub Total	**$277,379.14**	**$15,206.04**	**$111.93**	**$15,317.96**
020 Building Exterior				
Exterior Cladding - Copper Sealant Repairs	$0.00	$165.60	$0.38	$165.98
Exterior Cladding - Inspection	$6,000.00	$117.19	$0.27	$117.45
Exterior Cladding - Minor Repairs, Unfunded	$0.00	$0.00	$0.00	$0.00
Exterior Cladding - Steel Siding Painting	$145,849.60	$863.16	$42.50	$905.66
Exterior Doors - Courtyard	$0.00	$71.10	$0.16	$71.26
Exterior Iron Pedestrian Gates	$0.00	$24.28	$0.06	$24.33
Exterior Railings	$0.00	$235.56	$0.54	$236.10
Exterior Steel Doors	$0.00	$97.65	$0.23	$97.88
Exterior Windows - Common Storefront Areas	$0.00	$167.06	$0.38	$167.45
Fence - H Courtyard	$0.00	$50.07	$0.11	$50.18
Garage - Concrete Slab Protection, Unfunded	$0.00	$400.11	$0.91	$401.02
Lighting - Courtyard	$0.00	$22.56	$0.05	$22.61
Lighting - Garage	$0.00	$59.21	$0.13	$59.34
Lighting - Street & Exterior	$0.00	$252.14	$0.58	$252.72
Terrace Fencing - E	$0.00	$132.45	$0.30	$132.75
Terrace Fencing - H	$0.00	$54.99	$0.12	$55.11
Terrace Fencing - V	$0.00	$47.60	$0.10	$47.71
Sub Total	**$151,849.60**	**$2,760.72**	**$46.84**	**$2,807.55**
030 Building Interior				
Ceiling - Suspended, Hallways	$0.00	$155.55	$0.35	$155.90
Ceiling - Suspended, Parking Garage	$0.00	$82.43	$0.19	$82.62
Floor - Carpet	$42,344.00	$376.33	$12.63	$388.96
Floor - Tile	$0.00	$378.52	$0.87	$379.38
Interior Steel Doors	$0.00	$58.59	$0.13	$58.73
Lighting - Hallway Interiors	$0.00	$214.26	$0.49	$214.76
Lighting - Lobby Interiors	$0.00	$81.77	$0.19	$81.96

Boston Condominium Trust

Management / Accounting Summary

Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Lighting - Stairwells	$0.00	$81.22	$0.19	$81.41
Mailboxes	$0.00	$38.16	$0.09	$38.25
Signage Allowance	$0.00	$41.04	$0.10	$41.13
Stairwells - Unfunded	$0.00	$0.00	$0.00	$0.00
Sub Total	**$42,344.00**	**$1,507.87**	**$15.23**	**$1,523.09**
040 Furnishings				
Furnishings - Common Courtyard	$4,150.00	$55.99	$1.28	$57.27
Furnishings - Entrance Lobbies	$8,206.25	$50.97	$2.40	$53.37
Sub Total	**$12,356.25**	**$106.96**	**$3.68**	**$110.64**
090 Equipment				
Caravan Boiler Water Circulation	$6,500.00	$38.47	$1.89	$40.36
Caravan Boilers	$169,000.00	$1,049.77	$49.36	$1,099.12
Combustion Air Supply Fan	$0.00	$65.63	$0.15	$65.78
Condenser Water Circulation - Cooling Tower	$59,647.06	$359.91	$17.39	$377.31
Condenser Water Heat Exchanger	$39,000.00	$242.25	$11.39	$253.65
Cooling Tower	$153,947.37	$947.08	$44.95	$992.02
Cooling Tower - Water Treatment	$8,580.00	$50.78	$2.50	$53.28
Domestic Water Pumps	$30,000.00	$192.07	$0.44	$192.51
Elevator Cab Refurbish	$78,000.00	$484.51	$22.78	$507.28
Elevator Machine Room PTAC	$7,800.00	$46.16	$2.27	$48.43
Elevator Modernization	$0.00	$3,693.39	$8.46	$3,701.85
Emergency Ventilation - Corridor Exhaust	$0.00	$36.93	$0.09	$37.02
Emergency Ventilation - Stairwell Pressurization	$0.00	$221.60	$0.50	$222.11
Emergency Ventilation - Vestibule Exhaust	$0.00	$36.93	$0.09	$37.02
Emergency Ventilation - Vestibule Supply	$0.00	$36.93	$0.09	$37.02
Entrance Door Unit Intercom Access	$10,094.12	$60.91	$2.95	$63.86
Fire Alarm	$49,075.00	$304.84	$14.33	$319.17
Fire Communication Antenna	$24,375.00	$151.41	$7.12	$158.53
Fire Sprinkler - Main Pumps	$48,750.00	$302.82	$14.24	$317.05
Fire Sprinkler- Jockey Pumps	$11,700.00	$72.68	$3.41	$76.09
Garage Carbon Monoxide Detection	$7,150.00	$42.31	$2.08	$44.40
Garage Iron Gate - Actuator	$3,611.11	$22.00	$1.06	$23.06
Garage Iron Gate - Lower Garage Ramp	$5,344.44	$32.56	$1.56	$34.12
Garage Overhead Door - Fire Separation, Unfun	$0.00	$0.00	$0.00	$0.00
Garage Overhead Door - Rytec Upper Garage	$9,388.89	$57.20	$2.74	$59.94

Boston Condominium Trust

Management / Accounting Summary

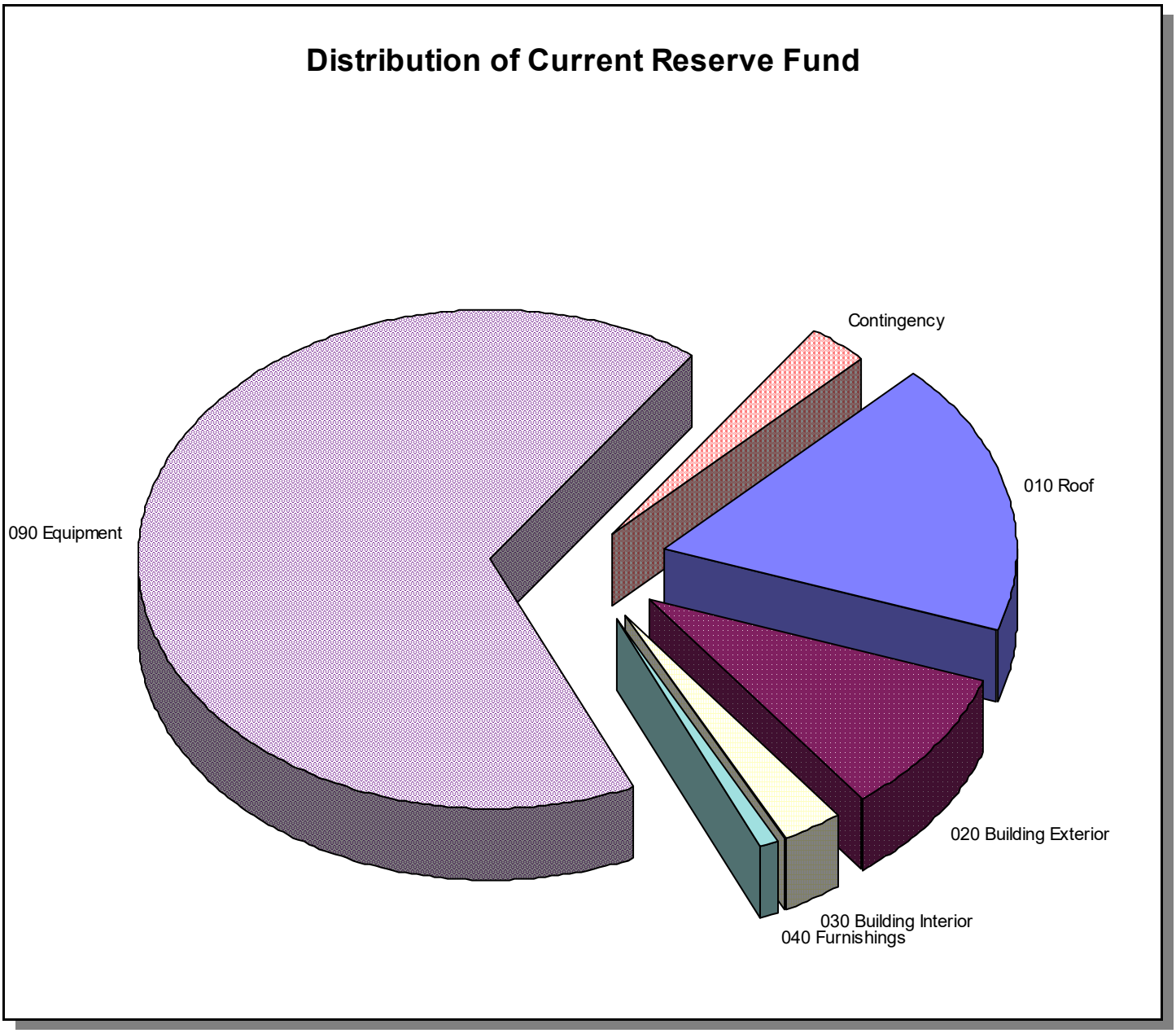
Directed Cash Flow Calculation Method; Sorted by Category

	Balance at Fiscal Year Beginning	Monthly Member Contribution	Monthly Interest Contribution	Total Monthly Contribution
Garage Pump Station	$6,500.00	$40.38	$1.90	$42.28
Garage Ventilation - Exhaust	$10,400.00	$64.60	$3.03	$67.63
Garage Ventilation - Supply	$1,625.00	$10.09	$0.48	$10.57
Generator - H	$0.00	$369.34	$0.85	$370.18
Generator - V	$0.00	$492.45	$1.13	$493.58
Grill - Courtyard	$1,833.33	$12.58	$0.54	$13.13
Heat Pump - Lobbies	$19,500.00	$121.13	$5.70	$126.82
Heat Pump Water Circulation	$64,480.00	$381.60	$18.79	$400.39
Rooftop Unit - Common Hallways	$65,000.00	$403.76	$18.98	$422.74
Surveillance System	$14,444.44	$88.01	$4.21	$92.22
Unit Heaters - Allowance	$0.00	$58.59	$0.13	$58.73
Ventilation - Roof Exhaust	$63,700.00	$395.68	$18.60	$414.28
Water Heater - Circulation	$6,500.00	$38.47	$1.89	$40.36
Water Heater - Main	$65,000.00	$384.68	$18.94	$403.62
Water Heater - Storage Tanks	$0.00	$75.87	$0.17	$76.05
Sub Total	**$1,040,945.77**	**$11,486.38**	**$307.20**	**$11,793.58**
Contingency	$45,746.24	$932.04	$14.85	$946.88
Total	**$1,570,621.00**	**$32,000.00**	**$499.70**	**$32,499.70**

Boston Condominium Trust

Management / Accounting Charts

Directed Cash Flow Calculation Method; Sorted by Category

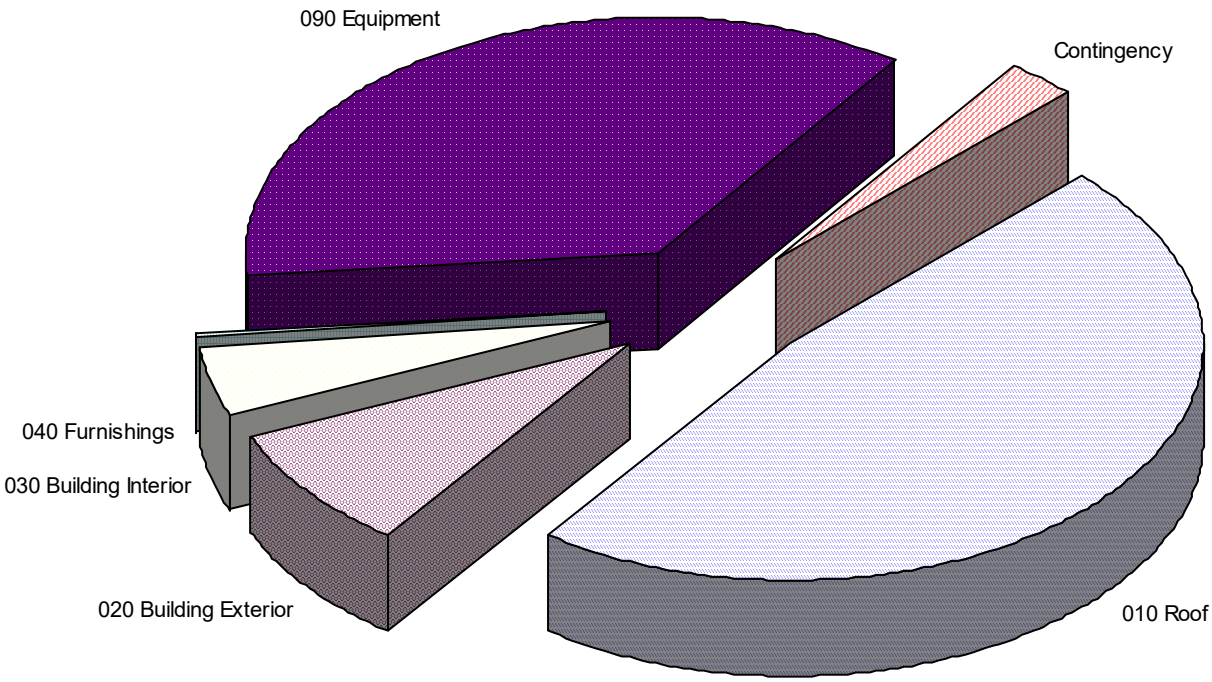


Boston Condominium Trust

Management / Accounting Charts

Directed Cash Flow Calculation Method; Sorted by Category

Monthly Member Contribution



Boston Condominium Trust

Annual Expenditure Detail

Sorted by Description

2019 Fiscal Year	
Domestic Water Pumps	$30,000.00
Exterior Cladding - Inspection	$6,000.00
Sub Total	**$36,000.00**
2021 Fiscal Year	
Caravan Boiler Water Circulation	$7,956.75
Cooling Tower - Water Treatment	$10,502.91
Elevator Machine Room PTAC	$9,548.10
Exterior Cladding - Steel Siding Painting	$178,536.74
Garage Carbon Monoxide Detection	$8,752.43
Heat Pump Water Circulation	$78,930.96
Water Heater - Circulation	$7,956.75
Water Heater - Main	$79,567.50
Sub Total	**$381,752.13**
2022 Fiscal Year	
Exterior Cladding - Inspection	$6,556.36
Exterior Steel Doors	$5,463.64
Interior Steel Doors	$3,278.18
Unit Heaters - Allowance	$3,278.18
Sub Total	**$18,576.36**
2023 Fiscal Year	
Condenser Water Circulation - Cooling Tower	$87,789.69
Entrance Door Unit Intercom Access	$14,856.72
Floor - Carpet	$71,487.82
Grill - Courtyard	$2,813.77
Sub Total	**$176,947.99**
2024 Fiscal Year	
Exterior Windows - Common Storefront Areas	$16,109.27
Furnishings - Common Courtyard	$9,621.97
Garage Iron Gate - Actuator	$5,796.37
Garage Iron Gate - Lower Garage Ramp	$8,578.63
Garage Overhead Door - Rytec Upper Garage	$15,070.56
Surveillance System	$23,185.48
Sub Total	**$78,362.29**
2025 Fiscal Year	
Cooling Tower	$268,661.77

Exterior Cladding - Inspection	$7,164.31
Exterior Steel Doors	$5,970.26
Interior Steel Doors	$3,582.16
Unit Heaters - Allowance	$3,582.16
Sub Total	**$288,960.66**

