

REPLACEMENT RESERVE REPORT FY 2017 CAMDEN TOWNES



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CAMDEN TOWNES

Community Management by:

ROCKTOWN REALTY

Bernard Hamann

218 Market Street
Harrisonburg, VA 22801
540-705-7080

Bernard@rocktownrealty.com

Consultant:

millerdodson | Capital
ASSOCIATES Reserve
Consultants

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

www.mdareserves.com

millerdodson
ASSOCIATES | Capital
Reserve
Consultants

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REPLACEMENT RESERVE REPORT

CAMDEN TOWNES

HARRISONBURG, VIRGINIA



Description. Camden Townes is a townhome community in Harrisonburg, Virginia that was constructed in 1989. The subject property consists of 15 buildings containing 99 units. The survey examined common elements of the property as well as unit owner items being maintained by the Association, including the following:

- Unit owned lead walks, steps, retaining walls, and awnings.
- Asphalt pavement, sidewalks, curb, steps, and railings.
- Dumpster fencing, mailboxes, pet waste stations, bike racks, entrance sign, bus stop shelter, dog run (40%), and picnic area.
- Townhome building roofing and siding.

Level of Service. This study has been performed as a Level 1 Full Service Reserve Study as defined under the National Reserve Study Standards that have been adopted by the Community Associations Institute. As such, a complete inventory of components was established for the commonly owned elements of this facility based on information provided by the Community Manager or by quantities that were developed from field measurement or takeoffs from to-scale drawings as performed by the Analyst. The condition of each inventory component was established by the Analyst, based on a visual inspection or review of provided historical data with a major repair or replacement cost for each also set. The included fund status and funding plan have been derived from analysis of this inventory.

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Video Answers to Frequently Asked Questions

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 Camden Townes (hereinafter called the Association) with an inventory of the common community facilities and infrastructure components that require periodic replacement. The Study includes a general view of the condition of these items and an effective financial plan to fund projected periodic replacements.

- **Inventory of Items Owned by the Association.** Section B lists the Projected Replacements of the commonly owned items that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about excluded items, which are items whose replacements are not scheduled for funding from Replacement Reserves.
- **Condition of Items Owned by the Association.** Section B includes our estimates of the normal economic life and the remaining economic life for the projected replacements. Section C provides a year-by-year listing of the projected replacements. Section D provides additional detail for items that are unique or deserving of attention because of their condition or the manner in which they have been treated in this study.
- **Financial Plan.** The Association has a fiduciary responsibility to protect the appearance, value, and safety of the property and it is therefore essential the Association have a financial plan that provides funding for the projected replacements. In conformance with American Institute of Certified Public Accountant guidelines, Section A, Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by the Cash Flow Method. Section A, Replacement Reserve Analysis includes graphic and tabular presentations of the Association's current funding and the recommended funding based on the Cash Flow Method. An Executive Summary of these calculations is provided on Page A1. The alternative Component Method of funding is provided in the Appendix.

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

- The Request for Proposal submitted and executed by the Association.
- Miller - Dodson performed a visual evaluation on December 5, 2016 to determine a remaining useful life and replacement cost for the commonly owned elements of this facility.
- This study contains additional recommendations to address inflation for the Cash Flow Method only. For this recommendation, Miller - Dodson uses the Producers Price Index (PPI), which gauges inflation in manufacturing and construction. Please see page A5 for further details.

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

Current Funding. This reserve study has been prepared for Fiscal Year 2017 covering the period from January 1, 2017 to December 31, 2017. The Replacement Reserves on deposit as of September 30, 2016 are reported to be \$32,215. The planned contribution for the entire fiscal year is \$1 €0,000. There are no planned expenditures for the remainder of the fiscal year. This results in a Reserve Fund balance at the start of the fiscal year as follows:

September 30, 2016 balance	\$32,215
3 months contribution	\$6,250
Planned expenditures	\$0
FY 2017 opening balance	\$38,465

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

Acknowledgement. Miller - Dodson Associates would like to acknowledge the assistance and input of the Community Manager, Mr. Bernard Hamann who lead the Miller Dodson analyst on a tour of the community and provided very helpful insight into the current operations of the property, including the contract for the most recent siding replacement project.

Analyst's Credentials. Mrs. Heather N. Naples holds a Bachelors Degree in Civil Engineering and a Masters Degree in Engineering Administration from Virginia Tech. A registered Professional Engineer, Mrs. Naples has experience in all phases of project design, contract administration, and inspection of public and private facilities. As an Engineer, she has completed multiple facilities engineering studies, life cycle cost studies, and analysis for repair versus replacement of facilities and systems. She is currently an Engineer and Reserve Specialist for Miller - Dodson Associates.

Respectfully submitted,



Heather Naples, RS, PE
Reserve Specialist

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EXECUTIVE SUMMARY

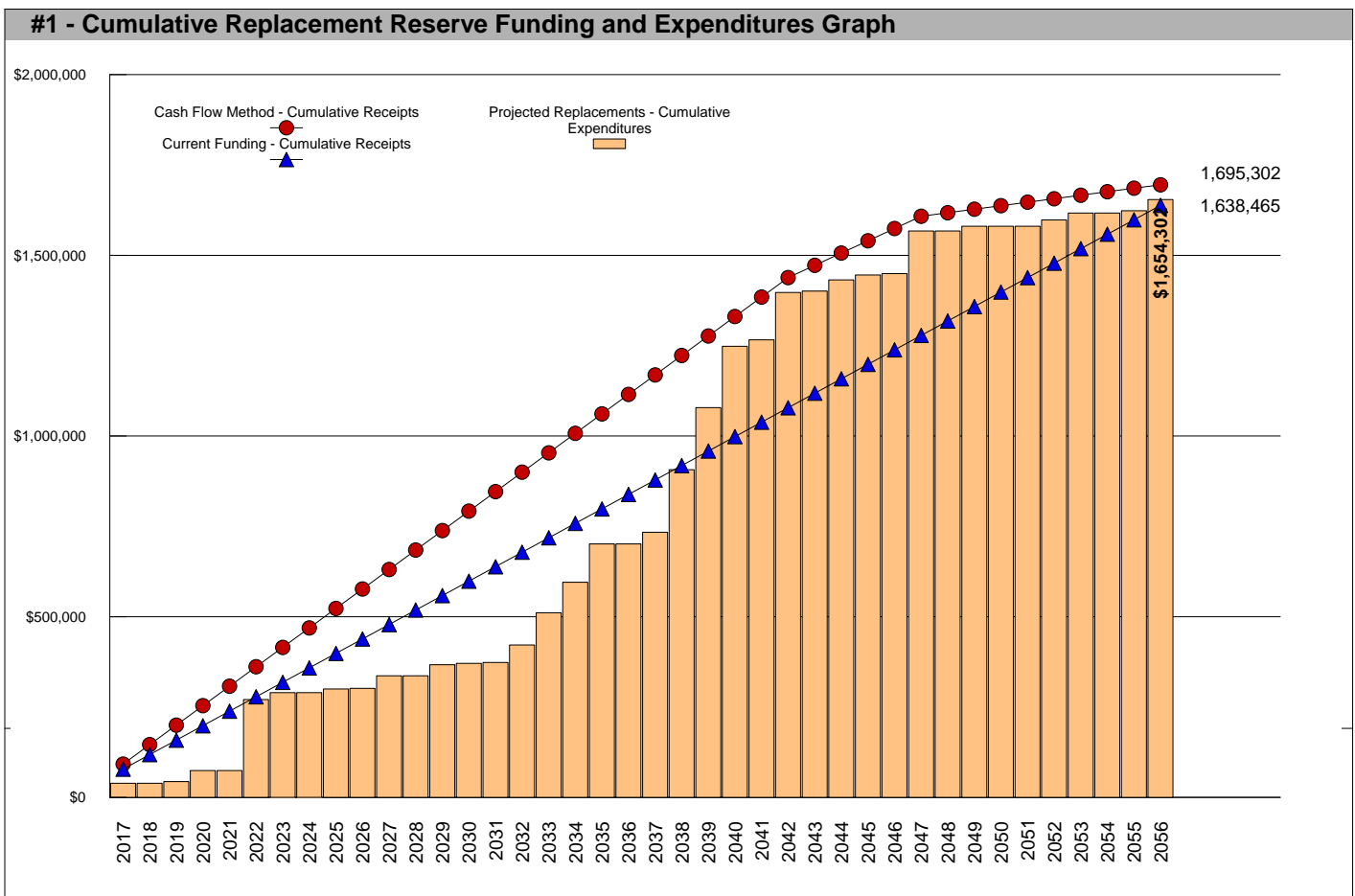
The Camden Townes Replacement Reserve Analysis uses the Cash Flow Method (CFM) to calculate Replacement Reserve funding for the periodic replacement of the 33 Projected Replacements identified in the Replacement Reserve Inventory.

