# REPLACEMENT RESERVE REPORT FY 2018
# BEACH CLUB TOWN HOMES

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millerdodson ASSOCIATES Capital Reserve Consultants


**Community Management by:**

**RED ROCK MANAGEMENT**

**Rod Shields**

**1012 Market Street, Suite 302**
**Tega Cay, South Carolina 29708**
**630-740-2831**
**rod.shields@schaeffler.com**

**Consultant:**

millerdodson ASSOCIATES Capital Reserve Consultants

**2661 Riva Road, Suite 1023**
**Annapolis, MD 21401**
**410.268.0479**
**800.850.2835**

**MillerDodson.com**

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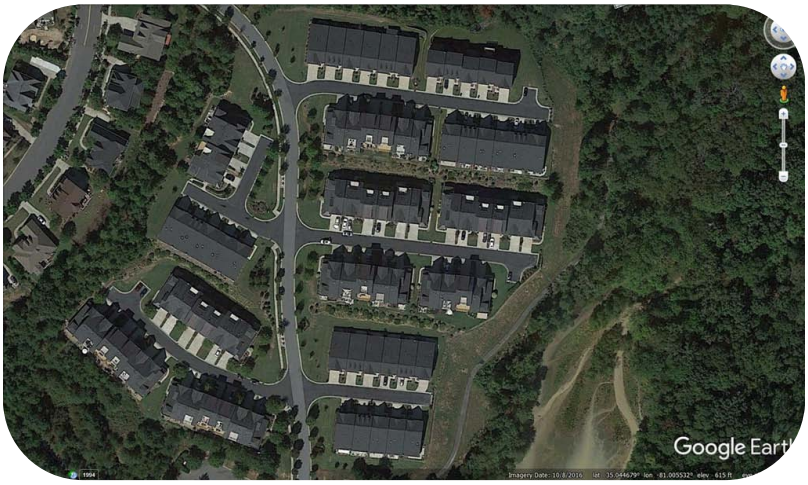
# REPLACEMENT RESERVE REPORT

## BEACH CLUB TOWN HOMES

TEGA CAY, SOUTH CAROLINA




**Description.** Beach Club Town Homes is a homeowners association, located in Tega Cay, South Carolina. The community was constructed in two phases, beginning with phase one in 2008, and phase two in 2012. The community consists of 82 living units. The survey examined the common elements of the property, including:

- Asphalt drives, asphalt parking, and parking guardrails.
- Concrete driveways, lead walks, curb and gutter.
- Retaining walls, fencing, railings, and street signage.
- Building exteriors, patios, and decks.

**Level of Service.** This study has been performed as a Level 2 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 in 2013 by Miller - Dodson Associates. The inventory was adjusted to reflect changes as provided by the Community Manager and HOA members, or adjustments were made based on the site visit and visual inspection performed by the Analyst. The included fund status and funding plan have been developed from analysis of the adjusted inventory.

To aid in the understanding of this report and its concepts and practices, on our web site, we have developed videos addressing frequently asked topics. In addition, there are posted links covering a variety of subjects under the resources page of our web site at mdareserves.com.

**Purpose.** The purpose of this Replacement Reserve Study is to provide {Property Name} (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Association.** Section B lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.

- **Condition of Items Owned by the Association.** Section B includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this study.

- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A, Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the Association's current funding and the recommended funding based on the Cash Flow Method. An Executive Summary of these calculations is provided on Page A1. The alternative Component Method of funding is provided in the Appendix.

**Basis.** The data contained in this Replacement Reserve Study is based upon the following:

- The Request for Proposal submitted and executed by the Association.

- Miller - Dodson performed a visual evaluation on {date of site work} to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.

- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller - Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

**To-Scale Drawings.** Site and building plans were not used in the development of this study. We recommend the Association assemble and maintain a library of site and building plans of the entire facility. Record drawings should be scanned into an electronic format for safe storage and ease of distribution. Upon request for a nominal fee, Miller - Dodson can provide scanning services.

**Current Funding.** This reserve study has been prepared for Fiscal Year 2018, covering the period from January 1, 2018 to December 31, 2018. The Replacement Reserves on deposit as of January 1, 2018 are projected to be $250,550. The planned contribution for the fiscal year is $69,000. This results in a Reserve Fund balance at the start of the fiscal year as follows:

| | |
|---|---|
| December 31, 2016 balance | $181,550 |
| 12 months contribution | $69,000 |
| Planned expenditures | |
| FY 2018 opening balance | $250,550 |

The balance and contribution figures have been supplied by the managing agent and confirmation or audit of these figures is beyond the scope of the study. For the purposes of this study, it is assumed that the annual contribution will be deposited at the end of each month.

**Acknowledgement.** Miller - Dodson Associates would like to acknowledge the assistance and input of the Community Manager, Mr. Rod Shields, HOA members, Mr. Ken Huber and Mr. Chip Nelson, all of which provided very helpful insight into the current operations of the property.

**Analyst's Credentials.** Mr. Glenn Larrimore, has over twenty year's professional experience in architecture, engineering, and construction. Glenn holds a Bachelor of Science degree in Architectural Engineering and a Master of Architecture degree from the Georgia Institute of Technology. His work experience includes commercial, multi-family, mixed-use, healthcare, and master planning. In addition, he has designed over 100 private homes and renovations, including several high-end residential projects. Mr. Larrimore is currently a Reserve Analyst for Miller - Dodson Associates, and a registered architect in the State of South Carolina.

Respectfully submitted,

millerdodson ASSOCIATES | Capital Reserve Consultants

Glenn Larrimore, Architect, NCARB
Reserve Analyst

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# EXECUTIVE SUMMARY

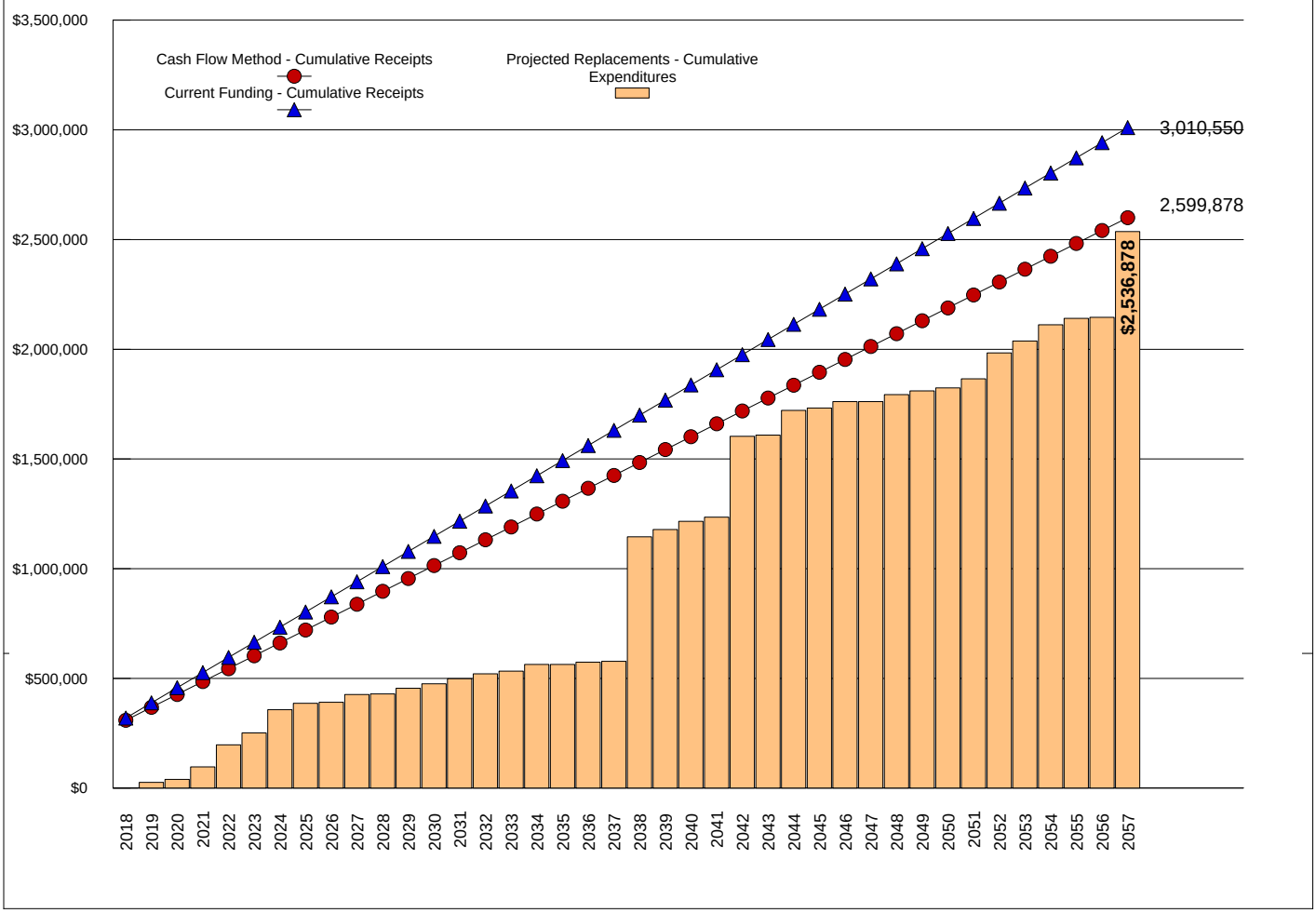
The Beach Club Town Homes Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 42 Projected Replacements identified in the Replacement Reserve Inventory.

**$58,733** **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2018**
$59.69 Per unit (average), minimum monthly funding of Replacement Reserves

We recommend the Association adopt a Replacement Reserve Funding Plan based on the annual funding recommendation above. Inflation adjusted funding for subsequent years is shown on Page A5.

Beach Club Town Homes reports a Starting Balance of $250,550 and Annual Funding totaling $69,000. Current funding is adequate to fund the $2,536,878 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.

**#1 - Cumulative Replacement Reserve Funding and Expenditures Graph**




The Current Funding Objective as calculated by the Component Method (Fully Funded) is $564,199 making the reserve account 44.4% funded. See the Appendix for more information on this method.

## REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Beach Club Town Homes Replacement Reserve Analysis calculations of recommended funding of Replacement Reserves by the Cash Flow Method and the evaluation of the Current Funding are based upon the same Study Year, Study Period, Beginning Balance, Replacement Reserve Inventory and Level of Service.

**2018** | **STUDY YEAR**

The Association reports that their accounting year begins on January 1, and the Study Year, the first year evaluated by the Replacement Reserve Analysis, begins on January 1, 2018.

**40 Years** | **STUDY PERIOD**

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 40-year Study Period.

**$250,550** | **STARTING BALANCE**

The Association reports Replacement Reserves on Deposit totaling $250,550 at the start of the Study Year.

**Level Two** | **LEVEL OF SERVICE**

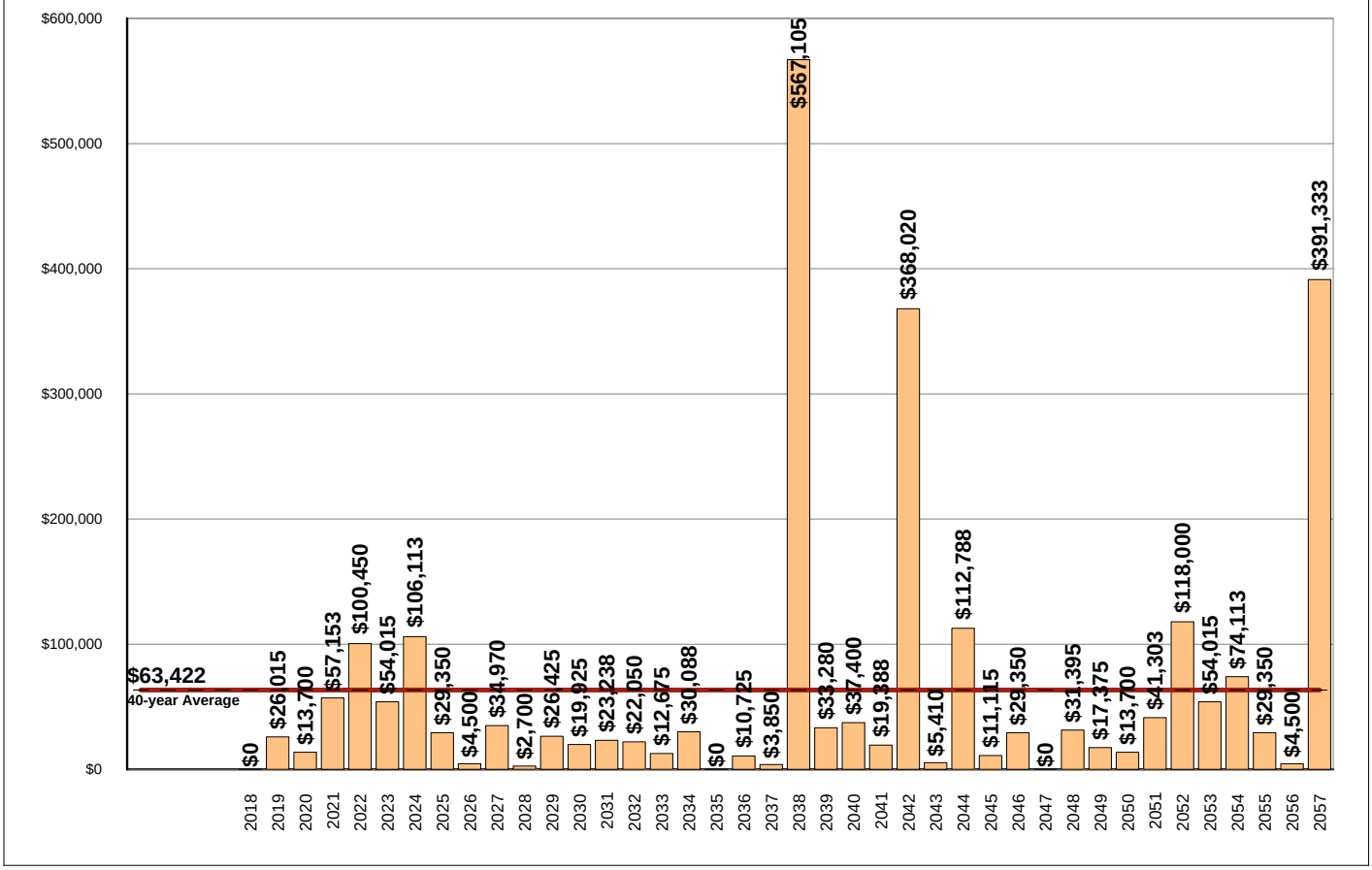
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level Two Study, as defined by the Community Associations Institute (CAI).