2026 Fiscal Year

Caravan Boilers	$319,767.21
Condenser Water Heat Exchanger	$73,792.43
Elevator Cab Refurbish	$147,584.86
Fire Alarm	$92,855.48
Fire Communication Antenna	$46,120.27
Fire Sprinkler - Main Pumps	$92,240.54
Fire Sprinkler- Jockey Pumps	$22,137.73
Furnishings - Entrance Lobbies	$15,527.16
Garage Pump Station	$12,298.74
Garage Ventilation - Exhaust	$19,677.98
Garage Ventilation - Supply	$3,074.68
Heat Pump - Lobbies	$36,896.22
Roof - Courtyard, Main	$1,085,732.65
Roof - E	$691,004.63
Roof - H	$294,739.27
Roof - V	$319,767.21
Roof Canopy- Lobby Entrance	$12,298.74
Rooftop Unit - Common Hallways	$122,987.39
Ventilation - Roof Exhaust	$120,527.64
Sub Total	**$3,529,030.82**

2028 Fiscal Year

Exterior Cladding - Inspection	$7,828.64
Exterior Steel Doors	$6,523.87
Interior Steel Doors	$3,914.32
Unit Heaters - Allowance	$3,914.32
Water Heater - Storage Tanks	$14,091.55
Sub Total	**$36,272.69**

2029 Fiscal Year

Domestic Water Pumps	$40,317.49
Exterior Windows - Common Storefront Areas	$18,675.06

Boston Condominium Trust

Annual Expenditure Detail

Sorted by Description

Sub Total	**$58,992.55**
2030 Fiscal Year	
Exterior Cladding - Copper Sealant Repairs	$38,896.97
Sub Total	**$38,896.97**
2031 Fiscal Year	
Ceiling - Suspended, Hallways	$40,548.64
Combustion Air Supply Fan	$17,109.13
Exterior Cladding - Inspection	$8,554.57
Exterior Doors - Courtyard	$18,534.89
Exterior Steel Doors	$7,128.80
Floor - Tile	$98,672.63
Garage Carbon Monoxide Detection	$11,762.53
Interior Steel Doors	$4,277.28
Lighting - Courtyard	$5,881.26
Lighting - Garage	$15,433.86
Lighting - Hallway Interiors	$55,854.18
Lighting - Lobby Interiors	$21,315.13
Lighting - Stairwells	$21,172.55
Lighting - Street & Exterior	$65,727.58
Unit Heaters - Allowance	$4,277.28
Sub Total	**$396,250.32**
2034 Fiscal Year	
Exterior Cladding - Inspection	$9,347.80
Exterior Steel Doors	$7,789.84
Exterior Windows - Common Storefront Areas	$21,649.52
Furnishings - Common Courtyard	$12,931.13
Interior Steel Doors	$4,673.90
Unit Heaters - Allowance	$4,673.90
Sub Total	**$61,066.09**
2035 Fiscal Year	
Floor - Carpet	$101,924.53
Sub Total	**$101,924.53**
2036 Fiscal Year	
Caravan Boiler Water Circulation	$12,396.36
Ceiling - Suspended, Parking Garage	$33,201.58

Boston Condominium Trust

Annual Expenditure Detail

Sorted by Description

Cooling Tower - Water Treatment	$16,363.19
Elevator Machine Room PTAC	$14,875.63
Elevator Modernization	$1,487,562.87
Emergency Ventilation - Corridor Exhaust	$14,875.63
Emergency Ventilation - Stairwell Pressurization	$89,253.77
Emergency Ventilation - Vestibule Exhaust	$14,875.63
Emergency Ventilation - Vestibule Supply	$14,875.63
Exterior Cladding - Steel Siding Painting	$278,154.42
Exterior Railings	$94,873.45
Fence - H Courtyard	$20,164.74
Generator - H	$148,756.29
Generator - V	$198,341.72
Heat Pump Water Circulation	$122,971.86
Mailboxes	$15,371.48
Roof - Courtyard, Copper	$11,239.36
Signage Allowance	$16,528.48
Surveillance System	$33,056.95
Terrace Fencing - E	$53,345.66
Terrace Fencing - H	$22,148.16
Terrace Fencing - V	$19,173.03
Water Heater - Circulation	$12,396.36
Water Heater - Main	$123,963.57
Sub Total	**$2,868,765.82**

2037 Fiscal Year

Cooling Tower	$383,047.44
Exterior Cladding - Inspection	$10,214.60
Exterior Steel Doors	$8,512.17
Interior Steel Doors	$5,107.30
Unit Heaters - Allowance	$5,107.30
Sub Total	**$411,988.80**

2038 Fiscal Year

Condenser Water Circulation - Cooling Tower	$136,773.47
Entrance Door Unit Intercom Access	$23,146.28
Grill - Courtyard	$4,383.77
Water Heater - Storage Tanks	$18,937.87
Sub Total	**$183,241.38**

Boston Condominium Trust

Annual Expenditure Detail

Sorted by Description

2039 Fiscal Year	
Domestic Water Pumps	$54,183.34
Exterior Windows - Common Storefront Areas	$25,097.72
Garage Iron Gate - Actuator	$9,030.56
Garage Iron Gate - Lower Garage Ramp	$13,365.22
Garage Overhead Door - Rytec Upper Garage	$23,479.45
Sub Total	**$125,156.28**
2040 Fiscal Year	
Exterior Cladding - Inspection	$11,161.77
Exterior Steel Doors	$9,301.47
Interior Steel Doors	$5,580.88
Unit Heaters - Allowance	$5,580.88
Sub Total	**$31,625.01**
2041 Fiscal Year	
Elevator Cab Refurbish	$229,932.41
Furnishings - Entrance Lobbies	$24,190.81
Garage Carbon Monoxide Detection	$15,807.85
Sub Total	**$269,931.07**
2043 Fiscal Year	
Exterior Cladding - Inspection	$12,196.76
Exterior Steel Doors	$10,163.97
Interior Steel Doors	$6,098.38
Unit Heaters - Allowance	$6,098.38
Sub Total	**$34,557.50**
2044 Fiscal Year	
Exterior Windows - Common Storefront Areas	$29,095.14
Furnishings - Common Courtyard	$17,378.36
Sub Total	**$46,473.49**
2045 Fiscal Year	
Exterior Cladding - Copper Sealant Repairs	$60,600.21
Sub Total	**$60,600.21**
2046 Fiscal Year	
Caravan Boilers	$577,535.14
Condenser Water Heat Exchanger	$133,277.34
Exterior Cladding - Inspection	$13,327.73

Boston Condominium Trust

Annual Expenditure Detail

Sorted by Description

Exterior Iron Pedestrian Gates	$18,547.76
Exterior Steel Doors	$11,106.45
Fire Alarm	$167,707.32
Fire Communication Antenna	$83,298.34
Fire Sprinkler - Main Pumps	$166,596.68
Fire Sprinkler- Jockey Pumps	$39,983.20
Garage Pump Station	$22,212.89
Garage Ventilation - Exhaust	$35,540.62
Garage Ventilation - Supply	$5,553.22
Heat Pump - Lobbies	$66,638.67
Interior Steel Doors	$6,663.87
Roof - E	$1,248,031.23
Roof - H	$532,331.91
Roof - V	$577,535.14
Roof Canopy- Lobby Entrance	$22,212.89
Rooftop Unit - Common Hallways	$222,128.90
Unit Heaters - Allowance	$6,663.87
Ventilation - Roof Exhaust	$217,686.32
Sub Total	**$4,174,579.49**
2047 Fiscal Year	
Floor - Carpet	$145,320.01
Sub Total	**$145,320.01**
2048 Fiscal Year	
Surveillance System	$47,131.31
Water Heater - Storage Tanks	$25,450.91
Sub Total	**$72,582.22**

Boston Condominium Trust

Projections

Directed Cash Flow Calculation Method

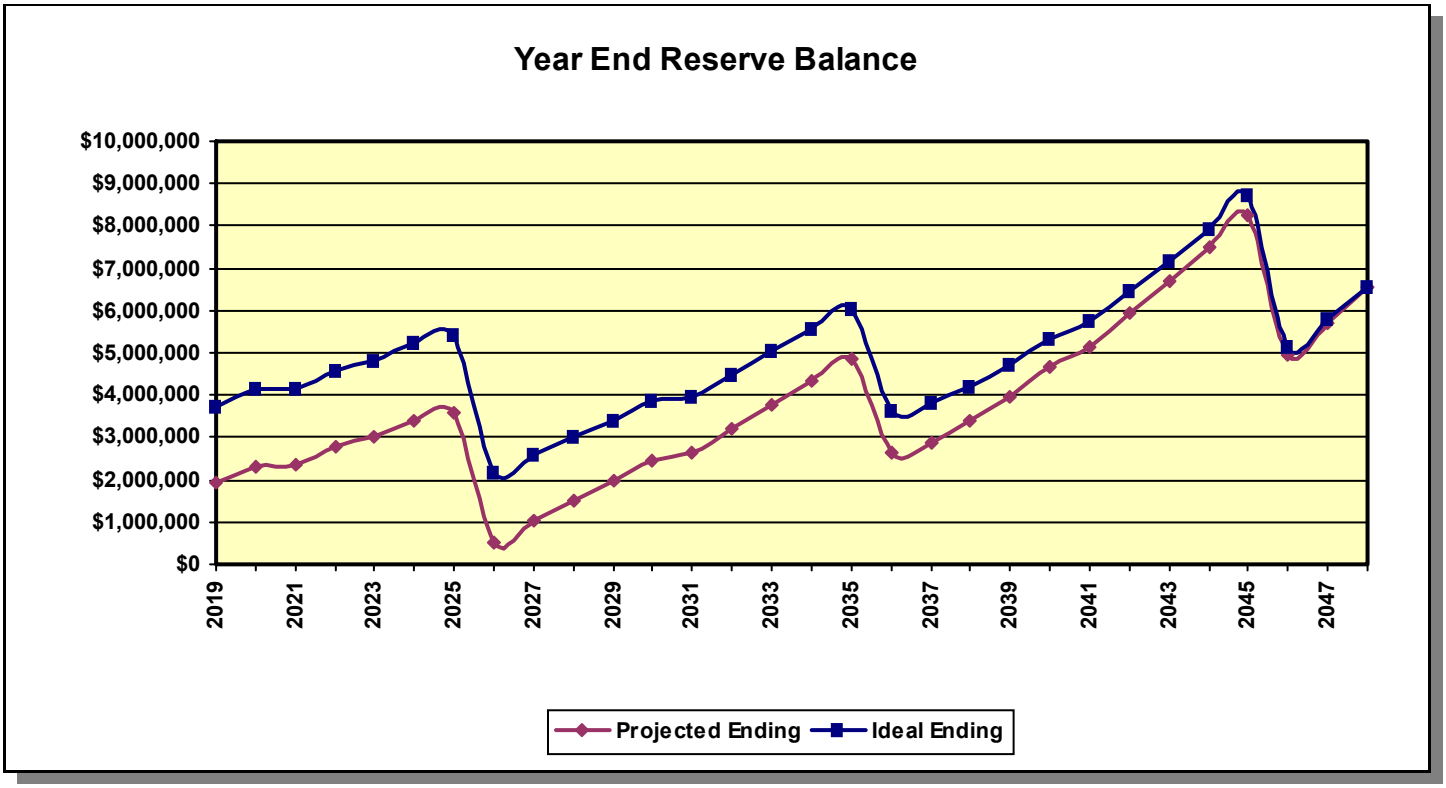
Fiscal Year	Beginning Balance	Member Contribution	Interest Contribution	Expenditures	Ending Balance	Fully Funded Ending Balance	Percent Funded
2019	$1,570,621	$384,000	$5,996	$36,000	$1,924,617	$3,725,713	52%
2020	$1,924,617	$395,520	$7,382	$0	$2,327,519	$4,128,359	56%
2021	$2,327,519	$407,386	$7,475	$381,752	$2,360,628	$4,147,119	57%
2022	$2,360,628	$419,607	$8,884	$18,576	$2,770,543	$4,560,733	61%
2023	$2,770,543	$432,195	$9,786	$176,948	$3,035,577	$4,828,859	63%
2024	$3,035,577	$445,161	$11,082	$78,362	$3,413,457	$5,220,221	65%
2025	$3,413,457	$458,516	$11,690	$288,961	$3,594,702	$5,418,539	66%
2026	$3,594,702	$472,272	$989	$3,529,031	$538,932	$2,179,550	25%
2027	$538,932	$486,440	$2,670	$0	$1,028,042	$2,597,613	40%
2028	$1,028,042	$501,033	$4,281	$36,273	$1,497,083	$3,000,317	50%
2029	$1,497,083	$516,064	$5,870	$58,993	$1,960,025	$3,401,896	58%
2030	$1,960,025	$531,546	$7,588	$38,897	$2,460,262	$3,848,066	64%
2031	$2,460,262	$547,492	$8,115	$396,250	$2,619,618	$3,940,826	66%
2032	$2,619,618	$563,917	$10,089	$0	$3,193,624	$4,468,682	71%
2033	$3,193,624	$580,834	$12,128	$0	$3,786,587	$5,024,663	75%
2034	$3,786,587	$598,259	$14,021	$61,066	$4,337,801	$5,545,196	78%
2035	$4,337,801	$616,207	$15,839	$101,925	$4,867,923	$6,051,035	80%
2036	$4,867,923	$634,693	$8,027	$2,868,766	$2,641,878	$3,650,136	72%
2037	$2,641,878	$653,734	$8,867	$411,989	$2,892,490	$3,797,436	76%
2038	$2,892,490	$673,346	$10,579	$183,241	$3,393,174	$4,206,079	81%
2039	$3,393,174	$693,547	$12,570	$125,156	$3,974,134	$4,703,278	84%
2040	$3,974,134	$714,353	$14,968	$31,625	$4,671,831	$5,329,734	88%
2041	$4,671,831	$735,784	$16,613	$269,931	$5,154,296	$5,737,732	90%
2042	$5,154,296	$757,857	$19,286	$0	$5,931,439	$6,460,374	92%
2043	$5,931,439	$780,593	$21,926	$34,557	$6,699,400	$7,184,549	93%
2044	$6,699,400	$804,011	$24,614	$46,473	$7,481,551	$7,934,818	94%
2045	$7,481,551	$828,131	$27,345	$60,600	$8,276,427	$8,710,129	95%
2046	$8,276,427	$852,975	$15,749	$4,174,579	$4,970,571	$5,162,225	96%
2047	$4,970,571	$878,564	$18,326	$145,320	$5,722,142	$5,801,114	99%
2048	$5,722,142	$904,921	$21,258	$72,582	$6,575,739	$6,555,483	100%