\$53,839 RECOMMENDED REPLACEMENT RESERVE FUNDING FOR THE STUDY YEAR, 2017

\$45.32 Per unit (average), minimum monthly funding of Replacement Reserves

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

Camden Townes reports a Starting Balance of \$38,465 and Annual Funding totaling \$40,000. Current funding is inadequate to fund the \$1,654,302 of Projected Replacements scheduled in the Replacement Reserve Inventory over the 40-year Study Period. See Page A3 for a more detailed evaluation.



The Current Funding Objective as calculated by the Component Method (Fully Funded) is \$326,278 making the reserve account 11.8% funded. See the Appendix for more information on this method.

12/23/16. Changed current contribution.

REPLACEMENT RESERVE ANALYSIS - GENERAL INFORMATION

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

2017 | 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, 2017.

40 Years | STUDY PERIOD

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

\$38,465 | STARTING BALANCE

The Association reports Replacement Reserves on Deposit totaling \$38,465 at the start of the Study Year.

Level One | LEVEL OF SERVICE

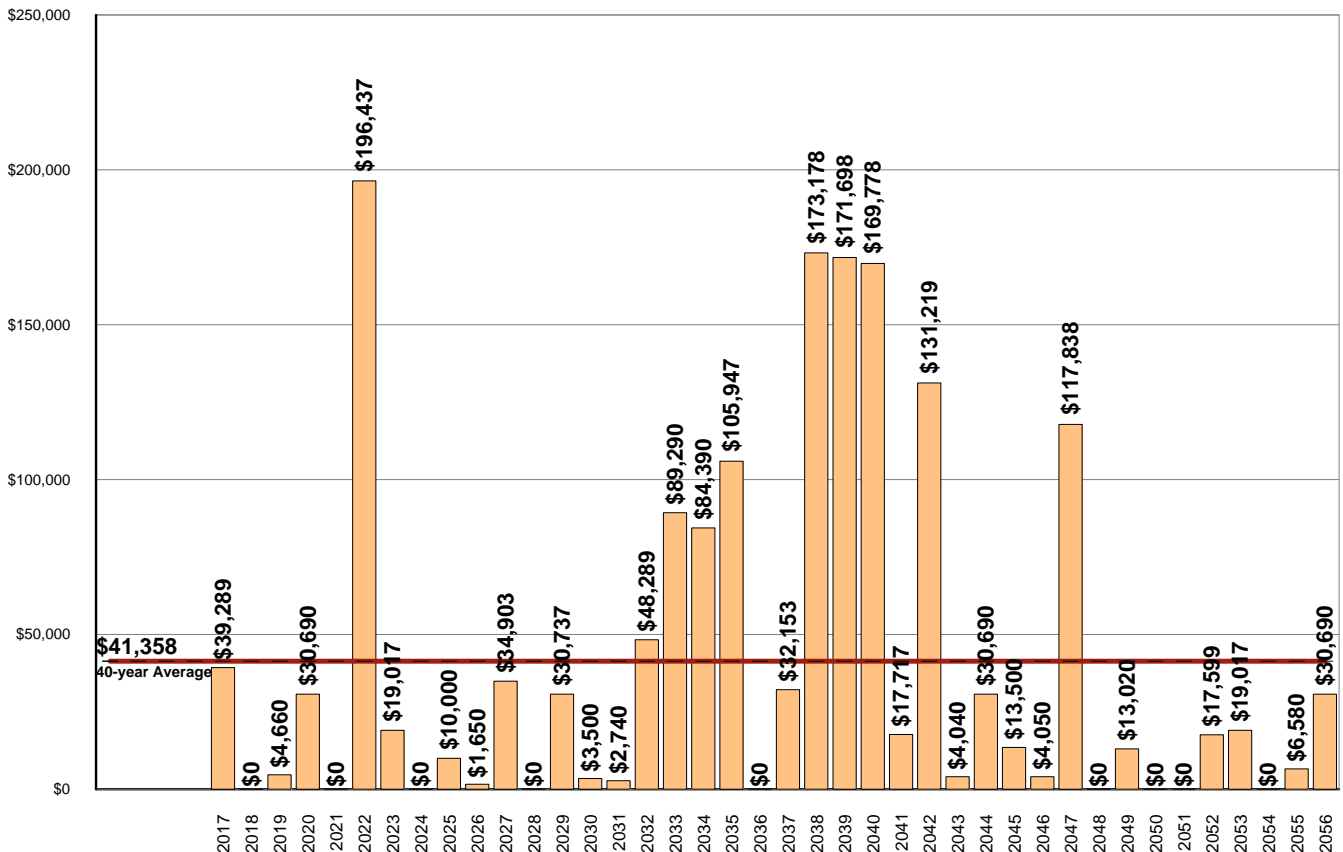
The Replacement Reserve Inventory has been developed in compliance with the National Reserve Study Standards for a Level One Study, as defined by the Community Associations Institute (CAI).

\$1,654,302 | REPLACEMENT RESERVE INVENTORY - PROJECTED REPLACEMENTS

The Camden Townes Replacement Reserve Inventory identifies 33 items that will require periodic replacement, that are to be funded from Replacement Reserves. We estimate the cost of these replacements will be \$1,654,302 over the 40-year Study Period. The Projected Replacements are divided into 11 major categories starting on Page B3. Pages B1-B2 provide detailed information on the Replacement Reserve Inventory.

#2 - Annual Expenditures for Projected Replacements Graph

This graph shows annual expenditures for Projected Replacements over the 40-year Study Period. The red line shows the average annual expenditure of \$41,358. Section C provides a year by year Calendar of these expenditures.



UPDATING

UPDATING OF THE FUNDING PLAN

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

UPDATING OF THE REPLACEMENT RESERVE STUDY

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

ANNUAL EXPENDITURES AND CURRENT FUNDING

The annual expenditures that comprise the \$1,654,302 of Projected Expenditures over the 40-year Study Period and the impact of the Association continuing to fund Replacement Reserves at the current level are detailed in Table 3.