**$2,536,878** | **REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS**

The Beach Club Town Homes Replacement Reserve Inventory identifies 42 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be $2,536,878 over the 40-year Study Period. The Projected Replacements are divided into 13 major categories starting on Page B3. Pages B1-B2 provide detailed information on the Replacement Reserve Inventory.

**#2 - Annual Expenditures for Projected Replacements Graph**

This graph shows annual expenditures for Projected Replacements over the 40-year Study Period. The red line shows the average annual expenditure of $63,422. Section C provides a year by year Calender of these expenditures.



## UPDATING

### UPDATING OF THE FUNDING PLAN

The Association has a responsibility to review the Funding Plan annually. The review should include a comparison and evaluation of actual reserve funding with recommended levels shown on Page A4 and A5. The Projected Replacements listed on Page C2 should be compared with any replacements accomplished and funded from Replacement Reserves. Discrepancies should be evaluated and if necessary, the Reserve Study should be updated or a new study commissioned. We recommend annual increases in replacement reserve funding to account for the impact of inflation. Inflation Adjusted Funding is discussed on Page A5.

### UPDATING OF THE REPLACEMENT RESERVE STUDY

At a minimum, the Replacement Reserve Study should be professionally updated every three to five years or after completion of a major replacement project. Updating should also be considered if during the annual review of the Funding Plan, discrepancies are noted between projected and actual reserve funding or replacement costs. Updating may also be necessary if there is a meaningful discrepancy between the actual inflation rate and the inflation rate used for the Inflation Adjusted Funding of Replacement Reserves on Page A5.

## ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the $2,536,878 of Projected Expenditures over the 40-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

**#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40**

| Year | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|---|---|---|---|---|
| Starting Balance | $250,550 | | | | | | | | | |
| Projected Replacements | | ($26,015) | ($13,700) | ($57,153) | ($100,450) | ($54,015) | ($106,113) | ($29,350) | ($4,500) | ($34,970) |
| Annual Deposit | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 |
| End of Year Balance | $319,550 | $362,535 | $417,835 | $429,683 | $398,233 | $413,218 | $376,105 | $415,755 | $480,255 | $514,285 |
| Cumulative Expenditures | | ($26,015) | ($39,715) | ($96,868) | ($197,318) | ($251,333) | ($357,445) | ($386,795) | ($391,295) | ($426,265) |
| Cumulative Receipts | $319,550 | $388,550 | $457,550 | $526,550 | $595,550 | $664,550 | $733,550 | $802,550 | $871,550 | $940,550 |
| **Year** | **2028** | **2029** | **2030** | **2031** | **2032** | **2033** | **2034** | **2035** | **2036** | **2037** |
| Projected Replacements | ($2,700) | ($26,425) | ($19,925) | ($23,238) | ($22,050) | ($12,675) | ($30,088) | | ($10,725) | ($3,850) |
| Annual Deposit | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 |
| End of Year Balance | $580,585 | $623,160 | $672,235 | $717,998 | $764,948 | $821,273 | $860,185 | $929,185 | $987,460 | $1,052,610 |
| Cumulative Expenditures | ($428,965) | ($455,390) | ($475,315) | ($498,553) | ($520,603) | ($533,278) | ($563,365) | ($563,365) | ($574,090) | ($577,940) |
| Cumulative Receipts | $1,009,550 | $1,078,550 | $1,147,550 | $1,216,550 | $1,285,550 | $1,354,550 | $1,423,550 | $1,492,550 | $1,561,550 | $1,630,550 |
| **Year** | **2038** | **2039** | **2040** | **2041** | **2042** | **2043** | **2044** | **2045** | **2046** | **2047** |
| Projected Replacements | ($567,105) | ($33,280) | ($37,400) | ($19,388) | ($368,020) | ($5,410) | ($112,788) | ($11,115) | ($29,350) | |
| Annual Deposit | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 |
| End of Year Balance | $554,505 | $590,225 | $621,825 | $671,438 | $372,418 | $436,008 | $392,220 | $450,105 | $489,755 | $558,755 |
| Cumulative Expenditures | ($1,145,045) | ($1,178,325) | ($1,215,725) | ($1,235,113) | ($1,603,133) | ($1,608,543) | ($1,721,330) | ($1,732,445) | ($1,761,795) | ($1,761,795) |
| Cumulative Receipts | $1,699,550 | $1,768,550 | $1,837,550 | $1,906,550 | $1,975,550 | $2,044,550 | $2,113,550 | $2,182,550 | $2,251,550 | $2,320,550 |
| **Year** | **2048** | **2049** | **2050** | **2051** | **2052** | **2053** | **2054** | **2055** | **2056** | **2057** |
| Projected Replacements | ($31,395) | ($17,375) | ($13,700) | ($41,303) | ($118,000) | ($54,015) | ($74,113) | ($29,350) | ($4,500) | ($391,333) |
| Annual Deposit | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 | $69,000 |
| End of Year Balance | $596,360 | $647,985 | $703,285 | $730,983 | $681,983 | $696,968 | $691,855 | $731,505 | $796,005 | $473,673 |
| Cumulative Expenditures | ($1,793,190) | ($1,810,565) | ($1,824,265) | ($1,865,568) | ($1,983,568) | ($2,037,583) | ($2,111,695) | ($2,141,045) | ($2,145,545) | ($2,536,878) |
| Cumulative Receipts | $2,389,550 | $2,458,550 | $2,527,550 | $2,596,550 | $2,665,550 | $2,734,550 | $2,803,550 | $2,872,550 | $2,941,550 | $3,010,550 |

## EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of $250,550 & annual funding of $69,000), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 42 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of $69,000 throughout the 40-year Study Period.

Annual Funding of $69,000 is approximately 117 percent of the $58,733 recommended Annual Funding calculated by the Cash Flow Method for 2018, the Study Year.
Evaluation of the 42 Projected Replacements calculates an average annual expenditure over the next 40 years of $63,422. Annual funding of $69,000 is 109 percent of the average annual expenditure.

In summary, Current Funding as reported by the Association and outlined above provides timely and adequate funding for the $2,536,878 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

# CASH FLOW METHOD FUNDING

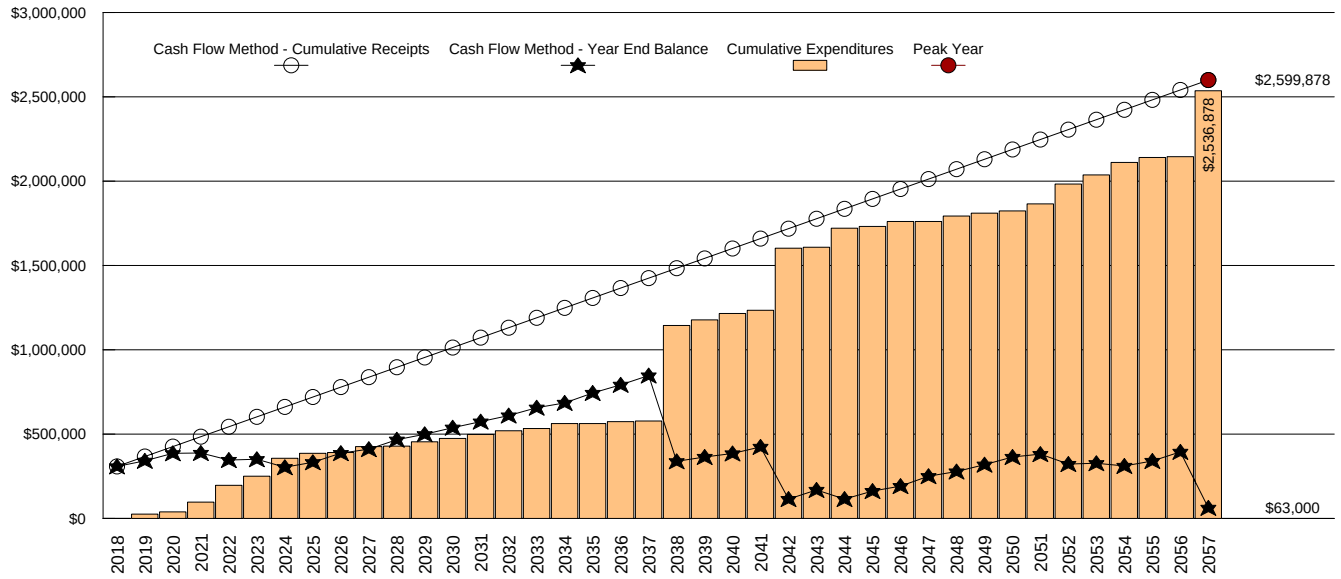
**$58,733** **RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2018**

$59.69 Per unit (average), minimum monthly funding of Replacement Reserves

Recommended Replacement Reserve Funding has been calculated using the Cash Flow Method (also called the Straight Line or Threshold Method). This method calculates a constant annual funding between peaks in cumulative expenditures, while maintaining a Minimum Balance (threshold) in the Peak Years.

- Peak Years. The First Peak Year occurs in 2057 with Replacement Reserves on Deposit dropping to the Reserves on Deposit dropping to the Minimum Balance after the completion of $2,536,878 of Projected Replacement Recommended annual funding of $58,733 remains constant throughout the entire 40-year Study Period.
- Minimum Balance. The calculations assume a Minimum Balance of $63,000 in Replacement Reserves. This is approx. 12 months of average expenditures based on the $63,422, 40-year average annual expenditure.
- Cash Flow Method Study Period. Cash Flow Method calculates funding for $2,536,878 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2057 and in 2057, the end of year balance will always be the Minimum Balance.

## #4 - Cash Flow Method - Graph of Cumulative Receipts and Expenditures - Years 1 through 40




## #5 - Cash Flow Method - Table of Receipts & Expenditures - Years 1 through 40

| Year | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|---|---|---|---|---|
| Starting Balance | $250,550 | | | | | | | | | |
| Projected Replacements | | ($26,015) | ($13,700) | ($57,153) | ($100,450) | ($54,015) | ($106,113) | ($29,350) | ($4,500) | ($34,970) |
| Annual Deposit | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 |
| End of Year Balance | $309,283 | $342,001 | $387,035 | $388,615 | $346,898 | $351,617 | $304,237 | $333,620 | $387,854 | $411,617 |
| Cumulative Expenditures | | $26,015 | $39,715 | $96,868 | $197,318 | $251,333 | $357,445 | $386,795 | $391,295 | $426,265 |
| Cumulative Receipts | $309,283 | $368,016 | $426,750 | $485,483 | $544,216 | $602,949 | $661,682 | $720,415 | $779,149 | $837,882 |

| Year | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 |
|---|---|---|---|---|---|---|---|---|---|---|
| Projected Replacements | ($2,700) | ($26,425) | ($19,925) | ($23,238) | ($22,050) | ($12,675) | ($30,088) | | ($10,725) | ($3,850) |
| Annual Deposit | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 |
| End of Year Balance | $467,650 | $499,958 | $538,766 | $574,262 | $610,945 | $657,003 | $685,649 | $744,382 | $792,391 | $847,274 |
| Cumulative Expenditures | ($428,965) | ($455,390) | ($475,315) | ($498,553) | ($520,603) | ($533,278) | ($563,365) | ($563,365) | ($574,090) | ($577,940) |
| Cumulative Receipts | $896,615 | $955,348 | $1,014,081 | $1,072,815 | $1,131,548 | $1,190,281 | $1,249,014 | $1,307,747 | $1,366,481 | $1,425,214 |

| Year | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 |
|---|---|---|---|---|---|---|---|---|---|---|
| Projected Replacements | ($567,105) | ($33,280) | ($37,400) | ($19,388) | ($368,020) | ($5,410) | ($112,788) | ($11,115) | ($29,350) | |
| Annual Deposit | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 |
| End of Year Balance | $338,902 | $364,355 | $385,688 | $425,034 | $115,747 | $169,070 | $115,016 | $162,634 | $192,017 | $250,751 |
| Cumulative Expenditures | ($1,145,045) | ($1,178,325) | ($1,215,725) | ($1,235,113) | ($1,603,133) | ($1,608,543) | ($1,721,330) | ($1,732,445) | ($1,761,795) | ($1,761,795) |
| Cumulative Receipts | $1,483,947 | $1,542,680 | $1,601,413 | $1,660,146 | $1,718,880 | $1,777,613 | $1,836,346 | $1,895,079 | $1,953,812 | $2,012,546 |

| Year | 2048 | 2049 | 2050 | 2051 | 2052 | 2053 | 2054 | 2055 | 2056 | 1st Peak - 2057 |
|---|---|---|---|---|---|---|---|---|---|---|
| Projected Replacements | ($31,395) | ($17,375) | ($13,700) | ($41,303) | ($118,000) | ($54,015) | ($74,113) | ($29,350) | ($4,500) | ($391,333) |
| Annual Deposit | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 | $58,733 |
| End of Year Balance | $278,089 | $319,447 | $364,480 | $381,911 | $322,644 | $327,362 | $311,983 | $341,366 | $395,599 | $63,000 |
| Cumulative Expenditures | ($1,793,190) | ($1,810,565) | ($1,824,265) | ($1,865,568) | ($1,983,568) | ($2,037,583) | ($2,111,695) | ($2,141,045) | ($2,145,545) | ($2,536,878) |
| Cumulative Receipts | $2,071,279 | $2,130,012 | $2,188,745 | $2,247,478 | $2,306,212 | $2,364,945 | $2,423,678 | $2,482,411 | $2,541,144 | $2,599,878 |

# INFLATION ADJUSTED FUNDING

The Cash Flow Method calculations on Page A4 have been done in today's dollars with no adjustment for inflation. At Miller + Dodson, we belive that long-term inflation forecasting is effective at demonstrating the power of compounding, not at calculating appropriate funding levels for Replacement Reserves. We have developed this proprietary model to estimate the short-term impact of inflation on Replacement Reserve funding.

**$58,733 2018 - CASH FLOW METHOD RECOMMENDED FUNDING**

The 2018 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

**$61,789 2019 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $309,283 on January 1, 2019.
- No Expenditures from Replacement Reserves in 2018.
- Construction Cost Inflation of 4.50 percent in 2018.

The $61,789 inflation adjusted funding in 2019 is a 5.20 percent increase over the non-inflation adjusted 2019 funding of $58,733.

**$65,001 2020 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2020 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $343,886 on January 1, 2020.
- All 2019 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $27,186.
- Construction Cost Inflation of 4.50 percent in 2019.

