

HAWAIIAN VILLAGE
CONDOMINIUM ASSOCIATION

ROYAL

REPLACEMENT RESERVE STUDY

2007



MILLER ❖ DODSON
ASSOCIATES
CAPITAL RESERVE CONSULTANTS

929 West Street, Suite 310 ❖ Annapolis, Maryland 21401
Tel: 800.850.2835 ❖ Fax: 410.268.8483
www.mdareserves.com



October 31, 2006
Revised February 27, 2007

Mr. Steven Kenny
OCEAN POINT MANAGEMENT
9923 Steven Decatur Highway, Suite D6
Ocean City, MD 21843

Tel: 410-213-7144

RE: HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

Dear Mr. Kenny,

Pursuant to your acceptance of our proposal of September 22, 2006, we have completed our evaluation of the Hawaiian Village Condominium Association – Royal in Ocean City, Maryland. The purpose of this evaluation was to obtain data for the preparation of the enclosed Replacement Reserve Study.

The following sections are included in this Report:

- ~ A written narrative, which includes a financial summary, additional information describing and clarifying the enclosed *Replacement Reserve Report*, and a summary of conditions found on the site;
- ~ The *Replacement Reserve Analysis* with tables listing the inventory of components, estimated replacement costs, estimated remaining life, and the graphical presentation of the calculated data;
- ~ *Supporting photographs*;
- ~ An *Appendix* describing the standard procedures and definitions.

Please review the narrative and data in this study with your Board of Directors. We will provide further revisions to this document if items have been improperly included or omitted, or if the Board wishes to suggest other modifications to the component inventory herein. We welcome the input and suggestions from your Board on these items. Such review and input always helps to hone the accuracy of the report. Such revisions should be requested in writing by the Board of Directors within ninety (90) days of the date of the original report.

If you have any questions regarding this report, please do not hesitate to contact my office.

Sincerely,
MILLER ♦ DODSON ASSOCIATES, INC.

Greg Gilbert
Reserve Analyst

Enclosures: Replacement Reserve Report

R:Projectfiles/hawaiianvillage

REPLACEMENT RESERVE REPORT

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION ROYAL

Ocean City, Maryland

October 31, 2006
Revised February 27, 2007

Property Management by:

Mr. Steven Kenny
OCEAN POINT MANAGEMENT
9923 Steven Decatur Highway, Suite D6
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Replacement Reserve Report

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION ROYAL

Ocean City, Maryland

October 31, 2006
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Replacement Reserve Report

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION ROYAL

Ocean City, Maryland

October 31, 2006

Revised February 27, 2007

The subject property consists of a single five-story, high-rise condominium building containing 88 units. The field work for this study was conducted on October 25, 2006. The weather was overcast, and the temperature was approximately 60 degrees Fahrenheit. The survey covered the building exterior systems including the roof, exterior surfaces, and lobbies, stairwells, elevators, and common building systems. This survey report did not include the common elements of the community, such as parking areas, walks, curbs, gutters, pools, and meeting rooms. These elements are included in a separate report. Interior of units were not evaluated, nor are they included in any of the analyses.

Miller-Dodson Associates has visually inspected the common elements in the building in order to ascertain the remaining useful life and the replacement costs of these components.

Miller-Dodson Associates would like to acknowledge the assistance and input of Mr. Richard Dannenberg and Mr. Steven Kenny. They have provided very helpful insight into the history of the physical condition of many of the components of the property.

Level of Service: This study has been performed as an Update, with Site Visit / On Site Review as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, the component inventory is based on the study that was performed by US Inspect dated June 26, 2002. This information was adjusted to reflect changes to the inventory that were provided by the property manager, and the quantities were adjusted accordingly from field measurements. The condition of all components was ascertained from a site visit and the visual inspection of each component by the analyst. The life expectancy and the value of components are provided based in part on these observations, and the fund status and funding plan have been derived from analysis of this data.

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

A. FINANCIAL SUMMARY

Methods of Accounting: *Important Note:* In the enclosed Replacement Reserve Analysis, the recommended annual deposit is calculated by two methods, the *Cash Flow Method* and the *Component Method*. Both methods are presented graphically, pages A-1 through A-5, with tables showing recommended annual deposits, expenditures, and balances projected over the next thirty years. Both methods of calculating Reserves are discussed in more detail below, as well as in the attached *Appendix*. It should be pointed out that most communities adopt the Cash Flow Method due to its lower annual contributions. However, the Board of Directors, in consultation with their management and accounting professionals, must decide which of the two accounting methods is more suitable for use by the Association.

Current Funding: This reserve study has been prepared for Fiscal Year 2007. The *Replacement Reserves Reported to be on Deposit* at the start of the year are reported to be \$50,000. Information concerning this balance has been supplied by the Association's representative, and confirmation or audit of the balance is beyond the scope of the study. The planned annual contribution to reserves for the Fiscal Year is \$0, which is equivalent to an average contribution of \$0 per unit per month. Based on currently projected expenditures, the Homeowners' Association will deplete the reserve fund in the year 2010 and will incur a deficit of \$145,064 in that year if annual reserve contributions are not increased. See Page A-5 for details.

Cash Flow Method: The *Minimum Recommended Annual Deposit* as calculated by the Cash Flow Method is \$93,243, which is equivalent to an average contribution of \$88.30 per unit per month. This is the uniform amount that must be placed in reserves each year until the critical year is reached in 2043, at which time, the Annual Contribution decreases. This funding level will provide an adequate amount to cover the replacement expenses that have been projected in the study and to maintain a minimum balance Threshold of \$49,577, which is equal to 3% of the value of the replacement inventory. It should be recognized, however, that Cash Flow Method calculations should be reviewed annually based on recent contributions and expenditures, and should be updated every three to five years based on a physical evaluation of the conditions of the components.

(Please note that the Critical Year falls outside of the 30-year period represented on the enclosed graphs and tables. In recognition of the recurring nature of replacement components, this program calculates reserve funding requirements over a 40-year period. This is done in an effort to prevent inadvertent under-funding by anticipating large funding needs beyond the 30-year study period shown in this report.)

Component Method: *Note: The Association has elected to use the Cash Flow Method of calculating the Reserve Contributions. Therefore, the Component Method calculations presented here are not germane to the Reserve Study and are provided only for comparative purposes.*

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

The *Current Funding Objective* calculated by the Component Method is \$474,624. With a reserves balance of \$50,000, the Association reserves are funded at 10.53% of this objective. The recommended *Minimum Recommended Annual Contribution* to the reserves as computed by the Component Method is \$161,344 in the first year of the study, declining to \$100,637 in the tenth year of the study. Projected annual deposits by the Component Method over the next ten years are shown on page A-4 of the Replacement Reserve Analysis.

The *Minimum Recommended Annual Contribution* in the study year projected by the Component method is higher than the annual deposit if reserves were fully funded. This higher deposit is due in large part to the initial acceleration that results from Component Method mathematical model. However, the high first year contribution may also be dictated by significant anticipated costs to be incurred for replacement of major common elements in the first ten years of the study. Refer to the tables and in the report for more detail.

Interest, Inflation and Taxes on Reserves: This study does not take into account the interest on the reserves on deposit, nor does it account for inflation over the period of the study. We will, however, incorporate interest and inflation figures into the study at the direction of the Board of Directors using figures provided by the Board. The study also assumes that the principal on the Association's Reserves are not subject to tax.

B. REPLACEMENT RESERVE ANALYSIS

Components included: Every effort has been made to identify all items, which should be reasonably considered to be "common elements" for inclusion in this analysis. To that end, this report may have been made overly inclusive. Some of these components could be appropriately deleted from the analysis. Such deletions, however, should be made consciously, with the approval of the Board, recognizing that any future replacement of the deleted components would have to be funded from sources other than the replacement reserves. Components that are candidates for deletion:

- 1. Small components:** For ease of administration, it may be preferable to handle replacement of relatively low cost components from the annual operating budget rather than making disbursements from the reserves. A commonly used guideline is to use operating funds for replacement of any component with replacement cost less than \$1,000. In larger Associations, this limit is often raised to \$5,000.
- 2. Long lasting components:** The reserve schedule includes components with estimated economic lives equaling or exceeding thirty years, for example, the stand pipes and boiler. While some analysts would omit these components from the schedule entirely on the basis that the economic lives of these components approach that of the property as a whole, it is recommended that they be retained since dropping them might expose the Association to a large unfunded liability should the replacements be needed at some time in the future.
- 3. Components incorrectly included:** In an effort to include all components that could reasonably be considered as "common," it is possible that some items have been included which are not the responsibility of the Association.