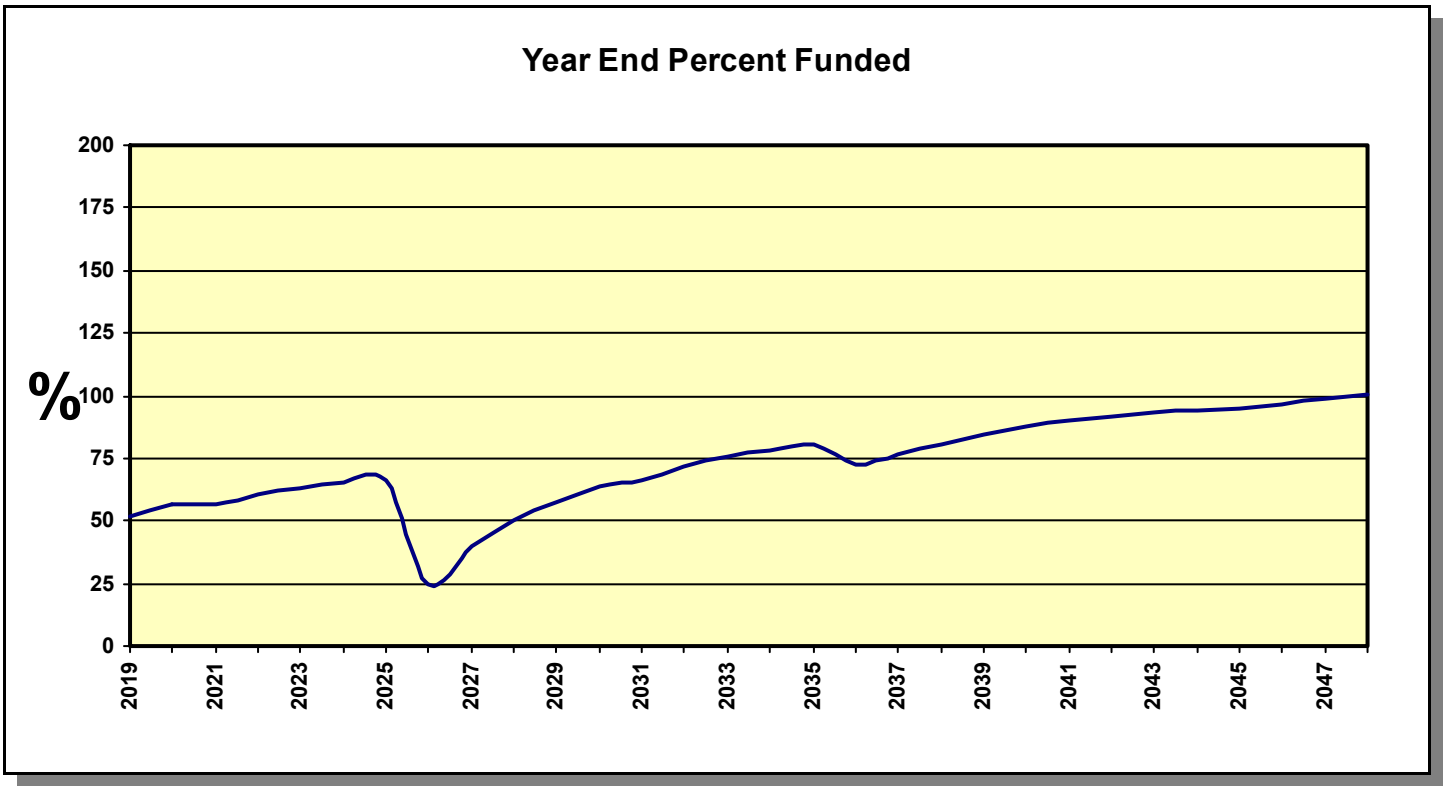
NOTE: In some cases, the projected Ending Balance may exceed the Fully Funded Ending Balance in years following high Expenditures. This is a result of the provision for contingency in this analysis, which in these projections is never expended. The contingency is continually adjusted according to need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

Boston Condominium Trust

Projection Charts

Directed Cash Flow Calculation Method

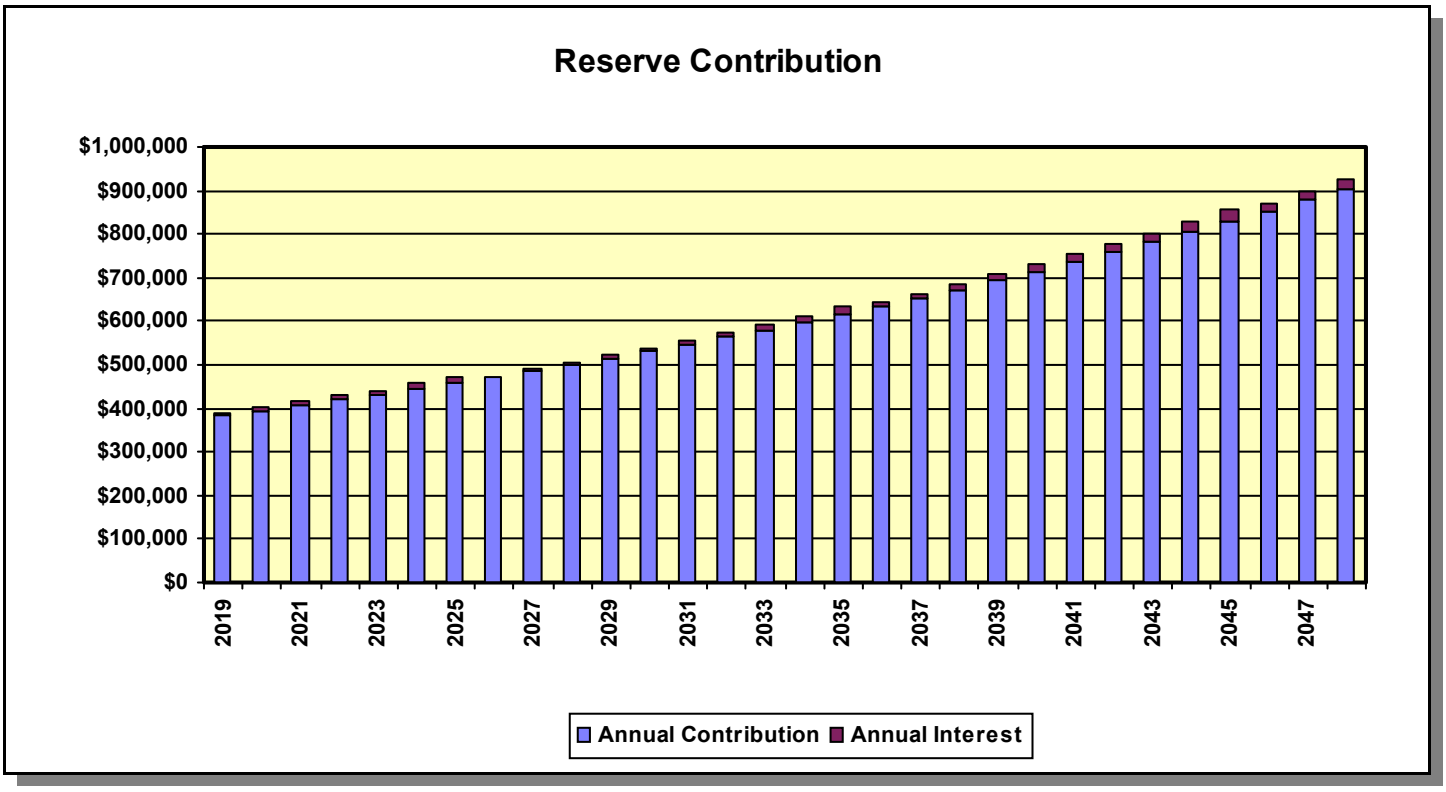


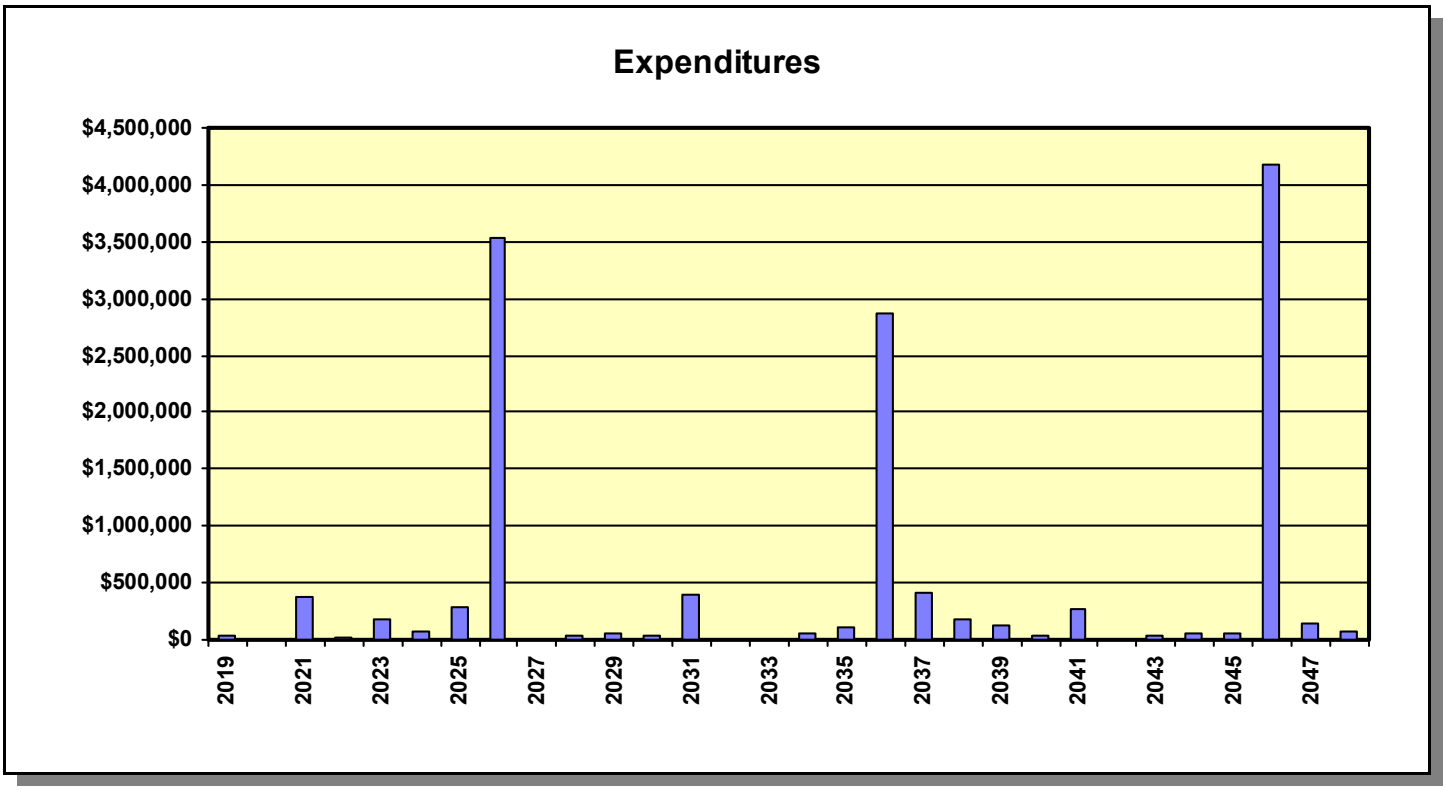


Boston Condominium Trust

Projection Charts

Directed Cash Flow Calculation Method





Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof - Courtyard, Copper

Category	010 Roof	Quantity	170 sq. ft.
Photo Date	May 2018	Unit Cost	$40.000
		% of Replacement	100.00%
		Current Cost	$6,800.00
Placed In Service	01/06	Future Cost	$11,239.36
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$27.91
Replacement Year	2036	Monthly Interest Contribution	$0.07
		Total Monthly Contribution	$27.97

Comments:

Component covers original copper roof installed on roof turret in 2005. Copper and seams were in good condition at site visit. No issues were reported by client.

Useful life is difficult to estimate without knowing weight and type of copper. With the effect of pollution, useful life could be as low as 30 years for 16 oz. soft copper. Component should be monitored and remaining life adjusted as needed.

Roofing contractor: Building Restoration Services 617-464-4260, Neil Rouleaux

The roof should be monitored/visually inspected twice a year (before and after winter). Any noted issues/damage should be addressed immediately to avoid further damage to the roofing system and/or interior of the building. If the roofing system becomes damaged or leaking issues occur, the Remaining Life of the roof should be adjusted accordingly.

Boston Condominium Trust

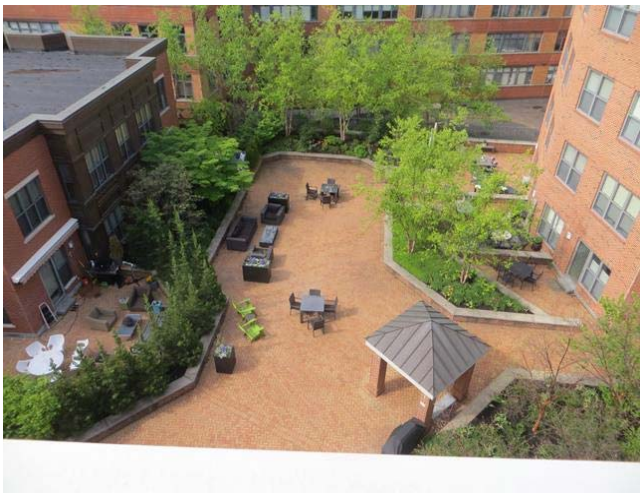
Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof - Courtyard, Main

Category	010 Roof	Quantity	11,035 sq. ft.
Photo Date	May 2018	Unit Cost	$80.000
		% of Replacement	100.00%
		Current Cost	$882,800.00
Placed In Service	01/06	Future Cost	$1,085,732.65
Useful Life	30		
Adjustment	-10	Assigned Reserves at FYB	$0.00
Remaining Life	7	Monthly Member Contribution	$7,775.92
Replacement Year	2026	Monthly Interest Contribution	$17.82
		Total Monthly Contribution	$7,793.74

Comments:



Component covers underground parking garage roof.

Roofing contractor: Building Restoration Services (BRS) 617-464-4260
Neil Rouleau, Building Envelope Specialist 617-852-4287

ARS did not perform any type of inspection of membrane roofing system because it is not accessible/visible. Expected Useful Life is based on industry standards. Life adjustment based on conversation with Neil Rouleau of BRS.

Per BRS report, construction from top down is:
- Brick pavers
- Thin layer of mastic to bond pavers
- Lightweight concrete topping slab ranging from 2" to 5" thick to provide pitch to drains
- Dimple/drainage board
- Waterproofing system Grace Perm-A-Barrier
- Structural concrete slab over steel deck

Operational Experience:
The roof over the parking garage has developed leaks over time. BRS has studied the leaks and prepared a report with recommendations in 2017. BRS performed a repair on a subset of the leaks in December 2017. Per Mr. Rouleau, the roof

will not likely reach its design life of 30 years. Roof was poorly installed in his opinion. Email from Mr. Rouleau to property manager in June 2017 budgets $750,000 for roof replacement. It is unclear exactly what scope this budget number covers. Current cost has been increased to reflect likely ancillary expenses.

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof - E

Category	010 Roof	Quantity	1 re-roof
Photo Date	May 2018	Unit Cost	$561,850.000
		% of Replacement	100.00%
		Current Cost	$561,850.00
Placed In Service	01/06	Future Cost	$691,004.63
Useful Life	20		
		Assigned Reserves at FYB	$0.00
Remaining Life	7	Monthly Member Contribution	$4,948.91
Replacement Year	2026	Monthly Interest Contribution	$11.35
		Total Monthly Contribution	$4,960.26

Comments:

Component covers EPDM roof membranes on all buildings that are about 2/3 through their useful life.

Emerson roof was in generally good condition on lower roofs. Upper roof had numerous patches near cooling tower due to damage from high heel shoes. No major issues noted. There were limited areas where air pressure from building has detached the fully adhered membrane. No current issues with roof per management.

Roof construction per drawings consists of structural concrete deck with 4" rigid insulation and fully adhered EPDM membrane.

Construction materials in roof terrace areas per drawings: terrace concrete pavers, protection mat, EPDM membrane, insulation boards, concrete deck. Visual inspection revealed that plastic feet are inserted between concrete pavers and protection mat.

Removal and reinstallation of pavers will be required. High strength/low asborbance pavers are typically used on roof terraces. Hanover Architectural Products is one manufacturer. These pavers usually have a long life and are simply removed for re-roofing and then reinstalled.

Roofing contractor: Building Restoration Services 617-464-4160 Neil Rouleaux
Mr. Rouleaux recommended budget cost to re-roof is about $30 per sq. ft. for this large discontinuous roof and $10 per

sq. ft. for paver removal an reinstallation.

Related items currently unfunded: Roof anchor points

upper roof	5,600	sq. ft.
6th floor roof incl bumpouts	4,605	sq. ft.
private roof terraces	1,750	sq. ft.
3rd flr roof outside private terraces	4,570	sq. ft.
3rd flr triangles (7) over bumpouts	70	sq. ft.
	16,595	sq. ft.

16,595	sq. ft. roof	@	$30.00	=	$497,850.00
6,400	sq. ft. terrace pavers remove & reset	@	$10.00	=	$64,000.00
			TOTAL	=	$561,850.00

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

The roof should be monitored/visual inspection twice a year: fall and early spring. Any issues/damage should be addressed immediately to avoid further damage to the roofing system and/or damage to the interior of the building. If the roofing system becomes damaged and/or leaking issues occur, the Remaining Life of the roof should be adjusted accordingly.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof - H

Category	010 Roof	Quantity	1 re-roof
Photo Date	May 2018	Unit Cost	$239,650.000
		% of Replacement	100.00%
		Current Cost	$239,650.00
Placed In Service	01/06	Future Cost	$294,739.27
Useful Life	20		
		Assigned Reserves at FYB	$155,772.50
Remaining Life	7	Monthly Member Contribution	$967.60
Replacement Year	2026	Monthly Interest Contribution	$45.50
		Total Monthly Contribution	$1,013.10

Comments:

Component covers EPDM roof membranes on all buildings that are about 2/3 through their useful life.

