REPLACEMENT RESERVE REPORT FY 2014

SPRINGFIELD SQUARE HOME OWNERS ASSOCIATION

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REPLACEMENT RESERVE REPORT

SPRINGFIELD SQUARE
HOME OWNERS ASSOCIATION

SPRINGFIELD, VIRGINIA

Description. Springfield Square Home Owners Association is a townhome community located in Springfield, Virginia. Constructed in 1978 - 1979, the community consists of 116 units. The survey examined the common elements of the property, including:

- Asphalt drive and parking.
- Concrete sidewalks, curb, and gutter.
- Fencing and site lighting.
- Signage and site components.

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 2008 by Miller - Dodson Associates. The inventory was adjusted to reflect changes as provided by the Community Manager 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 Springfield Square Home Owners Association (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 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. Section A includes graphic and tabular presentations of these methods and current Association funding. An Executive Summary of these calculations is provided on Page A1.

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

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

- Our visual evaluation and measurements on April 4, 2014. Miller - Dodson Associates has visually inspected the common elements of the property in order to ascertain the remaining useful life and the replacement costs of these components.

- This study contains additional recommendations to address inflation for the Cash Flow Method only. For the recommendation, Miller - Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A6 and A7 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 2014 covering the period from January 1, 2014 to December 31, 2014. The Replacement Reserves on deposit as of January 1 are reported to be $230,974.26. The planned contribution for the fiscal year is $10,990.

The balance and contribution figures have been supplied by the property management 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. Tim Kirchner provided very helpful insight into the current operations of the property and guided us on a site tour.

Analyst's Credentials. Mr. Mark Haase holds a Bachelor's Degree in Economics from the State University of New York at Fredonia and an Associate's degree in Civil Engineering from Northern Virginia Community College. Mr. Haase has experience in all phases of construction project design, initiation, administration, and inspection of facilities. As a project manager, he has managed all phases of commercial construction. He is currently a Reserve Analyst for Miller - Dodson Associates.

Respectfully submitted,

millerdodson ASSOCIATES | Capital Reserve Consultants

Mark Haase
Reserve Analyst

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EXECUTIVE SUMMARY

The Springfield Square Home Owners Association Replacement Reserve Inventory identifies 32 Projected Replacement funding from Replacement Reserves, with an estimated one-time replacement cost of $466,046.

The Replacement Reserve Analysis calculates recommended funding of Replacement Reserves by the two generally accepted methods, the Cash Flow Method and the Component Method. The Analysis also evaluates current funding of Replacement Reserves, as reported by the Association. The calculations and evaluation are summarized below:

$45,459 **CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2014.**

$32.66 Per unit (average), minimum monthly funding of Replacement Reserves

The Cash Flow Method (CFM) calculates Minimum Annual Funding of Replacement Reserves that will fund Projected Replacements identified in the Replacement Reserve Inventory from a common pool of Replacement Reserves and prevent Replacement Reserves from dropping below a Minimum Recommended Balance.

CFM - Minimum Annual Funding remains the same between peaks in cumulative expenditures called Peak Years.

The first Peak Year occurs in 2014 and the CFM - Minimum Annual Funding of Replacement Reserves in 2015 declines to $19,500 ($14.01 per unit, per month), after the completion of $252,851 of replacements in the Study Year, 2014.

After 2014 the CFM - Minimum Annual Funding remains constant for the remainder of the Study Period.

$90,938 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2014.**

$65.33 Per unit (average), recommended monthly funding of Replacement Reserves

The Component Method is a very conservative funding model developed by HUD in the early 1980's.

The Component Method treats each projected replacement in the Replacement Reserve Inventory as a separate account. Deposits are made to each individual account, where funds are held for exclusive use by that item.

Based on this funding model, the Association has a Current Funding Objective of $342,486.

The Association reports having $230,695 on deposit, which is 67.4% funded.

$10,990 **CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES (as reported by the Association).**

$7.90 Per unit (average), reported current monthly funding of Replacement Reserves

The evaluation of Current Funding, as reported by the Association, has calculated that if the Association continues to fund Replacement Reserves at the current level, there will NOT be adequate funds for Projected Replacements in 14 years of the 30-year Study Period, and a maximum shortfall of $-156,996 occurs in 2032.

Pages A2 and A3 explain the Study Year, Study Period, Adjustments (interest & inflation), Beginning Balance, and Projected Replacements. Pages A4 to A9 explain in more detail the calculations associated with the Cash Flow Method, Component Method, and Current Funding.

REPLACEMENT RESERVE STATUS AND FUNDING PLAN

Current funding of Replacement Reserves is inadequate to fund Projected Replacements.

We recommend the Association adopt a Replacement Reserve Funding Plan based on the Cash Flow Method or the Component Method, to ensure that adequate funding is available throughout the 30-Year Study Period for the $645,837 of Projected Replacements listed in the Springfield Square Home Owners Association Replacement Reserve I

The Funding Plan should be professionally updated every three to five years or after completion of each major replacement project. The Board of Directors has a fiduciary responsibility to review the Funding Plan annually and should consider annual increases in Replacement Reserve funding at least equal to the Producer Price Index.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

The Springfield Square Home Owners Association Replacement Reserve Analysis calculations of recommended funding Replacement Reserves by the Cash Flow Method and the Component Method, and the evaluation of the Current Funding, are based upon the same General Information; including the Study Year, Study Period, Beginning Balance, and Projected Replacements.

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, 2014.

STUDY PERIOD

The Replacement Reserve Analysis evaluates the funding of Replacement Reserves over a 30-year Study Period that begins on January 1, 2014.

BEGINNING BALANCE

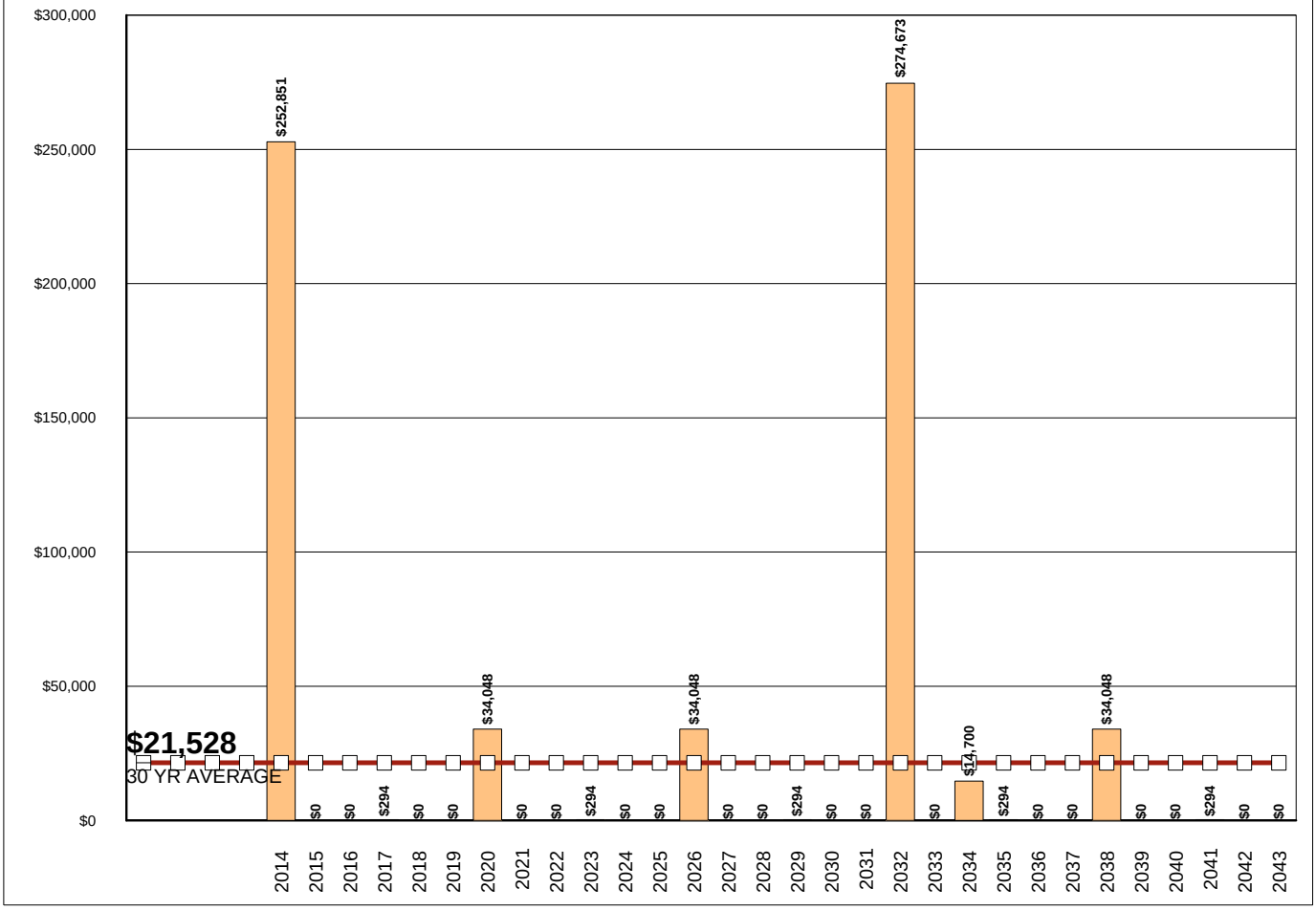
The Association reports Replacement Reserves on Deposit totaling $230,695 at the start of the Study Year.