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

Components excluded: The following components have been excluded from the Replacement Reserve Analyses. If any of these exclusions have been made in error, we will reinsert the component upon the written request of the Board of Directors:

1. **Long lived components.** The following components are expected to have a life equal to that of the project, if properly maintained:
 - a. Building foundations, structure and floor slabs.
 - b. Exterior, load bearing, masonry walls.
 - c. Electrical panels and common wiring.

2. **Local Government.** We have assumed the following components will be maintained and replaced by the local government (or responsible utility company):
 - a. Adjacent roads and associated improvements including curbs, gutters and sidewalks.
 - b. Underground water, sewer and gas mains.

3. **Individual Owners.** We have assumed the following components will be maintained and replaced by the individual tenants:
 - a. Entry doors, sliding glass doors windows and storm shutters.
 - b. Utility connections including water, sewer and electrical.
 - c. Building interiors, water heater and HVAC, including rooftop units.

4. **Operating Funds.** Pursuant to our proposal, we have not included items with a value of less than \$500.00 or those items that are funded from operating funds. Some of these items are listed below:
 - a. General signage throughout the community.
 - b. Fire extinguishers.
 - c. Plastic pool equipment.
 - d. Lobby furniture.

5. **Unreservable components.** The following items were omitted because they are considered to be non-capital expenses under IRS guidelines:
 - a. Painting - Revenue Ruling 75-370 and 75-371.
 - b. Seasonal landscaping, such as annual planting, mulching, and pruning.
 - c. Future Reserve Studies.

Revisions: Revisions will be made to the Replacement Reserve Analysis in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision if requested in writing within three months of the date of this report.

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL Replacement Reserve Report

Updating: It is recommended to review and revise the Replacement Reserve Analysis annually to take into account replacements, which have actually occurred and known changes in replacement costs. Updating the analysis after a major replacement is made usually results in a significant reduction in the annual deposit as calculated by the Component Method. A full analysis based on a physical evaluation of the components should be performed approximately every three to five years.

C. SUMMARY OF CONDITIONS

The subject property appears to be in good overall condition for its age. The general upkeep of the common facilities reflects the conscientiousness of the building manager and staff. This report is based on normal life expectancy of the building components and does not include repair costs related to storm damage. The following comments pertain to the larger, more significant components in the property's inventory and to those items that are unique or deserving of attention because of their condition or the manner in which they have been treated in the analysis.



Photo 1 - Side elevation

General Site and Architectural Drawings. No architectural drawings or engineering site plans were available other than a basic floor plan. We recommend the Association assemble a library of site and building plans of the property contacting the architect and the contractor who did the renovation in 1990. Reproducible drawings should be stored and kept in a secure fireproof location. The Association will find these drawings to be a valuable resource in the future.

Exterior Finish. The Exterior Wall Insulation and Finish System (EIFS) was visually inspected. The system is in good condition. All caulking appears in good condition. EIFS systems have historically experienced problems resulting from faulty installation and inappropriate design details that trap moisture behind the weather barrier. These conditions have caused leaks and structural damage at other locations. Improper detailing can also cause surface cracking. These defects can only be found by close inspection from scaffolding and by removal of small sections of the material to test if moisture is present. We recommend periodic inspection of the building by a professional certified and equipped to conduct this type of inspection.

There are different methods of maintaining the EIFS. The preferred method is to apply a silicone based color coat every 10 years. The theory behind installing a color coat is that ultraviolet rays slowly deteriorate the EIFS surface coat over time, which requires that the EIFS be refurbished on a periodic basis.

We recommend that the Association contact EIMA (EIFS industry manufacturers association) to determine inspection requirements and establish an annual inspection program. EIMA may be reached at the following:

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

EIMA
3000 Corporate Center Drive, Suite 270
Morrow, GA 30260
Tel: 1-800-294-3462 or 1-770-968-7945
www.eifsfacts.com

Alternatively, the Association may contact the manufacturer of to gain a better understanding of the EIFS system and standard inspection and maintenance procedures.

For the Reserve Study we have included an allowance for re-coating and caulking of the EIFS surface every ten years. We included the joint caulking at the same time as re-coating to take advantage of the scaffolding in place.



Photo 2 – Single ply membrane roofing

Roofing. The roof is covered with a single membrane with a ballasted covering. The roofing system was being replaced in 2006 at the time of the study. The roof should have proper ballasted with a double layer of concrete walking pads along the roof edge.



Photo 3 - Single ply roofing system – being installed

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL Replacement Reserve Report

Sprinkler (fire suppression) System. The building is equipped with a fire suppression system. The system is tagged with an appropriate 3rd party inspection sticker and our cursory observations of the primary components did not reveal any defects. However, evaluation and testing of this system was beyond the scope of the inspection. Consultation with the firm which has been servicing the equipment is recommended.



Photo 4 - Fire Alarm System

Building Piping Systems. The cost of replacing the various risers for water and waste throughout the building has been estimated using R. S. Means Building Construction Cost Data. Most of these lines are concealed making inspection impractical. We assume that most of these lines were replaced when kitchen facilities and rest rooms were added, and that they are therefore relatively new. We also expect that serviceable sections of the older lines were left in place at that time making the piping systems a mixture of old and new. To contend with potential need to replace older sections of line we have included estimated amounts for this purpose in the 24 to 30 year time frame.

Elevators. The estimated cost of replacing the major components of the building elevators has been developed utilizing R.S. Means Construction Cost Data. These costs are included to reflect the obsolescence that occurs with elevator systems. Even though the systems may be functioning well at this time, parts for most mechanical control systems are becoming increasingly hard to find. Parts availability becomes a major consideration that forces a replacement decision. When this work is ultimately accomplished, the elevators will have to be brought into compliance with the latest safety code requirements. This work typically entails upgrading door operating mechanisms, replacing elevator call systems and installation of emergency phones. A prudent amount has been included in anticipation of these problems.



Photo 5 - Elevator

D. LIFE EXPECTANCY AND COST ESTIMATES

Estimated Life Left: The "Estimated Life Left in Years" column represents the number of serviceable years left in the item based on its current or repaired condition. It is not a mathematical formula directly related to "Estimated Economic Life in Years." Some items may experience longer lives while others may experience shorter lives depending on many factors such as environment, initial quality of the component, maintenance, etc.

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

Cyclical Funding: The domestic water supply lines and sanitary waste and vent lines are components that are typically replaced in stages rather than all in one time period. For this reason, these items were placed in the cyclic replacement section of the reserve schedule, at full replacement value.

Partial Funding: Several of the replacement items have been funded at less than 100 percent of their full replacement value. This is done in an effort to keep reserve contributions at a reasonable level, on the theory that many of these components will never be replaced in their entirety. However, catastrophic failure is not anticipated, and therefore is not fully funded. The percentage of funding may be adjusted in future years based on historical data and actual experience. All other components were placed in the normal replacement sections at full estimated replacement cost with replacement time estimates based on current conditions and historical data.

E. SURVEY METHODOLOGY

Valuation: The replacement reserve analysis depends upon estimates of total useful life, life remaining and replacement cost. These estimates were obtained from Government standards, published estimating manuals, recent experience on comparable properties and engineering judgment. We believe that the analysis will provide a useful guide for planning. Actual experience in replacing equipment may differ significantly from the projections in the analysis because of conditions beyond our control, such as maintenance practices, inflation, variations in pricing and market conditions, future technological developments and regulatory actions.

Conflict of Interest: Neither Miller-Dodson Associates nor this Reserve Analyst has any prior or existing relationship with this community association which would represent a real or perceived conflict of interest.

Reliance on Client Data: Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant.

Scope: The Reserve Study will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.

Reserve Projects: Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

HAWAIIAN VILLAGE CONDOMINIUM ASSOCIATION - ROYAL
Replacement Reserve Report

Analyst's Credentials: Mr. Gregory S. Gilbert holds a Bachelors Degree in Architecture from the Georgia Institute of Technology and a Master of Architecture from the University of Oklahoma. Mr. Gilbert is a licensed Architect. Mr. Gilbert's experience includes the design of residential homes, fire stations, and most recently educational projects. He has also done over twenty feasibility studies for the U. S. Navy, Board of Educations and Retail developers. All of these feasibility studies included performing existing condition surveys to look for maintenance issues, code violations and general conditions of the structure to determine if and how the buildings can be renovated or modified. He is currently a Reserve Analyst for Miller-Dodson Associates.