#3 - Table of Annual Expenditures and Current Funding Data - Years 1 through 40										
Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Starting Balance	\$38,465									
Projected Replacements	(\$39,289)		(\$4,660)	(\$30,690)		(\$196,437)	(\$19,017)		(\$10,000)	(\$1,650)
Annual Deposit	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
End of Year Balance	\$39,176	\$79,176	\$114,516	\$123,826	\$163,826	\$7,389	\$28,372	\$68,372	\$98,372	\$136,722
Cumulative Expenditures	(\$39,289)	(\$39,289)	(\$43,949)	(\$74,639)	(\$74,639)	(\$271,076)	(\$290,093)	(\$290,093)	(\$300,093)	(\$301,743)
Cumulative Receipts	\$78,465	\$118,465	\$158,465	\$198,465	\$238,465	\$278,465	\$318,465	\$358,465	\$398,465	\$438,465
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Projected Replacements	(\$34,903)		(\$30,737)	(\$3,500)	(\$2,740)	(\$48,289)	(\$89,290)	(\$84,390)	(\$105,947)	
Annual Deposit	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
End of Year Balance	\$141,820	\$181,820	\$191,083	\$227,583	\$264,843	\$256,554	\$207,264	\$162,874	\$96,927	\$136,927
Cumulative Expenditures	(\$336,645)	(\$336,645)	(\$367,382)	(\$370,882)	(\$373,622)	(\$421,911)	(\$511,201)	(\$595,591)	(\$701,538)	(\$701,538)
Cumulative Receipts	\$478,465	\$518,465	\$558,465	\$598,465	\$638,465	\$678,465	\$718,465	\$758,465	\$798,465	\$838,465
Year	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Projected Replacements	(\$32,153)	(\$173,178)	(\$171,698)	(\$169,778)	(\$17,717)	(\$131,219)	(\$4,040)	(\$30,690)	(\$13,500)	(\$4,050)
Annual Deposit	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
End of Year Balance	\$144,775	\$11,597	(\$120,101)	(\$249,878)	(\$227,595)	(\$318,814)	(\$282,854)	(\$273,544)	(\$247,044)	(\$211,094)
Cumulative Expenditures	(\$733,691)	(\$906,868)	(\$1,078,566)	(\$1,248,343)	(\$1,266,060)	(\$1,397,279)	(\$1,401,319)	(\$1,432,009)	(\$1,445,509)	(\$1,449,559)
Cumulative Receipts	\$878,465	\$918,465	\$958,465	\$998,465	\$1,038,465	\$1,078,465	\$1,118,465	\$1,158,465	\$1,198,465	\$1,238,465
Year	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
Projected Replacements	(\$117,838)		(\$13,020)			(\$17,599)	(\$19,017)		(\$6,580)	(\$30,690)
Annual Deposit	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
End of Year Balance	(\$288,931)	(\$248,931)	(\$221,951)	(\$181,951)	(\$141,951)	(\$119,550)	(\$98,567)	(\$58,567)	(\$25,147)	(\$15,837)
Cumulative Expenditures	(\$1,567,396)	(\$1,567,396)	(\$1,580,416)	(\$1,580,416)	(\$1,580,416)	(\$1,598,015)	(\$1,617,032)	(\$1,617,032)	(\$1,623,612)	(\$1,654,302)
Cumulative Receipts	\$1,278,465	\$1,318,465	\$1,358,465	\$1,398,465	\$1,438,465	\$1,478,465	\$1,518,465	\$1,558,465	\$1,598,465	\$1,638,465

EVALUATION OF CURRENT FUNDING

The evaluation of Current Funding (Starting Balance of \$38,465 & annual funding of \$40,000), is done in today's dollars with no adjustments for inflation or interest earned on Replacement Reserves. The evaluation assumes Replacement Reserves will only be used for the 33 Projected Replacements identified in the Replacement Reserve Inventory and that the Association will continue Annual Funding of \$40,000 throughout the 40-year Study Period.

Annual Funding of \$40,000 is approximately 74 percent of the \$53,839 recommended Annual Funding calculated by the Cash Flow Method for 2017, the Study Year.

Evaluation of the 33 Projected Replacements calculates an average annual expenditure over the next 40 years of \$41,358. Annual funding of \$40,000 is 97 percent of the average annual expenditure.

Our calculations identify funding shortfalls in 18 years of the Study Period with the initial shortfall in 2039. The largest shortfall, \$-318,814, occurs in 2042. All shortfalls can be seen and evaluated in Table 3 above.

In summary, Current Funding as reported by the Association and shown above, does not provide adequate funding for the \$1,654,302 of Projected Replacements scheduled in the Replacement Reserve Inventory over the Study Period.

CASH FLOW METHOD FUNDING

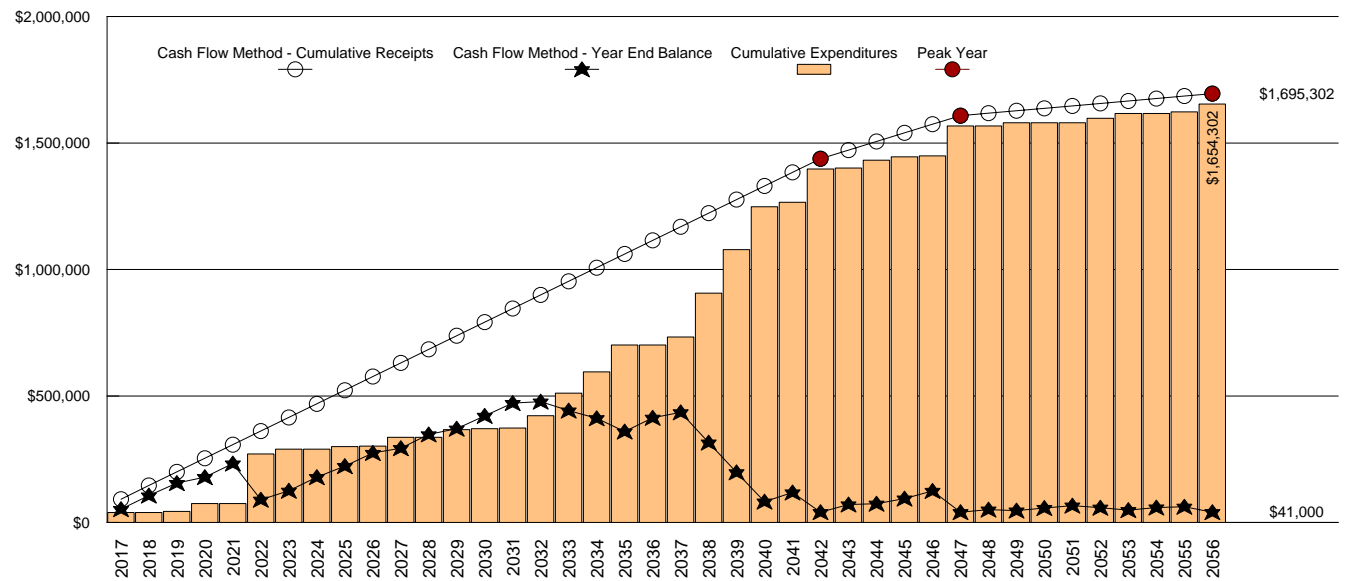
\$53,839 RECOMMENDED REPLACEMENT RESERVE FUNDING FOR 2017

\$45.32 Per unit (average), minimum monthly funding of Replacement Reserves

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

- **Peak Years.** The First Peak Year occurs in 2042 with Replacement Reserves on Deposit dropping to the Minimum Balance after the completion of \$1,397,279 of replacements from 2017 to 2042. Recommended funding declines from \$53,839 in 2042 to \$34,024 in 2043. Peak Years are identified in Chart 4 and Table 5.
- **Minimum Balance.** The calculations assume a Minimum Balance of \$41,000 in Replacement Reserves. This is approx. 12 months of average expenditures based on the \$41,358, 40-year average annual expenditure.
- **Cash Flow Method Study Period.** Cash Flow Method calculates funding for \$1,654,302 of expenditures over the 40-year Study Period. It does not include funding for any projects beyond 2056 and in 2056, the end of year balance will always be the Minimum Balance.