ADJUSTMENTS AND INFLATION

The short term consequences of 4.50% inflation and no constant annual increase in Reserve funding on the Cash Flow Method, as calculated by a proprietary model developed by Miller + Dodson Associates. are shown on Pages A6 and A7. Other calculations in this Analysis do not account for inflation or a constant annual increase. The calculations in this Analysis do not account for interest earned on Replacement Reserves.

Graph #1. Annual Expenditures for Projected Replacements

This bar graph summarizes annual expenditures for the $645,837 of Projected Replacements identified in the Replacement Reserve Inventory over the 30-year Study Period. The red line shows the average annual expenditure of $21,528.



PROJECTED REPLACEMENTS

The Springfield Square Home Owners Association Replacement Reserve Inventory (Section B) identifies 32 Projected Replacements with a one-time Replacement Cost of $466,046 and replacements totaling $645,837 in the 30-year Study Period. Projected Replacements are the replacement of commonly-owned items that:

require periodic replacement and
whose replacement is to be funded from Replacement Reserves.

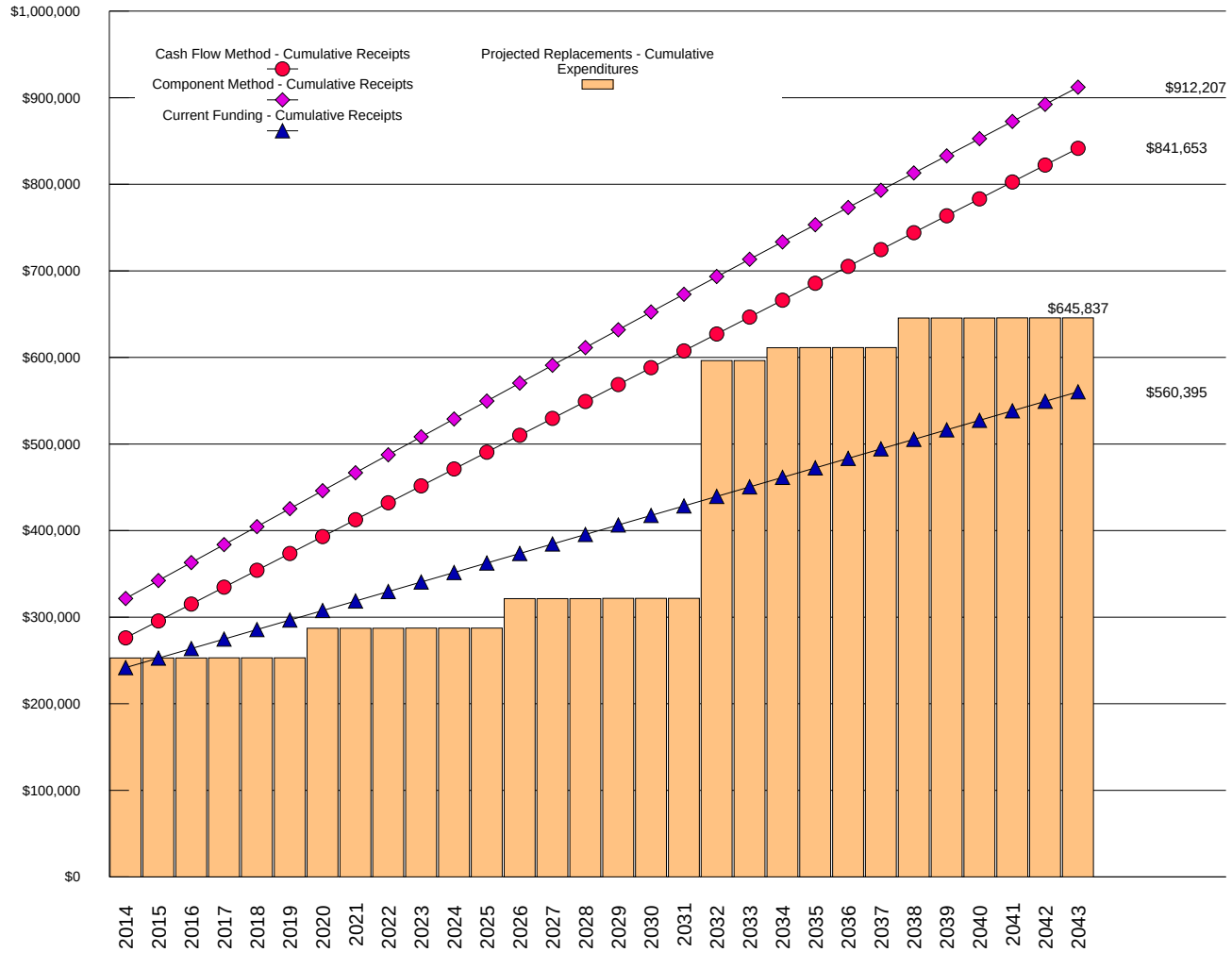
The accuracy of the Springfield Square Home Owners Association Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 32 Projected Replacements specifically listed in the Replacement Reserve Inventory.

To further assist in the identification of items not appropriately funded from Replacement Reserves, the Replacement Reserve Inventory identifies 28 Excluded Items. The rationale behind the exclusion of items from funding by Replacement Reserves is discussed in detail on Page B1.

The Section B - Replacement Reserve Inventory, contains Tables that list each Projected Replacement (and any Excluded Items) broken down into 6 major categories (Pages B3 to B7). Tables are also included that list each Projected Replacement by year for each of the 30 years of the Study Period beginning on Page C1.

Graph #2. Comparison of Cumulative Replacement Reserve Funding and Expenditures

The line graph shows Replacement Reserves - Cumulative Receipts over the 30-year Study Period by the Cash Flow Method (red circles), Component Method (purple diamonds), and the Current Funding Plan as reported by the Association (blue triangles). The bar graph shows the Cumulative Expenditures necessary to fund the Project Replacements listed in the Replacement Reserve Inventory (Section B) and summarized in Graph #1.



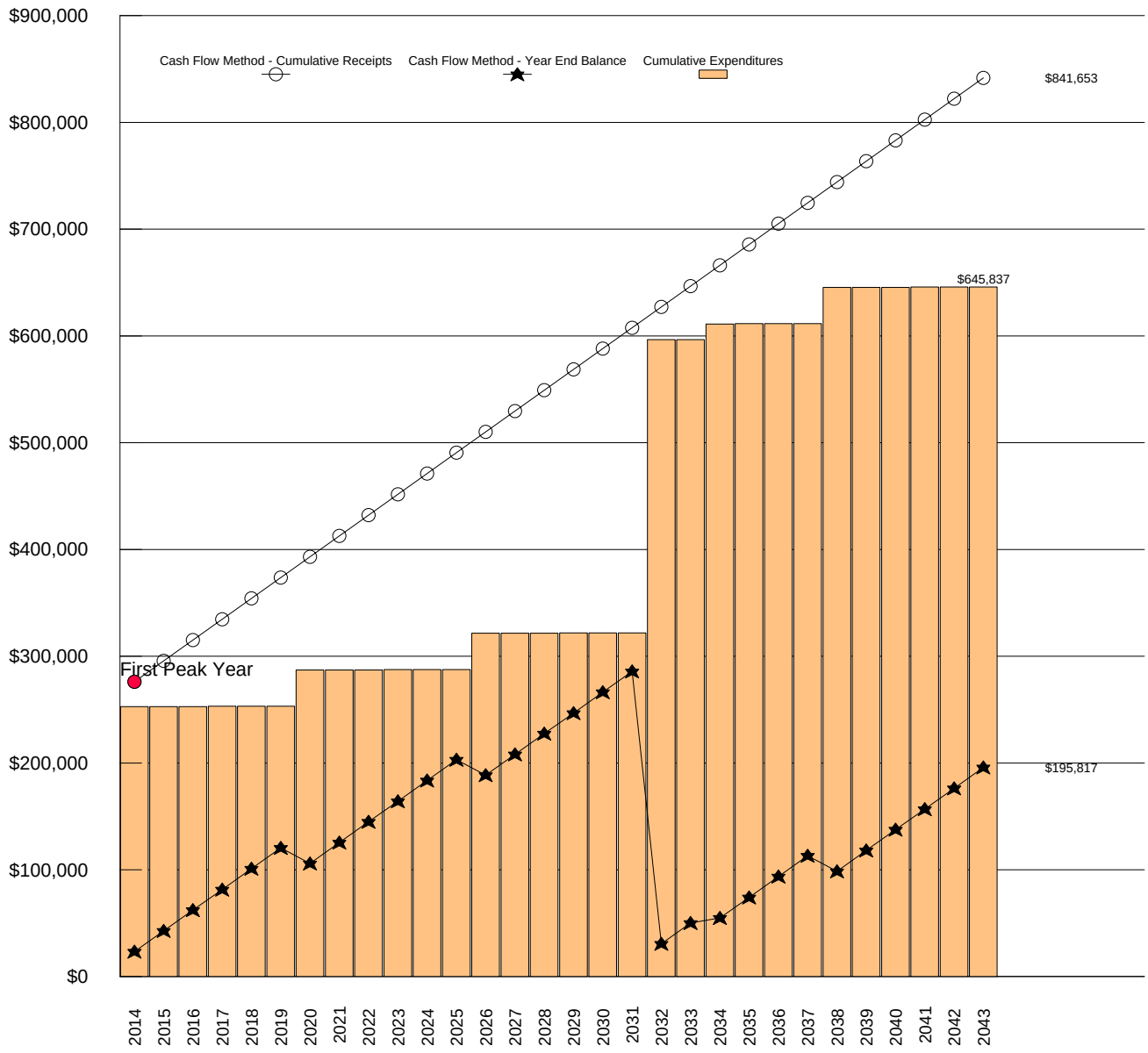
CASH FLOW METHOD

$45,459 **CASH FLOW METHOD MINIMUM ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2014.**
$32.66 Per unit (average), minimum monthly funding of Replacement Reserves