End of Report

Respectfully Submitted,
MILLER ❖ DODSON ASSOCIATES, INC

Greg Gilbert
Reserve Analyst

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REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

GENERAL INFORMATION:

2007 Study Year
 \$50,000 Replacement Reserves reported to be on deposit at start of Study Year
 \$1,652,583 Estimated value of all Components included in the Replacement Reserve Inventory

The information shown in this Summary does not account for interest earned on Replacement Reserves on deposit, nor does it include adjustments for inflation. For more information see the attached Appendix.

REPORTED CURRENT FUNDING DATA:

None REPORTED CURRENT ANNUAL CONTRIBUTION TO REPLACEMENT RESERVES

CASH FLOW METHOD CALCULATIONS:

\$93,243 MINIMUM RECOMMENDED ANNUAL CONTRIBUTION TO REPLACEMENT RESERVES

\$88.30 Per unit minimum recommended monthly contribution to Replacement Reserves
 \$49,577 Recommended minimum Replacement Reserve Funding Threshold (3.0 percent)
 2043 First year Reserves fall to minimum recommended level (Design Year)

COMPONENT METHOD CALCULATIONS:

\$161,344 MINIMUM RECOMMENDED ANNUAL CONTRIBUTION TO RESERVES (IN STUDY YEAR)

\$152.79 Per unit minimum recommended monthly contribution to Replacement Reserves
 \$474,624 Current Funding Objective
 10.53% Funding Percentage
 \$424,624 One time deposit required to fully fund Replacement Reserves
 \$91,639 Annual Contribution to Replacement Reserves if Reserves were fully funded.

PROJECT INFORMATION:

PROPERTY MANAGED BY:	MAJOR COMPONENTS IN ANALYSIS:	TYPE OF PROPERTY:
Ocean Point Management	Building Exterior Materials, Roof, Elevator	Condominium
Mr. Steven Kenny	Building Systems, Rails	# OF UNITS:
67th Street		88
Ocean City, MD 21843	PROPERTY LOCATION:	YEAR BUILT:
410 - 213-7144	Ocean City, Maryland	1989

NOTES:

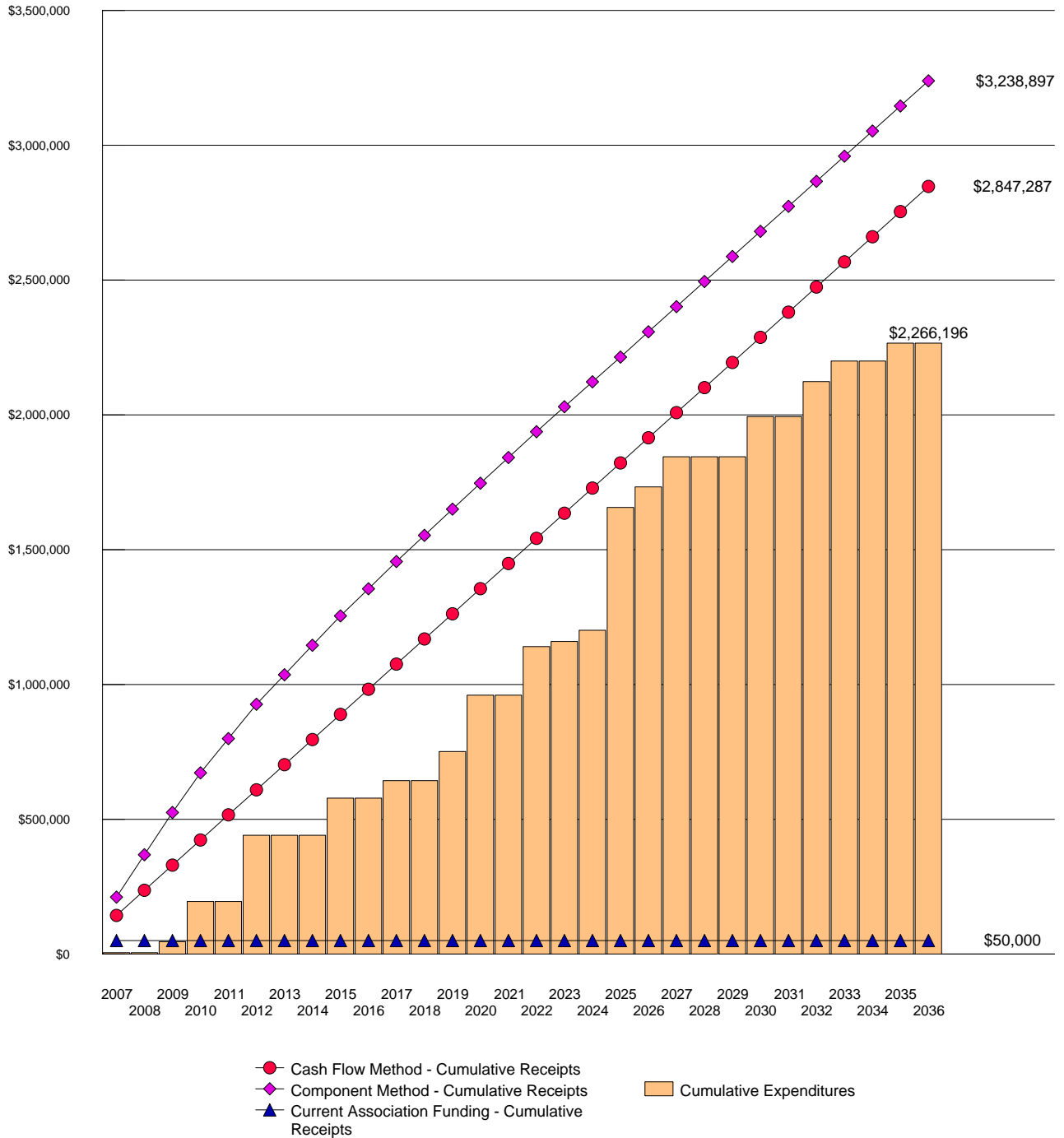
- This report conforms to the National Reserve Study Standards that were adopted by the CAI in 1998.
- The Association uses a Fiscal Year that covers the period if January 1 through December 31. 2/27/07. Revised per email dated January 17, 2007 from Richard Dannenberg.

REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

Funding Methods Comparison Graph - Cumulative Receipts and Expenditures

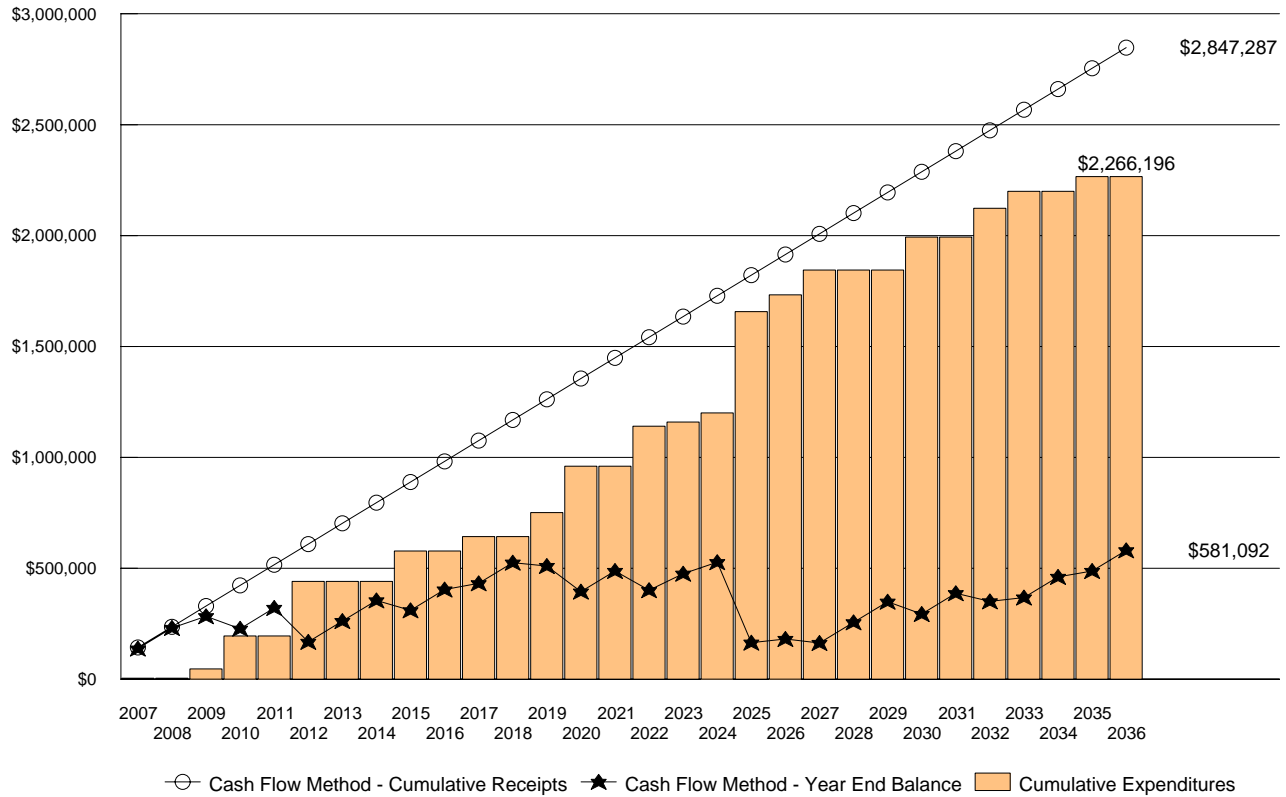


REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

Cash Flow Method - Cumulative Receipts and Expenditures Graph



Cash Flow Method Data - Years 1 through 30

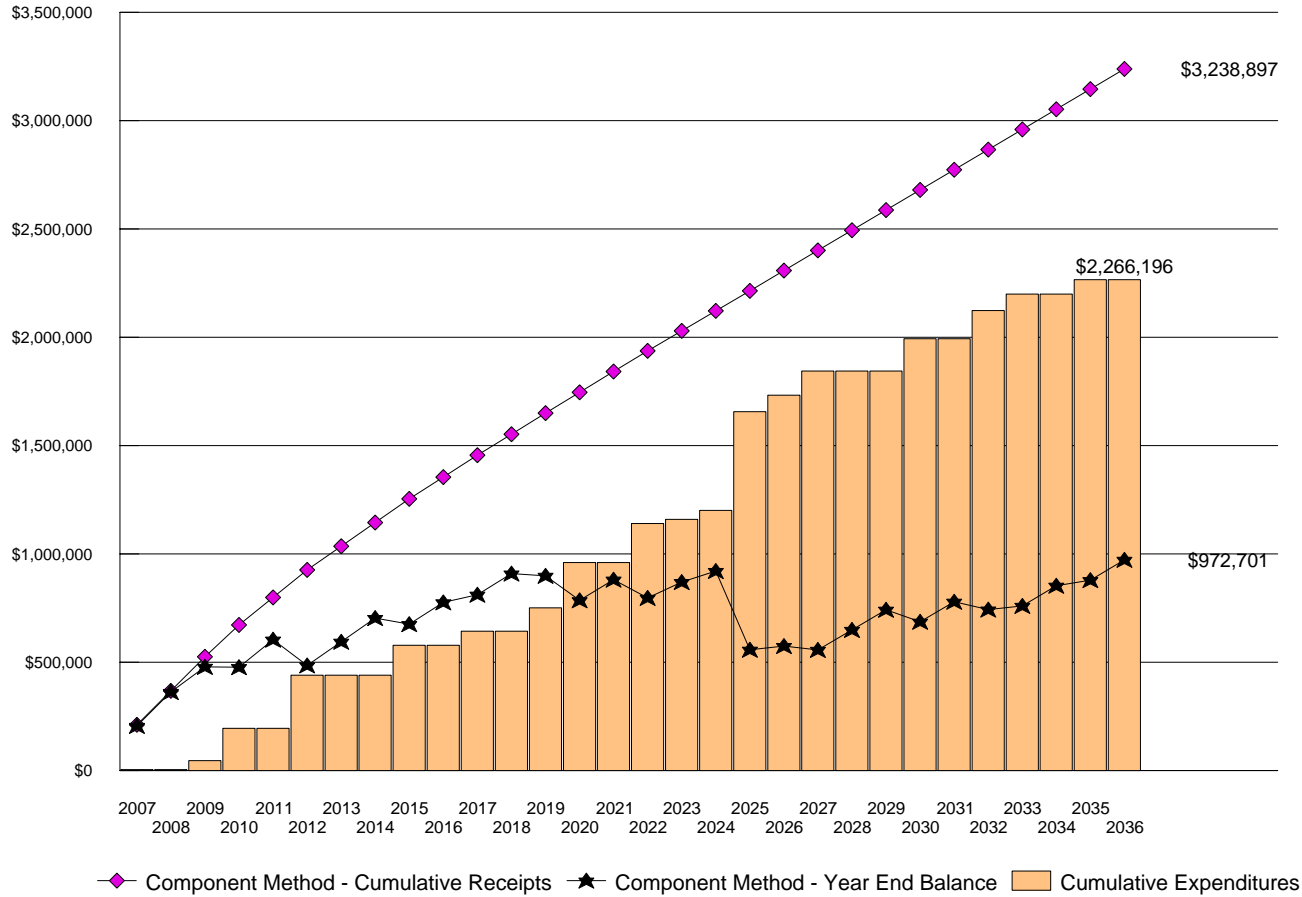
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TEN YEAR SUMMARIES
Starting balance	\$50,000										
Annual deposit	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	
Expenditures	\$5,000	\$0	\$41,190	\$148,874	\$0	\$245,705	\$0	\$0	\$137,640	\$0	Expenditures: \$578,409
Year end balance	\$138,243	\$231,486	\$283,539	\$227,908	\$321,151	\$168,688	\$261,931	\$355,174	\$310,777	\$404,020	Receipts: \$982,429
Minimum rec. funding lvl.	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	
Cumulative expenditures	\$5,000	\$5,000	\$46,190	\$195,064	\$195,064	\$440,769	\$440,769	\$440,769	\$578,409	\$578,409	
Cumulative receipts	\$143,243	\$236,486	\$329,729	\$422,972	\$516,215	\$609,457	\$702,700	\$795,943	\$889,186	\$982,429	
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Expenditures: \$1,154,707
Annual deposit	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	Receipts: \$934,446
Expenditures	\$65,000	\$0	\$108,160	\$208,874	\$0	\$180,233	\$19,090	\$41,190	\$456,000	\$76,160	
Year end balance	\$432,263	\$525,506	\$510,589	\$394,958	\$488,201	\$401,210	\$475,363	\$527,416	\$164,659	\$181,742	
Minimum rec. funding lvl.	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	
Cumulative expenditures	\$643,409	\$643,409	\$751,569	\$960,443	\$960,443	\$1,140,676	\$1,159,766	\$1,200,956	\$1,656,956	\$1,733,116	
Cumulative receipts	\$1,075,672	\$1,168,915	\$1,262,158	\$1,355,401	\$1,448,644	\$1,541,886	\$1,635,129	\$1,728,372	\$1,821,615	\$1,914,858	
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	Expenditures: \$533,079
Annual deposit	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	\$93,243	Receipts: \$934,456
Expenditures	\$111,675	\$0	\$0	\$148,874	\$0	\$129,770	\$76,160	\$0	\$66,600	\$0	
Year end balance	\$163,310	\$256,553	\$349,795	\$294,164	\$387,407	\$350,880	\$367,963	\$461,206	\$487,849	\$581,092	
Minimum rec. funding lvl.	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	\$49,577	
Cumulative expenditures	\$1,844,791	\$1,844,791	\$1,844,791	\$1,993,665	\$1,993,665	\$2,123,436	\$2,199,596	\$2,199,596	\$2,266,196	\$2,266,196	FIRST TRANSITION YEAR 2043
Cumulative receipts	\$2,008,101	\$2,101,344	\$2,194,587	\$2,287,830	\$2,381,073	\$2,474,316	\$2,567,558	\$2,660,801	\$2,754,044	\$2,847,287	

REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

Component Method - Cumulative Receipts and Expenditures Graph



Component Method Data - Years 1 through 30

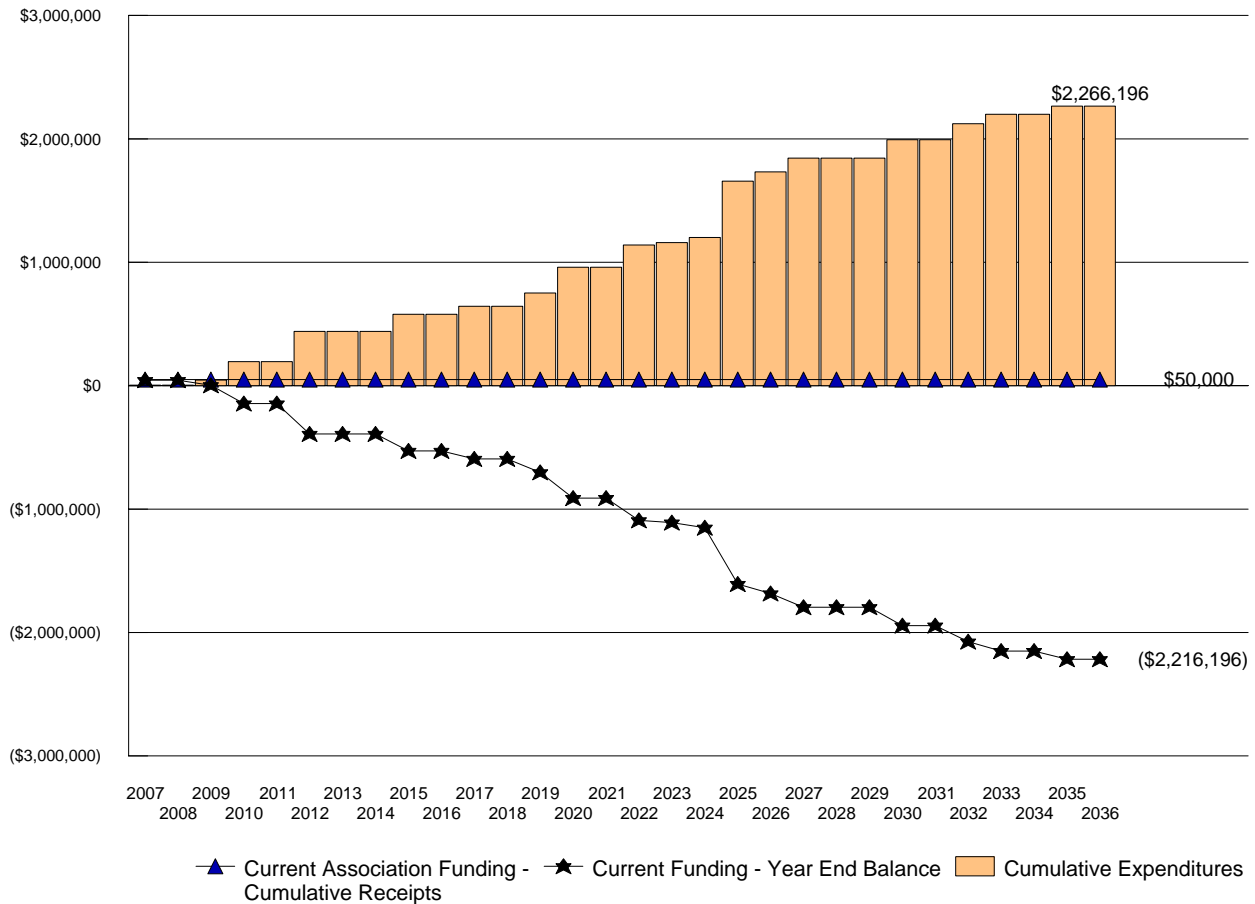
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TEN YEAR SUMMARIES
Starting balance	\$50,000										Expenditures: \$578,409 Receipts: \$1,355,151
Annual deposit	\$161,344	\$156,921	\$156,921	\$147,094	\$127,116	\$127,116	\$109,334	\$109,334	\$109,334	\$100,637	
Expenditures	\$5,000	\$0	\$41,190	\$148,874	\$0	\$245,705	\$0	\$0	\$137,640	\$0	
Year end balance	\$206,344	\$363,265	\$478,996	\$477,217	\$604,332	\$485,743	\$595,077	\$704,411	\$676,105	\$776,742	Expenditures: \$1,154,707 Receipts: \$955,006
Cumulative Expenditures	\$5,000	\$5,000	\$46,190	\$195,064	\$195,064	\$440,769	\$440,769	\$440,769	\$578,409	\$578,409	
Cumulative Receipts	\$211,344	\$368,265	\$525,186	\$672,281	\$799,396	\$926,512	\$1,035,846	\$1,145,180	\$1,254,514	\$1,355,151	
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Expenditures: \$533,079 Receipts: \$932,784
Annual deposit	\$100,637	\$97,354	\$97,354	\$95,867	\$95,612	\$95,612	\$92,632	\$92,196	\$92,196	\$93,530	
Expenditures	\$65,000	\$0	\$108,160	\$208,874	\$0	\$180,233	\$19,090	\$41,190	\$456,000	\$76,160	
Year end balance	\$812,378	\$909,732	\$898,926	\$785,920	\$881,532	\$796,910	\$870,452	\$921,458	\$557,654	\$575,024	Expenditures: \$533,079 Receipts: \$932,784
Cumulative Expenditures	\$643,409	\$643,409	\$751,569	\$960,443	\$960,443	\$1,140,676	\$1,159,766	\$1,200,956	\$1,656,956	\$1,733,116	
Cumulative Receipts	\$1,455,787	\$1,553,141	\$1,650,495	\$1,746,363	\$1,841,975	\$1,937,587	\$2,030,218	\$2,122,414	\$2,214,611	\$2,308,140	
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	
Annual deposit	\$93,530	\$92,973	\$92,973	\$92,973	\$92,973	\$92,973	\$93,091	\$93,091	\$93,091	\$93,091	Expenditures: \$533,079 Receipts: \$932,784
Expenditures	\$111,675	\$0	\$0	\$148,874	\$0	\$129,770	\$76,160	\$0	\$66,600	\$0	
Year end balance	\$556,878	\$649,851	\$742,824	\$686,923	\$779,895	\$743,098	\$760,029	\$853,120	\$879,611	\$972,701	
Cumulative Expenditures	\$1,844,791	\$1,844,791	\$1,844,791	\$1,993,665	\$1,993,665	\$2,123,436	\$2,199,596	\$2,199,596	\$2,266,196	\$2,266,196	
Cumulative Receipts	\$2,401,670	\$2,494,642	\$2,587,615	\$2,680,588	\$2,773,561	\$2,866,534	\$2,959,625	\$3,052,715	\$3,145,806	\$3,238,897	

REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

Current Association Funding - Cumulative Receipts and Expenditures Graph



Current Funding Data - Years 1 through 30

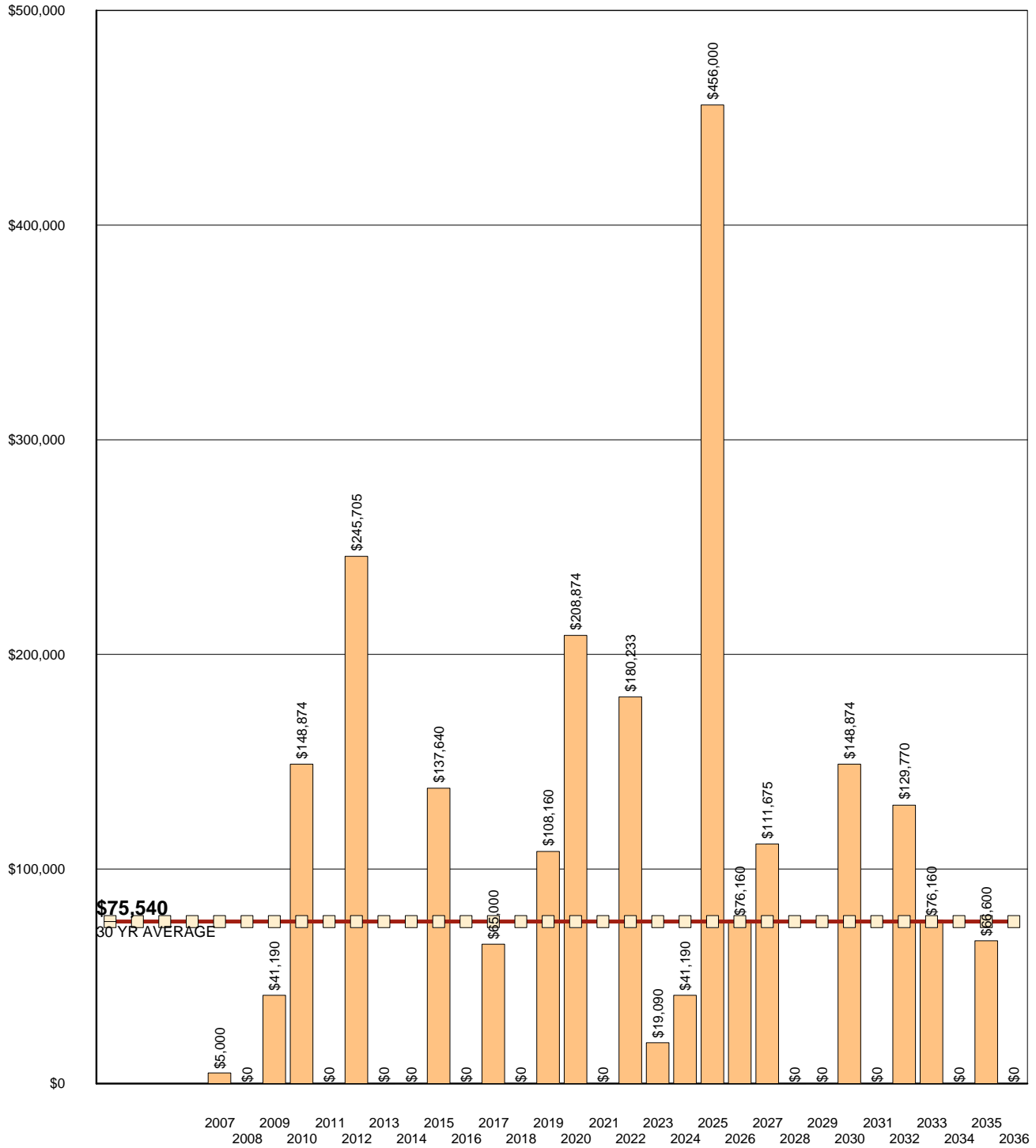
Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	TEN YEAR SUMMARIES
Starting balance	\$50,000										Expenditures: \$578,409 Receipts: \$50,000
Annual deposit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Expenditures	\$5,000	\$0	\$41,190	\$148,874	\$0	\$245,705	\$0	\$0	\$137,640	\$0	
Year end balance	\$45,000	\$45,000	\$3,810	(\$145,064)	(\$145,064)	(\$390,769)	(\$390,769)	(\$390,769)	(\$528,409)	(\$528,409)	
Cumulative Expenditures	\$5,000	\$5,000	\$46,190	\$195,064	\$195,064	\$440,769	\$440,769	\$440,769	\$578,409	\$578,409	
Cumulative Receipts	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	TEN YEAR SUMMARIES
Annual deposit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Expenditures: \$1,154,707 Receipts: \$0
Expenditures	\$65,000	\$0	\$108,160	\$208,874	\$0	\$180,233	\$19,090	\$41,190	\$456,000	\$76,160	
Year end balance	(\$593,409)	(\$593,409)	(\$701,569)	(\$910,443)	(\$910,443)	(\$1,090,676)	(\$1,109,766)	(\$1,150,956)	(\$1,606,956)	(\$1,683,116)	
Cumulative expenditures	\$643,409	\$643,409	\$751,569	\$960,443	\$960,443	\$1,140,676	\$1,159,766	\$1,200,956	\$1,656,956	\$1,733,116	
Cumulative receipts	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	TEN YEAR SUMMARIES
Annual deposit	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Expenditures: \$533,079 Receipts: \$0
Expenditures	\$111,675	\$0	\$0	\$148,874	\$0	\$129,770	\$76,160	\$0	\$66,600	\$0	
Year end balance	(\$1,794,791)	(\$1,794,791)	(\$1,794,791)	(\$1,943,665)	(\$1,943,665)	(\$2,073,436)	(\$2,149,596)	(\$2,149,596)	(\$2,216,196)	(\$2,216,196)	
Cumulative Expenditures	\$1,844,791	\$1,844,791	\$1,844,791	\$1,993,665	\$1,993,665	\$2,123,436	\$2,199,596	\$2,199,596	\$2,266,196	\$2,266,196	
Cumulative Receipts	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

REPLACEMENT RESERVE ANALYSIS

Royal - Hawaiian Village Condominium

October 24, 2006

Graph of Annual Replacement Expenditures



REPLACEMENT RESERVE INVENTORY

Royal - Hawaiian Village Condominium

October 24, 2006

INVENTORY OF COMPONENTS - INTERVAL REPLACEMENT

ITEM #	COMPONENT	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	COMPLETE CYCLE (YRS)	INITIAL REPLACEMENT (YRS)	TOTAL REPLACEMENT COST (\$)
1	Domestic Water Supply Lines	ls	1	\$196,428.00	25	15	\$196,428
	0.2 units to be replaced in 2022						\$39,286
	0.2 units to be replaced in 2027						\$39,286
	0.2 units to be replaced in 2032						\$39,286
	0.2 units to be replaced in 2037						\$39,286
	0.2 units to be replaced in 2042						\$39,286
2	Sanitary Waste and Vent Lines	ls	1	\$187,198.00	25	15	\$187,198
	0.2 units to be replaced in 2022						\$37,440
	0.2 units to be replaced in 2027						\$37,440
	0.2 units to be replaced in 2032						\$37,440
	0.2 units to be replaced in 2037						\$37,440
	0.2 units to be replaced in 2042						\$37,440

COMMENTS:

REPLACEMENT RESERVE INVENTORY

Royal - Hawaiian Village Condominium

October 24, 2006

INVENTORY OF COMPONENTS - NORMAL REPLACEMENT

ITEM #		UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	TOTAL REPLACEMENT COST (\$)
SITE IMPROVEMENTS							
3	Painted Wood Sign	ls	1	\$2,000.00	10	3	\$2,000
BUILDING EXTERIOR							
4	Roof - Single Ply with ballast	sf	38,000	\$12.00	18	18	\$456,000
5	EIFS - recoating	sf	41,964	\$3.50	10	3	\$146,874
6	Stone Panels	sf	2,500	\$7.00	30	5	\$17,500
7	Storefront Windows (including doors)	sf	704	\$27.00	30	15	\$19,008
8	Metal Picket Railing - 3.5'	lf	2,912	\$45.00	25	8	\$131,040
9	Exterior Lights	ea	22	\$225.00	25	20	\$4,950
10	Garage Ceiling	ls	1	\$60,000.00	15	13	\$60,000
11	Structural repair of column	ls	1	\$5,000.00	100	none	\$5,000
BUILDING INTERIOR							
12	Carpet	sf	21,760	\$3.50	7	5	\$76,160
13	Ceramic tile flooring	sf	700	\$15.00	25	15	\$10,500
14	Lay-in Ceiling 2X2	sf	700	\$4.35	20	5	\$3,045
15	Light Fixtures	ea	110	\$100.00	25	10	\$11,000
16	Mail Boxes (aluminum)	ea	88	\$75.00	20	8	\$6,600

COMMENTS:

2/27/07. Changed remaining life of carpet.

2/27/07. Added one-time structural repair of column.

REPLACEMENT RESERVE INVENTORY

Royal - Hawaiian Village Condominium

October 24, 2006

INVENTORY OF COMPONENTS - NORMAL REPLACEMENT

ITEM #		UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	TOTAL REPLACEMENT COST (\$)
BUILDING SYSTEMS							
17	Elevator Machinery	ls	2	\$12,000.00	25	5	\$24,000
18	Elevator Controls	ls	2	\$22,500.00	30	5	\$45,000
19	Elevator Cab and Doors	ls	2	\$27,000.00	30	10	\$54,000
20	Fire Alarm Devices	ea	112	\$300.00	15	2	\$33,600
21	Fire Alarm System	ls	1	\$7,590.00	15	2	\$7,590
22	Stand Pipes	ea	2	\$12,000.00	35	15	\$24,000
23	Fire Pump	ea	1	\$19,090.00	30	16	\$19,090
24	Trash Compactor	ea	1	\$30,000.00	15	5	\$30,000
25	Boiler	ea	1	\$32,000.00	40	12	\$32,000
26	Air Conditioners	ea	10	\$5,000.00	10	5	\$50,000

COMMENTS:

Unit doors and windows. The replacement of unit doors and windows is the responsibility of the Owners.
 There are 130 unit entry and balcony doors with a replacement cost of approximately \$74,750.
 There is 3,696 sq ft of windows and sliding glass doors with a replacement cost of approximately \$129,360.