The $65,001 inflation adjusted funding in 2020 is a 10.67 percent increase over the non-inflation adjusted 2020 funding of $58,733.

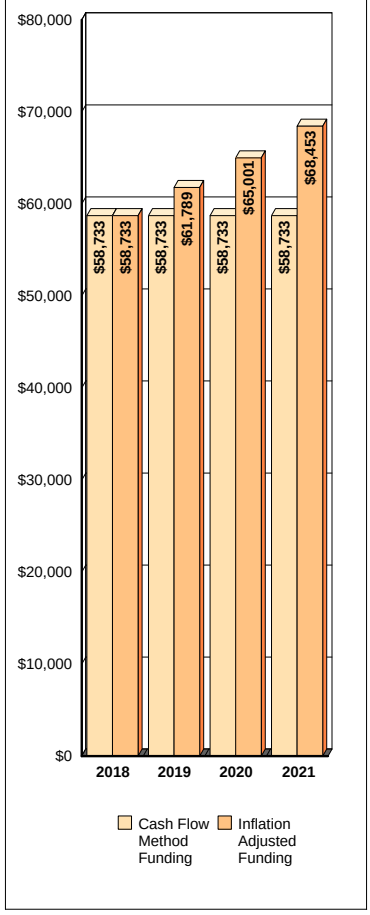
**$68,453 2021 - INFLATION ADJUSTED FUNDING**

A new analysis calculates 2021 funding based on three assumptions;

- Replacement Reserves on Deposit totaling $393,926 on January 1, 2021.
- All 2020 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than $14,961.
- Construction Cost Inflation of 4.50 percent in 2020.

The $68,453 inflation adjusted funding in 2021 is a 16.55 percent increase over the non-inflation adjusted funding of $58,733.

**#6 - Inflation Adjusted Funding**




**YEAR FIVE & BEYOND**

The inflation adjusted funding calculations outlined above are not intended to be a substitute for periodic evaluation of common elements by an experienced Reserve Analyst. Industry Standards, lender requirements, and many state and local statutes require a Replacement Reserve Study be professionally updated every 3 to 5 years.

**INFLATION ADJUSTMENT**

Prior to approving a budget based upon the 2019, 2020 and 2021 inflation adjusted funding calculations above, the 4.50 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percent), contact Miller Dodson + Associates prior to using the Inflation Adjusted Funding.

**INTEREST ON RESERVES**

The recommended funding calculations do not account for interest earned on Replacement Reserves.
In 2018, based on a 1.00 percent interest rate, we estimate the Association may earn $2,799 on an average balance of $279,917, $3,266 on an average balance of $326,585 in 2019, and $3,689 on $368,906 in 2020. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2018 funding from $58,733 to $55,934 (a 4.77 percent reduction), $61,789 to $58,523 in 2019 (a 5.29 percent reduction), and $65,001 to $61,312 in 2020 (a 5.68 percent reduction).

## REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

- Beach Club Town Homes has 82 units. The type of property is a homeowner association.
- The Cash Flow Method calculates the minimum annual funding necessary to prevent Replacement Reserves from dropping below the Minimum Balance. Failure to fund at least the recommended levels may result in funding not being available for the Projected Replacements listed in the Replacement Reserve Inventory.
- The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 42 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

# REPLACEMENT RESERVE INVENTORY
# GENERAL INFORMATION

Beach Club Town Homes - Replacement Reserve Inventory identifies 93 items. Two types of items are identified, Projected Replacements and Excluded Items:

- PROJECTED REPLACEMENTS. 42 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of $1,844,873. Replacements totaling $2,536,878 are scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

  Projected Replacements are the replacement of commonly-owned physical assets that require periodic replacement and whose replacement is to be funded from Replacement Reserves.

- EXCLUDED ITEMS. 51 of the items are Excluded Items, and expenditures for these items are NOT scheduled for funding from Replacement Reserves. The accuracy of the calculations made in the Replacement Reserve Analysis is dependent on expenditures NOT being made for Excluded Items. The Excluded Items are listed in the Replacement Reserve Inventory to identify specific items and categories of items that are not to be funded from Replacement Reserves. There are multiple categories of items that are typically excluded from funding by Replacement Reserves, including but not limited to:

  Tax Code. The United States Tax Code grants very favorable tax status to Replacement Reserves, conditioned on expenditures being made within certain guidelines. These guidelines typically exclude maintenance activities, minor repairs and capital improvements.

  Value. Items with a replacement cost of less that $1,000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect Association policy on the administration of Replacement Reserves. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

  Long-lived Items. Items that when properly maintained, can be assumed to have a life equal to the property as a whole, are typically excluded from the Replacement Reserve Inventory.

  Unit improvements. Items owned by a single unit and where the items serve a single unit are generally assumed to be the responsibility of that unit, not the Association.

  Other non-common improvements. Items owned by the local government, public and private utility companies, the United States Postal Service, Master Associations, state and local highway authorities, etc., may be installed on property that is owned by the Association. These types of items are generally not the responsibility of the Association and are excluded from the Replacement Reserve Inventory.

  The rationale for the exclusion of an item from funding by Replacement Reserves is discussed in more detail in the 'Comments' sections of the Section B - Replacement Reserve Inventory.

- CATEGORIES. The 93 items included in the Beach Club Town Homes Replacement Reserve Inventory are divided into 13 major categories. Each category is printed on a separate page, Pages B3 to B14.

- LEVEL OF SERVICE. This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level Two - Update (with site visit and on-site review), as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

  *Level II Studies are based entirely on the component inventory from a prior study. This information is adjusted to reflect changes to the inventory that are provided by the Association, and the quantities are adjusted accordingly from field measurement and/or quantity takeoffs from to-scale drawings that are made available to us. The condition of all components is ascertained from a site visit and the visual inspection of each component by the analyst. The Remaining Economic Life and replacement cost of components are provided based in part on these observations. The fund status and Funding Plan are derived from analysis of this data.*

## REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 42 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

  Item Number. The Item Number is assigned sequentially and is intended for identification purposes only.

  Item Description. We have identified each item included in the Inventory. Additional information may be included in the Comments section at the bottom of each page of the Inventory.

  Units. We have used standard abbreviations to identify the number of units including SF-square feet, LF-lineal feet, SY-square yard, LS-lump sum, EA-each, and PR-pair. Non-standard abbreviations are noted in the Comments section at the bottom of the page.

  Number of Units. The methods used to develop the quantities are discussed in "Level of Service" above.

  Unit Replacement Cost. We use four sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, information provided by local contractors and suppliers, industry standard estimating manuals, and a cost database we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work.

  Normal Economic Life (Yrs). The number of years that a new and properly installed item should be expected to remain in service.

  Remaining Economic Life (Yrs). The estimated number of years before an item will need to be replaced. In "normal" conditions, this could be calculated by subtracting the age of the item from the Normal Economic Life of the item, but only rarely do physical assets age "normally". Some items may have longer or shorter lives depending on many factors such as environment, initial quality of the item, maintenance, etc.

  Total Replacement Cost. This is calculated by multiplying the Unit Replacement Cost by the Number of Units.

  Each of the 51 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- REVIEW OF EXPENDITURES. This Replacement Reserve Study should be reviewed by an accounting professional representing the Association prior to implementation.

- PARTIAL FUNDING. Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted in the Comments section.

- REMAINING ECONOMIC LIFE GREATER THAN 40 YEARS. The calculations do not include funding for initial replacements beyond 40 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 40-year window.

## SITE COMPONENTS
**PROJECTED REPLACEMENTS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| 1 | Asphalt pavement, seal coat | sf | 40,000 | $0.20 | 5 | 1 | $8,000 |
| 2 | Asphalt pavement, mill & overlay | sf | 40,000 | $1.70 | 20 | 6 | $68,000 |
| 3 | Asphalt pavement, patch (3%) | sf | 2,400 | $3.60 | 20 | 1 | $8,640 |
| 4 | Concrete curb & gutter, (3%) | ft | 110 | $35.00 | 6 | 1 | $3,850 |
| 5 | Pavers, grouted, repoint, reset (20%) | sf | 650 | $8.50 | 10 | 1 | $5,525 |
| 6 | Segmental blk., retain wall, (reset 10%) | sf | 100 | $45.00 | 6 | 3 | $4,500 |
| 7 | W-beam guardrail | ft | 90 | $120.00 | 40 | 33 | $10,800 |
| 8 | Metal railing | ft | 900 | $40.00 | 45 | 36 | $36,000 |
| 9 | Sign & post, street | ea | 6 | $260.00 | 10 | 5 | $1,560 |
| 10 | Mailbox, cluster | ea | 6 | $1,300.00 | 15 | 7 | $7,800 |
| 11 | Irrigation, controller | ea | 8 | $1,150.00 | 10 | 2 | $9,200 |

SITE COMPONENTS - Replacement Costs - Subtotal $163,875

## SITE COMPONENTS
**COMMENTS**

- We have assumed that the Association will replace the asphalt pavement by the installation of a 2 inch thick overlay. The pavement will need to be milled prior to the installation of the overlay. Milling and the cost of minor repairs (5 to 10 percent of the total area) to the base materials and bearing soils beneath the pavement are included in the cost shown above. Patching is prevalent throughout the community, and it is recommended that the Association start milling and overlaying within six years.

- Asphalt, and all concrete flatwork along Beach Club Lane is not the responsibility of the HOA.

## SITE COMPONENTS - D R Horton (2008)

**PROJECTED REPLACEMENTS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| 12 | Concrete flatwork, driveway (3%) | sf | 620 | $10.50 | 6 | 6 | $6,510 |
| 13 | Concrete flatwork, leadwalk (3%) | sf | 100 | $9.75 | 6 | 6 | $975 |
| 14 | Concrete flatwork, patio (3%) | sf | 300 | $10.80 | 6 | 6 | $3,240 |

SITE COMPONENTS - D R Horton (2008) - Replacement Costs - Subtotal $10,725

## SITE COMPONENTS - D R Horton (2008)

**COMMENTS**

- For concrete components and other roadway shoulder work, we have assumed that the Association will conduct concrete component replacement projects in conjunction with the asphalt pavement and other concrete or right-of-way replacement projects.

## SITE COMPONENTS - Ryan (2012)
**PROJECTED REPLACEMENTS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| 15 | Concrete flatwork, driveway (3%) | sf | 420 | $10.50 | 6 | 3 | $4,410 |
| 16 | Concrete flatwork, leadwalk (3%) | sf | 60 | $9.75 | 6 | 3 | $585 |
| 17 | Concrete flatwork, patio (3%) | sf | 150 | $10.80 | 6 | 3 | $1,620 |

SITE COMPONENTS - Ryan (2012) - Replacement Costs - Subtotal $6,615

## SITE COMPONENTS - Ryan (2012)
**COMMENTS**

- For concrete components and other roadway shoulder work, we have assumed that the Association will conduct concrete component replacement projects in conjunction with the asphalt pavement and other concrete or right-of-way replacement projects.

## BUILDING EXTERIORS - D R Horton (2008)

**PROJECTED REPLACEMENTS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| 18 | Roofing, asphalt shingles | sf | 71,100 | $5.60 | 30 | 20 | $398,160 |
| 19 | Gutter & downspouts, aluminum | ft | 5,460 | $6.50 | 30 | 20 | $35,490 |
| 20 | Roofing, standing seam (40%) | sf | 2,120 | $9.75 | 40 | 30 | $20,670 |
| 21 | Siding & trim, cementitions (40%) | sf | 36,550 | $9.75 | 50 | 39 | $356,363 |
| 22 | Soffit & trim, cedar shakes | sf | 11,500 | $8.50 | 30 | 4 | $97,750 |
| 23 | Stone veneer, repointing (10%) | sf | 500 | $9.00 | 6 | 2 | $4,500 |
| 24 | Deck, structure | sf | 3,000 | $25.50 | 30 | 20 | $76,500 |
| 25 | Deck, wood decking | sf | 3,000 | $9.75 | 15 | 5 | $29,250 |
| 26 | Deck, wood railing | ft | 420 | $55.25 | 15 | 5 | $23,205 |
| 27 | Balcony, waterproofing (20%) | sf | 2,350 | $8.25 | 10 | 3 | $19,388 |
| 28 | Balcony, waterproofing (20%) | sf | 2,350 | $8.25 | 10 | 6 | $19,388 |
| 29 | Balcony, vinyl handrail | ft | 1,300 | $20.50 | 25 | 3 | $26,650 |
| 30 | Exterior lights, garage doors | ea | 98 | $150.00 | 15 | 7 | $14,700 |
| 31 | Exterior lights, additional allowance | ea | 1 | $3,000.00 | 15 | 7 | $3,000 |

BUILDING EXTERIORS - D R Horton (2008) - Replacement Costs - Subtotal $1,125,013

## BUILDING EXTERIORS - D R Horton (2008)

**COMMENTS**

- Drip edges were installed at balconies in 2016 and 2017 due to exterior leaking. The drip edges were shown in the drawings but were never installed originally.
- The Association added 60 lineal feet of downspout in 2016.
- The Association performed maintenance on the roof in 2015, new flashing was installed to prevent leaks.
- A $3,000 allowance for exterior lighting was added to provide coverage beyond the garage door lighting.

## BUILDING EXTERIORS - Ryan (2012)
**PROJECTED REPLACEMENTS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| 32 | Roofing, asphalt shingles | sf | 49,900 | $5.60 | 30 | 24 | $279,440 |
| 33 | Gutter & downspouts, aluminum | ft | 3,600 | $6.50 | 30 | 24 | $23,400 |
| 34 | Siding & trim, cementitions (40%) | sf | 15,200 | $9.75 | 50 | 44 | $148,200 |
| 35 | Stone veneer, repointing (10%) | sf | 300 | $9.00 | 6 | 4 | $2,700 |
| 36 | Deck, structure | sf | 1,200 | $25.50 | 30 | 24 | $30,600 |
| 37 | Deck, wood decking | sf | 1,200 | $9.75 | 15 | 9 | $11,700 |
| 38 | Deck, wood railing | ft | 220 | $55.25 | 15 | 9 | $12,155 |
| 39 | Window shutters, vinyl | ea | 90 | $115.00 | 20 | 14 | $10,350 |
| 40 | Privacy screens - 8 ft. long | ea | 32 | $225.00 | 20 | 14 | $7,200 |
| 41 | Exterior lights, garage doors | ea | 66 | $150.00 | 15 | 11 | $9,900 |
| 42 | Exterior lights, additional allowance | ea | 1 | $3,000.00 | 15 | 11 | $3,000 |

BUILDING EXTERIORS - Ryan (2012) - Replacement Costs - Subtotal $538,645

## BUILDING EXTERIORS - Ryan (2012)
**COMMENTS**

- A $3,000 allowance for exterior lighting was added to provide coverage beyond the garage door lighting.