General. The Cash Flow Method (also referred to as the Straight Line Method) is founded on the concept that the Replacement Reserve Account is solvent if cumulative receipts always exceed cumulative expenses. The Cash Flow Method calculates a MINIMUM annual deposit to Replacement Reserves that will:

- Fund all Projected Replacements listed in the Replacement Reserve Inventory (see Section B)
- Prevent Replacement Reserves from dropping below the Minimum Recommended Balance (see Page A-5)
- Allow a constant annual funding level between peaks in cumulative expenditures

Graph #3. Cash Flow Method - Cumulative Receipts and Expenditures Graph



CASH FLOW METHOD (cont'd)

- Replacement Reserves - Minimum Recommended Balance. The Minimum Recommended Balance is $23,302, which is 5.0 percent of the one-time replacement cost of the Projected Replacements listed in the Replacement Reserve Inventory. Unless otherwise noted in the Comments on Page A-9, the Minimum Recommended Balance has been established by the Analyst based upon an evaluation of the types of items included in the Replacement Reserve Inventory.
- Peak Years. The Cash Flow Method calculates a constant annual funding of Replacement Reserves between peaks in cumulative expenditures called Peak Years. In Peak Years, Replacement Reserves on Deposit decline to the Replacement Reserves - Minimum Recommended Balance discussed in the paragraph above.

  First Peak Year. The First Peak Year occurs in 2014, after the completion of $252,851 of replacements in the Study Year, 2014. The Cash Flow Method - Minimum Annual Funding of Replacement Reserves declines fror $45,459 in 2014 to $19,500 in 2015.

  Subsequent Peak Years. There are no subsequent Peak Years and after the first Peak Year in 2014, the Cash Flow Method - Minimum Annual Funding remains constant for the remainder of the Study Period.
- Study Period. The Cash Flow Method calculates the recommended contributions to Replacement Reserves over the 30-year Study Period. These calculations are based upon a 40-year projection of expenditures for Projected Replacements to avoid the Replacement Reserve balance dropping to the Minimum Recommended Balance in the final year of the Study Period.
- Failure to Fund. The Cash Flow Method calculates a MINIMUM annual funding of Replacement Reserves. Failure to fund Replacement Reserves at the minimum level calculated by the Cash Flow Method will result in Replacement Reserves not being available for the Projected Replacements listed in the Replacement Reserve Inventory and/or Replacement Reserves dropping below the Minimum Recommended Balance.
- Adjustment to the Cash Flow Method for interest and inflation. The funding recommendations on Pages A4 and A5 do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.
- Comparison of Cash Flow Funding and Average Annual Expenditure. The Average Annual Expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is $21,528 (see Graph #1). The Cash Flow Method - Minimum Annual Funding of Replacement Reserves in the Study Year is $45,459. This is 211.2 percent of the Average Annual Expenditure, indicating that the Association is building Replacement Reserves in advance of the first Peak Year in 2014.

Table #1. Cash Flow Method Data - Years 1 through 30

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Beginning balance	$230,695									
Minimum annual funding	$45,459	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500
Expenditures	$252,851			$294			$34,048			$294
Year end balance	$23,302	$42,802	$62,302	$81,508	$101,008	$120,508	$105,961	$125,461	$144,961	$164,167
Minimum recommended balance	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302
Cumulative expenditures	$252,851	$252,851	$252,851	$253,145	$253,145	$253,145	$287,193	$287,193	$287,193	$287,487
Cumulative receipts	$276,153	$295,653	$315,153	$334,653	$354,153	$373,653	$393,153	$412,653	$432,153	$451,653
	First Peak Year									

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Minimum annual funding	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500
Expenditures			$34,048			$294			$274,673	
Year end balance	$183,667	$203,167	$188,619	$208,119	$227,619	$246,825	$266,325	$285,825	$30,652	$50,152
Minimum recommended balance	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302
Cumulative expenditures	$287,487	$287,487	$321,534	$321,534	$321,534	$321,828	$321,828	$321,828	$596,501	$596,501
Cumulative receipts	$471,153	$490,653	$510,153	$529,653	$549,153	$568,653	$588,153	$607,653	$627,153	$646,653

Year	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Minimum annual funding	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500	$19,500
Expenditures	$14,700	$294			$34,048			$294		
Year end balance	$54,952	$74,158	$93,658	$113,158	$98,611	$118,111	$137,611	$156,817	$176,317	$195,817
Minimum recommended balance	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302	$23,302
Cumulative expenditures	$611,201	$611,495	$611,495	$611,495	$645,543	$645,543	$645,543	$645,837	$645,837	$645,837
Cumulative receipts	$666,153	$685,653	$705,153	$724,653	$744,153	$763,653	$783,153	$802,653	$822,153	$841,653

CASH FLOW METHOD - INFLATION ADJUSTED FUNDING

The Miller + Dodson Model

General. The Cash Flow Method funding recommendations shown on pages A4 and A5 have been calculated in today's dollars with no adjustment for inflation. Recent swings in construction costs demonstrate the risk facing an Association that does not consider the effects of inflation when funding Replacement Reserves. Below is an outline of the proprietary model developed by Miller + Dodson to forecast short-term impact of inflation on reserve funding.

- Study Year. The Unit Replacement Costs in the Study Year (listed in Section B Inventory) reflect current construction costs.
- Year Two Inflation Adjusted Funding Calculation. The Year Two Starting Balance is calculated assuming Association compliance with the Study Year funding and replacement data listed on Page A7.
  Next, the Projected Replacement Costs are adjusted using the Construction Cost Inflation Rate (see detailed information below).
  The adjusted data is then evaluated using the Cash Flow Method, calculating the Year Two Inflation Adjusted Minimum Annual Funding of Replacement Reserves.
- Year Three Inflation Adjusted Funding Calculation. The same methodology has been used to develop the Inflation Adjusted Cash Flow Method Minimum Annual Funding of Replacement Reserves in Year Three. Simple compounding has been used to calculate the Year Three Projected Replacement Costs.
- Year Four and Beyond. We have not calculated adjusted funding recommendations beyond the third year of the Study nor do we believe it is appropriate to do so. Inflation adjusted funding recommendations are not intended to be a substitute for the periodic evaluation of the common elements by an experienced Reserve Analyst. We recommend the common elements of the community be evaluated by a Reserve Analyst every 3 to 5 years and at the completion of major replacement projects, as recommended by the Community Associations Institute..

Base Construction Cost Inflation Rate. We have utilized a 4.50 percent base rate of inflation in our calculation of second and third year inflation adjusted funding. This rate of inflation is based upon our review of the Producer Price Indexes for Construction Materials, Structure Types & Subcontractors as published by the Bureau of Labor Statistics and our experience with recent pricing trends.

Assumptions. Cash Flow Method, Inflation Adjusted Funding in Year Two and Year Three is calculated based upon three assumptions discussed below and quantified on Page A7. Prior to approving a budget based upon the calculations, the Association should review the accuracy of the assumptions. If discrepancies are noted, contact Miller + Dodson Associates to arrange for a Replacement Reserve Study Update.

- Replacement Reserve Funding. We have assumed the Association will fund Replacement Reserves as recommended in the Study.
- Scheduled Replacements. We have assumed the Association will make Scheduled Replacements as discussed in the Study (beginning on Page C2) and that the cost of these replacements is in substantial compliance with the estimated replacement costs. We have further assumed that no Replacement Reserves will be used to fund replacements other than those specifically listed in the Replacement Reserve Inventory.
- Construction Cost Inflation Rate evaluation. Prior to approving a budget based upon the Year Two and Year Three Adjusted Replacement Reserve Funding calculations, the 4.50 percent base rate of inflation used in our should be compared to rates published by the Bureau of Labor Statistics. If a significant discrepancy (over 1 percent) is noted, contact Miller Dodson Associates prior to using the funding calculations.

Interest. The recommended funding calculations above do not account for interest earned on Replacement Reserves. In 2014, based on a 1.00 percent interest rate, we estimate the Association may earn $1,269 on an average balance of $126,999, $335 on an average balance of $33,506 in 2015, and $543 on $54,399 in 2016. The Association may elect to use these funds to reduce annual funding.

CASH FLOW METHOD
THREE-YEAR FUNDING RECOMMENDATIONS WITH INFLATION ADJUSTMENT

2014 - STUDY YEAR

$45,459 MINIMUM ANNUAL FUNDING

$32.66 Per unit (average), minimum monthly funding of Replacement Reserves

The $45,459 funding of Replacement Reserves in the Study Year has been calculated using current construction costs (listed in Section B Inventory). The Analyst has adjusted the costs to account for any time lag between the preparation of the Study and the Study Year.