REPLACEMENT RESERVE INVENTORY**Royal - Hawaiian Village Condominium****October 24, 2006****SCHEDULE OF REPLACEMENTS - YEARS ONE TO FIFTEEN**

2007		2008		2009	
Structural repair of column	\$5,000			Fire Alarm Devices	\$33,600
				Fire Alarm System	\$7,590
Total Scheduled Replacements	\$5,000	No Scheduled Replacements		Total Scheduled Replacements	\$41,190
2010		2011		2012	
EIFS - recoating	\$146,874			Carpet	\$76,160
Painted Wood Sign	\$2,000			Air Conditioners	\$50,000
				Elevator Controls	\$45,000
				Trash Compactor	\$30,000
				Elevator Machinery	\$24,000
				Stone Panels	\$17,500
				Lay-in Ceiling 2X2	\$3,045
Total Scheduled Replacements	\$148,874	No Scheduled Replacements		Total Scheduled Replacements	\$245,705
2013		2014		2015	
No Scheduled Replacements		No Scheduled Replacements		Metal Picket Railing - 3.5'	\$131,040
				Mail Boxes (aluminum)	\$6,600
				Total Scheduled Replacements	\$137,640
2016		2017		2018	
No Scheduled Replacements		Elevator Cab and Doors	\$54,000	No Scheduled Replacements	
		Light Fixtures	\$11,000		
		Total Scheduled Replacements	\$65,000		
2019		2020		2021	
Carpet	\$76,160	EIFS - recoating	\$146,874	No Scheduled Replacements	
Boiler	\$32,000	Garage Ceiling	\$60,000		
		Painted Wood Sign	\$2,000		
Total Scheduled Replacements	\$108,160	Total Scheduled Replacements	\$208,874		

REPLACEMENT RESERVE INVENTORY**Royal - Hawaiian Village Condominium****October 24, 2006****SCHEDULE OF REPLACEMENTS - YEARS SIXTEEN TO THIRTY**

<p style="text-align: center;">2022</p> <p>Air Conditioners \$50,000 Domestic Water Supply Lines \$39,286 Sanitary Waste and Vent Lines \$37,440 Stand Pipes \$24,000 Storefront Windows (including dc) \$19,008 Ceramic tile flooring \$10,500</p> <p>Total Scheduled Replacements \$180,233</p>	<p style="text-align: center;">2023</p> <p>Fire Pump \$19,090</p> <p>Total Scheduled Replacements \$19,090</p>	<p style="text-align: center;">2024</p> <p>Fire Alarm Devices \$33,600 Fire Alarm System \$7,590</p> <p>Total Scheduled Replacements \$41,190</p>
<p style="text-align: center;">2025</p> <p>Roof - Single Ply with ballast \$456,000</p> <p>Total Scheduled Replacements \$456,000</p>	<p style="text-align: center;">2026</p> <p>Carpet \$76,160</p> <p>Total Scheduled Replacements \$76,160</p>	<p style="text-align: center;">2027</p> <p>Domestic Water Supply Lines \$39,286 Sanitary Waste and Vent Lines \$37,440 Trash Compactor \$30,000 Exterior Lights \$4,950</p> <p>Total Scheduled Replacements \$111,675</p>
<p style="text-align: center;">2028</p> <p>No Scheduled Replacements</p>	<p style="text-align: center;">2029</p> <p>No Scheduled Replacements</p>	<p style="text-align: center;">2030</p> <p>EIFS - recoating \$146,874 Painted Wood Sign \$2,000</p> <p>Total Scheduled Replacements \$148,874</p>
<p style="text-align: center;">2031</p> <p>No Scheduled Replacements</p>	<p style="text-align: center;">2032</p> <p>Air Conditioners \$50,000 Domestic Water Supply Lines \$39,286 Sanitary Waste and Vent Lines \$37,440 Lay-in Ceiling 2X2 \$3,045</p> <p>Total Scheduled Replacements \$129,770</p>	<p style="text-align: center;">2033</p> <p>Carpet \$76,160</p> <p>Total Scheduled Replacements \$76,160</p>
<p style="text-align: center;">2034</p> <p>No Scheduled Replacements</p>	<p style="text-align: center;">2035</p> <p>Garage Ceiling \$60,000 Mail Boxes (aluminum) \$6,600</p> <p>Total Scheduled Replacements \$66,600</p>	<p style="text-align: center;">2036</p> <p>No Scheduled Replacements</p>

REPLACEMENT RESERVE ALLOCATION

Royal - Hawaiian Village Condominium

October 24, 2006

CASH FLOW METHOD - THREE YEAR ALLOCATION OF REPLACEMENT RESERVES

Item #	Component	Estimated Replacement Cost	Allocation of Reserves on Deposit	2007			2008			2009		
				Deposits	Expenses	Year End Balance	Deposits	Expenses	Year End Balance	Deposits	Expenses	Year End Balance
INTERVAL COMPONENTS												
1	Domestic Water Supply Lines	196,428										
2	Sanitary Waste and Vent Lines	187,198										
NORMAL COMPONENTS												
SITE IMPROVEMENTS												
3	Painted Wood Sign	2,000	51	1,253		1,304	696		2,000			2,000
4	Roof - Single Ply with ballast	456,000										
5	EIFS - recoating	146,874	3,759	91,990		95,749	51,125		146,874			146,874
6	Stone Panels	17,500					2,950		2,950	6,641		9,591
7	Storefront Windows (including d	19,008										
8	Metal Picket Railing - 3.5'	131,040										
9	Exterior Lights	4,950										
10	Garage Ceiling	60,000										
11	Structural repair of column	5,000	5,000		(5,000)							
12	Carpet	76,160					12,839		12,839	28,902		41,741
13	Ceramic tile flooring	10,500										
14	Lay-in Ceiling 2X2	3,045					513		513	1,156		1,669
15	Light Fixtures	11,000										
16	Mail Boxes (aluminum)	6,600										
BUILDING SYSTEMS												
17	Elevator Machinery	24,000					4,046		4,046	9,108		13,154
18	Elevator Controls	45,000					7,586		7,586	17,077		24,663
19	Elevator Cab and Doors	54,000										
20	Fire Alarm Devices	33,600	33,600			33,600			33,600		(33,600)	
21	Fire Alarm System	7,590	7,590			7,590			7,590		(7,590)	
22	Stand Pipes	24,000										
23	Fire Pump	19,090										
24	Trash Compactor	30,000					5,058		5,058	11,385		16,442
25	Boiler	32,000										
26	Air Conditioners	50,000					8,429		8,429	18,975		27,404