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



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

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Starting Balance	\$38,465									
Projected Replacements	(\$39,289)		(\$4,660)	(\$30,690)		(\$196,437)	(\$19,017)		(\$10,000)	(\$1,650)
Annual Deposit	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839
End of Year Balance	\$53,015	\$106,854	\$156,033	\$179,182	\$233,021	\$90,423	\$125,245	\$179,084	\$222,923	\$275,112
Cumulative Expenditures	\$39,289	\$39,289	\$43,949	\$74,639	\$74,639	\$271,076	\$290,093	\$290,093	\$300,093	\$301,743
Cumulative Receipts	\$92,304	\$146,143	\$199,982	\$253,821	\$307,660	\$361,499	\$415,338	\$469,177	\$523,016	\$576,855
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Projected Replacements	(\$34,903)		(\$30,737)	(\$3,500)	(\$2,740)	(\$48,289)	(\$89,290)	(\$84,390)	(\$105,947)	
Annual Deposit	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839
End of Year Balance	\$294,048	\$347,887	\$370,990	\$421,329	\$472,428	\$477,978	\$442,527	\$411,976	\$359,868	\$413,707
Cumulative Expenditures	(\$336,645)	(\$336,645)	(\$367,382)	(\$370,882)	(\$373,622)	(\$421,911)	(\$511,201)	(\$595,591)	(\$701,538)	(\$701,538)
Cumulative Receipts	\$630,694	\$684,533	\$738,372	\$792,211	\$846,050	\$899,889	\$953,728	\$1,007,567	\$1,061,406	\$1,115,245
Year	2037	2038	2039	2040	2041	1st Peak - 2042	2043	2044	2045	2046
Projected Replacements	(\$32,153)	(\$173,178)	(\$171,698)	(\$169,778)	(\$17,717)	(\$131,219)	(\$4,040)	(\$30,690)	(\$13,500)	(\$4,050)
Annual Deposit	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$53,839	\$34,024	\$34,024	\$34,024	\$34,024
End of Year Balance	\$435,393	\$316,055	\$198,196	\$82,258	\$118,380	\$118,380	\$70,984	\$74,317	\$94,841	\$124,814
Cumulative Expenditures	(\$733,691)	(\$906,868)	(\$1,078,566)	(\$1,248,343)	(\$1,266,060)	(\$1,397,279)	(\$1,401,319)	(\$1,432,009)	(\$1,445,509)	(\$1,449,559)
Cumulative Receipts	\$1,169,084	\$1,222,923	\$1,276,762	\$1,330,601	\$1,384,440	\$1,438,279	\$1,472,302	\$1,506,326	\$1,540,349	\$1,574,373
Year	2nd Peak - 2047	2048	2049	2050	2051	2052	2053	2054	2055	3rd Peak - 2056
Projected Replacements	(\$117,838)		(\$13,020)			(\$17,599)	(\$19,017)		(\$6,580)	(\$30,690)
Annual Deposit	\$34,024	\$9,656	\$9,656	\$9,656	\$9,656	\$9,656	\$9,656	\$9,656	\$9,656	\$9,656
End of Year Balance	\$41,000	\$50,656	\$47,292	\$56,949	\$66,605	\$66,605	\$49,301	\$58,958	\$62,034	\$41,000
Cumulative Expenditures	(\$1,567,396)	(\$1,567,396)	(\$1,580,416)	(\$1,580,416)	(\$1,580,416)	(\$1,580,416)	(\$1,617,032)	(\$1,617,032)	(\$1,623,612)	(\$1,654,302)
Cumulative Receipts	\$1,608,396	\$1,618,052	\$1,627,708	\$1,637,365	\$1,647,021	\$1,656,677	\$1,666,333	\$1,675,989	\$1,685,645	\$1,695,302

INFLATION ADJUSTED FUNDING

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

\$53,839 2017 - CASH FLOW METHOD RECOMMENDED FUNDING

The 2017 Study Year calculations have been made using current replacement costs (see Page B2), modified by the Analyst for any project specific conditions.

\$56,363 2018 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2018 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$53,015 on January 1, 2018.
- All 2017 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$39,289.
- Construction Cost Inflation of 4.50 percent in 2017.

The \$56,363 inflation adjusted funding in 2018 is a 4.69 percent increase over the non-inflation adjusted 2018 funding of \$53,839.

\$59,149 2019 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2019 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$109,378 on January 1, 2019.
- No Expenditures from Replacement Reserves in 2018.

- Construction Cost Inflation of 4.50 percent in 2018.

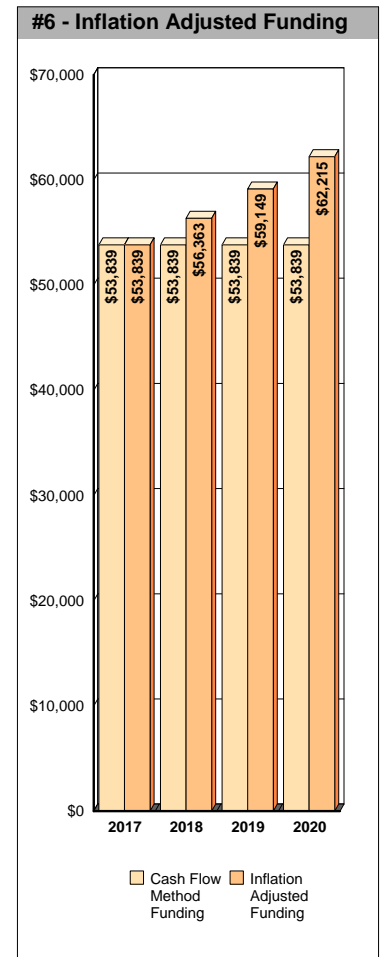
The \$59,149 inflation adjusted funding in 2019 is a 9.86 percent increase over the non-inflation adjusted 2019 funding of \$53,839.

\$62,215 2020 - INFLATION ADJUSTED FUNDING

A new analysis calculates 2020 funding based on three assumptions;

- Replacement Reserves on Deposit totaling \$163,439 on January 1, 2020.
- All 2019 Projected Replacements listed on Page C2 accomplished at a cost to Replacement Reserves less than \$5,089.
- Construction Cost Inflation of 4.50 percent in 2019.

The \$62,215 inflation adjusted funding in 2020 is a 15.56 percent increase over the non-inflation adjusted funding of \$53,839.



YEAR FIVE & BEYOND

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

INFLATION ADJUSTMENT

Prior to approving a budget based upon the 2018, 2019 and 2020 inflation adjusted funding calculations above, the 4.50 percent base rate of inflation used in our calculations should be compared to rates published by the Bureau of Labor Statistics. If there is a significant discrepancy (over 1 percent), contact Miller Dodson + Associates prior to using the Inflation Adjusted Funding.

INTEREST ON RESERVES

The recommended funding calculations do not account for interest earned on Replacement Reserves.