2015 - YEAR TWO

$20,407 INFLATION ADJUSTED MINIMUM ANNUAL FUNDING

$14.66 Per unit (average), minimum monthly funding of Replacement Reserves

The $20,407 inflation adjusted funding of Replacement Reserves in 2015 represents a -55.11 percent increase over the non-inflation adjusted funding recommendation of $19,500 in the Study Year.

The specific assumptions used to calculate the Year Two Inflation Adjusted Funding are listed below. If the assumptions are inaccurate, do not use the data and contact Miller Dodson Associates to arrange for a Replacement Reserve Study Update. The assumptions are:

- Replacement Reserves on Deposit totaling $23,302 on January 1, 2015.
- All 2014 Projected Replacements scheduled in the Replacement Reserve Inventory and listed on Page C2, having been accomplished in 2014 at a cost of $252,851.
- An average annual Construction Cost Inflation Rate of 4.50 percent over the previous 12 month period.

2016 - YEAR THREE

$21,381 INFLATION ADJUSTED MINIMUM ANNUAL FUNDING

$15.36 Per unit (average), minimum monthly funding of Replacement Reserves

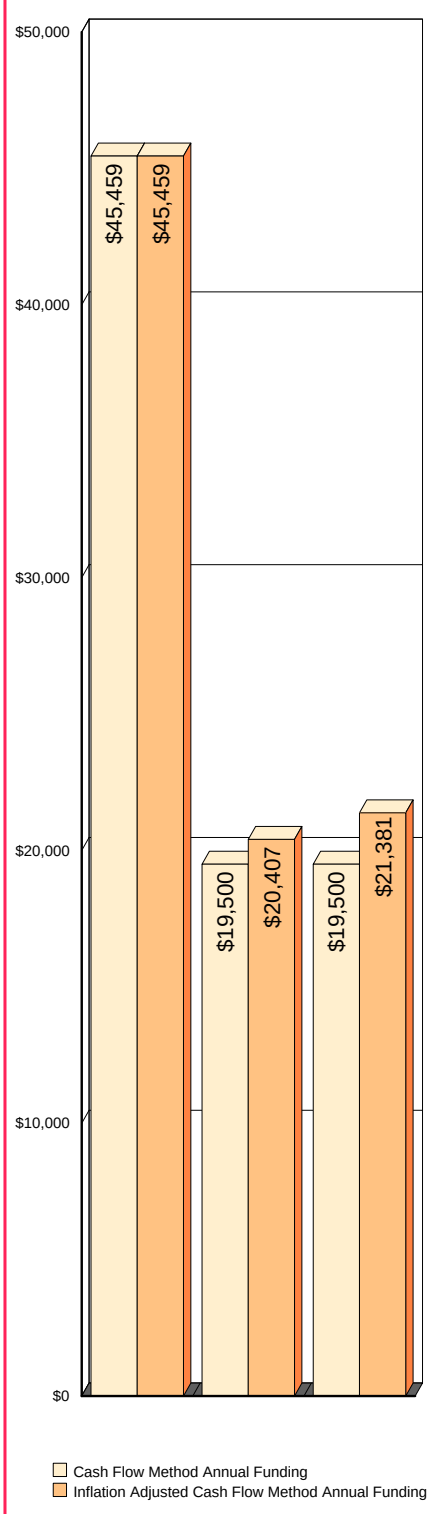
The $21,381 inflation adjusted funding of Replacement Reserves in 2016 represents a -52.97 percent increase over the non-inflation adjusted funding recommendation of $19,500 in the Study Year.

The specific assumptions used to calculate the Year Two Inflation Adjusted Funding are listed below. If the assumptions are inaccurate, do not use the data and contact Miller Dodson Associates to arrange for a Replacement Reserve Study Update. The assumptions are:

- Replacement Reserves on Deposit totaling $42,802 on January 1, 2016.
- No Expenditures from Replacement Reserves.
  Inventory and listed on Page C2, having been accomplished in 2015 at a cost of $0.
- An average annual Construction Cost Inflation Rate of 4.50 percent over the previous 24 month period.

ANNUAL FUNDING GRAPH

The bar graph below shows the Cash Flow Method Annual Funding calculated in today's dollars (lighter bars) and the Inflation Adjusted Cash Flow Method Annual Funding (dark bars)



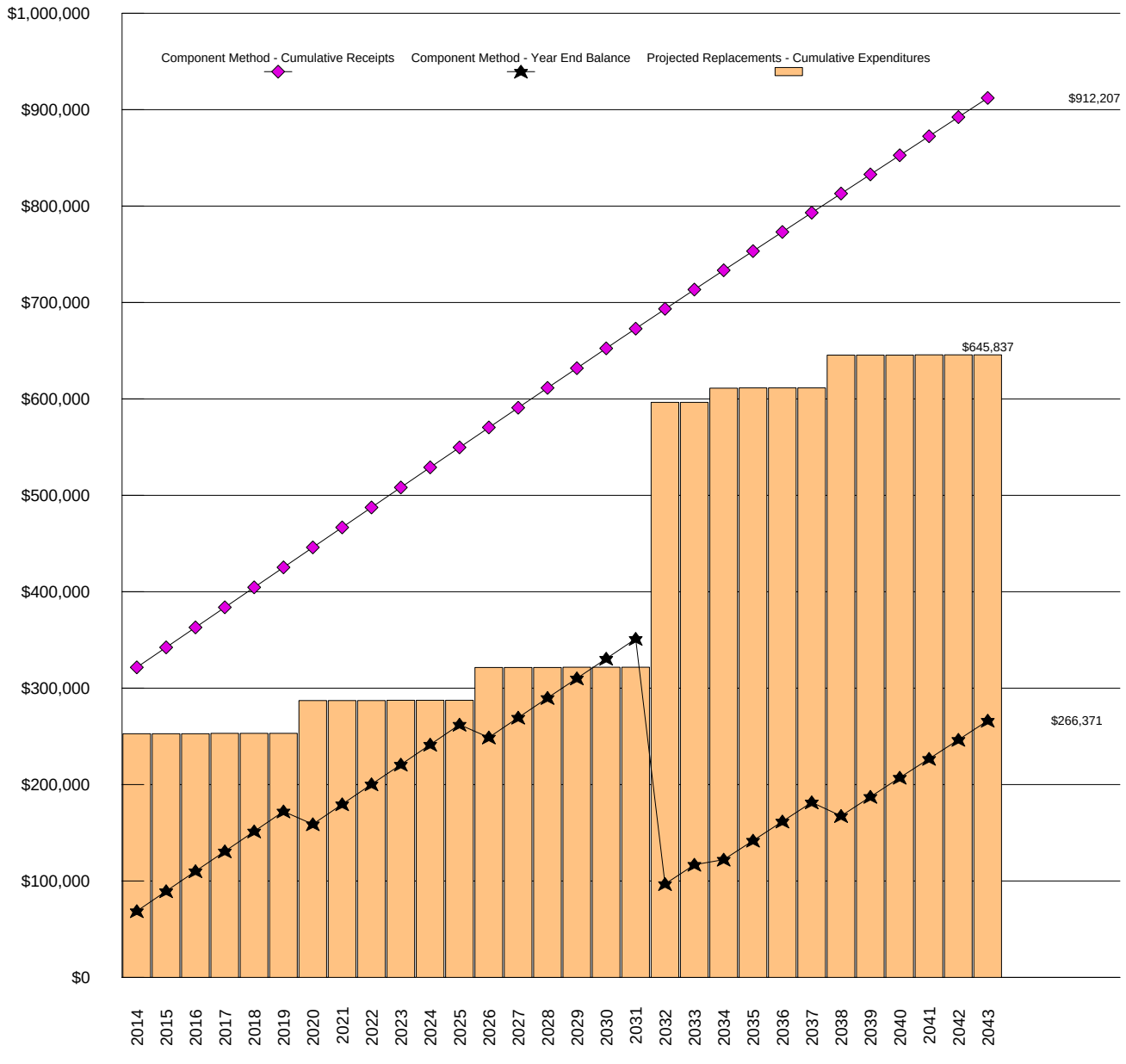
COMPONENT METHOD

$90,938 **COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2014.**

$65.33 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 32 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 A9.

Graph #4. 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 32 Projected Replacements. The total, $342,486, 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 ($230,695) by the Current Funding Objective ($342,486). At Springfield Square Home Owners Association the Funding Percenta

- Allocation of the Beginning Balance. The Beginning Balance is divided among the 32 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 67.4 percent funded, there is $539 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 $90,938, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2014).

  In our fence example, the $539 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 $231. Next year, the deposit remains $231, 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.