Hallet roof was in generally good condition. No major issues noted. There were limited areas where air pressure from building has detached the fully adhered membrane. No current issues with roof per management.

Roof construction per drawings consists of structural concrete deck with 4" rigid insulation and fully adhered EPDM membrane.

Construction materials in roof terrace areas per drawings: terrace concrete pavers, protection mat, EPDM membrane, insulation boards, concrete deck. Visual inspection revealed that plastic feet are inserted between concrete pavers and protection mat.

Removal and reinstallation of pavers will be required. High strength/low asborbance pavers are typically used on roof terraces. Hanover Architectural Products is one manufacturer. These pavers usually have a long life and are simply removed for re-roofing and then reinstalled.

Roofing contractor: Building Restoration Services 617-464-4160 Neil Rouleaux
Mr. Rouleaux recommended budget cost to re-roof is about $30 per sq. ft. for this large discontinuous roof and $10 per sq. ft. for paver removal an reinstallation.

Related items currently unfunded: Roof anchor points

main roof	6,800	sq. ft.
private roof terraces	460	sq. ft.
	7,260	sq. ft.

7,260	sq. ft. roof	@	$30.00	=	$217,800.00
2,185	sq. ft. terrace pavers remove & reset	@	$10.00	=	$21,850.00
			TOTAL	=	$239,650.00

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

The roof should be monitored/visual inspection twice a year: fall and early spring. Any issues/damage should be addressed immediately to avoid further damage to the roofing system and/or damage to the interior of the building. If the roofing system becomes damaged and/or leaking issues occur, the Remaining Life of the roof should be adjusted accordingly.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof - V

Category	010 Roof	Quantity	1 re-roof
Photo Date	May 2018	Unit Cost	$260,000.000
		% of Replacement	100.00%
		Current Cost	$260,000.00
Placed In Service	01/06	Future Cost	$319,767.21
Useful Life	20		
		Assigned Reserves at FYB	$115,106.64
Remaining Life	7	Monthly Member Contribution	$1,445.32
Replacement Year	2026	Monthly Interest Contribution	$35.29
		Total Monthly Contribution	$1,480.61

Comments:

Component covers EPDM roof membranes on all buildings that are about 2/3 through their useful life.

Vose roof was in generally good condition. No major issues noted. No current issues with roof per management.

Roof construction per drawings consists of structural concrete deck with 4" rigid insulation and fully adhered EPDM membrane.

Construction materials in roof terrace areas per drawings: terrace concrete pavers, protection mat, EPDM membrane, insulation boards, concrete deck. Visual inspection revealed that plastic feet are inserted between concrete pavers and protection mat.

Removal and reinstallation of pavers will be required. High strength/low asborbance pavers are typically used on roof terraces. Hanover Architectural Products is one manufacturer. These pavers usually have a long life and are simply removed for re-roofing and then reinstalled.

Roofing contractor: Building Restoration Services 617-464-4160 Neil Rouleaux
Mr. Rouleaux recommended budget cost to re-roof is about $30 per sq. ft. for this large discontinuous roof and $10 per sq. ft. for paver removal an reinstallation.

Related items currently unfunded: Roof anchor points

main roof	5,020	sq. ft.
private roof terraces	2,250	sq. ft.
	7,270	sq. ft.

7,270	sq. ft. roof	@	$30.00	=	$218,100.00
4,190	sq. ft. terrace pavers remove & reset	@	$10.00	=	$41,900.00
			TOTAL	=	$260,000.00

In order to ensure a high quality installation, the client may wish to obtain the services of an independent roofing consultant to work with the client and the roofing contractor providing installation. Consultants are available for the preparation of installation specifications and, if desired, to work with the contractor during the installation process. Fees for these services vary based on the size of the project and detail required by the client, and have not been included in the cost used for this component. Should the client desire, a provision for a consultant can be incorporated into this analysis.

The roof should be monitored/visual inspection twice a year: fall and early spring. Any issues/damage should be addressed immediately to avoid further damage to the roofing system and/or damage to the interior of the building. If the roofing system becomes damaged and/or leaking issues occur, the Remaining Life of the roof should be adjusted accordingly.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Roof Canopy- Lobby Entrance

Category	010 Roof	Quantity	2 canopies
Photo Date	May 2018	Unit Cost	$5,000.000
		% of Replacement	100.00%
		Current Cost	$10,000.00
Placed In Service	01/06	Future Cost	$12,298.74
Useful Life	20		
		Assigned Reserves at FYB	$6,500.00
Remaining Life	7	Monthly Member Contribution	$40.38
Replacement Year	2026	Monthly Interest Contribution	$1.90
		Total Monthly Contribution	$42.28

Comments:

Component covers glass canopies at entrance to E and H lobbies. No issues reported by client. Pricing from similar associations.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Cladding - Copper Sealant Repairs

Category	020 Building Exterior	Quantity	1 repair
Photo Date	May 2018	Unit Cost	$28,100.000
		% of Replacement	100.00%
		Current Cost	$28,100.00
Placed In Service	01/15	Future Cost	$38,896.97
Useful Life	15		
		Assigned Reserves at FYB	$0.00
Remaining Life	11	Monthly Member Contribution	$165.60
Replacement Year	2030	Monthly Interest Contribution	$0.38
		Total Monthly Contribution	$165.98

Comments:

Component covers sealants between copper and adjacent materials.

Service contractor: Seal-Tight Caulking & Masonry 781-492-0002
Rick Antonelllis, BESI certified Level 2 building envelope inspector MA-0263

Significant prior work on exterior cladding involved repair of failed sealant between copper siding and adjacent materials. In 2015, Seal-Tight Caulking and Masonry repaired copper sealant seams for $25,000 per client. Per Rick at Seal-Tight, initial sealant was polyurethane 2-part that may not have been mixed properly based on appearance and quick failure. Sealant was cleaned off surfaces and replaced with primer & Pecora silicone sealant. Expected life is 15-20 years.

Condition of exterior building cladding appeared good during site visits. No specific current issues were noted. Inflation at 3% added to sealant repair cost in 2015 to establish current cost.

Approximate copper siding areas of buildings:

E copper siding area	3,715	sq. ft.
H copper siding area	3,440	sq. ft.
	7,155	sq. ft.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Cladding - Inspection

Category	020 Building Exterior	Quantity	1 inspection
Photo Date	May 2018	Unit Cost	$6,000.000
		% of Replacement	100.00%
		Current Cost	$6,000.00
Placed In Service	01/16	Future Cost	$6,556.36
Useful Life	3		
		Assigned Reserves at FYB	$6,000.00
Remaining Life	0	Monthly Member Contribution	$117.19
Replacement Year	2019	Monthly Interest Contribution	$0.27
		Total Monthly Contribution	$117.45

Comments:

Component covers visual exterior inspection of all buildings and garage every 3 years. Inspections can spot minor issues before they become major and create an organized plan for more major repairs. Detailed inspection will also yield information on painting schedule need for steel siding on buildings.

Service contractor: Seal-Tight Caulking & Masonry 781-492-0002
Rick Antonelllis, BESI certified Level 2 building envelope inspector, MA-0263
Per Mr. Antonellis, inspections for the three buildings would take about 2 days per building at $1000 per day. Areas examined would include exterior walls, roofs, and garage.

Exterior cladding maintenance mainly involves caulking windows and other penetrations with a quality joint sealant. Exterior should be monitored for leaks and minor issues addressed. As issues become more prevalent on an elevation or building, the entire elevation/building should be addressed.

Exterior Cladding - Minor Repairs, Unfunded

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$0.000
		% of Replacement	100.00%
		Current Cost	$0.00
Placed In Service	01/06	Future Cost	$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	$0.00
Remaining Life	n.a.	Monthly Member Contribution	$0.00
Replacement Year	n.a.	Monthly Interest Contribution	$0.00
		Total Monthly Contribution	$0.00

Comments:

Reserve component is unfunded. If large specific repairs are perfomed in the future components can be added similar to the sealants for copper and steel areas.

Condition of exterior building cladding appeared good during site visits. No specific current issues were noted. Currently the association is spending about $15,000 annually from operating budget on cladding maintenance. Currently it is assumed that this budget will cover minor brick repointing that may be encountered. A separate brick component can be added as the building ages.

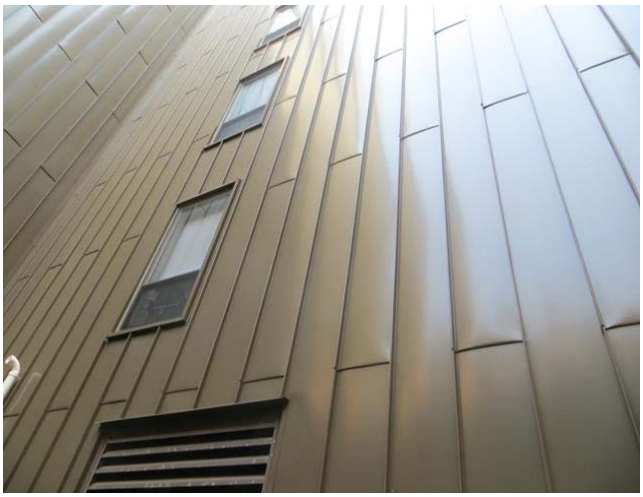
Service contractor 1: Seal-Tight Caulking & Masonry 781-492-0002
Rick Antonelllis, BESI certified Level 2 building envelope inspector MA-0263
Service contractor 2: Building Restoration Services 617-464-4260
Neil Rouleaux

Exterior cladding maintenance mainly involves caulking windows and other penetrations with a quality joint sealant. Exterior should be monitored for leaks and minor issues addressed. As issues become more prevalent on an elevation or building, the entire elevation/building should be addressed.

Exterior Cladding - Steel Siding Painting

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$168,288.000
		% of Replacement	100.00%
		Current Cost	$168,288.00
Placed In Service	01/06	Future Cost	$178,536.74
Useful Life	15		
		Assigned Reserves at FYB	$145,849.60
Remaining Life	2	Monthly Member Contribution	$863.16
Replacement Year	2021	Monthly Interest Contribution	$42.50
		Total Monthly Contribution	$905.66

Comments:



Component covers painting of steel siding and trim areas of all buildings with brush and roll method.

Condition of exterior building cladding appeared good during site visits. No specific current issues were noted. Currently the association is spending about $15,000 annually from operating budget on cladding maintenance.

Envelope contractor: Building Restoration Services (BRS) 617-464-4260
Neil Rouleau, Building Envelope Specialist 617-852-4287

Mr. Rouleau stated that steel siding repainting interval is typically 15-20 years. Paint can begin to fail in this time frame and corrosion can start at panel edges. He recommended researching electrostatic painting.

Painting contractor: W. T. Kenney Co. Arlington, MA 781-643-2105
Brian Jurgens, Senior Vice President
Mr. Jurgens does not recommend electrostatic painting because of cost and the fact that most surfaces will not be seen well due to heights. Based on ARS area calculations, cost of painting is about $3.60 per sq. ft. per W. T. Kenney budget pricing.

E steel siding areas	8,480	sq. ft.
H steel siding areas	13,670	sq. ft.

	V steel siding areas		7,930	sq. ft.	
			30,080	sq. ft.	
30,080	sq. ft. steel siding paint area	@	$3.60	=	$108,288.00
3	scaffolding & aerial lift allowance	@	$20,000.00	=	$60,000.00
			TOTAL	=	$168,288.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Doors - Courtyard

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$13,000.000
		% of Replacement	100.00%
		Current Cost	$13,000.00
Placed In Service	01/06	Future Cost	$18,534.89
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$71.10
Replacement Year	2031	Monthly Interest Contribution	$0.16
		Total Monthly Contribution	$71.26

Comments:

Component represents high use exterior common doors to courtyard over parking garage. Doors were in good condition during site visits and no problems were reported by client. Doors will need periodic painting and replacement of wear items (hinges, handles, etc.) to achieve useful life.

1	full view steel dbl, 72" x 84"	@	$5,000.00	=	$5,000.00
1	full view steel, 36" x 84"	@	$3,000.00	=	$3,000.00
1	full view steel dbl, 36" x 84" w/sidelight&transom	@	$5,000.00	=	$5,000.00
			TOTAL	=	$13,000.00

Boston Condominium Trust

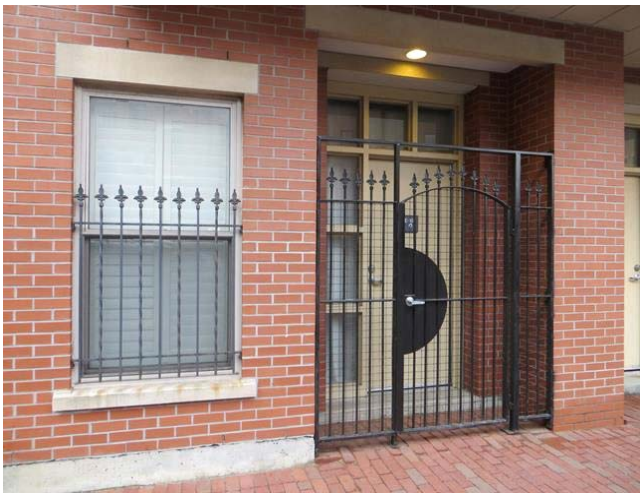
Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Iron Pedestrian Gates

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$8,350.000
		% of Replacement	100.00%
		Current Cost	$8,350.00
Placed In Service	01/16	Future Cost	$18,547.76
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	27	Monthly Member Contribution	$24.28
Replacement Year	2046	Monthly Interest Contribution	$0.06
		Total Monthly Contribution	$24.33

Comments:



Component covers steel pedestrian gates at three townhouse entry doors and stairwell exit on __ Street. Gates at townhouses were added in improve security in 2016 for $6000 per client. Gates were in good condition during site visits. Townhouse gate and fixed section measure approximately 76" x 84" tall. Stair exit gate measures 42"x84" tall. Regular painting/maintenance will insure gates achieve their useful life. Placed-in-service date set at 2016 for all gates. Stair gate will get low usage.

Grates covering windows are unit owner responsibility per property manager.

3	townhouse gates	@	$2,200.00	=	$6,600.00
1	exit stair gate	@	$1,750.00	=	$1,750.00
			TOTAL	=	$8,350.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Railings

Category	020 Building Exterior	Quantity	287 lin. ft.
Photo Date	May 2018	Unit Cost	$200.000
		% of Replacement	100.00%
		Current Cost	$57,400.00
Placed In Service	01/06	Future Cost	$94,873.45
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$235.56
Replacement Year	2036	Monthly Interest Contribution	$0.54
		Total Monthly Contribution	$236.10

Comments:

Component covers painted galvanized railings at courtyard and roof terraces. Unpainted galvanized elevator machine room railings and stairs are currently unfunded.

Railings are original to building and were in generally good condition during site visits. Regular maintenance will insure railings achieve their useful life. Chain link fences between roof terraces are listed separately.