In 2017, based on a 1.00 percent interest rate, we estimate the Association may earn \$457 on an average balance of \$45,740, \$812 on an average balance of \$81,197 in 2018, and \$1,364 on \$136,408 in 2019. The Association may elect to attribute 100 percent of the earned interest to Reserves, resulting in a reduction in the 2017 funding from \$53,839 to \$53,382 (a 0.85 percent reduction), \$56,363 to \$55,551 in 2018 (a 1.44 percent reduction), and \$59,149 to \$57,785 in 2019 (a 2.31 percent reduction).

REPLACEMENT RESERVE STUDY - SUPPLEMENTAL COMMENTS

- Camden Townes has 99 units. The type of property is a home owner association.
- The Cash Flow Method calculates the minimum annual funding necessary to prevent Replacement Reserves from dropping below the Minimum Balance. Failure to fund at least the recommended levels may result in funding not being available for the Projected Replacements listed in the Replacement Reserve Inventory.
- The accuracy of the Replacement Reserve Analysis is dependent upon expenditures from Replacement Reserves being made ONLY for the 33 Projected Replacements specifically listed in the Replacement Reserve Inventory. The inclusion/exclusion of items from the Replacement Reserve Inventory is discussed on Page B1.

REPLACEMENT RESERVE INVENTORY GENERAL INFORMATION

Camden Townes - Replacement Reserve Inventory identifies 74 items. Two types of items are identified, Projected Replacements and Excluded Items:

- **PROJECTED REPLACEMENTS.** 33 of the items are Projected Replacements and the periodic replacements of these items are scheduled for funding from Replacement Reserves. The Projected Replacements have an estimated one-time replacement cost of \$1,086,520. Replacements totaling \$1,654,302 are scheduled in the Replacement Reserve Inventory over the 40-year Study Period.

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

- **EXCLUDED ITEMS.** 41 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 than \$1,000 and/or a normal economic life of less than 3 years are typically excluded from funding from Replacement Reserves. This exclusion should reflect Association policy on the administration of Replacement Reserves. If the Association has selected an alternative level, it will be noted in the Replacement Reserve Inventory - General Comments on Page B2.

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

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

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

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

- **CATEGORIES.** The 74 items included in the Camden Townes Replacement Reserve Inventory are divided into 11 major categories. Each category is printed on a separate page, Pages B3 to B12.
- **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 33 Projected Replacements listed in the Replacement Reserve Inventory includes the following data:

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

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

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

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

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

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

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

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

Each of the 41 Excluded Items includes the Item Description, Units, and Number of Units. Many of the Excluded Items are listed as a 'Lump Sum' with a quantity of 1. For the Excluded Items, this indicates that all of the items identified by the 'Item Description' are excluded from funding by Replacement Reserves.

- **REVIEW OF EXPENDITURES.** This Replacement Reserve Study should be reviewed by an accounting professional representing the Association prior to implementation.
- **PARTIAL FUNDING.** Items may have been included in the Replacement Reserve Inventory at less than 100 percent of their full quantity and/or replacement cost. This is done on items that will never be replaced in their entirety, but which may require periodic replacements over an extended period of time. The assumptions that provide the basis for any partial funding are noted in the Comments section.
- **REMAINING ECONOMIC LIFE GREATER THAN 40 YEARS.** The calculations do not include funding for initial replacements beyond 40 years. These replacements are included in this Study for tracking and evaluation. They should be included for funding in future Studies, when they enter the 40-year window.

SITE COMPONENTS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
1	Asphalt pavement, mill & pave	sy	9,480	\$12.75	20	5	\$120,870
2	Asphalt pavement, patch 10%	sy	948	\$23.00	10	none	\$21,804
3	Asphalt pavement, seal coat	sy	9,408	\$1.10	5	none	\$10,349
4	Concrete sidewalk/flatwork, 6%	sf	615	\$7.25	6	none	\$4,459
5	Concrete dumpster pad, 20%	sf	196	\$12.25	6	6	\$2,401
6	Concrete curb/gutter, 6%	ft	287	\$28.50	6	6	\$8,180
7	Concrete steps, 10%	ft	13	\$100.00	10	6	\$1,300
8	Metal handrail at steps	ft	120	\$30.00	45	16	\$3,600
9	Dumpster enclosure, vinyl fence	ft	64	\$60.00	20	18	\$3,840
10	Dumpster enclosure, wood fence	ft	32	\$60.00	20	2	\$1,920
11	Metal mailbox clusters	ea	7	\$1,860.00	20	12	\$13,020
12	Pet waste stations	ea	4	\$685.00	12	2	\$2,740
13	Bike rack, metal	ea	4	\$850.00	25	21	\$3,400
14	Entrance monument, allowance	ls	1	\$3,500.00	15	13	\$3,500
15	Bus stop shelter, allowance	ls	1	\$7,250.00	20	15	\$7,250
SITE COMPONENTS - Replacement Costs - Subtotal							\$208,632

SITE COMPONENTS
COMMENTS

- We have assumed that the Association will replace the asphalt pavement by the installation of a 2 inch thick overlay. The pavement will need to be milled prior to the installation of the overlay. Milling and the cost of minor repairs (5 to 10 percent of the total area) to the base materials and bearing soils beneath the pavement are included in the cost shown above.
- For concrete components and other roadway shoulder work, we have assumed that the Association will conduct concrete component replacement projects in conjunction with the asphalt pavement and other concrete or right-of-way replacement projects.

SITE COMPONENTS (cont.)

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
16	Storm water management sytem, allow	ls	1	\$10,000.00	20	8	\$10,000
17	Picnic grill/seating/trash	ls	1	\$2,750.00	20	10	\$2,750
18	Dog park chaink link fence, 40%	ft	250	\$9.60	30	29	\$2,400
19	Dog park seating/trash, 40%	ls	1	\$1,650.00	20	9	\$1,650

SITE COMPONENTS (cont.) - Replacement Costs - Subtotal \$16,800

SITE COMPONENTS (cont.)

COMMENTS

- The dog park is shared with the neighboring condominium. The unit cost shown is Camden Towne's share of the cost, which is 40%.

SITE COMPONENTS (cont.) - UNIT OWNED, ASSOCIATION MAINTAINED

PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
20	Concrete lead walks, 6%	sf	315	\$8.50	6	none	\$2,678
21	Wood steps/wood platforms, unit entry	sf	536	\$26.00	25	5	\$13,936
22	Wood steps w/wood railings, unit entry	sf	1,084	\$31.50	25	5	\$34,146
23	Wood retaining walls, 1' ave height	ft	714	\$24.00	25	5	\$17,136
24	Entrance awnings, canvas	ea	99	\$310.00	12	3	\$30,690

SITE COMPONENTS (cont.) - UNIT OWNED, ASSOCIATION MAINTAINED - Replacement Costs - Subtotal \$98,586

SITE COMPONENTS (cont.) - UNIT OWNED, ASSOCIATION MAINTAINED

COMMENTS

- Items listed on this page are owned by unit owners but maintained by the Association.