Table #2. Component Method Data - Years 1 through 30

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Beginning balance	$230,695									
Recommended annual funding	$90,938	$20,747	$20,747	$20,747	$20,726	$20,726	$20,726	$20,744	$20,744	$20,744
Expenditures	$252,851			$294			$34,048			$294
Year end balance	$68,781	$89,529	$110,276	$130,729	$151,455	$172,181	$158,860	$179,604	$200,348	$220,798
Cumulative Expenditures	$252,851	$252,851	$252,851	$253,145	$253,145	$253,145	$287,193	$287,193	$287,193	$287,487
Cumulative Receipts	$321,633	$342,380	$363,127	$383,874	$404,600	$425,326	$446,053	$466,797	$487,540	$508,284

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Recommended annual funding	$20,737	$20,737	$20,737	$20,499	$20,499	$20,499	$20,496	$20,496	$20,496	$19,983
Expenditures			$34,048			$294			$274,673	
Year end balance	$241,535	$262,273	$248,962	$269,461	$289,960	$310,164	$330,660	$351,156	$96,979	$116,962
Cumulative Expenditures	$287,487	$287,487	$321,534	$321,534	$321,534	$321,828	$321,828	$321,828	$596,501	$596,501
Cumulative Receipts	$529,022	$549,759	$570,497	$590,995	$611,494	$631,993	$652,488	$672,984	$693,480	$713,463

Year	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Recommended annual funding	$19,983	$19,914	$19,913	$19,913	$19,913	$19,822	$19,822	$19,822	$19,821	$19,821
Expenditures	$14,700	$294			$34,048			$294		
Year end balance	$122,245	$141,865	$161,778	$181,691	$167,557	$187,378	$207,200	$226,728	$246,549	$266,371
Cumulative Expenditures	$611,201	$611,495	$611,495	$611,495	$645,543	$645,543	$645,543	$645,837	$645,837	$645,837
Cumulative Receipts	$733,446	$753,360	$773,273	$793,186	$813,099	$832,921	$852,743	$872,564	$892,386	$912,207

CURRENT FUNDING

$10,990 **CURRENT ANNUAL FUNDING OF REPLACEMENT RESERVES (as reported by the Association).**

$7.90 Per unit (average), reported current monthly funding of Replacement Reserves

General. Our evaluation of the Current Association Funding assumes that the Association will continue to fund Replacement Reserves at the current level of $10,990 per year in each of the 30 years of the Study Period.

Our evaluation is based upon this Replacement Reserve Funding Level, a $230,695 Beginning Balance, the Projected Annual Replacement Expenditures shown in Graph #1 and listed in the Replacement Reserve Inventory, and any interest, inflation rate, or constant annual increase in annual contribution adjustments discussed below.

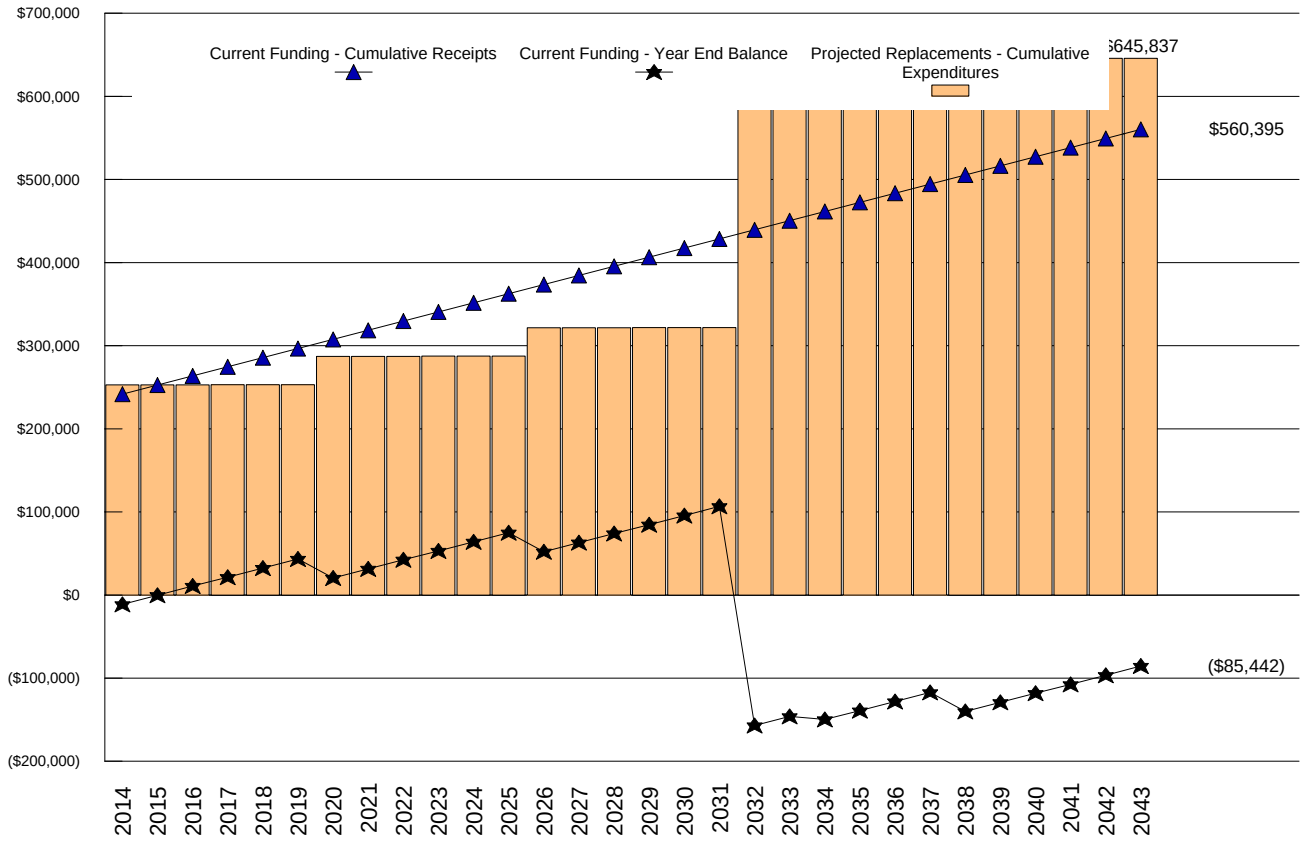
- Evaluation. Our calculations have determined that Current Annual Funding of Replacement Reserves, as reported by the Association, is inadequate to fund Projected Replacement beginning in 2014.

  The Current Annual Funding of Replacement Reserves results in insufficient funds to make Projected Replacements in 14 years of the 30-year Study Period, and a maximum shortfall of $-156,996 occurs in 2032.

- Adjustment to the Current Association Funding for interest and inflation. The Calculations in the Replacement Reserve Analysis do not account for interest earned on Replacement Reserves, the effects of inflation of the cost of Projected Replacements, or a constant annual increase in Annual Funding of Replacement Reserves.

- Comparison of Current Association Funding and Average Annual Expenditure. The average annual expenditure for Projected Replacements listed in the Reserve Inventory over the 30-year Study Period is $21,528 (see Graph #1). Current Association annual funding of Replacement Reserves is $10,990, or approximately 51 percent of the Average Annual Expenditure.

Graph #5. Current Association Funding - Cumulative Receipts and Expenditures Graph



CURRENT FUNDING (cont'd)

Table #3. Current Funding Data - Years 1 through 30

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Beginning balance	$230,695									
Annual deposit	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990
Expenditures	$252,851			$294			$34,048			$294
Year end balance	($11,166)	($176)	$10,814	$21,510	$32,500	$43,490	$20,432	$31,422	$42,412	$53,108
Cumulative Expenditures	$252,851	$252,851	$252,851	$253,145	$253,145	$253,145	$287,193	$287,193	$287,193	$287,487
Cumulative Receipts	$241,685	$252,675	$263,665	$274,655	$285,645	$296,635	$307,625	$318,615	$329,605	$340,595

Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Annual deposit	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990
Expenditures			$34,048			$294			$274,673	
Year end balance	$64,098	$75,088	$52,031	$63,021	$74,011	$84,707	$95,697	$106,687	($156,996)	($146,006)
Cumulative expenditures	$287,487	$287,487	$321,534	$321,534	$321,534	$321,828	$321,828	$321,828	$596,501	$596,501
Cumulative receipts	$351,585	$362,575	$373,565	$384,555	$395,545	$406,535	$417,525	$428,515	$439,505	$450,495

Year	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043
Annual deposit	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990	$10,990
Expenditures	$14,700	$294			$34,048			$294		
Year end balance	($149,716)	($139,020)	($128,030)	($117,040)	($140,098)	($129,108)	($118,118)	($107,422)	($96,432)	($85,442)
Cumulative Expenditures	$611,201	$611,495	$611,495	$611,495	$645,543	$645,543	$645,543	$645,837	$645,837	$645,837
Cumulative Receipts	$461,485	$472,475	$483,465	$494,455	$505,445	$516,435	$527,425	$538,415	$549,405	$560,395

COMMENTS ON THE REPLACEMENT RESERVE ANALYSIS

- This Replacement Reserve Study has been developed in compliance with the Community Associations Institute, National Reserve Study Standards, for a Level One Study - Full Service.
- Springfield Square Home Owners Association has 116 units. The type of property is a home owners association.
- Our calculations assume that Replacement Reserves are not subject to tax.

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REPLACEMENT RESERVE INVENTORY
GENERAL INFORMATION

Springfield Square Home Owners Association - Replacement Reserve Inventory identifies 60 items. Two types of items identified, Projected Replacements and Excluded Items:

- PROJECTED REPLACEMENTS. 32 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 $466,046. Replacements totaling $645,837 are scheduled in the Replacement Reserve Inventory over the 30-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. 28 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 is made to accurately reflect how Replacement Reserves are administered. If the Association has selected an alternative levels, 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 located on property 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 60 items included in the Springfield Square Home Owners Association Replacement Reserve are divided into 6 major categories. Each category is printed on a separate page, Pages B3 to B7.

- LEVEL OF SERVICE. This Replacement Reserve Inventory has been developed in compliance with the standards established for a Level One Study - Full Service, as defined by the National Reserve Study Standards, established in 1998 by Community Associations Institute, which states:

  A Level I - Full Service Reserve Study includes the computation of complete component inventory information regarding commonly owned components provided by the Association, quantities derived from field measurements and/or quantity takeoffs from to-scale engineering drawings that may be made available. The condition of all components is ascertained from a visual inspection of each component by the analyst. The remaining economic life and the value of the components are provided based on these observations and the funding status and funding plan are then derived from analysis of this data.