Pricing obtained from similar railings in Boston. Material for new rail replacement is galvanized steel. Solid 3/4" balusters. Logan Grate, Inc., fabrication and installation contractor, anticipates a Useful Life of 30 years for new railing/fencing with proper maintenance. Galvanized coating will protect iron fence if coating not damaged.

courtyard railings	190	lin. ft.
roof terrace railings, Emerson 4th floor	97	lin. ft.
	287	lin. ft.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Steel Doors

Category	020 Building Exterior	Quantity	1 repair allowance
Photo Date	May 2018	Unit Cost	$5,000.000
		% of Replacement	100.00%
		Current Cost	$5,000.00
Placed In Service	01/19	Future Cost	$5,463.64
Useful Life	3		
		Assigned Reserves at FYB	$0.00
Remaining Life	3	Monthly Member Contribution	$97.65
Replacement Year	2022	Monthly Interest Contribution	$0.23
		Total Monthly Contribution	$97.88

Comments:

Component covers exterior common steel doors in all three buildings. Allowance covers repairs to hinges and handles on three year interval. With proper maintenance, doors should last indefinitely. Consistent painting is critical to prevent corrosion. Many of these doors receive low use.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Exterior Windows - Common Storefront Areas

Category	020 Building Exterior	Quantity	1,158 sq. ft.
Photo Date	May 2018	Unit Cost	$60.000
		% of Replacement	20.00%
		Current Cost	$13,896.00
Placed In Service	01/19	Future Cost	$16,109.27
Useful Life	5		
		Assigned Reserves at FYB	$0.00
Remaining Life	5	Monthly Member Contribution	$167.06
Replacement Year	2024	Monthly Interest Contribution	$0.38
		Total Monthly Contribution	$167.45

Comments:

Component represents exterior common storefront lobby window/door areas for all buildings on first floor. Commercial units on first floor are excluded. Windows and doors were in good condition during site visits and no problems were reported by client. Component is for replacement of 20% of windows/doors on 5-year interval.

E common exterior windows	424	sq. ft.
H common exterior windows	481	sq. ft.
V common exterior windows	253	sq. ft.
	1,158	sq. ft.

Average cost for replacement glass is about $60 per sq. ft. Budget covers replacement of 20% of window/doors on 5 year interval. Budget for window replacements should be monitored and adjusted as the association gains more experience with this component.

1	window glass	@	$50.00	=	$50.00
1	labor allowance	@	$10.00	=	$10.00
			TOTAL	=	$60.00

Fence - H Courtyard

Category	020 Building Exterior	Quantity	61 lin. ft.
Photo Date	May 2018	Unit Cost	$200.000
		% of Replacement	100.00%
		Current Cost	$12,200.00
Placed In Service	01/06	Future Cost	$20,164.74
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$50.07
Replacement Year	2036	Monthly Interest Contribution	$0.11
		Total Monthly Contribution	$50.18

Comments:

Component covers painted 42" tall black picket fence at H courtyard sides. Fence integrates with existing fence surrounding adjacent parking lot not owned by the association.

Railings are original to building and were in generally good condition during site visits. Some evidence of corrosion was evident and should be addressed. Regular maintenance will insure railings achieve their useful life. Chain link fences between roof terraces are listed separately.

Pricing obtained from similar railings in Boston. Material for new rail replacement is galvanized steel. Solid 3/4" balusters. Logan Grate, Inc., fabrication and installation contractor, anticipates a Useful Life of 30 years for new railing/fencing with proper maintenance. Galvanized coating will protect iron fence if coating not damaged.

Boston Condominium Trust

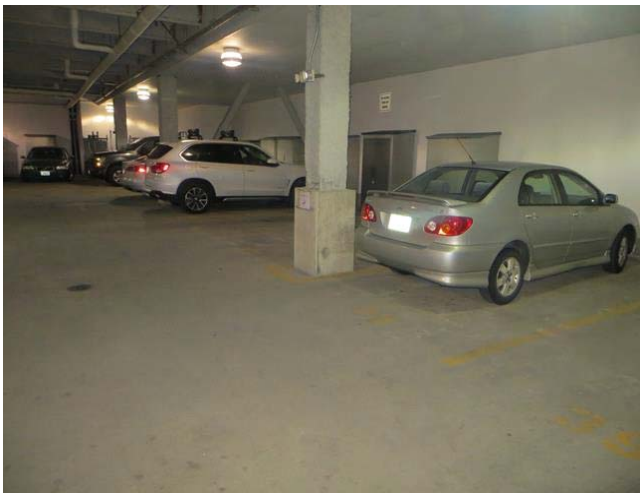
Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Garage - Concrete Slab Protection, Unfunded

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$243,450.000
		% of Replacement	100.00%
		Current Cost	$243,450.00
Placed In Service	01/06	Future Cost	$3,093,222.09
Useful Life	n.a.		
		Assigned Reserves at FYB	$0.00
Remaining Life	n.a.	Monthly Member Contribution	$400.11
Replacement Year	n.a.	Monthly Interest Contribution	$0.91
		Total Monthly Contribution	$401.02

Comments:



Per client, garage slabs have been sealed with penetrating sealer. Application is on annual basis from operating budget.

Currently unfunded component covers re-conditioning and sealing of concrete garage floor surfaces. Component does not include complete replacement of concrete. Occasional repairs should be addressed by operating budget on as-needed basis. Floors were in good condition at site visit.

Water and deicing chemicals tracked in by vehicles will damage concrete garage slab. It is recommended that funding for this component be added after a recommendation by a qualified consultant. Recommendation should include timing of slab treatments and locations treated. Pricing obtained from similar association. Association may contact Walker Restoration Consultants, Boston, MA 617-350-5040 or similar consultant to determine if coating parking garage floor is recommended to reduce corrosion and extend service life.

47,690	re-condition concrete surface	@	$5.00	=	$238,450.00
1	re-stripe lines	@	$5,000.00	=	$5,000.00
			TOTAL	=	$243,450.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Courtyard

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$4,125.000
		% of Replacement	100.00%
		Current Cost	$4,125.00
Placed In Service	01/06	Future Cost	$5,881.26
Useful Life	20		
Adjustment	+5	Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$22.56
Replacement Year	2031	Monthly Interest Contribution	$0.05
		Total Monthly Contribution	$22.61

Comments:

Component covers roof courtyard lighting. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

The remaining life of this component has been extended due to its condition at our most recent site visit.

16	decorative wall lights	@	$250.00	=	$4,000.00
1	ceiling LED	@	$125.00	=	$125.00
			TOTAL	=	$4,125.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Garage

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$10,825.000
		% of Replacement	100.00%
		Current Cost	$10,825.00
Placed In Service	01/06	Future Cost	$15,433.86
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$59.21
Replacement Year	2031	Monthly Interest Contribution	$0.13
		Total Monthly Contribution	$59.34

Comments:

Component covers garage lighting. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

40	cylindrical ceiling lights	@	$150.00	=	$6,000.00
18	wall lights	@	$125.00	=	$2,250.00
14	emergency lights	@	$125.00	=	$1,750.00
11	exit light	@	$75.00	=	$825.00
			TOTAL	=	$10,825.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Street & Exterior

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$46,100.000
		% of Replacement	100.00%
		Current Cost	$46,100.00
Placed In Service	01/06	Future Cost	$65,727.58
Useful Life	20		
Adjustment	+5	Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$252.14
Replacement Year	2031	Monthly Interest Contribution	$0.58
		Total Monthly Contribution	$252.72

Comments:

Component covers sidewalk street poles, recessed, and wall-mounted lighting. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

The remaining life of this component has been extended due to its condition at our most recent site visit.

8	street single post lights, Emerson & Hallet	@	$4,000.00	=	$32,000.00
2	street double post lights, Vose	@	$4,500.00	=	$9,000.00
8	wall lights, Emerson & Hallet	@	$200.00	=	$1,600.00
4	decorative sconce light, Emerson & Hallet	@	$500.00	=	$2,000.00
12	recessed lights	@	$125.00	=	$1,500.00
			TOTAL	=	$46,100.00

Terrace Fencing - E

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$32,275.000
		% of Replacement	100.00%
		Current Cost	$32,275.00
Placed In Service	01/06	Future Cost	$53,345.66
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$132.45
Replacement Year	2036	Monthly Interest Contribution	$0.30
		Total Monthly Contribution	$132.75

Comments:

Component covers beige painted galvanized fencing at roof terraces.

Fencing is original to building and was in generally functional condition during site visits. Extensive areas of peeling paint were evident on top fence rails and top of chain link mesh. This is currently an aesthetic issue. Steel railings at roof terraces are listed separately.

605	ln. ft. 60" tall chain link fencing	@	$35.00	=	$21,175.00
370	ln. ft. 42" tall chain link fencing	@	$30.00	=	$11,100.00
			TOTAL	=	$32,275.00

Terrace Fencing - H

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$13,400.000
		% of Replacement	100.00%
		Current Cost	$13,400.00
Placed In Service	01/06	Future Cost	$22,148.16
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$54.99
Replacement Year	2036	Monthly Interest Contribution	$0.12
		Total Monthly Contribution	$55.11

Comments:

Component covers black painted galvanized fencing at H roof terraces.

Fencing is original to building and was in generally functional condition during site visits. Extensive areas of peeling paint were evident on top fence rails and top of chain link mesh. This is currently an aesthetic issue. Steel railings at roof terraces are listed separately.

100	ln. ft. 60" tall chain link fencing	@	$35.00	=	$3,500.00
330	ln. ft. 42" tall chain link fencing	@	$30.00	=	$9,900.00
			TOTAL	=	$13,400.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Terrace Fencing - V

Category	020 Building Exterior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$11,600.000
		% of Replacement	100.00%
		Current Cost	$11,600.00
Placed In Service	01/06	Future Cost	$19,173.03
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$47.60
Replacement Year	2036	Monthly Interest Contribution	$0.10
		Total Monthly Contribution	$47.71

Comments:

Component covers green painted galvanized fencing at V roof terraces. 60 in. tall fences have green vinyl privacy slats.

Fencing is original to building and was in generally functional condition during site visits. Some areas of peeling paint were evident on top fence rails and top of chain link mesh. This is currently an aesthetic issue. Steel railings at roof terraces are listed separately.

200	ln. ft. 72" tall fencing w/privacy slats	@	$40.00	=	$8,000.00
120	ln. ft. 42" tall chain link fencing	@	$30.00	=	$3,600.00
			TOTAL	=	$11,600.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Ceiling - Suspended, Hallways

Category	030 Building Interior	Quantity	9,480 sq. ft.
Photo Date	May 2018	Unit Cost	$3.000
		% of Replacement	100.00%
		Current Cost	$28,440.00
Placed In Service	01/06	Future Cost	$40,548.64
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$155.55
Replacement Year	2031	Monthly Interest Contribution	$0.35
		Total Monthly Contribution	$155.90

Comments:

Component covers replacement of suspended ceilings in hallway areas. Minor repairs of specific damage should be covered by operating budget.

E ceiling areas	4,450	sq. ft.
H ceiling areas	2,850	sq. ft.
V ceiling areas	2,180	sq. ft.
	9,480	sq. ft.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Ceiling - Suspended, Parking Garage

Category	030 Building Interior	Quantity	8,035 sq. ft.
Photo Date	May 2018	Unit Cost	$2.500
		% of Replacement	100.00%
		Current Cost	$20,087.50
Placed In Service	01/06	Future Cost	$33,201.58
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$82.43
Replacement Year	2036	Monthly Interest Contribution	$0.19
		Total Monthly Contribution	$82.62

Comments:

Component covers replacement of suspended ceilings in parking garage areas. Minor repairs of specific damage should be covered by operating budget. Ceilings in garage are in generally good condition, but there were areas of water damage to tile from courtyard leaks. Ceiling tiles must be maintained carefully because they are part of the fire protection system for the building.

upper garage ceiling areas	6,762	sq. ft.
lower garage ramp ceiling	1,273	sq. ft.
	8,035	sq. ft.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Floor - Carpet

Category	030 Building Interior	Quantity	9,480 sq. ft.
Photo Date	May 2018	Unit Cost	$6.700
		% of Replacement	100.00%
		Current Cost	$63,516.00
Placed In Service	01/11	Future Cost	$71,487.82
Useful Life	12		
		Assigned Reserves at FYB	$42,344.00
Remaining Life	4	Monthly Member Contribution	$376.33
Replacement Year	2023	Monthly Interest Contribution	$12.63
		Total Monthly Contribution	$388.96

Comments:

Component covers all association carpet and vinyl baseboard in unit hallways and garage lobby.

Carpet in hallways is in generally good condition and will likely have a remaining life of 3-5 years. Original carpet was replaced with Bigelow Milan Square carpet in 2011 for a total cost of $50,000 per client ($5.27 per sq. ft.). Inflation added through 2018 for current cost per sq. ft.

E carpet areas (incl garage elevator lobby)	4,450	sq. ft.
H carpet areas	2,850	sq. ft.
V carpet areas	2,180	sq. ft.
	9,480	sq. ft.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Floor - Tile

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$69,207.000
		% of Replacement	100.00%
		Current Cost	$69,207.00
Placed In Service	01/06	Future Cost	$98,672.63
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$378.52
Replacement Year	2031	Monthly Interest Contribution	$0.87
		Total Monthly Contribution	$379.38

Comments:

Component covers tile floors and walls in building lobbies. No loose or cracked tiles were observed. Removal of existing tile is difficult to estimate. Cost of materials chosen to replace the current tile can also vary widely.

991	sq. ft. tile in lobby E	@	$17.00	=	$16,847.00
895	sq. ft. tile in lobby H	@	$17.00	=	$15,215.00
2,185	sq. ft. tile in lobby V	@	$17.00	=	$37,145.00
			TOTAL	=	$69,207.00

Interior Steel Doors

Category	030 Building Interior	Quantity	1 repair allowance
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$3,000.00
Placed In Service	01/19	Future Cost	$3,278.18
Useful Life	3		
		Assigned Reserves at FYB	$0.00
Remaining Life	3	Monthly Member Contribution	$58.59
Replacement Year	2022	Monthly Interest Contribution	$0.13
		Total Monthly Contribution	$58.73

Comments:

Component covers interior common steel doors in all three buildings. Allowance covers repairs to hinges and handles on three year interval. With proper maintenance, doors should last indefinitely. Many doors receive very low use.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Hallway Interiors

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$39,175.000
		% of Replacement	100.00%
		Current Cost	$39,175.00
Placed In Service	01/06	Future Cost	$55,854.18
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$214.26
Replacement Year	2031	Monthly Interest Contribution	$0.49
		Total Monthly Contribution	$214.76

Comments:

Component covers interior hallway area lighting in all three buildings. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

171	recessed lights	@	$125.00	=	$21,375.00
137	decorative sconce	@	$125.00	=	$17,125.00
71	exit lights	@	$75.00	=	$5,325.00
			TOTAL	=	$43,825.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Lobby Interiors

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$14,950.000
		% of Replacement	100.00%
		Current Cost	$14,950.00
Placed In Service	01/06	Future Cost	$21,315.13
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$81.77
Replacement Year	2031	Monthly Interest Contribution	$0.19
		Total Monthly Contribution	$81.96

Comments:

Component covers interior lobby area lighting in all three buildings. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

80	recessed lights	@	$125.00	=	$10,000.00
15	decorative sconce	@	$125.00	=	$1,875.00
8	decorative hanging fixture	@	$300.00	=	$2,400.00
9	exit lights	@	$75.00	=	$675.00
			TOTAL	=	$14,950.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Lighting - Stairwells

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$14,850.000
		% of Replacement	100.00%
		Current Cost	$14,850.00
Placed In Service	01/06	Future Cost	$21,172.55
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$81.22
Replacement Year	2031	Monthly Interest Contribution	$0.19
		Total Monthly Contribution	$81.41

Comments:

Component covers stairwell lighting in all three buildings. Lighting was in good condition at site visit. Conversion to LED bulbs for reduced energy use and less frequent bulb replacement is recommended.

Hallet and Vose buildings have two stairwells each. Emerson has four.
Lights in various exit corridors from stairwells to exterior were not inventoried and are currently unfunded.

50	E emergency lights	@	$125.00	=	$6,250.00
28	H emergency lights	@	$125.00	=	$3,500.00
36	V emergency lights	@	$125.00	=	$4,500.00
8	exit lights	@	$75.00	=	$600.00
			TOTAL	=	$14,850.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Mailboxes

Category	030 Building Interior	Quantity	1 repair allowance
Photo Date	May 2018	Unit Cost	$9,300.000
		% of Replacement	100.00%
		Current Cost	$9,300.00
Placed In Service	01/06	Future Cost	$15,371.48
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$38.16
Replacement Year	2036	Monthly Interest Contribution	$0.09
		Total Monthly Contribution	$38.25

Comments:

Component covers Salsbury Industries USPS-STD-4B+ recessed mailboxes in building lobbies. Mailboxes were in good condition at site visit.