BUILDING EXTERIORS
PROJECTED REPLACEMENTS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
25	Asphalt shingle roof, 5 buildings	sf	29,100	\$2.90	25	16	\$84,390
26	Asphalt shingle roof, 5 buildings	sf	29,100	\$2.90	25	17	\$84,390
27	Asphalt shingle roof, 5 buildings	sf	29,100	\$2.90	25	18	\$84,390
28	Alum gutters/downspouts, 5 buildings	ft	2,170	\$5.75	25	21	\$12,478
29	Alum gutters/downspouts, 5 buildings	ft	2,170	\$5.75	25	22	\$12,478
30	Alum gutters/downspouts, 5 buildings	ft	2,170	\$5.75	25	23	\$12,478
31	Vinyl siding and trim, 5 buildings	sf	28,600	\$5.50	25	21	\$157,300
32	Vinyl siding and trim, 5 buildings	sf	28,600	\$5.50	25	22	\$157,300
33	Vinyl siding and trim, 5 buildings	sf	28,600	\$5.50	25	23	\$157,300

BUILDING EXTERIORS - Replacement Costs - Subtotal \$762,503

BUILDING EXTERIORS
COMMENTS

- The community had all siding and trim replaced in phases from 2012 to 2016. The project included replacement of the gutter system, replacement of rotted wood and wrapping of wood trim that remained. The unit costs are based on the cost for the final phase, completed in 2016.
- The building exterior projects are phased over a 3-year period to make the project manageable and to avoid spending a large amount of money in the same year.
- Windows, doors and decks/patios are owned by unit owners.

VALUATION EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Solar light at entrance monument	ls	1				EXCLUDED
	Property identification signage	ls	1				EXCLUDED
	Miscellaneous signage	ls	1				EXCLUDED
	Gravel path w/wood border	ls	1				EXCLUDED

VALUATION EXCLUSIONS

COMMENTS

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

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

LONG-LIFE EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Masonry columns at entrance sign	ls	1				EXCLUDED
	Miscellaneous culverts	ls	1				EXCLUDED
	Building foundation(s)	ls	1				EXCLUDED
	Wall, floor, & roof structure	ls	1				EXCLUDED
	Wall, floor, & roof structure	ls	1				EXCLUDED

LONG-LIFE EXCLUSIONS

COMMENTS

- Long Life Exclusions. Components that when properly maintained, can be assumed to have a life equal to the property as a whole, are normally excluded from the Replacement Reserve Inventory. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

UNIT IMPROVEMENTS EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Domestic water pipes serving one unit	ls	1				EXCLUDED
	Sanitary sewers serving one unit	ls	1				EXCLUDED
	Electrical wiring serving one unit	ls	1				EXCLUDED
	Cable TV service serving one unit	ls	1				EXCLUDED
	Telephone service serving one unit	ls	1				EXCLUDED
	Unit windows	ls	1				EXCLUDED
	Unit doors	ls	1				EXCLUDED
	Unit deck, patio, and/or balcony	ls	1				EXCLUDED
	Unit interior	ls	1				EXCLUDED
	Unit HVAC system	ls	1				EXCLUDED

UNIT IMPROVEMENTS EXCLUSIONS

COMMENTS

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

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

UTILITY EXCLUSIONS

EXCLUDED ITEMS

ITEM #	ITEM DESCRIPTION	UNIT	NUMBER OF UNITS	UNIT REPLACEMENT COST (\$)	NORMAL ECONOMIC LIFE (YRS)	REMAINING ECONOMIC LIFE (YRS)	REPLACEMENT COST (\$)
	Primary electric feeds	ls	1				EXCLUDED
	Electric transformers	ls	1				EXCLUDED
	Cable TV systems and structures	ls	1				EXCLUDED
	Telephone cables and structures	ls	1				EXCLUDED
	Site lighting	ls	1				EXCLUDED
	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
	Exterior painting	ls	1				EXCLUDED
	Janitorial service	ls	1				EXCLUDED
	Repair services	ls	1				EXCLUDED
	Partial replacements	ls	1				EXCLUDED
	Capital improvements	ls	1				EXCLUDED

MAINTENANCE AND REPAIR EXCLUSIONS

COMMENTS

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

GOVERNMENT EXCLUSIONS

EXCLUDED ITEMS

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

GOVERNMENT EXCLUSIONS

COMMENTS

- Government Exclusions. We understand that some of the improvements installed on property owned by the Association will be maintained by the state, county, or local government, or other association or other responsible entity. Examples of items excluded from funding by Replacement Reserves by this standard are listed above.
- Excluded right-of-ways, including Bradley Drive, and adjacent properties.
- The list above exemplifies exclusions by the cited standard(s) and is not intended to be comprehensive.

PROJECTED ANNUAL REPLACEMENTS GENERAL INFORMATION

CALENDAR OF ANNUAL REPLACEMENTS. The 33 Projected Replacements in the Camden Townes Replacement Reserve Inventory whose replacement is scheduled to be funded from Replacement Reserves are broken down on a year-by-year basis, beginning on Page C2.

REPLACEMENT RESERVE ANALYSIS AND INVENTORY POLICIES, PROCEDURES, AND ADMINISTRATION

- **REVISIONS.** Revisions will be made to the Replacement Reserve Analysis and Replacement Reserve Inventory in accordance with the written instructions of the Board of Directors. No additional charge is incurred for the first revision, if requested in writing within three months of the date of the Replacement Reserve Study. It is our policy to provide revisions in electronic (Adobe PDF) format only.
- **TAX CODE.** The United States Tax Code grants favorable tax status to a common interest development (CID) meeting certain guidelines for their Replacement Reserve. If a CID files their taxes as a 'Corporation' on Form 1120 (IRC Section 277), these guidelines typically require maintenance activities, partial replacements, minor replacements, capital improvements, and one-time only replacements to be excluded from Reserves. A CID cannot co-mingle planning for maintenance activities with capital replacement activities in the Reserves (Revenue Ruling 75-370). Funds for maintenance activities and capital replacements activities must be held in separate accounts. If a CID files taxes as an "Exempt Homeowners Association" using Form 1120H (IRC Section 528), the CID does not have to segregate these activities. However, because the CID may elect to change their method of filing from year to year within the Study Period, we advise using the more restrictive approach. We further recommend that the CID consult with their Accountant and consider creating separate and independent accounts and reserves for large maintenance items, such as painting.
- **CONFLICT OF INTEREST.** Neither Miller - Dodson Associates nor the Reserve Analyst has any prior or existing relationship with this Association which would represent a real or perceived conflict of interest.
- **RELIANCE ON DATA PROVIDED BY THE CLIENT.** Information provided by an official representative of the Association regarding financial, physical conditions, quality, or historical issues is deemed reliable.
- **INTENT.** This Replacement Reserve Study is a reflection of the information provided by the Association and the visual evaluations of the Analyst. It has been prepared for the sole use of the Association and is not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- **PREVIOUS REPLACEMENTS.** Information provided to Miller - Dodson Associates regarding prior replacements is considered to be accurate and reliable. Our visual evaluation is not a project audit or quality inspection.
- **EXPERIENCE WITH FUTURE REPLACEMENTS.** The Calendar of Annual Projected Replacements, lists replacements we have projected to occur over the next thirty years, begins on Page C2. Actual experience in replacing the items may differ significantly from the cost estimates and time frames shown because of conditions beyond our control. These differences may be caused by maintenance practices, inflation, variations in pricing and market conditions, future technological developments, regulatory actions, acts of God, and luck. Some items may function normally during our visual evaluation and then fail without notice.
- **REVIEW OF THE REPLACEMENT RESERVE STUDY.** For this study to be effective, it should be reviewed by the Camden Townes Board of Directors, those responsible for the management of the items included in the Replacement Reserve Inventory, and the accounting professionals employed by the Association.