REPLACEMENT RESERVE INVENTORY - GENERAL INFORMATION (cont'd)

- INVENTORY DATA. Each of the 32 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 named each item included in the Inventory. Where the name of the item and the category are not sufficient to specifically identify the item, we have included additional information in the Comments section at the bottom of the page.

  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. Nonstandard abbreviations are noted in the Comments section on the page on which the abbreviation is used.

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

  Unit Replacement Cost. We use three sources to develop the unit cost data shown in the Inventory; actual replacement cost data provided by the client, industry standard estimating manuals, and a cost database that we have developed based upon our detailed interviews with contractors and service providers who are specialists in their respective lines of work. In addition, trends in the Producers Price Index (PPI), labor rates, and transportation costs are monitored and considered. This cost database is reviewed and updated regularly by Miller Dodson and biannually by an independent professional cost estimating firm.

  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 28 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 on 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	Franconia, mill and overlay	sf	60,420	$1.90	18	none	$114,798
2	Franconia, seal coat	sf	60,420	$0.20	6	6	$12,084
3	Thornhills pavement, mill and overlay	sf	16,044	$1.90	18	none	$30,484
4	Thornhills, seal coat	sf	16,044	$0.20	6	6	$3,209
5	Springfield Square, mill and overlay	sf	16,650	$1.90	18	none	$31,635
6	Springfield Square, seal coat	sf	16,650	$0.20	6	6	$3,330
7	Access road, mill and overlay	sf	15,994	$1.90	18	none	$30,389
8	Access road, seal coat	sf	15,994	$0.20	6	6	$3,199
9	Concrete curb and gutter (20% allowance)	ft	980	$34.00	54	none	$33,320
10	Concrete curb and gutter (20% allowance)	ft	980	$34.00	54	18	$33,320
11	Concrete curb and gutter (20% allowance)	ft	980	$34.00	54	36	$33,320

SITE COMPONENTS - Replacement Costs - Subtotal $329,087

SITE COMPONENTS
COMMENTS

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 (6%)	sf	1,404	$8.50	60	none	$11,932
13	Concrete flatwork (6%)	sf	1,404	$8.50	60	6	$11,932
14	Concrete flatwork (6%)	sf	1,404	$8.50	60	12	$11,932
15	Concrete flatwork (6%)	sf	1,404	$8.50	60	18	$11,932
16	Concrete flatwork (6%)	sf	1,404	$8.50	60	24	$11,932
17	Concrete flatwork (6%)	sf	1,404	$8.50	60	30	$11,932
18	Concrete flatwork (6%)	sf	1,404	$8.50	60	36	$11,932
19	Concrete flatwork (6%)	sf	1,404	$8.50	60	42	$11,932
20	Concrete flatwork (6%)	sf	1,404	$8.50	60	48	$11,932
21	Concrete flatwork (6%)	sf	1,404	$8.50	60	54	$11,932
22	PTL rail fencing (10% allowance)	ft	21	$14.00	30	none	$294
23	PTL rail fencing (10% allowance)	ft	21	$14.00	30	3	$294
24	PTL rail fencing (10% allowance)	ft	21	$14.00	30	6	$294
25	PTL rail fencing (10% allowance)	ft	21	$14.00	30	9	$294
26	PTL rail fencing (10% allowance)	ft	21	$14.00	30	12	$294
27	PTL rail fencing (10% allowance)	ft	21	$14.00	30	15	$294
28	PTL rail fencing (10% allowance)	ft	21	$14.00	30	18	$294
29	PTL rail fencing (10% allowance)	ft	21	$14.00	30	21	$294
30	PTL rail fencing (10% allowance)	ft	21	$14.00	30	24	$294
31	PTL rail fencing (10% allowance)	ft	21	$14.00	30	27	$294
32	6' Chain link fence	ft	420	$35.00	30	20	$14,700
						ERR	$136,960

COMMENTS

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
	Sidewalk on an individual lot	ls	1				EXCLUDED
	Stairs on an individual lot	ls	1				EXCLUDED
	Fence on an individual lot	ls	1				EXCLUDED
	Unit exterior	ls	1				EXCLUDED
	Unit windows	ls	1				EXCLUDED
	Unit doors	ls	1				EXCLUDED
	Unit deck, patio, and/or balcony	ls	1				EXCLUDED
	Unit mailbox	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
	Water mains and meters	ls	1				EXCLUDED
	Sanitary sewers	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
	Crack sealing of asphalt pavement	ls	1				EXCLUDED
	Painting of curbs	ls	1				EXCLUDED
	Striping of parking spaces	ls	1				EXCLUDED
	Numbering of parking spaces	ls	1				EXCLUDED
	Landscaping and site grading	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.

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PROJECTED ANNUAL REPLACEMENTS
GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 32 Projected Replacements in the Springfield Square Home Owners 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 commingle 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.
- UPDATING. In the first two or possibly three years after the completion of a Level One Replacement Reserve Study, we recommend the Association review and revise the Replacement Reserve Analysis and Inventory annually to take into account replacements which have occurred and known changes in replacement costs. This can frequently be handled as a Level Two or Level Three Study (as defined by the Community Associations Institute), unless the Association has completed major replacement projects. A full analysis (Level One) based on a comprehensive visual evaluation of the site should be accomplished every three to five years or after each major replacement project.
- 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 Springfield Square Home Owners Association Board of Directors, those responsible for the management of the included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

PROJECTED REPLACEMENTS - YEARS 1 TO 6

Item	2014	$
1	Franconia, mill and overlay	$114,798
3	Thornhills pavement, mill an	$30,484
5	Springfield Square, mill and	$31,635
7	Access road, mill and overla	$30,389
9	Concrete curb and gutter (2(	$33,320
12	Concrete flatwork (6%)	$11,932
22	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$252,851

Item	2015	$
	No Scheduled Replacements	

Item	2016	$
	No Scheduled Replacements	

Item	2017	$
23	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$294

Item	2018	$
	No Scheduled Replacements	

Item	2019	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 7 TO 12

Item	2020	$
2	Franconia, seal coat	$12,084
4	Thornhills, seal coat	$3,209
6	Springfield Square, seal coa	$3,330
8	Access road, seal coat	$3,199
13	Concrete flatwork (6%)	$11,932
24	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$34,048

Item	2021	$
	No Scheduled Replacements	

Item	2022	$
	No Scheduled Replacements	

Item	2023	$
25	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$294

Item	2024	$
	No Scheduled Replacements	

Item	2025	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 13 TO 18

Item	2026	$
2	Franconia, seal coat	$12,084
4	Thornhills, seal coat	$3,209
6	Springfield Square, seal coa	$3,330
8	Access road, seal coat	$3,199
14	Concrete flatwork (6%)	$11,932
26	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$34,048

Item	2027	$
	No Scheduled Replacements	

Item	2028	$
	No Scheduled Replacements	

Item	2029	$
27	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$294

Item	2030	$
	No Scheduled Replacements	

Item	2031	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 19 TO 24

Item	2032	$
1	Franconia, mill and overlay	$114,798
2	Franconia, seal coat	$12,084
3	Thornhills pavement, mill an	$30,484
4	Thornhills, seal coat	$3,209
5	Springfield Square, mill and	$31,635
6	Springfield Square, seal coa	$3,330
7	Access road, mill and overla	$30,389
8	Access road, seal coat	$3,199
10	Concrete curb and gutter (2(	$33,320
15	Concrete flatwork (6%)	$11,932
28	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$274,673

Item	2033	$
	No Scheduled Replacements	

Item	2034	$
32	6' Chain link fence	$14,700
	Total Scheduled Replacements	$14,700

Item	2035	$
29	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$294

Item	2036	$
	No Scheduled Replacements	

Item	2037	$
	No Scheduled Replacements	

PROJECTED REPLACEMENTS - YEARS 25 TO 30

Item	2038	$
2	Franconia, seal coat	$12,084
4	Thornhills, seal coat	$3,209
6	Springfield Square, seal coa	$3,330
8	Access road, seal coat	$3,199
16	Concrete flatwork (6%)	$11,932
30	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$34,048

Item	2039	$
	No Scheduled Replacements	

Item	2040	$
	No Scheduled Replacements	

Item	2041	$
31	PTL rail fencing (10% allowa	$294
	Total Scheduled Replacements	$294

Item	2042	$
	No Scheduled Replacements	

Item	2043	$
	No Scheduled Replacements	

CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Springfield Square Home Owners Association in April 2014. Springfield Square Home Owners Association is in generally good condition for a community constructed in 1978 - 1979. 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 drive lanes, parking areas, and service roads. In general, the Association's asphalt pavements are in fair condition, with cracking, alligatoring, and distress in a few locations.

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

● Franconia Ct.	60,420	sf
● Thornhills Ct.	16,044	sf
● Springfield Square	16,650	sf
● Access Road	15,994	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 Work. The concrete work includes the community curb and gutters, sidewalks, and other flatwork. We have modeled for curb replacement when the asphalt pavement is overlaid. The overall condition of the concrete work is good with a few problem areas.

The standards we use for recommending replacement are as follows:

- Trip hazard, ½ inch height difference.
- Severe cracking.
- Severe spalling and scale.

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.