14	7-unit vertical mailboxes	@	$350.00	=	$4,900.00
4	3-unit vertical mailboxes	@	$150.00	=	$600.00
2	18-unit horizontal mailboxes	@	$900.00	=	$1,800.00
20	installation allowance	@	$100.00	=	$2,000.00
			TOTAL	=	$9,300.00

Signage Allowance

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$10,000.000
		% of Replacement	100.00%
		Current Cost	$10,000.00
Placed In Service	01/06	Future Cost	$16,528.48
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$41.04
Replacement Year	2036	Monthly Interest Contribution	$0.10
		Total Monthly Contribution	$41.13

Comments:

Component covers allowance for general signage throughout association.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Stairwells - Unfunded

Category	030 Building Interior	Quantity	1 total
Photo Date	May 2018	Unit Cost	$0.000
		% of Replacement	100.00%
		Current Cost	$0.00
Placed In Service	01/06	Future Cost	$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	$0.00
Remaining Life	n.a.	Monthly Member Contribution	$0.00
Replacement Year	n.a.	Monthly Interest Contribution	$0.00
		Total Monthly Contribution	$0.00

Comments:

Component covers floor and ceiling finishes stairwells and exit corridors in all three buildings. Interior finishes in these low use areas are currently unfunded. Components can be added if desired by client. Lighting is covered by other component.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Furnishings - Common Courtyard

Category	040 Furnishings	Quantity	1 terrace furishings
Photo Date	May 2018	Unit Cost	$8,300.000
		% of Replacement	100.00%
		Current Cost	$8,300.00
Placed In Service	01/14	Future Cost	$9,621.97
Useful Life	10		
		Assigned Reserves at FYB	$4,150.00
Remaining Life	5	Monthly Member Contribution	$55.99
Replacement Year	2024	Monthly Interest Contribution	$1.28
		Total Monthly Contribution	$57.27

Comments:

Component covers furnishings on parking garage rooftop courtyard. Furnishings were in good condition at site visit.

The actual date this component was placed into service is not available. For budgeting purposes, this date has been estimated based on its condition at our most recent site visit.

1	misc. tables	@	$500.00	=	$500.00
2	39" dining table & 4 chairs	@	$1,000.00	=	$2,000.00
1	90" couch & 43" side chairs	@	$4,000.00	=	$4,000.00
2	adirondack chairs	@	$450.00	=	$900.00
3	planters	@	$300.00	=	$900.00
			TOTAL	=	$8,300.00

Unfunded items: granite bench 48" x 15"

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Furnishings - Entrance Lobbies

Category	040 Furnishings	Quantity	1 total
Photo Date	May 2018	Unit Cost	$12,625.000
		% of Replacement	100.00%
		Current Cost	$12,625.00
Placed In Service	01/06	Future Cost	$15,527.16
Useful Life	15		
Adjustment	+5	Assigned Reserves at FYB	$8,206.25
Remaining Life	7	Monthly Member Contribution	$50.97
Replacement Year	2026	Monthly Interest Contribution	$2.40
		Total Monthly Contribution	$53.37

Comments:

Component covers furnishings in building lobbies. Furniture was in good condition at site visit.
The remaining life of this component has been extended due to its condition at our most recent site visit.

The actual date this component was placed into service is not available. For budgeting purposes, this date is assumed to be at original construction.

2	steel side tables, E	@	$150.00	=	$300.00
1	leather couch 36"x70", H	@	$2,000.00	=	$2,000.00
1	leather bench 22"x34", H	@	$500.00	=	$500.00
2	leather/steel chairs, H	@	$250.00	=	$500.00
1	steel/glass side table, H	@	$200.00	=	$200.00
5	ceramic planters, H	@	$125.00	=	$625.00
1	mail area cabinetry, H	@	$3,000.00	=	$3,000.00
1	leather couch 26"x69", V	@	$2,000.00	=	$2,000.00
2	leather side chairs, V	@	$800.00	=	$1,600.00
2	leather/steel chairs, V	@	$350.00	=	$700.00

4	misc. tables, V	@	$250.00	=	$1,000.00
1	round mirror 42", V	@	$200.00	=	$200.00
1	grand piano UNFUNDED, V	@	$0.00	=	$0.00
			TOTAL	=	$12,625.00

Caravan Boiler Water Circulation

Category	090 Equipment	Quantity	3 pumps
Photo Date	May 2018	Unit Cost	$2,500.000
		% of Replacement	100.00%
		Current Cost	$7,500.00
Placed In Service	01/06	Future Cost	$7,956.75
Useful Life	15		
		Assigned Reserves at FYB	$6,500.00
Remaining Life	2	Monthly Member Contribution	$38.47
Replacement Year	2021	Monthly Interest Contribution	$1.89
		Total Monthly Contribution	$40.36

Comments:

Component covers Grundfos pumps that circulate boiler water within Caravan boilers.
Pumps are controlled with variable frequency drives. These pumps are secondary to the main heat pump water pumps listed as separate component.

Service contractor: Duggan Mechanical Services, Inc. Canton, MA 781-843-3900
Ken Vertullo, Service manager

Operational experience:
No issues reported.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Caravan Boilers

Category	090 Equipment	Quantity	13 modules
Photo Date	May 2018	Unit Cost	$20,000.000
		% of Replacement	100.00%
		Current Cost	$260,000.00
Placed In Service	01/06	Future Cost	$319,767.21
Useful Life	20		
		Assigned Reserves at FYB	$169,000.00
Remaining Life	7	Monthly Member Contribution	$1,049.77
Replacement Year	2026	Monthly Interest Contribution	$49.36
		Total Monthly Contribution	$1,099.12

Comments:

Slant/Fin Caravan GG-399 HEC modular gas-fired boilers provide hot water for heating each building. Capacity is approximately 400,000 btu per boiler per Ken Vertullo. 80% efficiency boilers are atmospherically-vented through wall.

By step-firing just enough modules to meet demand, Caravan systems operate efficiently through the entire year. Caravan modules are energized one at a time as needed. Each module's full capacity is utilized before the next module is energized.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager
Systems are under service contract.

Operational experience: No major issues. Boilers are original to construction and in good condition. They have been well maintained and have been very reliable per Ken Vertullo. These Slant/Fin boilers are simple and very reliable but not high efficiency. It is difficult to predict when significant failures will occur, but typically failures start at about 15-20 year life. Replacing a single module would cost about $20,000. Units weigh about 500 lbs and are difficult to transport to mechanical rooms on the roof. Plumbing and electrical modifications may be required if new modules are not identical to exisiting.

For ultimate replacement of the boilers, Ken recommends that a study comparing the initial and operating costs of similar

standard efficiency units to higher efficiency units. Higher efficiency units are more complex and require more maintenance. For example, cleaning would cost about $5-6000 every 2-3 years. Differences between standard and high efficiency boilers are less dramatic on these relatively smaller buildings.

Caravan modular boilers, V	4	modules
Caravan modular boilers, E	5	modules
Caravan modular boilers, H	4	modules
	13	modules

Combustion Air Supply Fan

Category	090 Equipment	Quantity	3 fans
Photo Date	May 2018	Unit Cost	$4,000.000
		% of Replacement	100.00%
		Current Cost	$12,000.00
Placed In Service	01/06	Future Cost	$17,109.13
Useful Life	25		
		Assigned Reserves at FYB	$0.00
Remaining Life	12	Monthly Member Contribution	$65.63
Replacement Year	2031	Monthly Interest Contribution	$0.15
		Total Monthly Contribution	$65.78

Comments:

Component covers fans bringing combustion air into mechanical room for water heaters and boilers. Fans are inconsistent between buildings. Generall allowance used.

Service contractor: Duggan Mechanical Services, Inc. Canton, MA 781-843-3900

Operational experience: No issues

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Condenser Water Circulation - Cooling Tower

Category	090 Equipment	Quantity	6 pumps
Photo Date	May 2018	Unit Cost	$13,000.000
		% of Replacement	100.00%
		Current Cost	$78,000.00
Placed In Service	01/06	Future Cost	$87,789.69
Useful Life	15		
Adjustment	+2	Assigned Reserves at FYB	$59,647.06
Remaining Life	4	Monthly Member Contribution	$359.91
Replacement Year	2023	Monthly Interest Contribution	$17.39
		Total Monthly Contribution	$377.31

Comments:

(2) 10 hp motors power pumps to circulate condenser water within the cooling tower and heat exchanger in each building. Pumps can circulate 400 gpm in E and 300 gpm in H and V. The system can operate with only one motor/pump in a building if the other motor/pump fails. Cost obtained from similar 10 hp motor and pump combination with variable frequency drive. It is difficult to predict exactly when motors of pumps will fail. Useful life extended due to operation experience.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager
Systems are under service contract.

Operational experience: Motors and pumps have generally been reliable per Mr. Vertullo. Motors typically will fail before pumps. Pumps are inspected if motor fails and rebuilt as required.

1	10 hp motor	@	$6,200.00	=	$6,200.00
1	pump	@	$5,200.00	=	$5,200.00
1	variable frequency drive	@	$1,600.00	=	$1,600.00
			TOTAL	=	$13,000.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Condenser Water Heat Exchanger

Category	090 Equipment	Quantity	3 heat exchanger
Photo Date	May 2018	Unit Cost	$20,000.000
		% of Replacement	100.00%
		Current Cost	$60,000.00
Placed In Service	01/06	Future Cost	$73,792.43
Useful Life	20		
		Assigned Reserves at FYB	$39,000.00
Remaining Life	7	Monthly Member Contribution	$242.25
Replacement Year	2026	Monthly Interest Contribution	$11.39
		Total Monthly Contribution	$253.65

Comments:

Component covers stainless steel heat exhangers for heat pump cooling water supply in summer.

Manufacturer: APV Products, Goldsboro, NC 919-735-4570
Condenser water heat exchanger provides cooled water to building for air conditioning via water source heat pumps.
Label indicates manufactured in 2004. January 1, 2006 placed-in-service date assumed.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager
Systems are under service contract.

Operational experience: no major issues reported. Heat exchanger in Emerson exhibited minor leaking during site visit. Depending on quality of circulating water, heat exchanger scale will need to be removed with an acid flushing process when heat exchanger effectiveness diminishes. Cost for flushing heat exchanger is about $2000 and should be funded from operations. Per Mr. Vertullo, actual replacement of heat exchanger plates is rare and would cost about $20,000.

Cooling Tower

Category	090 Equipment	Quantity	3 cooling towers
Photo Date	May 2018	Unit Cost	$75,000.000
		% of Replacement	100.00%
		Current Cost	$225,000.00
Placed In Service	01/06	Future Cost	$268,661.77
Useful Life	12		
Adjustment	+7	Assigned Reserves at FYB	$153,947.37
Remaining Life	6	Monthly Member Contribution	$947.08
Replacement Year	2025	Monthly Interest Contribution	$44.95
		Total Monthly Contribution	$992.02

Comments:

Component covers Evapco, Inc. cooling towers in each building.
- E model LRT 5-93
- H model LRT 5-66
- V model LRT 5-66

Sub components included:
Air circulation fans and motor
Water spray system

Condenser water circulation pumps are a separate component.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager
Systems are under service contract.

Operational experience: No large issues reported. Galvanized towers have typical life of 12 years. With protective urethane coating, life can be extended by about 5-7 years by minimizing corrosion. All three cooling towers have been coated per property manager. Cost was $4995 for Vose and Hallet and $5512 for Emerson 2015.

It is difficult to know the replacement cost of the towers precisely due to structural modifications that may be needed due to footprint differences. Mr. Vertullo estimated replacement between $50,000-$100,000.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Cooling Tower - Water Treatment

Category	090 Equipment	Quantity	3 treatment system
Photo Date	May 2018	Unit Cost	$3,300.000
		% of Replacement	100.00%
		Current Cost	$9,900.00
Placed In Service	01/06	Future Cost	$10,502.91
Useful Life	15		
		Assigned Reserves at FYB	$8,580.00
Remaining Life	2	Monthly Member Contribution	$50.78
Replacement Year	2021	Monthly Interest Contribution	$2.50
		Total Monthly Contribution	$53.28

Comments:

Component covers water treatment system for cooling tower in each building.
System is operated by Barclay Water Management, Newton, MA.
Contact: Greg Jacobson, 978-870-6685
Mr. Jacobson stated that there are no current issues with system. System is original. Yearly fee covers operation of pumps, but equipment, piping, etc. is owned by association.
Three chemical pumps supply each cooling tower. Lifespan of pumps is about 10-15 years. Lifespan of controller is about 15-20 years when protected from elements.

Operational experience: no issues

Component covers both pumps and controller due to relatively low cost.

3	chemical pumps	@	$500.00	=	$1,500.00
1	controller	@	$1,800.00	=	$1,800.00
			TOTAL	=	$3,300.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Domestic Water Pumps

Category	090 Equipment	Quantity	1 duplex system
Photo Date	May 2018	Unit Cost	$30,000.000
		% of Replacement	100.00%
		Current Cost	$30,000.00
Placed In Service	01/06	Future Cost	$40,317.49
Useful Life	10		
Adjustment	+3	Assigned Reserves at FYB	$30,000.00
Remaining Life	0	Monthly Member Contribution	$192.07
Replacement Year	2019	Monthly Interest Contribution	$0.44
		Total Monthly Contribution	$192.51

Comments:

Component covers SyncroFlo 55DA33 domestic water duplex booster pumps in V building. Pumps are powered by 3 hp motors. 75 gpm per pump. Street pressure is sufficient in E and H buildings to alleviate the need for booster pumps. These pumps have been decomissioned per client.

Service contractor: Gustavo Preston, Chelmsford, MA, 978-856-5587
Per Ed Nickerson, pumps are beyond typical system useful life of 10 years. New system package consists of (2) pumps, variable frequency drive and control panel. Control panels may also have individual components that need periodic replacement (electrical contactors are an example).

The cost of new pump system will be offset by lower energy use and lower maintenance costs. The variable frequency drive has a soft start for motor and operates at lower frequency. Maintenance cost will likely decrease about $2000 per year for each pump system.

The remaining life of this component has been extended due to its condition at our most recent site visit.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Elevator Cab Refurbish

Category	090 Equipment	Quantity	6 elevator cabs
Photo Date	May 2018	Unit Cost	$20,000.000
		% of Replacement	100.00%
		Current Cost	$120,000.00
Placed In Service	01/06	Future Cost	$147,584.86
Useful Life	15		
Adjustment	+5	Assigned Reserves at FYB	$78,000.00
Remaining Life	7	Monthly Member Contribution	$484.51
Replacement Year	2026	Monthly Interest Contribution	$22.78
		Total Monthly Contribution	$507.28

Comments:

Component cover refurbishment of (6) elevator cabs. Cabs are essentially identical in the buildings. Cabs were in very good condition at site visit. The remaining life of this component has been extended due to its condition at our most recent site visit.

Service contractor: Cleary Elevator, Shawn Cleary, 617-481-1234
Mr. Cleary provided rough ballpark cost for elevator cab refurbishment as $10,000 - $30,000. For cab finishes similar to current, he estimated about $20,000 per cab.

Elevator Machine Room PTAC

Category	090 Equipment	Quantity	3 PTAC units
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$9,000.00
Placed In Service	01/06	Future Cost	$9,548.10
Useful Life	15		
		Assigned Reserves at FYB	$7,800.00
Remaining Life	2	Monthly Member Contribution	$46.16
Replacement Year	2021	Monthly Interest Contribution	$2.27
		Total Monthly Contribution	$48.43

Comments:

Component covers LG PTAC (packaged terminal air conditioners) supply cooling and heat to elevator machine rooms.

Service contractor: none

Operational experience: no issues reported by client. Units functioning properly at site visit.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Elevator Modernization

Category	090 Equipment	Quantity	6 elevators
Photo Date	May 2018	Unit Cost	$150,000.000
		% of Replacement	100.00%
		Current Cost	$900,000.00
Placed In Service	01/06	Future Cost	$1,487,562.87
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$3,693.39
Replacement Year	2036	Monthly Interest Contribution	$8.46
		Total Monthly Contribution	$3,701.85

Comments:

Component covers modernization of (6) traction elevators, (2) in each building.