PROJECTED REPLACEMENTS - YEARS ONE TO FIFTEEN

Item	2017 - STUDY YEAR	\$
2	Asphalt pavement, patch 10	\$21,804
3	Asphalt pavement, seal coat	\$10,349
4	Concrete sidewalk/flatwork,	\$4,459
20	Concrete lead walks, 6%	\$2,678
Total Scheduled Replacements		\$39,289

Item	2018 - YEAR 2	\$
No Scheduled Replacements		

Item	2019 - YEAR 3	\$
10	Dumpster enclosure, wood f	\$1,920
12	Pet waste stations	\$2,740
Total Scheduled Replacements		\$4,660

Item	2020 - YEAR 4	\$
24	Entrance awnings, canvas	\$30,690
Total Scheduled Replacements		\$30,690

Item	2021 - YEAR 5	\$
No Scheduled Replacements		

Item	2022 - YEAR 6	\$
1	Asphalt pavement, mill & pa	\$120,870
3	Asphalt pavement, seal coat	\$10,349
21	Wood steps/wood platforms	\$13,936
22	Wood steps w/wood railings	\$34,146
23	Wood retaining walls, 1' ave	\$17,136
Total Scheduled Replacements		\$196,437

Item	2023 - YEAR 7	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20°	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
7	Concrete steps, 10%	\$1,300
20	Concrete lead walks, 6%	\$2,678
Total Scheduled Replacements		\$19,017

Item	2024 - YEAR 8	\$
No Scheduled Replacements		

Item	2025 - YEAR 9	\$
16	Storm water management s	\$10,000
Total Scheduled Replacements		\$10,000

Item	2026 - YEAR 10	\$
19	Dog park seating/trash, 40%	\$1,650
Total Scheduled Replacements		\$1,650

Item	2027 - YEAR 11	\$
2	Asphalt pavement, patch 10	\$21,804
3	Asphalt pavement, seal coat	\$10,349
17	Picnic grill/seating/trash	\$2,750
Total Scheduled Replacements		\$34,903

Item	2028 - YEAR 12	\$
No Scheduled Replacements		

Item	2029 - YEAR 13	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20°	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
11	Metal mailbox clusters	\$13,020
20	Concrete lead walks, 6%	\$2,678
Total Scheduled Replacements		\$30,737

Item	2030 - YEAR 14	\$
14	Entrance monument, allowa	\$3,500
Total Scheduled Replacements		\$3,500

Item	2031 - YEAR 15	\$
12	Pet waste stations	\$2,740
Total Scheduled Replacements		\$2,740

PROJECTED REPLACEMENTS - YEARS SIXTEEN TO THIRTY

Item	2032 - YEAR 16	\$
3	Asphalt pavement, seal coat	\$10,349
15	Bus stop shelter, allowance	\$7,250
24	Entrance awnings, canvas	\$30,690
Total Scheduled Replacements		\$48,289

Item	2033 - YEAR 17	\$
7	Concrete steps, 10%	\$1,300
8	Metal handrail at steps	\$3,600
25	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$89,290

Item	2034 - YEAR 18	\$
26	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$84,390

Item	2035 - YEAR 19	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20%	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
9	Dumpster enclosure, vinyl fe	\$3,840
20	Concrete lead walks, 6%	\$2,678
27	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$105,947

Item	2036 - YEAR 20	\$
No Scheduled Replacements		

Item	2037 - YEAR 21	\$
2	Asphalt pavement, patch 10	\$21,804
3	Asphalt pavement, seal coat	\$10,349
Total Scheduled Replacements		\$32,153

Item	2038 - YEAR 22	\$
13	Bike rack, metal	\$3,400
28	Alum gutters/downspouts, 5	\$12,478
31	Vinyl siding and trim, 5 build	\$157,300
Total Scheduled Replacements		\$173,178

Item	2039 - YEAR 23	\$
10	Dumpster enclosure, wood f	\$1,920
29	Alum gutters/downspouts, 5	\$12,478
32	Vinyl siding and trim, 5 build	\$157,300
Total Scheduled Replacements		\$171,698

Item	2040 - YEAR 24	\$
30	Alum gutters/downspouts, 5	\$12,478
33	Vinyl siding and trim, 5 build	\$157,300
Total Scheduled Replacements		\$169,778

Item	2041 - YEAR 25	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20%	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
20	Concrete lead walks, 6%	\$2,678
Total Scheduled Replacements		\$17,717

Item	2042 - YEAR 26	\$
1	Asphalt pavement, mill & pa	\$120,870
3	Asphalt pavement, seal coat	\$10,349
Total Scheduled Replacements		\$131,219

Item	2043 - YEAR 27	\$
7	Concrete steps, 10%	\$1,300
12	Pet waste stations	\$2,740
Total Scheduled Replacements		\$4,040

Item	2044 - YEAR 28	\$
24	Entrance awnings, canvas	\$30,690
Total Scheduled Replacements		\$30,690

Item	2045 - YEAR 29	\$
14	Entrance monument, allowa	\$3,500
16	Storm water management s)	\$10,000
Total Scheduled Replacements		\$13,500

Item	2046 - YEAR 30	\$
18	Dog park chaink link fence, '	\$2,400
19	Dog park seating/trash, 40%	\$1,650
Total Scheduled Replacements		\$4,050

PROJECTED REPLACEMENTS - YEARS THIRTY-ONE TO FORTY-FIVE

Item	2047 - YEAR 31	\$
2	Asphalt pavement, patch 10	\$21,804
3	Asphalt pavement, seal coat	\$10,349
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20°	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
17	Picnic grill/seating/trash	\$2,750
20	Concrete lead walks, 6%	\$2,678
21	Wood steps/wood platforms	\$13,936
22	Wood steps w/wood railings	\$34,146
23	Wood retaining walls, 1' ave	\$17,136
Total Scheduled Replacements		\$117,838

Item	2048 - YEAR 32	\$
No Scheduled Replacements		

Item	2049 - YEAR 33	\$
11	Metal mailbox clusters	\$13,020
Total Scheduled Replacements		\$13,020

Item	2050 - YEAR 34	\$
No Scheduled Replacements		

Item	2051 - YEAR 35	\$
No Scheduled Replacements		

Item	2052 - YEAR 36	\$
3	Asphalt pavement, seal coat	\$10,349
15	Bus stop shelter, allowance	\$7,250
Total Scheduled Replacements		\$17,599

Item	2053 - YEAR 37	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20°	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
7	Concrete steps, 10%	\$1,300
20	Concrete lead walks, 6%	\$2,678
Total Scheduled Replacements		\$19,017

Item	2054 - YEAR 38	\$
No Scheduled Replacements		

Item	2055 - YEAR 39	\$
9	Dumpster enclosure, vinyl fe	\$3,840
12	Pet waste stations	\$2,740
Total Scheduled Replacements		\$6,580

Item	2056 - YEAR 40	\$
24	Entrance awnings, canvas	\$30,690
Total Scheduled Replacements		\$30,690

Item	2057 (beyond Study Period)	\$
2	Asphalt pavement, patch 10	\$21,804
3	Asphalt pavement, seal coat	\$10,349
Total Scheduled Replacements		\$32,153

Item	2058 (beyond Study Period)	\$
25	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$84,390

Item	2059 (beyond Study Period)	\$
4	Concrete sidewalk/flatwork,	\$4,459
5	Concrete dumpster pad, 20°	\$2,401
6	Concrete curb/gutter, 6%	\$8,180
10	Dumpster enclosure, wood f	\$1,920
20	Concrete lead walks, 6%	\$2,678
26	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$104,027

Item	2060 (beyond Study Period)	\$
14	Entrance monument, allowa	\$3,500
27	Asphalt shingle roof, 5 buildi	\$84,390
Total Scheduled Replacements		\$87,890

Item	2061 (beyond Study Period)	\$
No Scheduled Replacements		

CONDITION ASSESSMENT

General Comments. Miller - Dodson Associates conducted a Reserve Study at Camden Townes in December 2016. Camden Townes is in generally good condition for a community that was built in 1989. 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 asphalt roads and parking areas serving the townhome buildings. Other roadways such as Bradley Drive are maintained by the City, County, or other municipality.