Fencing, Wooden Spilt Rail. The Association maintains wooden split rail fencing that is in generally fair condition with maintenance planned for the study year. This type of fencing is typically replaced on an as needed basis when railings and posts decay or become unsightly.

Protection from string machine damage during lawn maintenance can extend the useful life of the railing posts. Applying herbicides around post bases or installing protective sheathing are the typical ways of protecting from string machine damage.

For more information on fencing, visit our website link to the American Fence Association.

Fencing. The Association maintains metal fencing that is in generally good condition. Fencing systems have a large number of configurations and finishes that can usually be repaired as a maintenance activity by replacing individual components as they become damaged or weathered.

Protection from string machine damage during lawn maintenance can extend the useful life of some fence types. Protection from this type of damage is typically provided by applying herbicides around post bases or installing protective sheathing.

Chain link fencing can have a useful life of 40 years or more. Periodic weed control may be required to protect and maintain the fence.

For more information on fencing, visit our website link to the American Fence Association.

Storm Water System. We have included the curb inlets, catch basins, and portions of the underground piping in the Reserve Analysis. No engineering drawings were available to accurately determine distances, sizes of lines and materials used for underground components of the system. Accordingly, we have provided an allowance of the approximate replacement cost based on our experience with other communities of similar size and on our inspection of the visible components while on site. Inspection of the underground lines and structures is beyond the scope of work of this study.

Because it is highly unlikely that all of the community's storm water piping will fail and require replacement in the period of the study, we have programmed funds for the replacement of ten percent of the inventory every 10 years to reflect the incremental nature of this work.

Site Lighting. The Association is responsible for the operation of the facility's site lighting and streetlights. The lighting system was not on at the time of our site visit but is reported to be in good condition. We understand that the lighting system is owned by the association but maintained by the power utility.

This study assumes replacement of the light fixtures every 15 to 20 years, and pole replacement every 30 to 40 years. When the light poles are replaced, we assume that the underground wiring will also be replaced.

When a whole-scale lighting replacement project is called for, we recommend consulting with a lighting design expert. Many municipalities have design codes, guidelines, and restrictions when it comes to exterior illumination.

In addition, new technology such LED and LIFI among others should be evaluated when considering replacement.

Entry Monument and Signage. The Association maintains a brick entry monument and two wood signs. The monument and signs are in good condition.

The monument is constructed of brick masonry with lighting and acrylic lettering that is expected to have a useful life of 10 to 15 years.

We recommend repointing and replacement of defective areas of the masonry as needed. The Association may want to consider applying a coat of Siloxane or other appropriate breathable sealant to mitigate water penetration and further degradation of the masonry work. For additional information, please see the appropriate links on our web site at http://mdareserves.com/resources/links/building-exterior.

The signs made of wood are in good condition with no noticeable damage or weathering. In order to keep the monument fresh and appealing, we recommend replacement every 15 to 20 years.

In addition to the monuments, the Association is responsible for the community's signage including street, and parking signs. Other small miscellaneous signs are not considered in this study and should be replaced using other funds.

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

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CASH FLOW METHOD ACCOUNTING SUMMARY

This Springfield Square Home Owners Association - Cash Flow Method Accounting Summary is an attachment to the Springfield Square Home Owners Association - Replacement Reserve Study dated April 4, 2014 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles.
This Summary consists of four reports, the 2014, 2015, and 2016 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2014, 2015, and 2016. Each of the 32 Projected Replacements listed in the Springfield Square Home Owners Association Replacement Reserve Inventory has be assigned to one of 2 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 $230,695 Beginning Balance (at the start of the Study Year) and the $84,459 of additional Replacement Reserve Funding in 2014 through 2016 (as calculated in the Replacement Reserve Analysis) to each of the 32 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 schedule in years 2014 through 2016.
  - Allocation of the $230,695 Beginning Balance to the Projected Replacements by Chronological Allocation.
  - Allocation of the $84,459 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2014 through 2016, 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 $230,695 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 Springfield Square Home Owners Association the Beginning Balance funds 91.2% of Scheduled Replacer the Study Year.
  - The next step is the allocation of the $45,459 of 2014 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 Springfield Square Home Owners Association the Beginning Balance and the 2014 Replacement Reserve Funding, funds replacements through 2019 and partial funds (67.6%) replacements in 2020.
  - Allocations of the 2015 and 2016 Reserve Funding are done using the same methodology.
  - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2014 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CF-1 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 $230,695 as of the first day of the Study Year, January 1, 2014.
- Total reserve funding (including the Beginning Balance) of $276,153 in the Study Year.
- 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 2014 being accomplished in 2014 at a cost of $252,851.

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.

2014 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2014 BEGINNING BALANCE	2014 RESERVE FUNDING	2014 PROJECTED REPLACEMENTS	2014 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	0 to 36 years	$329,087	$219,540	$35,831	($240,625)	$14,746
	30 to 60 years	0 to 54 years	$136,960	$11,155	$9,627	($12,226)	$8,556

2015 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CF-2 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 $23,302 on January 1, 2015.
- Total reserve funding (including the Beginning Balance) of $295,653 in 2014 through 2015.
- 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.

2015 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2015 BEGINNING BALANCE	2015 RESERVE FUNDING	2015 PROJECTED REPLACEMENTS	2015 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	5 to 53 years	$329,087	$14,746	$12,309		$27,056
	30 to 60 years	2 to 59 years	$136,960	$8,556	$7,191		$15,747

2016 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CF-3 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 $42,802 on January 1, 2016.
- Total Replacement Reserve funding (including the Beginning Balance) of $315,153 in 2014 to 2016.
- 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.

2016 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF-3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2016 BEGINNING BALANCE	2016 RESERVE FUNDING	2016 PROJECTED REPLACEMENTS	2016 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	4 to 52 years	$329,087	$27,056	$12,498		$39,554
	30 to 60 years	1 to 58 years	$136,960	$15,747	$7,002		$22,749

CASH FLOW METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CF-4 below details the allocation of the $230,695 Beginning Balance, as reported by the Association and the $84,459 of Replacement Reserve Funding calculated by the Cash Flow Method in 2014 to 2016, to the 32 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 CF-1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $230,695 on January 1, 2014.
- Replacement Reserves on Deposit totaling $23,302 on January 1, 2015.
- Replacement Reserves on Deposit totaling $42,802 on January 1, 2016.
- Total Replacement Reserve funding (including the Beginning Balance) of $315,153 in 2014 to 2016.
- 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 2014 to 2016 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $252,851.

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 CF-4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2014 Reserve Funding	2014 Projected Replacements	2014 End of Year Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance
	SITE COMPONENTS											
1	Franconia, mill and overlay	114,798	104,739	10,059	(114,798)							
2	Franconia, seal coat	12,084		8,166		8,166	6,817		14,983	6,921		21,903
3	Thornhills pavement, mill and overlay	30,484	27,812	2,671	(30,484)							
4	Thornhills, seal coat	3,209		2,168		2,168	1,810		3,978	1,838		5,816
5	Springfield Square, mill and overlay	31,635	28,863	2,772	(31,635)							
6	Springfield Square, seal coat	3,330		2,250		2,250	1,878		4,129	1,907		6,036
7	Access road, mill and overlay	30,389	27,726	2,663	(30,389)							
8	Access road, seal coat	3,199		2,162		2,162	1,804		3,966	1,832		5,798
9	Concrete curb and gutter (20% allowar	33,320	30,400	2,920	(33,320)							
10	Concrete curb and gutter (20% allowar	33,320										
11	Concrete curb and gutter (20% allowar	33,320										
12	Concrete flatwork (6%)	11,932	10,886	1,046	(11,932)							
13	Concrete flatwork (6%)	11,932		8,063		8,063	3,869		11,932			11,932
14	Concrete flatwork (6%)	11,932					2,862		2,862	6,834		9,696
15	Concrete flatwork (6%)	11,932										
16	Concrete flatwork (6%)	11,932										
17	Concrete flatwork (6%)	11,932										
18	Concrete flatwork (6%)	11,932										
19	Concrete flatwork (6%)	11,932										
20	Concrete flatwork (6%)	11,932										
21	Concrete flatwork (6%)	11,932										
22	PTL rail fencing (10% allowance)	294	268	26	(294)							
23	PTL rail fencing (10% allowance)	294		294		294			294			294
24	PTL rail fencing (10% allowance)	294		199		199	95		294			294
25	PTL rail fencing (10% allowance)	294					294		294			294
26	PTL rail fencing (10% allowance)	294					71		71	168		239
27	PTL rail fencing (10% allowance)	294										
28	PTL rail fencing (10% allowance)	294										
29	PTL rail fencing (10% allowance)	294										
30	PTL rail fencing (10% allowance)	294										
31	PTL rail fencing (10% allowance)	294										
32	6' Chain link fence	14,700										

COMPONENT METHOD ACCOUNTING SUMMARY

This Springfield Square Home Owners Association - Component Method Accounting Summary is an attachment to the Springfield Square Home Owners Association - Replacement Reserve Study dated April 4, 2014 and is for use by accounting and reserve professionals experienced in Association funding and accounting principals.
This Summary consists of four reports, the 2014, 2015, and 2016 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2014, 2015, and 2016. Each of the 32 Projected Replacements listed in the Springfield Square Home Owners Association Replacement Reserve Inventory has be assigned to one of 2 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 $230,695 Beginning Balance (at the start of the Study Year) and the $132,432 of additional Replacement Reserve funding in 2014 through 2016 (as calculated in the Replacement Reserve Analysis) to each of the 32 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 2014 through 2016.
  - Allocation of the $230,695 Beginning Balance to the Projected Replacements by the Component Method.
  - Allocation of the $132,432 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2014 through 2016, by the Component Method.