Service contractor: Cleary Elevator, Shawn Cleary, 617-481-1234-5039
Mr. Cleary provided rough ballpark cost of $140,000-150,000 for elevator modernizations after 25-30 years. For residential elevators that typically receive light use, 30 year useful life is standard ARS uses.
First modernization typicaly consists of controls, control wiring, motor replacement, and new bearings for traction elevator machine. The machine itself will likely last 50 years.

Operational experience: no issues reported.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Emergency Ventilation - Corridor Exhaust

Category	090 Equipment	Quantity	3 fans
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$9,000.00
Placed In Service	01/06	Future Cost	$14,875.63
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$36.93
Replacement Year	2036	Monthly Interest Contribution	$0.09
		Total Monthly Contribution	$37.02

Comments:

Component covers fan exhausting air from corridors in all three buildings during an emergency. Fans are tested periodically. Little specific information available. No issues reported.

Service and preventative maintenance contractor: None

Pricing per similar fans in other associations.

1	motor, 3 hp estimated	@	$1,500.00	=	$1,500.00
1	miscellaneous fan bearings, et.	@	$1,500.00	=	$1,500.00
			TOTAL	=	$3,000.00

Boston Condominium Trust

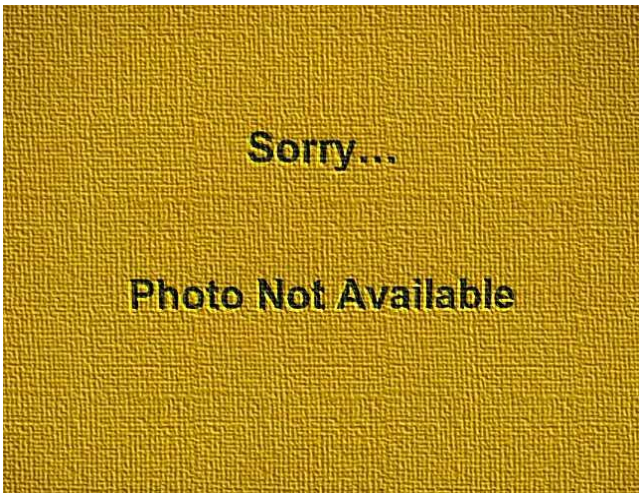
Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Emergency Ventilation - Stairwell Pressurization

Category	090 Equipment	Quantity	18 fans
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$54,000.00
Placed In Service	01/06	Future Cost	$89,253.77
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$221.60
Replacement Year	2036	Monthly Interest Contribution	$0.50
		Total Monthly Contribution	$222.11

Comments:



Component covers fan pressurizing stairwells and elevator shafts in all three buildings during an emergency. Fans are tested periodically. Little specific information available. The number of fans has been estimated. No issues reported.

Service and preventative maintenance contractor: None

Pricing per similar fans in other associations.

E stair fans estimated	8	fans
H stair fans per smoke control panel	5	fans
V stair fans estimated	5	fans
	18	fans

1	motor, 3 hp estimated	@	$1,500.00	=	$1,500.00
1	miscellaneous fan bearings, et.	@	$1,500.00	=	$1,500.00
			TOTAL	=	$3,000.00

Boston Condominium Trust

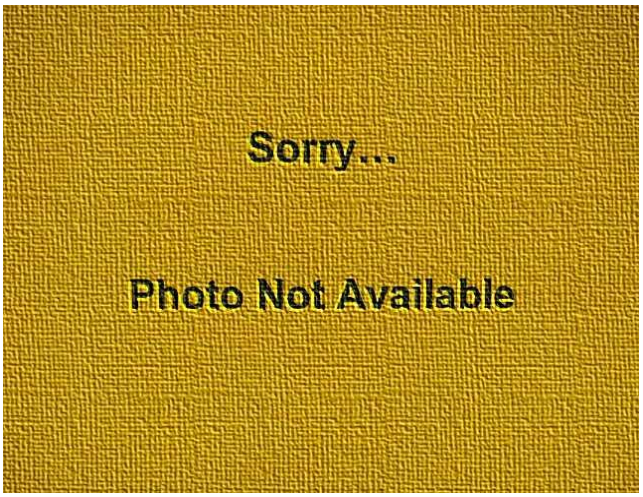
Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Emergency Ventilation - Vestibule Exhaust

Category	090 Equipment	Quantity	3 fans
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$9,000.00
Placed In Service	01/06	Future Cost	$14,875.63
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$36.93
Replacement Year	2036	Monthly Interest Contribution	$0.09
		Total Monthly Contribution	$37.02

Comments:



Component covers fan exhausting air from stairwell vestibules in all three buildings during an emergency. Fans are tested periodically. Little specific information available. No issues reported.

Service and preventative maintenance contractor: None

Pricing per similar fans in other associations.

1	motor, 3 hp estimated	@	$1,500.00	=	$1,500.00
1	miscellaneous fan bearings, et.	@	$1,500.00	=	$1,500.00
			TOTAL	=	$3,000.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Emergency Ventilation - Vestibule Supply

Category	090 Equipment	Quantity	3 fans
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$9,000.00
Placed In Service	01/06	Future Cost	$14,875.63
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$36.93
Replacement Year	2036	Monthly Interest Contribution	$0.09
		Total Monthly Contribution	$37.02

Comments:

Component covers fan supplying air to stairwell vestibules in all three buildings during an emergency. Fans are tested periodically. Little specific information available. No issues reported.

Service and preventative maintenance contractor: None

Pricing per similar fans in other associations.

1	motor, 3 hp estimated	@	$1,500.00	=	$1,500.00
1	miscellaneous fan bearings, et.	@	$1,500.00	=	$1,500.00
			TOTAL	=	$3,000.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Entrance Door Unit Intercom Access

Category	090 Equipment	Quantity	3 total
Photo Date	May 2018	Unit Cost	$4,400.000
		% of Replacement	100.00%
		Current Cost	$13,200.00
Placed In Service	01/06	Future Cost	$14,856.72
Useful Life	15		
Adjustment	+2	Assigned Reserves at FYB	$10,094.12
Remaining Life	4	Monthly Member Contribution	$60.91
Replacement Year	2023	Monthly Interest Contribution	$2.95
		Total Monthly Contribution	$63.86

Comments:

Component covers access control system for the three buildings. Door King 1835 allows visitors to call units to gain access to buildings.

Service contractor: Boston Intercom 617-325-3131
John provided proposal for $4366 to association in January 2018 to replace system in V. Cause of recurring failure of Vose intercom proved to be a loose wire and unit was not replaced. John commented that the units are near the end of service life and will likely need to be replaced soon.

The remaining life of this component has been extended due to its condition at our most recent site visit.

Pricing assumes all wiring can be reused.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Fire Alarm

Category	090 Equipment	Quantity	1 total
Photo Date	May 2018	Unit Cost	$75,500.000
		% of Replacement	100.00%
		Current Cost	$75,500.00
Placed In Service	01/06	Future Cost	$92,855.48
Useful Life	20		
		Assigned Reserves at FYB	$49,075.00
Remaining Life	7	Monthly Member Contribution	$304.84
Replacement Year	2026	Monthly Interest Contribution	$14.33
		Total Monthly Contribution	$319.17

Comments:

Component covers main parts of fire alarm system. The fire alarm system is composed of Edwards EST3 fire alarm panels and peripheral equipment in the buildings. Component does not include re-wiring, pull stations, fire emergency lights, heat detectors, or horns. Replacement of devices peripheral currently on an as-needed basis.

Service contractor:
Fire alarm panels are all still in production and parts are available. It is expected that parts will be available for the foreseeable future and that parts will be backwards compatible with both head end panels and peripheral devices (detectors, pull stations, sirens, boosters, batteries).

Each building has an alarm main panel on ground level. H and V have remote annunciators near lobby doors.

Operational experience: No issues reported by client

Service contractor: Prestige Alarm, Quincy, MA 617-328-6800
Joe Caristi 617-325-3131

3	main fire alarm panels	@	$14,000.00	=	$42,000.00
2	remote annunciators	@	$1,750.00	=	$3,500.00

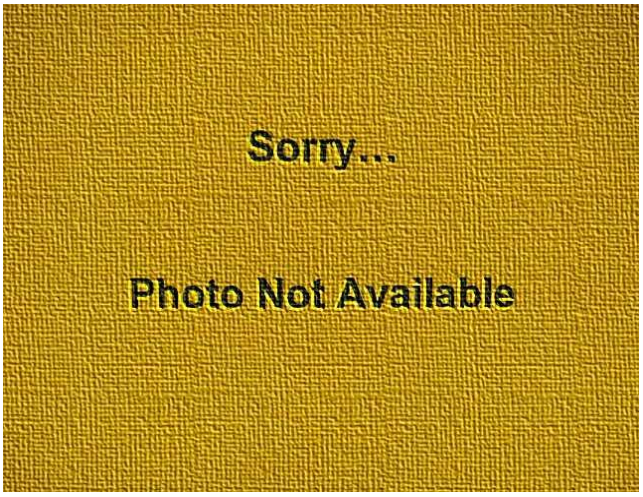
3	miscellaneous electrical, etc.	@	$10,000.00 =	$30,000.00
			TOTAL =	$75,500.00

Pricing for panels includes programming, final connections, testing per similar associations. Miscellaneous allowance includes electrical work that may be required, permits, assistance with testing from other trades.

Fire Communication Antenna

Category	090 Equipment	Quantity	3 total
Photo Date	May 2018	Unit Cost	$12,500.000
		% of Replacement	100.00%
		Current Cost	$37,500.00
Placed In Service	01/06	Future Cost	$46,120.27
Useful Life	20		
		Assigned Reserves at FYB	$24,375.00
Remaining Life	7	Monthly Member Contribution	$151.41
Replacement Year	2026	Monthly Interest Contribution	$7.12
		Total Monthly Contribution	$158.53

Comments:



Component covers bidirectional antenna system for emergency responder communication in the three buildings.

Service contractor: Comtronics 617-770-0212
Catherine Leonard stated system service life will be about 20 years. Upgrade to current codes would run $10,000-$15,000 per building. Battery replacement every 3-4 years will cost approximately $1000 and should be funded from operations.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Fire Sprinkler - Main Pumps

Category	090 Equipment	Quantity	3 pumps
Photo Date	May 2018	Unit Cost	$25,000.000
		% of Replacement	100.00%
		Current Cost	$75,000.00
Placed In Service	01/06	Future Cost	$92,240.54
Useful Life	20		
		Assigned Reserves at FYB	$48,750.00
Remaining Life	7	Monthly Member Contribution	$302.82
Replacement Year	2026	Monthly Interest Contribution	$14.24
		Total Monthly Contribution	$317.05

Comments:

Component covers fire sprinkler pumps in buildings. H and V have 75 hp motors with 750 gpm pumps. E has 50 hp motor with 500 gpm pump. Controllers are TornaTech.

Pricing obtained from similar associations.

Operational experience: no issues reported by client

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Fire Sprinkler- Jockey Pumps

Category	090 Equipment	Quantity	3 pumps
Photo Date	May 2018	Unit Cost	$6,000.000
		% of Replacement	100.00%
		Current Cost	$18,000.00
Placed In Service	01/06	Future Cost	$22,137.73
Useful Life	20		
		Assigned Reserves at FYB	$11,700.00
Remaining Life	7	Monthly Member Contribution	$72.68
Replacement Year	2026	Monthly Interest Contribution	$3.41
		Total Monthly Contribution	$76.09

Comments:

Component covers fire sprinkler jockey pumps is in sprinkler equipment rooms of the three buildings.
Pump maintains wet sprinkler pipes at approximate target pressure to aid in sensing if a sprinkler head discharges.
Jockey pump also eliminates need for main fire pump to run to maintain system pressure.

All pumps are rated at 10 gpm. Motors: E 1 hp; H 1-1/2 hp; V 1-1/2 hp
Controllers are TornaTech.

Pricing obtained from similar associations.

Operational experience: no issues reported

Garage Carbon Monoxide Detection

Category	090 Equipment	Quantity	11 detectors
Photo Date	May 2018	Unit Cost	$750.000
		% of Replacement	100.00%
		Current Cost	$8,250.00
Placed In Service	01/06	Future Cost	$8,752.43
Useful Life	10		
Adjustment	+5	Assigned Reserves at FYB	$7,150.00
Remaining Life	2	Monthly Member Contribution	$42.31
Replacement Year	2021	Monthly Interest Contribution	$2.08
		Total Monthly Contribution	$44.40

Comments:

Component covers Honeywell VA201T Vulcain Gas Detection Transmitter/carbon monoxide detectors in parking garage. Detectors control operation of supply and exhaust fans to insure that carbon monoxide levels are safe. There are 6 detectors in lower garage and 5 in upper garage.

Operational experience: No issues reported by client. Detectors are original. They are calibrated periodically.

The remaining life of this component has been extended due to its condition at our most recent site visit.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Garage Iron Gate - Actuator

Category	090 Equipment	Quantity	1 gate actuator set
Photo Date	May 2018	Unit Cost	$5,000.000
		% of Replacement	100.00%
		Current Cost	$5,000.00
Placed In Service	01/06	Future Cost	$5,796.37
Useful Life	15		
Adjustment	+3	Assigned Reserves at FYB	$3,611.11
Remaining Life	5	Monthly Member Contribution	$22.00
Replacement Year	2024	Monthly Interest Contribution	$1.06
		Total Monthly Contribution	$23.06

Comments:

Component covers actuators for iron gate at garage ramp entrance to lower parking garage. Gate measures approximately 16' wide x 9' 6" tall

Service contractor: None
Gate actuators and controls

The remaining life of this component has been extended due to its condition at our most recent site visit.

Garage Iron Gate - Lower Garage Ramp

Category	090 Equipment	Quantity	1 iron gate pair
Photo Date	May 2018	Unit Cost	$7,400.000
		% of Replacement	100.00%
		Current Cost	$7,400.00
Placed In Service	01/06	Future Cost	$8,578.63
Useful Life	15		
Adjustment	+3	Assigned Reserves at FYB	$5,344.44
Remaining Life	5	Monthly Member Contribution	$32.56
Replacement Year	2024	Monthly Interest Contribution	$1.56
		Total Monthly Contribution	$34.12

Comments:

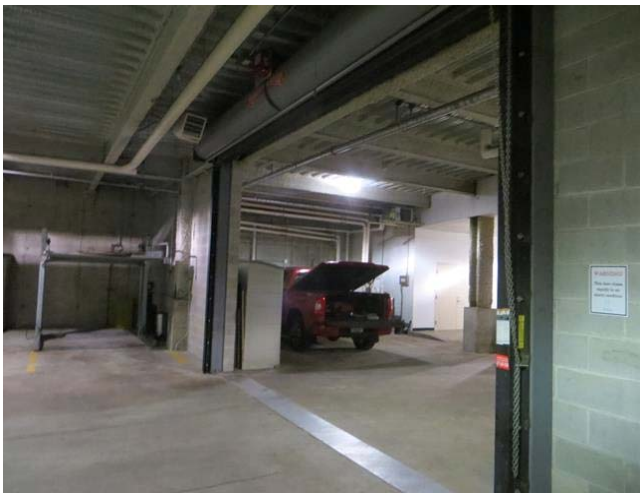
Component covers iron gate at garage ramp entrance to lower parking garage. Gate measures approximately 16' wide x 9' 6" tall.

Pricing obtained from similar fence in Boston. Material for new rail replacement is galvanized steel. Solid 3/4" balusters. Logan Grate, Inc., fabrication and installation contractor, anticipates a Useful Life of 30 years for new railing/fencing with proper maintenance. Galvanized coating will protect iron fence if coating not damaged.

Garage Overhead Door - Fire Separation, Unfunded

Category	090 Equipment	Quantity	3 overhead door
Photo Date	May 2018	Unit Cost	$0.000
		% of Replacement	100.00%
		Current Cost	$0.00
Placed In Service	01/06	Future Cost	$0.00
Useful Life	n.a.		
		Assigned Reserves at FYB	$0.00
Remaining Life	n.a.	Monthly Member Contribution	$0.00
Replacement Year	n.a.	Monthly Interest Contribution	$0.00
		Total Monthly Contribution	$0.00

Comments:



Component covers garage overhead fire separation doors within upper and lower parking garage.
Doors are unfunded due to low use. Minor repairs should be funded from operating budget.