## VALUATION EXCLUSIONS

**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Site lighting fixtures | ls | 1 | | | | EXCLUDED |
| | Interior doors | ls | 1 | | | | EXCLUDED |
| | Window unit | ls | 1 | | | | EXCLUDED |

## VALUATION EXCLUSIONS

**COMMENTS**

- Valuation Exclusions. For ease of administration of the Replacement Reserves and to reflect accurately how Replacement Reserves are administered, items with a dollar value less than $1,000.00 have not been scheduled for funding from Replacement Reserves. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## LONG-LIFE EXCLUSIONS
**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Masonry features | ls | 1 | | | | EXCLUDED |
| | Miscellaneous culverts | ls | 1 | | | | EXCLUDED |
| | Concrete retaining walls | ls | 1 | | | | EXCLUDED |
| | Building foundation(s) | ls | 1 | | | | EXCLUDED |
| | Concrete floor slabs (interior) | ls | 1 | | | | EXCLUDED |
| | Wall, floor, & roof structure | ls | 1 | | | | EXCLUDED |
| | Fire protection/security systems | ls | 1 | | | | EXCLUDED |
| | Common element electrical services | ls | 1 | | | | EXCLUDED |
| | Electrical wiring | ls | 1 | | | | EXCLUDED |
| | Water piping at common facilities | ls | 1 | | | | EXCLUDED |
| | Waste piping at common facilities | ls | 1 | | | | EXCLUDED |

## LONG-LIFE EXCLUSIONS
**COMMENTS**

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- Exterior masonry is generally assumed to have an unlimited economic life but periodic repointing is required and we have included this for funding in the Replacement Reserve Inventory.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## UNIT IMPROVEMENTS EXCLUSIONS

**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Domestic water pipes serving one unit | ls | 1 | | | | EXCLUDED |
| | Sanitary sewers serving one unit | ls | 1 | | | | EXCLUDED |
| | Electrical wiring serving one unit | ls | 1 | | | | EXCLUDED |
| | Cable TV service serving one unit | ls | 1 | | | | EXCLUDED |
| | Telephone service serving one unit | ls | 1 | | | | EXCLUDED |
| | Gas service serving one unit | ls | 1 | | | | EXCLUDED |
| | Unit windows | ls | 1 | | | | EXCLUDED |
| | Unit doors | ls | 1 | | | | EXCLUDED |
| | Unit skylights | ls | 1 | | | | EXCLUDED |
| | Unit interior | ls | 1 | | | | EXCLUDED |
| | Unit HVAC system | ls | 1 | | | | EXCLUDED |

## UNIT IMPROVEMENTS EXCLUSIONS

**COMMENTS**

- Unit improvement Exclusions. We understand that the elements of the project that relate to a single unit are the responsibility of that unit owner. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## UTILITY EXCLUSIONS
**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Primary electric feeds | ls | 1 | | | | EXCLUDED |
| | Electric transformers | ls | 1 | | | | EXCLUDED |
| | Cable TV systems and structures | ls | 1 | | | | EXCLUDED |
| | Telephone cables and structures | ls | 1 | | | | EXCLUDED |
| | Site lighting | ls | 1 | | | | EXCLUDED |
| | Gas mains and meters | ls | 1 | | | | EXCLUDED |
| | Water mains and meters | ls | 1 | | | | EXCLUDED |
| | Sanitary sewers | ls | 1 | | | | EXCLUDED |
| | Stormwater management system | ls | 1 | | | | EXCLUDED |

## UTILITY EXCLUSIONS
**COMMENTS**

- Utility Exclusions. Many improvements owned by utility companies are on property owned by the Association. We have assumed that repair, maintenance, and replacements of these components will be done at the expense of the appropriate utility company. Examples of items excluded from funding Replacement Reserves by this standard are listed above.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## MAINTENANCE AND REPAIR EXCLUSIONS

**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Cleaning of asphalt pavement | ls | 1 | | | | EXCLUDED |
| | Landscaping and site grading | ls | 1 | | | | EXCLUDED |
| | Exterior painting | ls | 1 | | | | EXCLUDED |
| | Interior painting | ls | 1 | | | | EXCLUDED |
| | Repair services | ls | 1 | | | | EXCLUDED |
| | Partial replacements | ls | 1 | | | | EXCLUDED |
| | Capital improvements | ls | 1 | | | | EXCLUDED |

## MAINTENANCE AND REPAIR EXCLUSIONS

**COMMENTS**

- Maintenance activities, one-time-only repairs, and capital improvements. These activities are NOT appropriately funded from Replacement Reserves. The inclusion of such component in the Replacement Reserve Inventory could jeopardize the special tax status of ALL Replacement Reserves, exposing the Association to significant tax liabilities. We recommend that the Board of Directors discuss these exclusions and Revenue Ruling 75-370 with a Certified Public Accountant.
- Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## GOVERNMENT EXCLUSIONS

**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Government, roadways & parking | ls | 1 | | | | EXCLUDED |
| | Government, sidewalks & curbs | ls | 1 | | | | EXCLUDED |
| | Government, lighting | ls | 1 | | | | EXCLUDED |
| | Government, stormwater mgmt. | ls | 1 | | | | EXCLUDED |

## GOVERNMENT EXCLUSIONS

**COMMENTS**

- Government Exclusions. We have assumed that some of the improvements installed on property owned by the Association will be maintained by the state, county, or local government, or other association or other responsible entity. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.

- Excluded right-of-ways, including LIST ROADS, and adjacent properties.

- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

## IRRIGATION SYSTEM EXCLUSIONS

**EXCLUDED ITEMS**

| ITEM # | ITEM DESCRIPTION | UNIT | NUMBER OF UNITS | UNIT REPLACEMENT COST ($) | NORMAL ECONOMIC LIFE (YRS) | REMAINING ECONOMIC LIFE (YRS) | REPLACEMENT COST ($) |
|---|---|---|---|---|---|---|---|
| | Subsurface irrigation pipe | ls | 1 | | | | EXCLUDED |
| | Subsurface irrigation valve | ls | 1 | | | | EXCLUDED |
| | Subsurface irrigation control wiring | ls | 1 | | | | EXCLUDED |
| | Irrigation control system | ls | 1 | | | | EXCLUDED |
| | Irrigation system electrical service | ls | 1 | | | | EXCLUDED |
| | Irrigation system enclosures | ls | 1 | | | | EXCLUDED |

## IRRIGATION SYSTEM EXCLUSIONS

**COMMENTS**

- Irrigation System Exclusions. We have assumed that the maintenance, repair, and periodic replacement of the components of the extensive irrigation systems at the property will not be funded from Replacement Reserves. These systems should be inspected each spring when the systems are brought on line and each fall when they are winterized. Repairs/replacements should be made in conjunction with these inspections.

# PROJECTED ANNUAL REPLACEMENTS
# GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 42 Projected Replacements in the Beach Club Town Homes Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

# REPLACEMENT RESERVE ANALYSIS AND INVENTORY
# POLICIES, PROCEDURES, AND ADMINISTRATION

- REVISIONS. Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory 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 the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- TAX CODE. The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1120 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot co-mingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1120H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- CONFLICT OF INTEREST. Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Association which would represent a real or perceived conflict of interest.
- RELIANCE ON DATA PROVIDED BY THE CLIENT. Information provided by an official representative of the Association regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- INTENT. This Replacement Reserve Study is a reflection of the information provided by the Association and the visual evaluations of the Analyst. It has been prepared for the sole use of the Association and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- PREVIOUS REPLACEMENTS. Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- EXPERIENCE WITH FUTURE REPLACEMENTS. The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- REVIEW OF THE REPLACEMENT RESERVE STUDY. For this study to be effective, it should be reviewed by the Beach Club Town Homes Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

## PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

| Item | 2018 - STUDY YEAR | $ |
|---|---|---|
| | No Scheduled Replacements | |

| Item | 2019 - YEAR 2 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 3 | Asphalt pavement, patch (3 | $8,640 |
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 5 | Pavers, grouted, repoint, res | $5,525 |
| | Total Scheduled Replacements | $26,015 |

| Item | 2020 - YEAR 3 | $ |
|---|---|---|
| 11 | Irrigation, controller | $9,200 |
| 23 | Stone veneer, repointing (10 | $4,500 |
| | Total Scheduled Replacements | $13,700 |

| Item | 2021 - YEAR 4 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| 27 | Balcony, waterproofing (20% | $19,388 |
| 29 | Balcony, vinyl handrail | $26,650 |
| | Total Scheduled Replacements | $57,153 |

| Item | 2022 - YEAR 5 | $ |
|---|---|---|
| 22 | Soffit & trim, cedar shakes | $97,750 |
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $100,450 |

| Item | 2023 - YEAR 6 | $ |
|---|---|---|
| 9 | Sign & post, street | $1,560 |
| 25 | Deck, wood decking | $29,250 |
| 26 | Deck, wood railing | $23,205 |
| | Total Scheduled Replacements | $54,015 |

| Item | 2024 - YEAR 7 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 2 | Asphalt pavement, mill & ov | $68,000 |
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| 28 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $106,113 |

| Item | 2025 - YEAR 8 | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 10 | Mailbox, cluster | $7,800 |
| 30 | Exterior lights, garage doors | $14,700 |
| 31 | Exterior lights, additional allo | $3,000 |
| | Total Scheduled Replacements | $29,350 |

| Item | 2026 - YEAR 9 | $ |
|---|---|---|
| 23 | Stone veneer, repointing (10 | $4,500 |
| | Total Scheduled Replacements | $4,500 |

| Item | 2027 - YEAR 10 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| 37 | Deck, wood decking | $11,700 |
| 38 | Deck, wood railing | $12,155 |
| | Total Scheduled Replacements | $34,970 |

| Item | 2028 - YEAR 11 | $ |
|---|---|---|
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $2,700 |

| Item | 2029 - YEAR 12 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 5 | Pavers, grouted, repoint, res | $5,525 |
| 41 | Exterior lights, garage doors | $9,900 |
| 42 | Exterior lights, additional allo | $3,000 |
| | Total Scheduled Replacements | $26,425 |

| Item | 2030 - YEAR 13 | $ |
|---|---|---|
| 11 | Irrigation, controller | $9,200 |
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| | Total Scheduled Replacements | $19,925 |

| Item | 2031 - YEAR 14 | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 27 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $23,238 |

| Item | 2032 - YEAR 15 | $ |
|---|---|---|
| 23 | Stone veneer, repointing (10 | $4,500 |
| 39 | Window shutters, vinyl | $10,350 |
| 40 | Privacy screens - 8 ft. long | $7,200 |
| | Total Scheduled Replacements | $22,050 |

## PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

| Item | 2033 - YEAR 16 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 9 | Sign & post, street | $1,560 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| | Total Scheduled Replacements | $12,675 |

| Item | 2034 - YEAR 17 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 28 | Balcony, waterproofing (20% | $19,388 |
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $30,088 |

| Item | 2035 - YEAR 18 | $ |
|---|---|---|
| | No Scheduled Replacements | |

| Item | 2036 - YEAR 19 | $ |
|---|---|---|
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| | Total Scheduled Replacements | $10,725 |

| Item | 2037 - YEAR 20 | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| | Total Scheduled Replacements | $3,850 |

| Item | 2038 - YEAR 21 | $ |
|---|---|---|
| 18 | Roofing, asphalt shingles | $398,160 |
| 19 | Gutter & downspouts, alumi | $35,490 |
| 23 | Stone veneer, repointing (10 | $4,500 |
| 24 | Deck, structure | $76,500 |
| 25 | Deck, wood decking | $29,250 |
| 26 | Deck, wood railing | $23,205 |
| | Total Scheduled Replacements | $567,105 |

| Item | 2039 - YEAR 22 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 3 | Asphalt pavement, patch (3 | $8,640 |
| 5 | Pavers, grouted, repoint, res | $5,525 |
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| | Total Scheduled Replacements | $33,280 |

| Item | 2040 - YEAR 23 | $ |
|---|---|---|
| 10 | Mailbox, cluster | $7,800 |
| 11 | Irrigation, controller | $9,200 |
| 30 | Exterior lights, garage doors | $14,700 |
| 31 | Exterior lights, additional allo | $3,000 |
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $37,400 |

| Item | 2041 - YEAR 24 | $ |
|---|---|---|
| 27 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $19,388 |

| Item | 2042 - YEAR 25 | $ |
|---|---|---|
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| 32 | Roofing, asphalt shingles | $279,440 |
| 33 | Gutter & downspouts, alumi | $23,400 |
| 36 | Deck, structure | $30,600 |
| 37 | Deck, wood decking | $11,700 |
| 38 | Deck, wood railing | $12,155 |
| | Total Scheduled Replacements | $368,020 |

| Item | 2043 - YEAR 26 | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 9 | Sign & post, street | $1,560 |
| | Total Scheduled Replacements | $5,410 |

| Item | 2044 - YEAR 27 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 2 | Asphalt pavement, mill & ov | $68,000 |
| 23 | Stone veneer, repointing (10 | $4,500 |
| 28 | Balcony, waterproofing (20% | $19,388 |
| 41 | Exterior lights, garage doors | $9,900 |
| 42 | Exterior lights, additional allo | $3,000 |
| | Total Scheduled Replacements | $112,788 |

| Item | 2045 - YEAR 28 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| | Total Scheduled Replacements | $11,115 |

| Item | 2046 - YEAR 29 | $ |
|---|---|---|
| 29 | Balcony, vinyl handrail | $26,650 |
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $29,350 |

| Item | 2047 - YEAR 30 | $ |
|---|---|---|
| | No Scheduled Replacements | |

## PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

| Item | 2048 - YEAR 31 | $ |
|---|---|---|
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| 20 | Roofing, standing seam (40% | $20,670 |
| | Total Scheduled Replacements | $31,395 |

| Item | 2049 - YEAR 32 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 5 | Pavers, grouted, repoint, res | $5,525 |
| | Total Scheduled Replacements | $17,375 |

| Item | 2050 - YEAR 33 | $ |
|---|---|---|
| 11 | Irrigation, controller | $9,200 |
| 23 | Stone veneer, repointing (10 | $4,500 |
| | Total Scheduled Replacements | $13,700 |

| Item | 2051 - YEAR 34 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 7 | W-beam guardrail | $10,800 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| 27 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $41,303 |