2014 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CM-1 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 $230,695 as of the first day of the Study Year, January 1, 2014.
- Total reserve funding (including the Beginning Balance) of $321,633 in the Study Year.
- 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 2014 being accomplished in 2014 at a cost of $252,851.

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.

2014 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM-1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2014 BEGINNING BALANCE	2014 RESERVE FUNDING	2014 PROJECTED REPLACEMENTS	2014 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	0 to 36 years	$329,087	$183,695	$83,358	$240,625	$26,428
	30 to 60 years	0 to 54 years	$136,960	$47,000	$7,580	$12,226	$42,354

2015 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CM-2 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 $68,781 on January 1, 2015.
- Total reserve funding (including the Beginning Balance) of $342,380 in 2014 through 2015.
- 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.

2015 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM-2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2015 BEGINNING BALANCE	2015 RESERVE FUNDING	2015 PROJECTED REPLACEMENTS	2015 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	5 to 53 years	$329,087	$26,428	$16,949		$43,377
	30 to 60 years	2 to 59 years	$136,960	$42,354	$3,798		$46,152

2016 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 32 Projected Replacements included in the Springfield Square Home Owners Association Replacement Res Inventory has been assigned to one of the 2 categories listed in TABLE CM-3 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 $89,529 on January 1, 2016.
- Total Replacement Reserve funding (including the Beginning Balance) of $363,127 in 2014 to 2016.
- 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.

2016 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM-3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2016 BEGINNING BALANCE	2016 RESERVE FUNDING	2016 PROJECTED REPLACEMENTS	2016 END OF YEAR BALANCE
SITE COMPONENTS	6 to 54 years	4 to 52 years	$329,087	$43,377	$16,949		$60,326
	30 to 60 years	1 to 58 years	$136,960	$46,152	$3,798		$49,950

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM-4 below details the allocation of the $230,695 Beginning Balance, as reported by the Association and the $132,432 of Replacement Reserve Funding calculated by the Cash Flow Method in 2014 to 2016, to the 32 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 CF-1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling $230,695 on January 1, 2014.
- Replacement Reserves on Deposit totaling $68,781 on January 1, 2015.
- Replacement Reserves on Deposit totaling $89,529 on January 1, 2016.
- Total Replacement Reserve funding (including the Beginning Balance) of $363,127 in 2014 to 2016.
- 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 2014 to 2016 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of $252,851.

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 CM-4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2014 Reserve Funding	2014 Projected Replacements	2014 End of Year Balance	2015 Reserve Funding	2015 Projected Replacements	2015 End of Year Balance	2016 Reserve Funding	2016 Projected Replacements	2016 End of Year Balance
	SITE COMPONENTS											
1	Franconia, mill and overlay	114,798	77,327	37,471	(114,798)		6,378		6,378	6,378		12,755
2	Franconia, seal coat	12,084		1,726		1,726	1,726		3,453	1,726		5,179
3	Thornhills pavement, mill and overlay	30,484	20,533	9,950	(30,484)		1,694		1,694	1,694		3,387
4	Thornhills, seal coat	3,209		458		458	458		917	458		1,375
5	Springfield Square, mill and overlay	31,635	21,309	10,326	(31,635)		1,758		1,758	1,758		3,515
6	Springfield Square, seal coat	3,330		476		476	476		951	476		1,427
7	Access road, mill and overlay	30,389	20,469	9,919	(30,389)		1,688		1,688	1,688		3,377
8	Access road, seal coat	3,199		457		457	457		914	457		1,371
9	Concrete curb and gutter (20% allowar	33,320	22,444	10,876	(33,320)		617		617	617		1,234
10	Concrete curb and gutter (20% allowar	33,320	14,547	988		15,535	988		16,523	988		17,511
11	Concrete curb and gutter (20% allowar	33,320	7,066	710		7,775	710		8,485	710		9,194
12	Concrete flatwork (6%)	11,932	8,037	3,895	(11,932)		199		199	199		398
13	Concrete flatwork (6%)	11,932	7,100	690		7,790	690		8,480	690		9,171
14	Concrete flatwork (6%)	11,932	6,296	434		6,729	434		7,163	434		7,596
15	Concrete flatwork (6%)	11,932	5,492	339		5,831	339		6,170	339		6,509
16	Concrete flatwork (6%)	11,932	4,688	290		4,978	290		5,268	290		5,558
17	Concrete flatwork (6%)	11,932	3,885	260		4,144	260		4,404	260		4,663
18	Concrete flatwork (6%)	11,932	3,081	239		3,320	239		3,559	239		3,799
19	Concrete flatwork (6%)	11,932	2,277	225		2,502	225		2,726	225		2,951
20	Concrete flatwork (6%)	11,932	1,473	213		1,687	213		1,900	213		2,114
21	Concrete flatwork (6%)	11,932	670	205		875	205		1,079	205		1,284
22	PTL rail fencing (10% allowance)	294	198	96	(294)		10		10	10		20
23	PTL rail fencing (10% allowance)	294	172	31		202	31		233	31		263
24	PTL rail fencing (10% allowance)	294	152	20		172	20		192	20		213
25	PTL rail fencing (10% allowance)	294	132	16		148	16		164	16		181
26	PTL rail fencing (10% allowance)	294	112	14		126	14		140	14		154
27	PTL rail fencing (10% allowance)	294	92	13		105	13		118	13		130
28	PTL rail fencing (10% allowance)	294	73	12		84	12		96	12		108
29	PTL rail fencing (10% allowance)	294	53	11		64	11		75	11		86
30	PTL rail fencing (10% allowance)	294	33	10		43	10		54	10		64
31	PTL rail fencing (10% allowance)	294	13	10		23	10		33	10		43
32	6' Chain link fence	14,700	2,971	559		3,529	559		4,088	559		4,646

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 U.S. Census, there were 130,000 Community Associations in 1990. 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; 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 two generally accepted accounting methods; the Cash Flow Method and the Component Method. Section A Replacement Reserve Analysis includes graphic and tabular presentations of these methods and current Association funding.

- 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.

- Section E Attachments. 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).

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:

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

  First, the total Current Objective is calculated, which is the reserve amount that would have accumulated had all of the items on the schedule been funded from initial construction at their current replacement costs. Next, the 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.

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

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

- Adjusted Cash Flow Analysis. This program has the ability to modify the Cash Flow Method to take into account forecasted inflation and interest rates, thereby producing an Adjusted Cash Flow Analysis. Attempting to forecast future inflation and interest rates and the impact of changing technology is highly tenuous. Therefore, in most cases it is preferable to make a new schedule periodically rather than attempt to project far into the future. We will provide more information on this type of analysis upon request.

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.

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 Remaining Economic Life. Used in the Normal Replacement Schedules, this term is the number of years until the current item is expected to need replacement. Normally, this number would be considered 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.

Incremental Replacement Item. Incremental replacement refers to an inventory component that will be replaced in portions over the life of the study rather than in its entirety, as distinguished below, see Normal Replacement Item.

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 is replaced in its entirety. (As distinguished from an Incremental Replacement Item, 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?

http://bcove.me/nc0o69t7

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

http://bcove.me/stt373hj

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

http://bcove.me/81ch7kjt

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

http://bcove.me/ixis1yxm

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

http://bcove.me/81ch7kjt

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

http://bcove.me/fazwdk3h

clients?

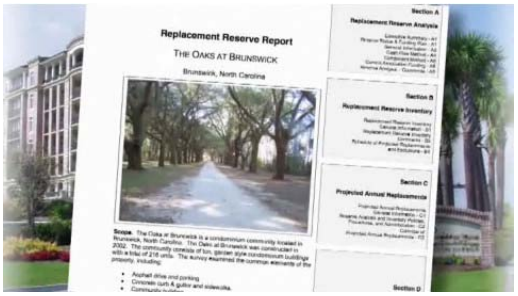
What is my role as a Board Member?
Will a Reserve Study meet my community's needs?

http://bcove.me/n6nwnktv

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

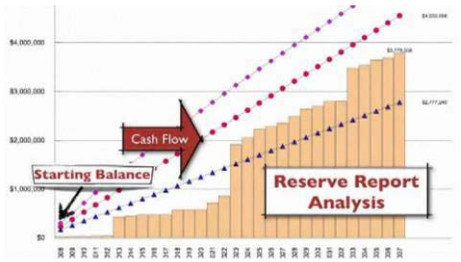
http://bcove.me/2vfih1tz

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



http://bcove.me/wb2fugb1

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

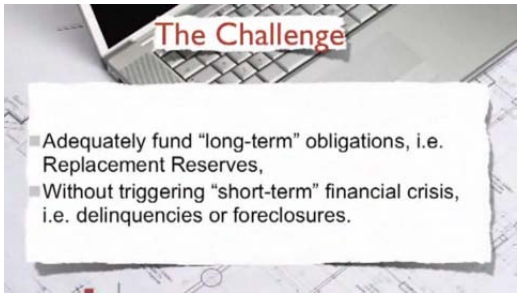


http://bcove.me/7buer3n8

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

http://bcove.me/s2tmtj9b

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



http://bcove.me/iqul31vq