REPLACEMENT RESERVE ALLOCATION

Royal - Hawaiian Village Condominium

October 24, 2006

COMPONENT METHOD - THREE YEAR ALLOCATION OF REPLACEMENT RESERVES

Item #	Component	Estimated Replacement Cost	Allocation of Reserves on Deposit	2007			2008			2009		
				Deposits	Expenses	Year End Balance	Deposits	Expenses	Year End Balance	Deposits	Expenses	Year End Balance
INTERVAL COMPONENTS												
1	Domestic Water Supply Lines	196,428	2,152	8,071		10,223	8,071		18,294	8,071		26,365
2	Sanitary Waste and Vent Lines	187,198	2,051	7,692		9,743	7,692		17,434	7,692		25,126
NORMAL COMPONENTS												
SITE IMPROVEMENTS												
3	Painted Wood Sign	2,000	126	468		595	468		1,063	468		1,532
4	Roof - Single Ply with ballast	456,000		24,000		24,000	24,000		48,000	24,000		72,000
5	EIFS - recoating	146,874	9,284	34,398		43,681	34,398		78,079	34,398		112,476
6	Stone Panels	17,500	1,475	2,671		4,146	2,671		6,817	2,671		9,487
7	Storefront Windows (including d	19,008	934	1,130		2,064	1,130		3,194	1,130		4,323
8	Metal Picket Railing - 3.5'	131,040	8,835	13,578		22,413	13,578		35,992	13,578		49,570
9	Exterior Lights	4,950	83	232		315	232		547	232		779
10	Garage Ceiling	60,000	421	4,256		4,677	4,256		8,933	4,256		13,188
11	Structural repair of column	5,000	527	4,473	(5,000)		50		50			100
12	Carpet	76,160	1,146	12,502		13,648	12,502		26,151	12,502		38,653
13	Ceramic tile flooring	10,500	398	631		1,030	631		1,661	631		2,292
14	Lay-in Ceiling 2X2	3,045	225	470		695	470		1,165	470		1,635
15	Light Fixtures	11,000	649	941		1,590	941		2,531	941		3,472
16	Mail Boxes (aluminum)	6,600	382	691		1,073	691		1,764	691		2,455
BUILDING SYSTEMS												
17	Elevator Machinery	24,000	1,922	3,680		5,601	3,680		9,281	3,680		12,961
18	Elevator Controls	45,000	3,792	6,868		10,660	6,868		17,528	6,868		24,396
19	Elevator Cab and Doors	54,000	3,603	4,582		8,184	4,582		12,766	4,582		17,348
20	Fire Alarm Devices	33,600	2,832	10,256		13,088	10,256		23,344	10,256	(33,600)	
21	Fire Alarm System	7,590	640	2,317		2,956	2,317		5,273	2,317	(7,590)	
22	Stand Pipes	24,000	1,373	1,414		2,787	1,414		4,201	1,414		5,615
23	Fire Pump	19,090	871	1,072		1,943	1,072		3,015	1,072		4,086
24	Trash Compactor	30,000	1,896	4,684		6,580	4,684		11,264	4,684		15,948
25	Boiler	32,000	2,275	2,287		4,562	2,287		6,848	2,287		9,135
26	Air Conditioners	50,000	2,107	7,982		10,089	7,982		18,071	7,982		26,053

APPENDIX Section A

PROCEDURES AND DEFINITIONS USED IN THE REPLACEMENT RESERVE SCHEDULE

A. Replacement Reserve Analysis

- **Analysis methods.** The Replacement Reserve industry generally recognizes two different methods of accounting for Replacement Reserve Analysis. Due to the difference in accounting methodologies, these methods lead to different calculated values for the *Minimum Annual Contribution* to the Reserves. The results of both methods are presented in this report. The Association should obtain the advice of its accounting professional as to which method is more appropriate for this Association. The two methods are:

1. **Component Method.** This method is a time tested mathematical model developed by HUD in the early 1980's. It treats each item in the replacement schedule as an individual line item budget. Generally, the *Minimum Annual Contribution* to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

First, the total *Current Objective* is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the *Reserve Currently on Deposit* (as reported by the Association) are distributed to the components in the schedule in proportion to the *Current Objective*. The *Minimum Annual Deposit* for each component is equal to the Estimated Replacement Cost, minus the Reserves on Hand, divided by the years of life remaining.

2. **Cash Flow Method.** The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (*Minimum Annual Deposit*) required to meet projected expenditures, without allowing TOTAL reserves on hand to fall below the specified minimum level in any year. This method usually results in a calculated requirement for annual contribution somewhat less than that arrived at by the Component Method of analysis.

First, the *Minimum Recommended Reserve Level to be Held on Account* is determined based on the age, condition, and replacement cost of the individual components. The mathematical model then allocates the estimated replacement costs to the future years in which they are projected to occur. Based on these expenditures, it then calculates the minimum constant yearly contribution (*Minimum Annual Deposit*) to the reserves necessary to keep the reserve balance at the end of each year above the *Minimum Recommended Reserve Level to be Held on Account*. The Cash Flow Analysis assumes that the Association will have authority to use all of the reserves on hand for replacements as the need occurs. This method usually results in a *Minimum Annual Deposit* that is less than that arrived at by the Component Analysis.

- **Adjusted Cash Flow Analysis.** This program has the ability to modify the Cash Flow Method to take into account forecasted inflation and interest rates, thereby producing an *Adjusted Cash Flow Analysis*. Attempting to forecast future inflation and interest rates and the impact of changing technology is highly tenuous. Therefore, in most cases it is preferable to make a new schedule periodically rather than attempt to project far into the future. We will provide more information on this type of analysis upon request.
- **Unit costs.** Unit costs are developed using nationally published standards and estimating guides, and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

Contractor proposals or actual cost experience may be available as part of the Association records. This is useful information that should be incorporated into your report. Please bring any such available data to our attention, preferably before the report is commenced.

- **Replacement vs. repair and maintenance.** A Replacement Reserve Study addresses the required funding for Capital Replacement Expenditures. This should not be confused with operational costs or cost of repairs or maintenance.

B. Definitions

- **Adjusted Cash Flow Analysis.** Cash flow analysis adjusted to take into account annual cost increases due to inflation, and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.
- **Annual Deposit if Reserves Were Fully Funded.** Shown on the Summary Sheet, "A" in the Component Method summary, this would be the amount of the Annual Deposit needed if the *Reserves Currently on Deposit* were equal to the *Total Current Objective*.
- **Cash Flow Analysis.** See *Cash Flow Method*, above.
- **Component Analysis.** See *Component Method*, above.
- **Contingency.** An allowance for unexpected requirements. Roughly the same as the *Minimum Recommended Reserve Level to be Held on Account* used in the *Cash Flow Method* of analysis.
- **Critical Year.** In the *Cash Flow Analysis*, a year in which the reserves on hand are projected to fall to the established minimum level. See *Minimum Recommended Reserve Level to be Held on Account*
- **Current Objective.** *This* is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement costs. It is equal to the *estimated replacement cost* divided by the estimated economic life, times the number of years expended (the difference between the *Estimated Economic Life* and the *Estimated Life Left*). The *Total Current Objective* can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

- **Cyclic Replacement Item.** A component item that typically begins to fail after an initial period (*Estimated Initial Replacement*), but which will be replaced in increments over a number of years (the *Estimated Replacement Cycle*). The Reserve Analysis program divides the number of years in the *Estimated Replacement Cycle* into five equal increments. It then allocates the *Estimated Replacement Cost* equally over those five increments. (As distinguished from *Normal Replacement Items*, see below)
- **Normal Replacement Schedules.** A component item that typically begins to fail after an initial period (*Estimated Initial Replacement*), but which will be replaced in increments over a number of years (the *Estimated Replacement Cycle*).
- **Estimated Economic Life.** Used in the *Normal Replacement Schedules*. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.
- **Estimated Economic Life Left.** Used in the *Normal Replacement Schedules*. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the *Estimated Economic Life* and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.
- **Estimated Initial Replacement.** For a *Cyclic Replacement Item* (see above), the number of years until the replacement cycle is expected to begin.
- **Estimated Replacement Cycle.** For a *Cyclic Replacement Item*, the number of years over which the remainder of the component's replacement occurs.
- **Minimum Annual Deposit.** Shown on the Summary Sheet, "A-1." The calculated requirement for annual contribution to reserves as calculated by the *Cash Flow Method* (see above).
- **Minimum Deposit in the Study Year.** Shown on the Summary Sheet, "A-1." The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).
- **Minimum Recommended Reserve Level to be Held on Account.** Shown on the Summary Sheet, "A" this number is used in the Cash Flow Method only, this is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total *Estimated Replacement Cost* of all reserve components.
- **Normal Replacement Item.** A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from *Cyclic Replacement Items*, see above.)
- **Normal Replacement Schedules.** The list of Normal Replacement Items by category or location. These items appear on pages designated.

- **Number of Years of the Study.** The number of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.
- **One Time Deposit Required to Fully Fund Reserves.** Shown on the Summary Sheet, "A-1" in the Component Method summary, this is the difference between the *Total Current Objective* and the *Reserves Currently on Deposit*.
- **Reserves Currently on Deposit.** Shown on the Summary Sheet, "A-1", this is the amount of accumulated reserves as reported by the Association in the current year.
- **Reserves on Hand.** Shown in the *Cyclic Replacement* and *Normal Replacement Schedules*, this is the amount of reserves allocated to each component item in the *Cyclic* or *Normal Replacement* schedules. This figure is based on the ratio of *Reserves Currently on Deposit* divided by the total *Current Objective*.
- **Replacement Reserve Study.** An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.
- **Total Replacement Cost.** Shown on the Summary Sheet, "A-1", this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.
- **Unit Replacement Cost.** Estimated replacement cost for a single unit of a given item on the schedule.
- **Unit (of Measure).** The following abbreviations are used in this report:
EA: each FT: feet LS: lump sum SF: square feet