| Item | 2052 - YEAR 35 | $ |
|---|---|---|
| 22 | Soffit & trim, cedar shakes | $97,750 |
| 35 | Stone veneer, repointing (10 | $2,700 |
| 39 | Window shutters, vinyl | $10,350 |
| 40 | Privacy screens - 8 ft. long | $7,200 |
| | Total Scheduled Replacements | $118,000 |

| Item | 2053 - YEAR 36 | $ |
|---|---|---|
| 9 | Sign & post, street | $1,560 |
| 25 | Deck, wood decking | $29,250 |
| 26 | Deck, wood railing | $23,205 |
| | Total Scheduled Replacements | $54,015 |

| Item | 2054 - YEAR 37 | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 8 | Metal railing | $36,000 |
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| 28 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $74,113 |

| Item | 2055 - YEAR 38 | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 10 | Mailbox, cluster | $7,800 |
| 30 | Exterior lights, garage doors | $14,700 |
| 31 | Exterior lights, additional allc | $3,000 |
| | Total Scheduled Replacements | $29,350 |

| Item | 2056 - YEAR 39 | $ |
|---|---|---|
| 23 | Stone veneer, repointing (10 | $4,500 |
| | Total Scheduled Replacements | $4,500 |

| Item | 2057 - YEAR 40 | $ |
|---|---|---|
| 6 | Segmental blk., retain wall, ( | $4,500 |
| 15 | Concrete flatwork, driveway | $4,410 |
| 16 | Concrete flatwork, leadwalk | $585 |
| 17 | Concrete flatwork, patio (3% | $1,620 |
| 21 | Siding & trim, cementitions ( | $356,363 |
| 37 | Deck, wood decking | $11,700 |
| 38 | Deck, wood railing | $12,155 |
| | Total Scheduled Replacements | $391,333 |

| Item | 2058 (beyond Study Period) | $ |
|---|---|---|
| 35 | Stone veneer, repointing (10 | $2,700 |
| | Total Scheduled Replacements | $2,700 |

| Item | 2059 (beyond Study Period) | $ |
|---|---|---|
| 1 | Asphalt pavement, seal coat | $8,000 |
| 3 | Asphalt pavement, patch (3 | $8,640 |
| 5 | Pavers, grouted, repoint, res | $5,525 |
| 41 | Exterior lights, garage doors | $9,900 |
| 42 | Exterior lights, additional allc | $3,000 |
| | Total Scheduled Replacements | $35,065 |

| Item | 2060 (beyond Study Period) | $ |
|---|---|---|
| 11 | Irrigation, controller | $9,200 |
| 12 | Concrete flatwork, driveway | $6,510 |
| 13 | Concrete flatwork, leadwalk | $975 |
| 14 | Concrete flatwork, patio (3% | $3,240 |
| | Total Scheduled Replacements | $19,925 |

| Item | 2061 (beyond Study Period) | $ |
|---|---|---|
| 4 | Concrete curb & gutter, (3% | $3,850 |
| 27 | Balcony, waterproofing (20% | $19,388 |
| | Total Scheduled Replacements | $23,238 |

| Item | 2062 (beyond Study Period) | $ |
|---|---|---|
| 23 | Stone veneer, repointing (10 | $4,500 |
| 34 | Siding & trim, cementitions ( | $148,200 |
| | Total Scheduled Replacements | $152,700 |

# CONDITION ASSESSMENT

**General Comments.** Miller - Dodson Associates conducted a Reserve Study at Beach Club Town Homes on February 16, 2017. Beach Club Town Homes is in generally good condition for a community constructed in two phases. The first phase was started in 2008 by D.R. Horton. The second phase was started in 2012 by Ryan Homes. A review of the Replacement Reserve Inventory will show that we are anticipating most of the components achieving their normal economic lives.

The following comments pertain to the larger, more significant components in the Replacement Reserve 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 Replacement Reserve Analysis or Inventory.

**General Condition Statements.**

**Excellent.** 100% to 90% of Normal Economic Life expected, with no appreciable wear or defects.

**Good.** 90% to 60% of Normal Economic Life expected, minor wear or cosmetic defects found. Normal maintenance should be expected. If performed properly, normal maintenance may increase the useful life of a component. Otherwise, the component is wearing normally.

**Fair.** 60% to 30% of Normal Economic Life expected, moderate wear with defects found. Repair actions should be taken to extend the life of the component or to correct repairable defects and distress. Otherwise, the component is wearing normally.

**Marginal.** 30% to 10% of Normal Economic Life expected, with moderate to significant wear or distress found. Repair actions are expected to be cost effective for localized issues, but normal wear and use are evident. The component is reaching the end of the Normal Economic Life.

**Poor.** 10% to 0% of Normal Economic Life expected, with significant distress and wear. Left unattended, additional damage to underlying structures is likely to occur. Further maintenance is unlikely to be cost effective.

## SITE COMPONENTS

**Asphalt Pavement.** The Association is responsible for the roadways, parking areas, and paths within the community; other roadways are maintained by the City, County, or other municipality. In general, the Association's asphalt pavements are in marginal to poor condition, with cracking, distress, and deterioration in a several locations. The Association maintains approximately 40,000 sq. ft. of asphalt paving.

The Association maintains an inventory of asphalt pavement along the following streets and areas:

| | | |
|---|---|---|
| • Chartwell Lane | 4,800 | sf |
| • Halyard Lane | 3,000 | sf |
| • Inlet Point Drive | 9,650 | sf |
| • Sailview Drive | 4,650 | sf |
| • Sunfish Lane | 8,450 | sf |
| • Wave Crest Drive | 9,450 | sf |
| • TOTAL ASPHALT | 40,000 | sf |

As a rule of thumb, asphalt should be overlaid when approximately 5% of the surface area is cracked or otherwise deteriorated. The normal service life of asphalt pavement is typically 18 to 20 years.

In order to maintain the condition of the pavement throughout the community and to ensure the longest life of the asphalt, we recommend a systematic and comprehensive maintenance program that includes:

- **Cleaning.** Long-term exposure to oil or gas breaks down asphalt. Because this asphalt pavement is generally not used for long-term parking, it is unlikely that frequent cleaning will be necessary. When necessary, spill areas should be cleaned or patched if deterioration has penetrated the asphalt. This is a maintenance activity, and we have assumed that it will not be funded from Reserves.

- **Crack Repair.** All cracks should be repaired with an appropriate compound to prevent water infiltration through the asphalt into the base. This repair should be done annually. Crack repair is normally considered a maintenance activity and is not funded from Reserves. Areas of extensive cracking or deterioration that cannot be made watertight should be cut out and patched.

- **Seal Coating.** The asphalt should be seal coated every five to seven years. For this maintenance, activity to be effective in extending the life of the asphalt, cleaning and crack repair should be performed first.

The pricing used is based on recent contracts for a two-inch overlay, which reflects the current local market for this work.

For seal coating, several different products are available. The older, more traditional seal coating products are simply paints. They coat the surface of the asphalt and they are minimally effective. However, the newer coating materials, such as those from Total Asphalt Management, Asphalt Restoration Technologies, Inc., and others, are penetrating. They are engineered, so to speak, to 'remoisturize' the pavement. Asphalt pavement is intended to be flexible. Over time, the volatile chemicals in the pavement dry, the pavement becomes brittle, and degradation follows in the forms of cracking and potholes. Remoisturizing the pavement can return its flexibility and extend the life of the pavement.

Lastly, the resource links provided on our website may provide insight into the general terms and concerns, including maintenance related advantages and disadvantages, which may help the Association better manage the asphalt pavements throughout the community: http://mdareserves.com/resources/links/site-components.

**Concrete Flatwork.** The concrete flatwork includes the community curbs and gutters, driveways, lead walks, stoops and patios. We have modeled for curb replacement when the asphalt pavement is overlaid. The overall condition of the concrete work is good, with general deterioration in only a few areas. No tripping hazards were observed during the site visit. The Association was constructed in two phases; the D.R. Horton phase of 2008, and the Ryan Homes phase of 2012. The Association maintains approximately 34,000 sq. ft. of concrete flatwork in the D.R. Horton phase, and 21,000 sq. ft. of concrete flatwork in the Ryan Homes phase.

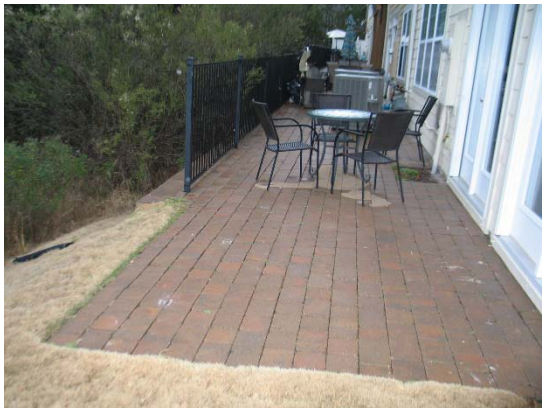
The standards we use for recommending replacement are as follows:

- Trip hazard, ½ inch height difference.
- Severe cracking.
- Severe spalling and scale.
- Uneven riser heights on steps.
- Steps with risers in excess of 8¼ inches.

Because it is highly unlikely that all of the concrete components will fail and require replacement in the period of the study, we have programmed funds for the replacement of these inventories and spread the funds over an extended timeframe to reflect the incremental nature of this work.

The relevant links on our web site may provide useful information related to concrete terminology, maintenance, and repair. Please see http://mdareserves.com/resources/links/site-components.

**Unit Pavers.** Unit pavers provide a solid, decorative, and renewable surface that are part of the community's patios and walkways. The Association maintains approximately 3,250 sq. ft. of unit pavers. The unit pavers are in good condition, with areas of defects consistent with the age of the installation.



The defects noted include the following:

- Cracking. There are a few cracked pavers, some of which will cause tripping hazards within the next 5 years.

- Settlement. We identified areas where pavers have settled due to a failure of the base under the pavers. This settlement has resulted in an uneven surface that can pose a trip hazard.

- Aggregate missing from the joints between paver units. Fine aggregate is effective in reducing the amount of base soil that is removed due to water penetration.

To correct defects and provide the longest service life of the unit paver system, periodic re-setting is required. Re-setting provides an opportunity to replace broken unit pavers, fill in voids in the foundation material, and level the surface. We have included an allowance for periodic re-set of portions of the system.

Unit pavers have a service life of 30 years or more if the system is maintained on a periodic basis. Eventually the system will require a large-scale replacement, identical paver units may not be available and it is recommended that the unit paver system be replaced.

**Metal Hand Railing.** The Association maintains metal handrails and railing posts that are embedded in concrete or masonry. Moderate rusting is occurring at the base of the wrought iron, embedded posts, and along a few of the wrought iron railings. Two types of metal fences are being utilized in the community, and consist of aluminum railings, and wrought iron railings. Only the wrought iron railing is rusting.

As part of normal maintenance, we recommend the following:

- Remove existing caulk completely.
- Clean, prime, and paint all posts, rails, and pickets.
- Apply an appropriate caulk around each post base.
- Tool and shape caulking to shed water from post.
- Reinstall base covers, and seal and paint all joints.

Railings can have an extended useful life if these simple maintenance activities are performed. If left unattended, the pressure from expansive post rust can crack and damage the supporting material.

**Retaining Walls.** The Association maintains considerable segmental block retaining walls. The retaining walls are in good condition with no leaning, bowing, or deterioration. Efflorescence on the retaining walls was discovered in a few locations. Efflorescence is usually not a structural concern, but it is advised that the Association inspect the walls annually. Efflorescence occurs whenever water seeps into the wall or its cementitious joints, and causes a breakdown in the salts of the material. The salt particles penetrate to the surface of the retaining wall, and is distinguished by a white, chalky, appearance.

Retaining walls in general are designed to provide slope stabilization and soil retention by means of a structural system. Typically, walls that are three feet high or more require some level of design.

Movement and displacement of any retaining wall is a sign of general settlement or failure. This typically is in the form of leaning and bowing, and can involve the entire wall or localized sections of the wall. Typically, these types of movements are gradual and may require the replacement of the wall. Movement of retaining walls located near other buildings or structures may negatively affect the stability of the adjacent structure. These conditions can become extremely costly if not properly identified, monitored, and addressed.

Segmental block retaining walls can have an extended useful life, and if stable, are likely to only require localized resetting of displaced blocks, typically near the top of the wall. This study assumes that resetting will be performed incrementally as needed.

These systems are very low maintenance. If over time the wall experiences movement, sections of the walls can be re-stacked at a very small portion of the cost of a new wall. Segmental block retaining walls can have a service life of 80 years or more. As a general source of information about retaining walls, we offer several links from our website at http://mdareserves.com/resources/links/site-components.

Retaining wall replacement can be costly, and early planning on the part of the Association can help to reduce the impact of this work on the community's budget in the future. We therefore recommend having a Professional Engineer inspect the walls and develop preliminary replacement alternatives and recommendations based on the site conditions, replacement costs, and recommended replacement wall types. This information can then be incorporated into future updates to the Reserve Study.

**Mailboxes.** The cluster mailboxes located throughout the community are in good condition. Mailboxes should be maintained to the extent that rust does not develop on the structure or pedestal. All mail slot doors remain intact and hinges and locks remain operable. Our replacement estimate assumes that these units will be replaced with fiberglass or composite units.

**W-Beam Guardrail.** The Association maintains approximately 90 linear feet of steel and wood framed guardrail. The guardrail throughout the community is in good condition and sturdy. No defects or damages were observed during the site visit.

## BUILDING EXTERIORS

**Building Roofing.** The community is roofed in asphalt, and standing seam metal roofs. The Association maintains approximately 121,000 sq. ft. of asphalt roofing, and approximately 5,500 sq. ft. of standing seam, metal roof. The asphalt roofing is in generally good shape. The standing seam, metal roofing is in good condition.

Asphalt shingle roofs can have a useful life of 20 to 50 years depending on the weight and quality of the shingle. Weathered, curled, and missing shingles are all indications that the shingles may be nearing the end of their useful life.

Metal roofing can have a normal economic life of 50 to 100 years. In some cases, recoating or repainting can extend the useful life of a metal roof. Access to the roof was not provided at the time of inspection.

Annual inspections are recommended, with cleaning, repair, and mitigation of vegetation performed as needed. Access, inspection, and repair work should be performed by contractors and personnel with the appropriate access equipment who are experienced in the types of roofing used for the facility.

For additional information on roofs and roof maintenance, please see the appropriate links on our web site at http://mdareserves.com/resources/links/building-exterior.

**Gutters and Downspouts.** The buildings have aluminum gutters and downspouts. The gutters and downspouts are in good condition.