Service contractor: Collins Overhead Door, Inc. Chelsea, MA 617-387-0759

Door inventory:
Upper garage: 21' x 11.5' under edge of Vose building
Lower garage: 21' x 7' under edge of Vose building and 18' x 7'.5' at bottom of entrance ramp

Garage Overhead Door - Rytec Upper Garage

Category	090 Equipment	Quantity	1 overhead door
Photo Date	May 2018	Unit Cost	$13,000.000
		% of Replacement	100.00%
		Current Cost	$13,000.00
Placed In Service	01/06	Future Cost	$15,070.56
Useful Life	15		
Adjustment	+3	Assigned Reserves at FYB	$9,388.89
Remaining Life	5	Monthly Member Contribution	$57.20
Replacement Year	2024	Monthly Interest Contribution	$2.74
		Total Monthly Contribution	$59.94

Comments:

Component covers Rytec 12' x 12' garage overhead door at entrance to upper parking garage.

Service contractor: Collins Overhead Door, Inc. Chelsea, MA 617-387-0759
Scott Collins stated that current number of cycles is about 272,000. Door is in good condition and wearing well. Some minor painting on exterior steel parts is recommended. Replacement cost is about $12,000-13,000.

The remaining life of this component has been extended due to its condition at our most recent site visit.

Doors are not currently under preventative maintenance agreement. PM is highly recommended twice a year and will allow doors to reach their useful life.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Garage Pump Station

Category	090 Equipment	Quantity	1 pump system
Photo Date	May 2018	Unit Cost	$10,000.000
		% of Replacement	100.00%
		Current Cost	$10,000.00
Placed In Service	01/06	Future Cost	$12,298.74
Useful Life	20		
		Assigned Reserves at FYB	$6,500.00
Remaining Life	7	Monthly Member Contribution	$40.38
Replacement Year	2026	Monthly Interest Contribution	$1.90
		Total Monthly Contribution	$42.28

Comments:

Component covers sewage ejector pumps for parking garage floor drains. Oil, sand, and salt water are pumped to sanitary sewer. No issues reported by management.

Duplex pump system is located in lower garage along Harrison Ave wall. Component covers pumps and controls. Collection tank and piping have long life unless damaged.

Component also covers Zoeller sump pump for lower parking garage floor drains. Oil, sand, and salt water are pumped to parking garage pump station. No issues reported by management.

Service contractor: Gustavo Preston, Chelmsford, MA, 978-856-5587
Per Ed Nickerson, for pump station cost to replace pumps and control is about $8500. Individual pumps would be about $3500. Cost to replace sump pump would be about $1500.

1	pump station	@	$8,500.00	=	$8,500.00
1	sump pump	@	$1,500.00	=	$1,500.00
			TOTAL	=	$10,000.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Garage Ventilation - Exhaust

Category	090 Equipment	Quantity	2 fans
Photo Date	May 2018	Unit Cost	$8,000.000
		% of Replacement	100.00%
		Current Cost	$16,000.00
Placed In Service	01/06	Future Cost	$19,677.98
Useful Life	20		
		Assigned Reserves at FYB	$10,400.00
Remaining Life	7	Monthly Member Contribution	$64.60
Replacement Year	2026	Monthly Interest Contribution	$3.03
		Total Monthly Contribution	$67.63

Comments:

Component covers fans exhausting air from parking garage to insure that carbon monoxide levels are safe. Fans/motors are located on E roofs.

Service and preventative maintenance contractor: None specifically
Manufacturer: Acme Engineering and Manufacturing (918) 682-7791
Model: 8154 CL/1 for fan on upper roof, fan on lower roof not accessible during site visits

Pricing per similar fans in other associations.

1	30 hp motor	@	$7,000.00	=	$7,000.00
1	miscellaneous fan bearings, etc.	@	$1,000.00	=	$1,000.00
			TOTAL	=	$8,000.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Garage Ventilation - Supply

Category	090 Equipment	Quantity	1 fan
Photo Date	May 2018	Unit Cost	$2,500.000
		% of Replacement	100.00%
		Current Cost	$2,500.00
Placed In Service	01/06	Future Cost	$3,074.68
Useful Life	20		
		Assigned Reserves at FYB	$1,625.00
Remaining Life	7	Monthly Member Contribution	$10.09
Replacement Year	2026	Monthly Interest Contribution	$0.48
		Total Monthly Contribution	$10.57

Comments:

Component covers fan supplying fresh air to lower level parking garage to insure that carbon monoxide levels are safe.

Service and preventative maintenance contractor: None
Acme Fan Tubemaster

Operational experience: no major issues

Pricing per similar fans in other associations.

1	3 hp motor	@	$1,500.00	=	$1,500.00
1	miscellaneous fan bearings, et.	@	$1,000.00	=	$1,000.00
			TOTAL	=	$2,500.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Generator - H

Category	090 Equipment	Quantity	1 total
Photo Date	May 2018	Unit Cost	$90,000.000
		% of Replacement	100.00%
		Current Cost	$90,000.00
Placed In Service	01/06	Future Cost	$148,756.29
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$369.34
Replacement Year	2036	Monthly Interest Contribution	$0.85
		Total Monthly Contribution	$370.18

Comments:

Component covers generator and peripheral equipment.

Service contractor: Power Products Systems, LLC Wakefield, MA 781-246-1810
Mike Romano stated that Hallet generator is rated at 100 kw. Generator is tested once a week.
Equipment cost to replace is about $30,000. Installation will require code updates to separate electrical circuits into emergency and non-emergency applications. Mr. Romano could not estimate installation cost. It is currently estimated that installation will be twice equipment cost

Operational experience: no major issues reported. Fuel tank under generator is corroding and should be painted.

The remaining life of this component has been extended due to its apparent infrequent use. If long power outages occur, remaining life should be decreased.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Generator - V

Category	090 Equipment	Quantity	1 total
Photo Date	May 2018	Unit Cost	$120,000.000
		% of Replacement	100.00%
		Current Cost	$120,000.00
Placed In Service	01/06	Future Cost	$198,341.72
Useful Life	30		
		Assigned Reserves at FYB	$0.00
Remaining Life	17	Monthly Member Contribution	$492.45
Replacement Year	2036	Monthly Interest Contribution	$1.13
		Total Monthly Contribution	$493.58

Comments:

Component covers generator and peripheral equipment.

Service contractor: Power Products Systems, LLC Wakefield, MA 781-246-1810
Mike Romano stated that Vose generator is rated at 150 kw. Generator is tested once a week.
Equipment cost to replace is about $40,000. New piping will be required for roof top radiator. Current generators have two coolant loops versus a single loop on the existing generator. Installation will require code updates to separate electrical circuits into emergency and non-emergency applications. Mr. Romano could not estimate installation cost. It is currently estimated that installation will be twice equipment cost.

Operational experience: no major issues reported. .

The remaining life of this component has been extended due to its apparent infrequent use. If long power outages occur, remaining life should be decreased.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Grill - Courtyard

Category	090 Equipment	Quantity	1 total
Photo Date	May 2018	Unit Cost	$2,500.000
		% of Replacement	100.00%
		Current Cost	$2,500.00
Placed In Service	01/08	Future Cost	$2,813.77
Useful Life	15		
		Assigned Reserves at FYB	$1,833.33
Remaining Life	4	Monthly Member Contribution	$12.58
Replacement Year	2023	Monthly Interest Contribution	$0.54
		Total Monthly Contribution	$13.13

Comments:

Component covers Weber 1810001 grill on roof courtyard. Placed-in-service 2008 per label.

Heat Pump - Lobbies

Category	090 Equipment	Quantity	3 heat pumps
Photo Date	May 2018	Unit Cost	$10,000.000
		% of Replacement	100.00%
		Current Cost	$30,000.00
Placed In Service	01/06	Future Cost	$36,896.22
Useful Life	20		
		Assigned Reserves at FYB	$19,500.00
Remaining Life	7	Monthly Member Contribution	$121.13
Replacement Year	2026	Monthly Interest Contribution	$5.70
		Total Monthly Contribution	$126.82

Comments:

Component covers Trane water source heat pumps servicing lobbies of each building. Heat pumps are located above ceiling and were not accessible during site visit.

Service contractor: Duggan Mechanical Services, Inc. Canton, MA 781-843-3900
Ken Vertullo, Service manager
Pricing per Mr. Vertullo.

Operational experience: No significant issues reported. Typically failed parts within units will be replaced rather than replacing entire unit. Compressor most likely major part to fail.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Heat Pump Water Circulation

Category	090 Equipment	Quantity	6 pumps
Photo Date	May 2018	Unit Cost	$12,400.000
		% of Replacement	100.00%
		Current Cost	$74,400.00
Placed In Service	01/06	Future Cost	$78,930.96
Useful Life	15		
		Assigned Reserves at FYB	$64,480.00
Remaining Life	2	Monthly Member Contribution	$381.60
Replacement Year	2021	Monthly Interest Contribution	$18.79
		Total Monthly Contribution	$400.39

Comments:

(2) motors power 300 gpm pumps that circulate circulate condenser/boiler water to heat pumps in each building. Pump motor sizes: 7.5 hp V; 10 hp H; 15 hp E. Average cost for 10 hp motor used. The system can operate with only one motor/pump.

Service contractor: Duggan Mechanical Services, Inc. Canton, MA 781-843-3900
Ken Vertullo, Service manager

1	10 hp motor	@	$6,000.00	=	$6,000.00
1	pump	@	$5,000.00	=	$5,000.00
1	variable frequency drive	@	$1,400.00	=	$1,400.00
			TOTAL	=	$12,400.00

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Rooftop Unit - Common Hallways

Category	090 Equipment	Quantity	4 RTU
Photo Date	May 2018	Unit Cost	$25,000.000
		% of Replacement	100.00%
		Current Cost	$100,000.00
Placed In Service	01/06	Future Cost	$122,987.39
Useful Life	20		
		Assigned Reserves at FYB	$65,000.00
Remaining Life	7	Monthly Member Contribution	$403.76
Replacement Year	2026	Monthly Interest Contribution	$18.98
		Total Monthly Contribution	$422.74

Comments:

Component covers Trane roof top units providing heating and cooling in common hallway areas in all buildings.
There are (4) units:
- Trane 250,000 Btu rooftop unit, E
- Trane 150,000 Btu rooftop unit, E
- Trane 350,000 Btu rooftop unit, H
- Trane 200,000 Btu rooftop unit, V

Service contractor: Duggan Mechanical Services, Inc. Canton, MA 781-843-3900
Ken Vertullo, Service manager
Pricing per Mr. Vertullo is $25,000 per unit including crane service. This includes standard economizer and return.

Operational experience: No major issues with Hallet and Emerson units. Per Mr. Vertullo, Vose unit has had numerous problems. Blower motor and heat exchanger have been replaced.

Boston Condominium Trust

Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Surveillance System

Category	090 Equipment	Quantity	1 system
Photo Date	May 2018	Unit Cost	$20,000.000
		% of Replacement	100.00%
		Current Cost	$20,000.00
Placed In Service	01/06	Future Cost	$23,185.48
Useful Life	12		
Adjustment	+6	Assigned Reserves at FYB	$14,444.44
Remaining Life	5	Monthly Member Contribution	$88.01
Replacement Year	2024	Monthly Interest Contribution	$4.21
		Total Monthly Contribution	$92.22

Comments:

Component covers combined surveillance system for the three buildings and garage.

Service contractor: Back Bay Consulting, Boston, MA
Michael Calabrese 617-329-1724
Mr. Calabrese stated that to his knowledge, system is original to construction with analog coaxial cables connecting cameras to digital video recorder. A new DVR was installed 2-3 years ago and will likely last another 5 years. New systems use ethernet cables for network that connects cameras. At some point a decision to modernize the system will likely be made and new wiring will need to be installed. Mr. Calabrese estimated that a new system comparable to what is installed in comparative new buildings would cost about $20,000, with about 40% of that cost attributed to wiring.

Unit Heaters - Allowance

Category	090 Equipment	Quantity	1 allowance
Photo Date	May 2018	Unit Cost	$3,000.000
		% of Replacement	100.00%
		Current Cost	$3,000.00
Placed In Service	01/19	Future Cost	$3,278.18
Useful Life	3		
		Assigned Reserves at FYB	$0.00
Remaining Life	3	Monthly Member Contribution	$58.59
Replacement Year	2022	Monthly Interest Contribution	$0.13
		Total Monthly Contribution	$58.73

Comments:

Component covers electrical unit heaters provide heat to mechanical rooms in building and garage. No specific inventory taken. Allowance covers repairs and replacements as needed. Allowance amount can be adjusted as association gains more experience with replacements.

Service contractor: none

Operational experience: no issues

Ventilation - Roof Exhaust

Category	090 Equipment	Quantity	28 fans
Photo Date	May 2018	Unit Cost	$3,500.000
		% of Replacement	100.00%
		Current Cost	$98,000.00
Placed In Service	01/06	Future Cost	$120,527.64
Useful Life	20		
		Assigned Reserves at FYB	$63,700.00
Remaining Life	7	Monthly Member Contribution	$395.68
Replacement Year	2026	Monthly Interest Contribution	$18.60
		Total Monthly Contribution	$414.28

Comments:

Component covers roof top mushroom fans exhausting air from various areas of buildings.

Service and preventative maintenance contractor: None specifically
Manufacturer: Acme Engineering and Manufacturing (918) 682-7791
Model: Centri Master, various sizes and models.

Pricing per similar fans in other associations.

E roof top fans	16	fans
H roof top fans	12	fans
V roof top fans	9	fans
	37	fans

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Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Water Heater - Circulation

Category	090 Equipment	Quantity	3 pumps
Photo Date	May 2018	Unit Cost	$2,500.000
		% of Replacement	100.00%
		Current Cost	$7,500.00
Placed In Service	01/06	Future Cost	$7,956.75
Useful Life	15		
		Assigned Reserves at FYB	$6,500.00
Remaining Life	2	Monthly Member Contribution	$38.47
Replacement Year	2021	Monthly Interest Contribution	$1.89
		Total Monthly Contribution	$40.36

Comments:

Component covers motor and pumps to circulation domestic hot water through buildings.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager

Water Heater - Main

Category	090 Equipment	Quantity	3 water heaters
Photo Date	May 2018	Unit Cost	$25,000.000
		% of Replacement	100.00%
		Current Cost	$75,000.00
Placed In Service	01/06	Future Cost	$79,567.50
Useful Life	15		
		Assigned Reserves at FYB	$65,000.00
Remaining Life	2	Monthly Member Contribution	$384.68
Replacement Year	2021	Monthly Interest Contribution	$18.94
		Total Monthly Contribution	$403.62

Comments:

Component covers Lochinvar domestic water heaters.

E model CWN0986PM
H model not available
V model CWN0745PM

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager
Systems are under service contract. All units are original to construction. Mr Vertullo recommends considering high efficiency modulation replacement units. Budget pricing per Mr. Vertullo.

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Component Detail

Directed Cash Flow Calculation Method; Sorted by Category

Water Heater - Storage Tanks

Category	090 Equipment	Quantity	4 storage tanks
Photo Date	May 2018	Unit Cost	$2,700.000
		% of Replacement	100.00%
		Current Cost	$10,800.00
Placed In Service	01/18	Future Cost	$14,091.55
Useful Life	10		
		Assigned Reserves at FYB	$0.00
Remaining Life	9	Monthly Member Contribution	$75.87
Replacement Year	2028	Monthly Interest Contribution	$0.17
		Total Monthly Contribution	$76.05

Comments:

Component covers Rheem Ruud commercial domestic hot water storage tanks. Tank capacity is 115 gallons.

E: (2) tanks replaced 12/2017
H: (1) tank (replacement date not available)
V: (1) tank replaced 1/2018
Average placed-in-service date used.

Service and preventative maintenance contractor:
Duggan Mechanical Services, Inc. Canton, MA 781-843-3900, Ken Vertullo, service manager

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Detail Report Index

Number of components included in this reserve analysis is 76.