A gutter and downspout system will remove rainwater from the area of the building roof, siding, and foundation. This will protect building's exterior surfaces from water damage. Gutters should run the full length of all drip

edges of the building roof. Even with full gutters, it is important to inspection the function of the gutters during heavy rain to identify any deficiencies. It may be necessary to periodically adjust the slope of sections, repair connections, replace hangers, and install shrouds to the gutters. Downspouts should be securely attached to the side of the structure. Any broken straps should be replaced. The area of the outlet should be inspected to promote run-off in the desired direction. Long straight runs should have an elbow at the bottom. Splash blocks should be installed to fray the water out-letting from the downspout.

It is recommended that all gutters be cleaned at least twice each year. If there are a large number of trees located close to a building, consider installing a gutter debris shield that will let water into the gutters but will filter out leaves, twigs, and other debris.


**Siding and Trim.** The exteriors of the buildings utilize three types of materials for cladding purposes. Cementitious hardboard, wood shakes, stone veneer, and composite wood. The siding and trim materials are in generally good condition.

Wooden exterior materials are typically repaired as needed during normal painting cycles. Painting cycles for wooden exteriors vary between five and ten years depending on the grade of wood and the quality of the materials and finish work. In this study, we have modeled for incremental wood material replacement to coincide with the painting cycle of the facility. Painting is not considered a replacement or reserve item.

Hardboard materials are constructed from wood fiber, wax, and resins that are compressed under heat and pressure. Many of these types of materials have a history of problems and premature failure. As the hardboard material ages, some of the compression is relieved, resulting in localized swelling. Water can enter these swollen areas, accelerating the degradation process, resulting in delamination, and blistering. Once damaged, the hardboard material cannot be repaired. In addition, the Association may discover that there is significant damage to the underlying sheathing and building structure if the damaged hardboard has allowed moisture to gain access to these underlying elements over a long period. Structural repairs and latent damage are not accounted for in this study.

As an alternative to high-maintenance materials, the Association may want to consider replacements using low maintenance synthetic or cementitious materials. For additional consideration, please see the related articles "Alternative Trim Materials - A Replacement for Wood Trim?" and "An Examination of New Materials - Cement Fiber Composites" on our web site at http://mdareserves.com/resources/links/building-exterior.

Cementitious materials typically have an extended useful life and require repainting and recaulking every 10 to 15 years. Following the manufacturer's recommendations for cleaning, painting, and caulking, we expect cementitious products to have a useful life of 40 years or more.

Stone masonry is used as the main exterior cladding of the building. As masonry weathers, the mortar joints will become damaged by water penetration. As additional water gains access to the joints, repeated freeze-thaw cycles gradually increase the damage to the mortar joints. If allowed to progress, even the masonry units such as brick, block, and stone can have their surfaces affected and masonry units can become loose.

In general, masonry is considered a long-life item and is therefore excluded from reserve funding. However, because weather and other conditions result in the slow deterioration of the mortar in masonry joints, we have included funding in this study for repointing. Repointing is the process of raking and cutting out damaged sections of mortar and replacing them with new mortar.

Periodic repointing and local replacement of damaged masonry units will limit the damage done by moisture penetration. For this study, we assume that 10% of the masonry will require repointing every 10 years after approximately 30 years. For additional information about masonry and repointing, please view the relevant links at http://mdareserves.com/resources/links/building-exterior.

**Vinyl Window Shutters.** The Association maintains the window shutters on the units. There are 90 pairs of window shutters. The shutters are in generally good condition. Although there are several different sizes of window shutters, we have used an average price for their replacement.

Vinyl window shutters have a service life of 15 to 20 years. Their actual life depends on a number of factors, including the quality of the shutter, how well it was installed, and its exposure to sunlight and wind.

**Wood Decks.** The wooden decks of the community are maintained by the Association. The wooden deck structures are in good condition, with the wooden decking is in good condition and the wooden railings are in good condition. This study assumes that the entire decking system will be replaced at one time.

We recommend for the Association implement an annual inspection program. We also recommend power washing and the application of a wood sealer with UV protection every two to three years. Installation of carpet or other water trapping coverings should be prohibited and potted plants should be placed on raised feet to allow for proper air circulation and drying of wooden components.

Please note that your State or local jurisdiction may have specific requirements for deck and balcony inspections, such as the recently enacted Maryland HB 947 (Jonathan's Law). This level of inspection is beyond the scope of work for this Reserve Study.

**Privacy Fence.** The Association maintains privacy fence at several units. The privacy walls are in generally good shape

.

This Condition Assessment is based upon our visual survey of the property. The sole purpose of the visual survey was an evaluation of the common elements of the property to ascertain the remaining useful life and the replacement costs of these common elements. Our evaluation assumed that all components met building code requirements in force at the time of construction. Our visual survey was conducted with care by experienced persons, but no warranty or guarantee is expressed or implied.

End of Condition Assessment

# CASH FLOW METHOD ACCOUNTING SUMMARY

This Beach Club Town Homes - Cash Flow Method Accounting Summary is an attachment to the Beach Club Town Homes - Replacement Reserve Study dated February 16, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2018, 2019, and 2020 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2018, 2019, and 2020. Each of the 42 Projected Replacements listed in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of 5 categories. The following information is summarized by category in each report:
  - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
  - Cost of all Scheduled Replacements in each category.
  - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
  - Cost of Projected Replacements in the report period.
  - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Cash Flow Method.

- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the $250,550 Beginning Balance (at the start of the Study Year) and the $176,200 of additional Replacement Reserve Funding in 2018 through 2020 (as calculated in the Replacement Reserve Analysis) to each of the 42 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and discussed below. The calculated data includes:
  - Identification and estimated cost of each Projected Replacement scheduled in years 2018 through 2020.
  - Allocation of the $250,550 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $176,200 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2018 through 2020, by Chronological Allocation.

- CHRONOLOGICAL ALLOCATION. Chronological Allocation assigns Replacement Reserves to Projected Replacements on a "first come, first serve" basis in keeping with the basic philosophy of the Cash Flow Method. The Chronological Allocation methodology is outlined below.
  - The first step is the allocation of the $250,550 Beginning Balance to the Projected Replacements in the Study Year. Remaining unallocated funds are next allocated to the Projected Replacements in subsequent years in chronological order until the total of Projected Replacements in the next year is greater than the unallocated funds. Projected Replacements in this year are partially funded with each replacement receiving percentage funding. The percentage of funding is calculated by dividing the unallocated funds by the total of Projected Replacements in the partially funded year.

    At Beach Club Town Homes the Beginning Balance funds all Scheduled Replacements in the Study Year through 2022 and provides partial funding (99%) of replacements scheduled in 2023.
  - The next step is the allocation of the $58,733 of 2018 Cash Flow Method Reserve Funding calculated in the Replacement Reserve Analysis. These funds are first allocated to fund the partially funded Projected Replacements and then to subsequent years in chronological order as outlined above.

    At Beach Club Town Homes the Beginning Balance and the 2018 Replacement Reserve Funding, funds replacements through 2023 and partial funds (54.6%) replacements in 2024.
  - Allocations of the 2019 and 2020 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

# 2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CF1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of $250,550 as of the first day of the Study Year, January 1, 2018.
- Total reserve funding (including the Beginning Balance) of $309,283 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF1

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2018 BEGINNING BALANCE | 2018 RESERVE FUNDING | 2018 PROJECTED REPLACEMENTS | 2018 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 1 to 36 years | $163,875 | $41,252 | $41,528 | | $82,780 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 6 years | $10,725 | | $5,857 | | $5,857 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 3 years | $6,615 | $6,615 | | | $6,615 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 2 to 39 years | $1,125,013 | $199,983 | $11,348 | | $211,330 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 4 to 44 years | $538,645 | $2,700 | | | $2,700 |

# 2019 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CF2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $309,283 on January 1, 2019.
- Total reserve funding (including the Beginning Balance) of $368,016 from 2018 through 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of $26,015.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2019 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2019 BEGINNING BALANCE | 2019 RESERVE FUNDING | 2019 PROJECTED REPLACEMENTS | 2019 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 0 to 35 years | $163,875 | $82,780 | $38,691 | ($26,015) | $95,456 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 5 years | $10,725 | $5,857 | $4,868 | | $10,725 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 2 years | $6,615 | $6,615 | | | $6,615 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 1 to 38 years | $1,125,013 | $211,330 | $15,175 | | $226,505 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 3 to 43 years | $538,645 | $2,700 | | | $2,700 |

# 2020 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CF3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $342,001 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of $426,750 from 2018 to 2020.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2020 being accomplished in 2020 at a cost of $13,700.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2020 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2020 BEGINNING BALANCE | 2020 RESERVE FUNDING | 2020 PROJECTED REPLACEMENTS | 2020 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 0 to 34 years | $163,875 | $95,456 | $11,954 | ($9,200) | $98,210 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 4 years | $10,725 | $10,725 | | | $10,725 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 1 years | $6,615 | $6,615 | $6,615 | | $13,230 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 0 to 37 years | $1,125,013 | $226,505 | $15,825 | ($4,500) | $237,830 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 2 to 42 years | $538,645 | $2,700 | $24,340 | | $27,040 |

# CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF4 below details the allocation of the $250,550 Beginning Balance, as reported by the Association and the $176,200 of Replacement Reserve Funding calculated by the Cash Flow Method from 2018 to 2020, to the 42 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $250,550 on January 1, 2018.
- Replacement Reserves on Deposit totaling $309,283 on January 1, 2019.
- Replacement Reserves on Deposit totaling $342,001 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of $426,750 from 2018 to 2020.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2018 to 2020 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $39,715.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

## CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4

| Item # | Description of Projected Replacement | Estimated Replacement Costs | Allocation of Beginning Balance | 2018 Reserve Funding | 2018 Projected Replacements | 2018 End of Year Balance | 2019 Reserve Funding | 2019 Projected Replacements | 2019 End of Year Balance | 2020 Reserve Funding | 2020 Projected Replacements | 2020 End of Year Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SITE COMPONENTS | | | | | | | | | | | |
| 1 | Asphalt pavement, seal coat | 8,000 | 8,000 | 4,369 | | 12,369 | 3,631 | (8,000) | 8,000 | | | 8,000 |
| 2 | Asphalt pavement, mill & overlay | 68,000 | | 37,136 | | 37,136 | 30,864 | | 68,000 | | | 68,000 |
| 3 | Asphalt pavement, patch (3%) | 8,640 | 8,640 | | | 8,640 | | (8,640) | | | | |
| 4 | Concrete curb & gutter, (3%) | 3,850 | 3,850 | | | 3,850 | 1,387 | (3,850) | 1,387 | 2,463 | | 3,850 |
| 5 | Pavers, grouted, repoint, reset (20%) | 5,525 | 5,525 | | | 5,525 | | (5,525) | | | | |
| 6 | Segmental blk., retain wall, (reset 10% | 4,500 | 4,500 | | | 4,500 | | | 4,500 | 4,500 | | 9,000 |
| 7 | W-beam guardrail | 10,800 | | | | | | | | | | |
| 8 | Metal railing | 36,000 | | | | | | | | | | |
| 9 | Sign & post, street | 1,560 | 1,537 | 23 | | 1,560 | | | 1,560 | | | 1,560 |
| 10 | Mailbox, cluster | 7,800 | | | | | 2,809 | | 2,809 | 4,991 | | 7,800 |
| 11 | Irrigation, controller | 9,200 | 9,200 | | | 9,200 | | | 9,200 | | (9,200) | |
| | SITE COMPONENTS - D R Horton ( | | | | | | | | | | | |
| 12 | Concrete flatwork, driveway (3%) | 6,510 | | 3,555 | | 3,555 | 2,955 | | 6,510 | | | 6,510 |
| 13 | Concrete flatwork, leadwalk (3%) | 975 | | 532 | | 532 | 443 | | 975 | | | 975 |
| 14 | Concrete flatwork, patio (3%) | 3,240 | | 1,769 | | 1,769 | 1,471 | | 3,240 | | | 3,240 |
| | SITE COMPONENTS - Ryan (2012) | | | | | | | | | | | |
| 15 | Concrete flatwork, driveway (3%) | 4,410 | 4,410 | | | 4,410 | | | 4,410 | 4,410 | | 8,820 |
| 16 | Concrete flatwork, leadwalk (3%) | 585 | 585 | | | 585 | | | 585 | 585 | | 1,170 |
| 17 | Concrete flatwork, patio (3%) | 1,620 | 1,620 | | | 1,620 | | | 1,620 | 1,620 | | 3,240 |
| | BUILDING EXTERIORS - D R Horto | | | | | | | | | | | |
| 18 | Roofing, asphalt shingles | 398,160 | | | | | | | | | | |
| 19 | Gutter & downspouts, aluminum | 35,490 | | | | | | | | | | |
| 20 | Roofing, standing seam (40%) | 20,670 | | | | | | | | | | |
| 21 | Siding & trim, cementitions (40%) | 356,363 | | | | | | | | | | |
| 22 | Soffit & trim, cedar shakes | 97,750 | 97,750 | | | 97,750 | | | 97,750 | | | 97,750 |
| 23 | Stone veneer, repointing (10%) | 4,500 | 4,500 | | | 4,500 | | | 4,500 | 4,500 | (4,500) | 4,500 |
| 24 | Deck, structure | 76,500 | | | | | | | | | | |
| 25 | Deck, wood decking | 29,250 | 28,826 | 424 | | 29,250 | | | 29,250 | | | 29,250 |
| 26 | Deck, wood railing | 23,205 | 22,869 | 336 | | 23,205 | | | 23,205 | | | 23,205 |
| 27 | Balcony, waterproofing (20%) | 19,388 | 19,388 | | | 19,388 | | | 19,388 | | | 19,388 |
| 28 | Balcony, waterproofing (20%) | 19,388 | | 10,588 | | 10,588 | 8,800 | | 19,388 | | | 19,388 |
| 29 | Balcony, vinyl handrail | 26,650 | 26,650 | | | 26,650 | | | 26,650 | | | 26,650 |
| 30 | Exterior lights, garage doors | 14,700 | | | | | 5,295 | | 5,295 | 9,405 | | 14,700 |
| 31 | Exterior lights, additional allowance | 3,000 | | | | | 1,081 | | 1,081 | 1,919 | | 3,000 |
| | BUILDING EXTERIORS - Ryan (20 | | | | | | | | | | | |
| 32 | Roofing, asphalt shingles | 279,440 | | | | | | | | | | |
| 33 | Gutter & downspouts, aluminum | 23,400 | | | | | | | | | | |

## CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CF4 cont'd

| Item # | Description of Projected Replacement | Estimated Replacement Costs | Allocation of Beginning Balance | 2018 Reserve Funding | 2018 Projected Replacements | 2018 End of Year Balance | 2019 Reserve Funding | 2019 Projected Replacements | 2019 End of Year Balance | 2020 Reserve Funding | 2020 Projected Replacements | 2020 End of Year Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 | Siding & trim, cementitions (40%) | 148,200 | | | | | | | | | | |
| 35 | Stone veneer, repointing (10%) | 2,700 | 2,700 | | | 2,700 | | | 2,700 | 485 | | 3,185 |
| 36 | Deck, structure | 30,600 | | | | | | | | | | |
| 37 | Deck, wood decking | 11,700 | | | | | | | | 11,700 | | 11,700 |
| 38 | Deck, wood railing | 12,155 | | | | | | | | 12,155 | | 12,155 |
| 39 | Window shutters, vinyl | 10,350 | | | | | | | | | | |
| 40 | Privacy screens - 8 ft. long | 7,200 | | | | | | | | | | |
| 41 | Exterior lights, garage doors | 9,900 | | | | | | | | | | |
| 42 | Exterior lights, additional allowance | 3,000 | | | | | | | | | | |

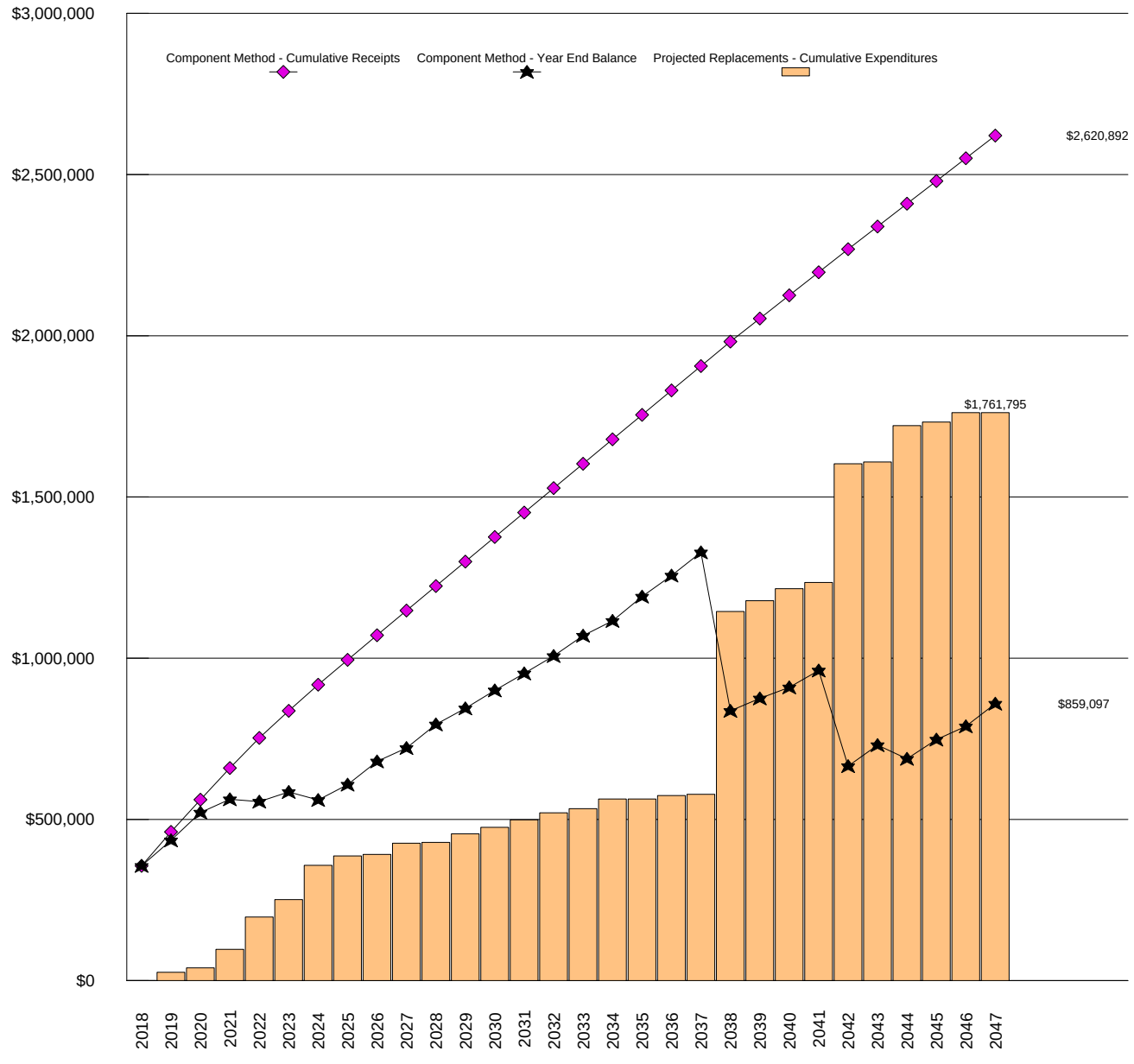
# COMPONENT METHOD

**$105,373** **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2018.**

$107.09 Per unit (average), recommended monthly funding of Replacement Reserves

General. The Component Method (also referred to as the Full Funded Method) is a very conservative mathematical model developed by HUD in the early 1980s. Each of the 42 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of the individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page CM2.

## Component Method - Cumulative Receipts and Expenditures Graph



## COMPONENT METHOD (cont'd)

- Current Funding Objective. A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 42 Projected Replacements. The total, $564,199, is the Current Funding Objective.

  For an example, consider a very simple Replacement Reserve Inventory with one Projected Replacement, a fence with a $1,000 Replacement Cost, a Normal Economic Life of 10 years, and a Remaining Economic Life of 2 years. A contribution to Replacement Reserves of $100 ($1,000 + 10 years) should have been made in each of the previous 8 years (10 years - 2 years). The result is a Current Funding Objective of $800 (8 years x $100 per year).

- Funding Percentage. The Funding Percentage is calculated by dividing the Beginning Balance ($250,550) by the Current Funding Objective ($564,199). At Beach Club Town Homes the Funding Percentage is 44.4%

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 42 Projected Replacements in the Replacement Reserve Inventory. The Current Funding Objective for each Projected Replacement is multiplied by the Funding Percentage and these funds are then "locked" into the account of each item.

  If we relate this calculation back to our fence example, it means that the Association has not accumulated $800 in Reserves (the Funding Objective), but rather at 44.4 percent funded, there is $355 in the account for the fence.

- Annual Funding. The Recommended Annual Funding of Replacement Reserves is then calculated for each Projected Replacement. The funds allocated to the account of the Projected Replacement are subtracted from the Replacement Cost. The result is then divided by the number of years until replacement, and the result is the annual funding for each of the Projected Replacements. The sum of these is $105,373, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2018).

  In our fence example, the $355 in the account is subtracted from the $1,000 Total Replacement Cost and divided by the 2 years that remain before replacement, resulting in an annual deposit of $322. Next year, the deposit remains $322, but in the third year, the fence is replaced and the annual funding adjusts to $100.

- Adjustment to the Component Method for interest and inflation. The calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, inflation, or a constant annual increase in Annual Funding of Replacement Reserves. The Component Method is a very conservative method and if the Analysis is updated regularly, adequate funding will be maintained without the need for adjustments.

### Component Method Data - Years 1 through 30

| Year | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|---|---|---|---|---|
| Beginning balance | $250,550 | | | | | | | | | |
| Recommended annual funding | $105,373 | $105,373 | $99,935 | $98,325 | $93,082 | $83,975 | $81,001 | $77,285 | $76,458 | $76,458 |
| Interest on reserves | | | | | | | | | | |
| Expenditures | | $26,015 | $13,700 | $57,153 | $100,450 | $54,015 | $106,113 | $29,350 | $4,500 | $34,970 |
| Year end balance | $355,923 | $435,281 | $521,516 | $562,688 | $555,320 | $585,280 | $560,169 | $608,104 | $680,061 | $721,549 |
| Cumulative Expenditures | | $26,015 | $39,715 | $96,868 | $197,318 | $251,333 | $357,445 | $386,795 | $391,295 | $426,265 |
| Cumulative Receipts | $355,923 | $461,296 | $561,231 | $659,556 | $752,638 | $836,613 | $917,614 | $994,899 | $1,071,356 | $1,147,814 |

| Year | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 | 2037 |
|---|---|---|---|---|---|---|---|---|---|---|
| Recommended annual funding | $76,016 | $76,016 | $75,896 | $75,896 | $75,896 | $75,733 | $75,733 | $75,733 | $75,733 | $75,733 |
| Interest on reserves | | | | | | | | | | |
| Expenditures | $2,700 | $26,425 | $19,925 | $23,238 | $22,050 | $12,675 | $30,088 | | $10,725 | $3,850 |
| Year end balance | $794,864 | $844,455 | $900,426 | $953,084 | $1,006,930 | $1,069,989 | $1,115,635 | $1,191,368 | $1,256,376 | $1,328,260 |
| Cumulative Expenditures | $428,965 | $455,390 | $475,315 | $498,553 | $520,603 | $533,278 | $563,365 | $563,365 | $574,090 | $577,940 |
| Cumulative Receipts | $1,223,829 | $1,299,845 | $1,375,741 | $1,451,637 | $1,527,533 | $1,603,266 | $1,679,000 | $1,754,733 | $1,830,466 | $1,906,200 |

| Year | 2038 | 2039 | 2040 | 2041 | 2042 | 2043 | 2044 | 2045 | 2046 | 2047 |
|---|---|---|---|---|---|---|---|---|---|---|
| Recommended annual funding | $75,733 | $71,682 | $71,682 | $71,682 | $71,682 | $70,446 | $70,446 | $70,446 | $70,446 | $70,446 |
| Interest on reserves | | | | | | | | | | |
| Expenditures | $567,105 | $33,280 | $37,400 | $19,388 | $368,020 | $5,410 | $112,788 | $11,115 | $29,350 | |
| Year end balance | $836,888 | $875,290 | $909,572 | $961,867 | $665,528 | $730,565 | $688,223 | $747,555 | $788,651 | $859,097 |
| Cumulative Expenditures | $1,145,045 | $1,178,325 | $1,215,725 | $1,235,113 | $1,603,133 | $1,608,543 | $1,721,330 | $1,732,445 | $1,761,795 | $1,761,795 |
| Cumulative Receipts | $1,981,933 | $2,053,615 | $2,125,297 | $2,196,979 | $2,268,661 | $2,339,107 | $2,409,553 | $2,480,000 | $2,550,446 | $2,620,892 |

# COMPONENT METHOD ACCOUNTING SUMMARY

This Beach Club Town Homes - Component Method Accounting Summary is an attachment to the Beach Club Town Homes - Replacement Reserve Study dated February 16, 2017 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2018, 2019, and 2020 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2018, 2019, and 2020. Each of the 42 Projected Replacements listed in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of 5 categories. The following information is summarized by category in each report:
  - Normal Economic Life and Remaining Economic Life of the Projected Replacements.
  - Cost of all Scheduled Replacements in each category.
  - Replacement Reserves on Deposit allocated to the category at the beginning and end of the report period.
  - Cost of Projected Replacements in the report period.
  - Recommended Replacement Reserve Funding allocated to the category during the report period as calculated by the Component Method.
- THREE-YEAR REPLACEMENT FUNDING REPORT. This report details the allocation of the $250,550 Beginning Balance (at the start of the Study Year) and the $310,681 of additional Replacement Reserve funding from 2018 to 2020 (as calculated in the Replacement Reserve Analysis) to each of the 42 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using the Component Method as outlined in the Replacement Reserve Analysis.
  The calculated data includes:
  - Identification and estimated cost of each Projected Replacement schedule in years 2018 through 2020.
  - Allocation of the $250,550 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $310,681 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2018 through 2020, by the Component Method.

# 2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CM1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of $250,550 as of the first day of the Study Year, January 1, 2018.
- Total reserve funding (including the Beginning Balance) of $355,923 in the Study Year.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM1

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2018 BEGINNING BALANCE | 2018 RESERVE FUNDING | 2018 PROJECTED REPLACEMENTS | 2018 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 1 to 36 years | $163,875 | $37,297 | $20,825 | | $58,122 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 6 years | $10,725 | | $1,532 | | $1,532 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 3 years | $6,615 | $979 | $1,409 | | $2,388 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 2 to 39 years | $1,125,013 | $174,188 | $61,557 | | $235,745 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 4 to 44 years | $538,645 | $38,086 | $20,050 | | $58,135 |

# 2019 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CM2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $355,923 on January 1, 2019.
- Total reserve funding (including the Beginning Balance) of $461,296 from 2018 through 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of $26,015.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2019 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2019 BEGINNING BALANCE | 2019 RESERVE FUNDING | 2019 PROJECTED REPLACEMENTS | 2019 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 0 to 35 years | $163,875 | $58,122 | $20,825 | $26,015 | $52,932 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 5 years | $10,725 | $1,532 | $1,532 | | $3,064 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 2 years | $6,615 | $2,388 | $1,409 | | $3,797 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 1 to 38 years | $1,125,013 | $235,745 | $61,557 | | $297,302 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 3 to 43 years | $538,645 | $58,135 | $20,050 | | $78,185 |

# 2020 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 42 Projected Replacements included in the Beach Club Town Homes Replacement Reserve Inventory has been assigned to one of the 5 categories listed in TABLE CM3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $435,281 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of $561,231 from 2018 to 2020.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2020 being accomplished in 2020 at a cost of $13,700.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates to arrange for an update of the Replacement Reserve Study.

## 2020 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

| CATEGORY | NORMAL ECONOMIC LIFE | REMAINING ECONOMIC LIFE | ESTIMATED REPLACEMENT COST | 2020 BEGINNING BALANCE | 2020 RESERVE FUNDING | 2020 PROJECTED REPLACEMENTS | 2020 END OF YEAR BALANCE |
|---|---|---|---|---|---|---|---|
| SITE COMPONENTS | 5 to 45 years | 0 to 34 years | $163,875 | $52,932 | $15,388 | $9,200 | $59,120 |
| SITE COMPONENTS - D R Horton (2008) | 6 years | 4 years | $10,725 | $3,064 | $1,532 | | $4,596 |
| SITE COMPONENTS - Ryan (2012) | 6 years | 1 years | $6,615 | $3,797 | $1,409 | | $5,206 |
| BUILDING EXTERIORS - D R Horton (2008) | 6 to 50 years | 0 to 37 years | $1,125,013 | $297,302 | $61,557 | $4,500 | $354,359 |
| BUILDING EXTERIORS - Ryan (2012) | 6 to 50 years | 2 to 42 years | $538,645 | $78,185 | $20,050 | | $98,234 |

# COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the $250,550 Beginning Balance, as reported by the Association and the $310,681 of Replacement Reserve Funding calculated by the Cash Flow Method from 2018 to 2020, to the 42 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $250,550 on January 1, 2018.
- Replacement Reserves on Deposit totaling $355,923 on January 1, 2019.
- Replacement Reserves on Deposit totaling $435,281 on January 1, 2020.
- Total Replacement Reserve funding (including the Beginning Balance) of $561,231 from 2018 to 2020.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2018 to 2020 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $39,715.

If any of these critical factors are inaccurate, do not use the data and please contact Miller Dodson Associates, Inc., to arrange for an update of the Replacement Reserve Study.

## COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4

| Item # | Description of Projected Replacement | Estimated Replacement Costs | Allocation of Beginning Balance | 2018 Reserve Funding | 2018 Projected Replacements | 2018 End of Year Balance | 2019 Reserve Funding | 2019 Projected Replacements | 2019 End of Year Balance | 2020 Reserve Funding | 2020 Projected Replacements | 2020 End of Year Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SITE COMPONENTS | | | | | | | | | | | |
| 1 | Asphalt pavement, seal coat | 8,000 | 2,132 | 2,934 | | 5,066 | 2,934 | (8,000) | | 1,600 | | 1,600 |
| 2 | Asphalt pavement, mill & overlay | 68,000 | 19,628 | 6,910 | | 26,539 | 6,910 | | 33,449 | 6,910 | | 40,359 |
| 3 | Asphalt pavement, patch (3%) | 8,640 | 3,453 | 2,593 | | 6,047 | 2,593 | (8,640) | | 432 | | 432 |
| 4 | Concrete curb & gutter, (3%) | 3,850 | 1,140 | 1,355 | | 2,495 | 1,355 | (3,850) | | 642 | | 642 |
| 5 | Pavers, grouted, repoint, reset (20%) | 5,525 | 1,963 | 1,781 | | 3,744 | 1,781 | (5,525) | | 553 | | 553 |
| 6 | Segmental blk., retain wall, (reset 10% | 4,500 | 666 | 958 | | 1,625 | 958 | | 2,583 | 958 | | 3,542 |
| 7 | W-beam guardrail | 10,800 | 719 | 296 | | 1,016 | 296 | | 1,312 | 296 | | 1,609 |
| 8 | Metal railing | 36,000 | 2,842 | 896 | | 3,738 | 896 | | 4,634 | 896 | | 5,531 |
| 9 | Sign & post, street | 1,560 | 277 | 214 | | 491 | 214 | | 705 | 214 | | 919 |
| 10 | Mailbox, cluster | 7,800 | 1,616 | 773 | | 2,389 | 773 | | 3,162 | 773 | | 3,935 |
| 11 | Irrigation, controller | 9,200 | 2,860 | 2,113 | | 4,973 | 2,113 | | 7,087 | 2,113 | (9,200) | |
| | SITE COMPONENTS - D R Horton ( | | | | | | | | | | | |
| 12 | Concrete flatwork, driveway (3%) | 6,510 | | 930 | | 930 | 930 | | 1,860 | 930 | | 2,790 |
| 13 | Concrete flatwork, leadwalk (3%) | 975 | | 139 | | 139 | 139 | | 279 | 139 | | 418 |
| 14 | Concrete flatwork, patio (3%) | 3,240 | | 463 | | 463 | 463 | | 926 | 463 | | 1,389 |
| | SITE COMPONENTS - Ryan (2012) | | | | | | | | | | | |
| 15 | Concrete flatwork, driveway (3%) | 4,410 | 653 | 939 | | 1,592 | 939 | | 2,531 | 939 | | 3,471 |
| 16 | Concrete flatwork, leadwalk (3%) | 585 | 87 | 125 | | 211 | 125 | | 336 | 125 | | 460 |
| 17 | Concrete flatwork, patio (3%) | 1,620 | 240 | 345 | | 585 | 345 | | 930 | 345 | | 1,275 |
| | BUILDING EXTERIORS - D R Horto | | | | | | | | | | | |
| 18 | Roofing, asphalt shingles | 398,160 | 53,045 | 16,434 | | 69,479 | 16,434 | | 85,913 | 16,434 | | 102,347 |
| 19 | Gutter & downspouts, aluminum | 35,490 | 4,728 | 1,465 | | 6,193 | 1,465 | | 7,658 | 1,465 | | 9,123 |
| 20 | Roofing, standing seam (40%) | 20,670 | 2,065 | 600 | | 2,665 | 600 | | 3,266 | 600 | | 3,866 |
| 21 | Siding & trim, cementitions (40%) | 356,363 | 31,651 | 8,118 | | 39,769 | 8,118 | | 47,886 | 8,118 | | 56,004 |
| 22 | Soffit & trim, cedar shakes | 97,750 | 36,174 | 12,315 | | 48,489 | 12,315 | | 60,804 | 12,315 | | 73,120 |
| 23 | Stone veneer, repointing (10%) | 4,500 | 999 | 1,167 | | 2,166 | 1,167 | | 3,333 | 1,167 | (4,500) | |
| 24 | Deck, structure | 76,500 | 10,192 | 3,158 | | 13,349 | 3,158 | | 16,507 | 3,158 | | 19,664 |
| 25 | Deck, wood decking | 29,250 | 7,794 | 3,576 | | 11,370 | 3,576 | | 14,946 | 3,576 | | 18,522 |
| 26 | Deck, wood railing | 23,205 | 6,183 | 2,837 | | 9,020 | 2,837 | | 11,857 | 2,837 | | 14,694 |
| 27 | Balcony, waterproofing (20%) | 19,388 | 5,166 | 3,555 | | 8,721 | 3,555 | | 12,277 | 3,555 | | 15,832 |
| 28 | Balcony, waterproofing (20%) | 19,388 | 2,583 | 2,401 | | 4,984 | 2,401 | | 7,384 | 2,401 | | 9,785 |
| 29 | Balcony, vinyl handrail | 26,650 | 9,941 | 4,177 | | 14,118 | 4,177 | | 18,296 | 4,177 | | 22,473 |
| 30 | Exterior lights, garage doors | 14,700 | 3,046 | 1,457 | | 4,503 | 1,457 | | 5,960 | 1,457 | | 7,416 |
| 31 | Exterior lights, additional allowance | 3,000 | 622 | 297 | | 919 | 297 | | 1,216 | 297 | | 1,514 |
| | BUILDING EXTERIORS - Ryan (20 | | | | | | | | | | | |
| 32 | Roofing, asphalt shingles | 279,440 | 20,682 | 10,350 | | 31,033 | 10,350 | | 41,383 | 10,350 | | 51,733 |
| 33 | Gutter & downspouts, aluminum | 23,400 | 1,732 | 867 | | 2,599 | 867 | | 3,465 | 867 | | 4,332 |

## COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4 cont'd

| Item # | Description of Projected Replacement | Estimated Replacement Costs | Allocation of Beginning Balance | 2018 Reserve Funding | 2018 Projected Replacements | 2018 End of Year Balance | 2019 Reserve Funding | 2019 Projected Replacements | 2019 End of Year Balance | 2020 Reserve Funding | 2020 Projected Replacements | 2020 End of Year Balance |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 34 | Siding & trim, cementitions (40%) | 148,200 | 6,581 | 3,147 | | 9,728 | 3,147 | | 12,875 | 3,147 | | 16,023 |
| 35 | Stone veneer, repointing (10%) | 2,700 | 200 | 500 | | 700 | 500 | | 1,200 | 500 | | 1,700 |
| 36 | Deck, structure | 30,600 | 2,265 | 1,133 | | 3,398 | 1,133 | | 4,532 | 1,133 | | 5,665 |
| 37 | Deck, wood decking | 11,700 | 1,732 | 997 | | 2,729 | 997 | | 3,726 | 997 | | 4,722 |
| 38 | Deck, wood railing | 12,155 | 1,799 | 1,036 | | 2,835 | 1,036 | | 3,870 | 1,036 | | 4,906 |
| 39 | Window shutters, vinyl | 10,350 | 1,149 | 613 | | 1,762 | 613 | | 2,376 | 613 | | 2,989 |
| 40 | Privacy screens - 8 ft. long | 7,200 | 799 | 427 | | 1,226 | 427 | | 1,653 | 427 | | 2,079 |
| 41 | Exterior lights, garage doors | 9,900 | 879 | 752 | | 1,631 | 752 | | 2,383 | 752 | | 3,134 |
| 42 | Exterior lights, additional allowance | 3,000 | 266 | 228 | | 494 | 228 | | 722 | 228 | | 950 |

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

Over the past 40 years, the responsibility for community facilities and infrastructure around many of our homes has shifted from the local government to Community Associations. Thirty years ago, a typical new town house abutted a public street on the front and a public alley on the rear. Open space was provided by a nearby public park and recreational facilities were purchased ala carte from privately owned country clubs, swim clubs, tennis clubs, and gymnasiums. Today, 60% of all new residential construction, i.e. townhouses, single-family homes, condominiums, and cooperatives, is in Common Interest Developments (CID). In a CID, a homeowner is bound to a Community Association that owns, maintains, and is responsible for periodic replacements of various components that may include the roads, curbs, sidewalks, playgrounds, streetlights, recreational facilities, and other community facilities and infrastructure.

The growth of Community Associations has been explosive. In 1965, there were only 500 Community Associations in the United States. According to the 1990 U.S. Census, there were 130,000 Community Associations. Community Associations Institute (CAI), a national trade association, estimates there were more than 200,000 Community Associations in the year 2000, and that the number of Community Associations will continue to multiply.

The shift of responsibility for billions of dollars of community facilities and infrastructure from the local government and private sector to Community Associations has generated new and unanticipated problems. Although Community Associations have succeeded in solving many short-term problems, many Associations have failed to properly plan for the tremendous expenses of replacing community facilities and infrastructure components. When inadequate replacement reserve funding results in less than timely replacements of failing components, home owners are exposed to the burden of special assessments, major increases in Association fees, and a decline in property values.

2. REPLACEMENT RESERVE STUDY

The purpose of a Replacement Reserve Study is to provide the Association with an inventory of the common community facilities and infrastructure components that require periodic replacement, a general view of the condition of these components, and an effective financial plan to fund projected periodic replacements. The Replacement Reserve Study consists of the following:

- Replacement Reserve Study Introduction. The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.

- Section A Replacement Reserve Analysis. Many components owned by the Association have a limited life and require periodic replacement. Therefore, it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Miller - Dodson provides a replacement reserve recommendation based on the Cash Flow Method in Section A, and the Component Method in the Appendix of the report.

- Section B Replacement Reserve Inventory. The Replacement Reserve Inventory lists the commonly owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

  Replacement Reserve Inventory includes estimates of the normal economic life and the remaining economic life for those components whose replacement is scheduled for funding from Replacement Reserves.

- Section C Projected Annual Replacements. The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.

- Section D Condition Assessment. Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.

- The Appendix is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc). The Appendix also includes the Accounting Summary for the Cash Flow Method and the Component Method.

3. METHODS OF ANALYSIS

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 the Association. The two methods are:

- 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.

  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 Method.

- Component Method. This method is a time tested mathematical model developed by HUD in the early 1980s, but has been generally relegated to a few States that require it by law. For the vast majority of Miller - Dodson's clients, this method is not used.

  The Component Method 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 Reserves 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.

4. REPLACEMENT RESERVE STUDY DATA

- Identification of Reserve Components. The Reserve Analyst has only two methods of identifying Reserve Components; (1) information provided by the Association and (2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.

- 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, which 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.

5. 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 A1 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 Method, 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 cost. 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)

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 A1. 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 A1. 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 A1, 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 numbers 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 A1 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 A1, 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 A1, 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). Non-standard abbreviations are defined on the page of the Replacement Reserve Inventory where the item appears. The following standard abbreviations are used in this report:

EA: each FT: feet LS: lump sum PR: pair SF: square feet SY: square yard

What is a Reserve Study?
Who are we?


https://youtu.be/m4BcOE6q3Aw

What kind of property uses a Reserve Study?
Who are our clients?


https://youtu.be/40SodajTW1g

Who conducts a Reserve Study?
Reserve Specialist (RS) what does this mean?

https://youtu.be/pYSMZO13VjQ

When should a Reserve Study be updated?
What are the different types of Reserve Studies?


https://youtu.be/Qx8WHB9Cgnc

What is in a Reserve Study and what is out?
Improvement vs Component, is there a difference?


https://youtu.be/ZfBoAEhtf3E

What is my role as a Community Manager?
Will the report help me explain Reserves to my clients?


https://youtu.be/1J2h7FIU3qw

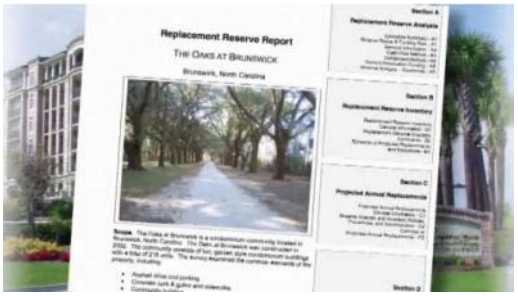
What is my role as a Board Member?
Will a Reserve Study meet my community's needs?

https://youtu.be/aARD1B1Oa3o

Community dues, how can a Reserve Study help?
Will a study help keep my property competitive?

https://youtu.be/diZfM1IyJYU

How do I read the report?
Will I have a say in what the report contains?




https://youtu.be/qCeVJhFf9ag

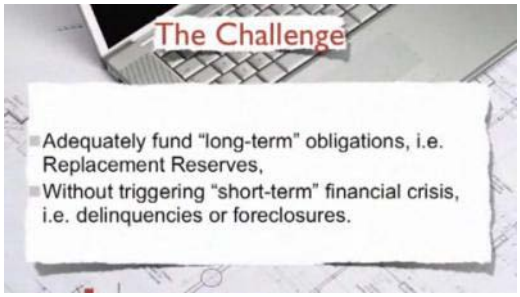
Where do the numbers come from?
Cumulative expenditures and funding, what?


https://youtu.be/SePdwVDvHWI

How are interest and inflation addressed?
What should we look at when considering inflation?

https://youtu.be/W8CDLwRIv68

A community needs more help, where do we go?
What is a Strategic Funding Plan?




https://youtu.be/hIxV9X1tIcA