In general, the Association's asphalt pavements are in fair to poor condition, with wide cracking and distress in multiple locations.

The defects noted include the following:

- **Open Cracks.** There are multiple locations where open cracks are allowing water to penetrate to the asphalt base and the bearing soils beneath the pavement. This water will erode the base accelerating the deterioration of the asphalt pavement. If the cracks have allowed the deterioration of the base materials and the bearing soil, the damaged areas should be removed and replaced. All other cracks should be cleaned and filled.
- **Alligatoring.** There are multiple locations where the asphalt has developed a pattern of cracking known as alligatoring. Alligatoring is the result of an unstable base under the asphalt. Shifting in the base causes the asphalt to crack and shift, forming the cracks that resemble the skin of an alligator. Once these cracks extend through the asphalt, they will allow water to penetrate to the base,



accelerating the rate of deterioration. The only solution is to remove the defective asphalt and compact the base before new asphalt is installed.

- **Potholes.** There are a number of locations where potholes have formed as the result of the failure of the underlying base material or the surface material. Repair will require removal of the asphalt and base material, installation and compaction of new base material, and resurfacing with asphalt.
- **Depressions.** There are areas where the asphalt surface is depressed due to deformation in the surface or underlying layers. These depressions may continue to grow with exposure to traffic. Water ponding was noted in several of these areas. Repair will require removal of the asphalt and base material, installation and compaction of new base material, and resurfacing with asphalt.



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.

We understand that current reserve funds are limited and the Association would prefer to maintain the road in 2017 and defer full replacement until funds are available. We estimate that approximately 10% of the asphalt has extensive surface cracking and has reached the end of its useful life. This asphalt is primarily located along the route used by heavy trash trucks. We have scheduled patching and seal coating for 2017, followed by full mill and repave 6 years later.

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.

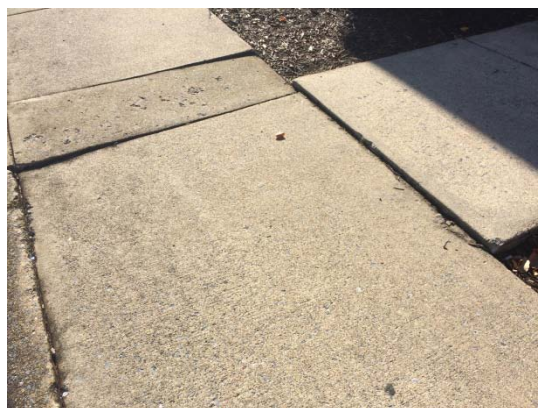
Lastly, the resource links provided on our website may provide insight into the general terms and concerns, including maintenance related advantages and disadvantages, which may help the Association better manage the asphalt pavements throughout the community: <http://mdareserves.com/resources/links/site-components>.

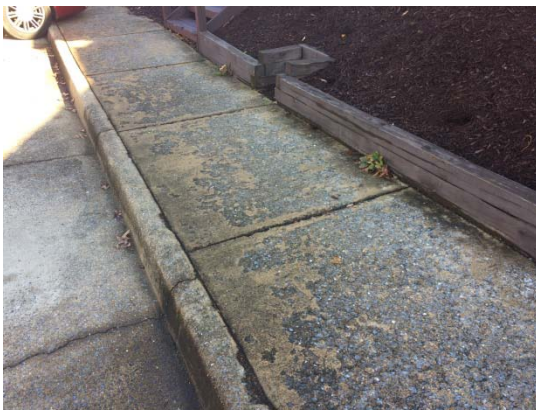
Gravel Visitor Parking Lot. Camden Townes is responsible for the small gravel parking area adjacent to the dog park. The Association has been grading this lot annually using existing gravel. There hasn't been a need to add gravel and we anticipate continued maintenance of this lot indefinitely using other funds. No items related to the gravel visitor parking lot are included in the Replacement Reserve Inventory.



Concrete Work. The concrete work includes the community curbs, sidewalks, dumpster pads, stairs and other flatwork. The Association has also been maintaining lead walks owned by individual unit owners and we have included lead walks in the Replacement Reserve Inventory to reflect the costs associated with this program. We have modeled for curb replacement when the asphalt pavement is maintained.

The overall condition of the concrete work is poor to good, with a number of trip hazards that should be addressed immediately. The Manager reported that the Association has been replacing concrete sections annually in recent years, including around \$6,600 of replacements in 2016. A new concrete dumpster pad was recently installed to support the weight of the trash trucks.

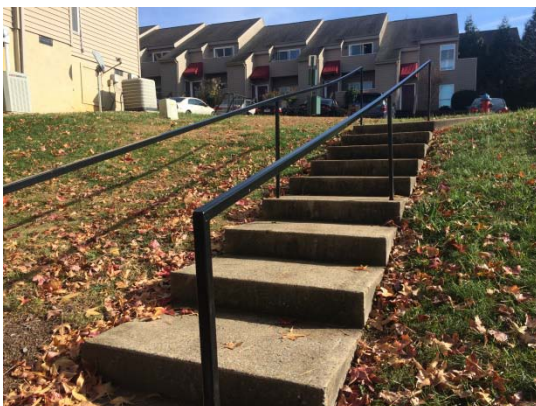




The concrete step structures are in good condition. The metal handrails have been kept painted and are structurally stable. As part of normal maintenance for the metal railing, we recommend the following:

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

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



The standards we use for recommending concrete replacement are as follows:

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

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

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

Wood Retaining Walls (Unit Owners). Wood retaining walls on unit owner property is being maintained by the Association and has been included at the Community Manager's direction. The retaining walls range in height from 1 to 6 boards, with the majority of walls no more than 2 boards high. The retaining walls are in fair condition with no major issues noted.



Wood retaining walls will experience rot and decay over time and partial replacement of defective wooden members is often possible in the early stages of decay. Eventually however, these walls will require replacement.

We have programmed fund to replace all of the retaining walls at the same time. Interim repairs and replacements should be funded from the operating budget.

Wood Steps and Walkways (Unit Owners). Wood steps with wood railings and wood steps without wood railings but with wood decking lead to some of the unit owners' homes. These wood structures are being maintained by the Association and have been included at the Community Manager's direction. The wood components were stained in 2016 and are fair condition.



We have programmed fund to replace all of the wood stairs, platforms and railings at the same time. Interim repairs and replacements should be funded from the operating budget.

Fencing. There are several types of fencing throughout the community.

The Association maintains 8' tall wood fencing at 1 dumpster location, and 7' tall vinyl fencing at the other 2 dumpster locations. The vinyl fencing was installed in 2015 at one location and 2016 at the other, at a cost of approximately \$2,600 for each. The vinyl fencing is in excellent condition. The wood fencing is in fair condition with minor repairs needed.

Pressure treated wood fencing should be cleaned and sealed every year or two. Typically the least cost fencing option, this type of fence can last 15 to 20 years if maintained properly. The replacement cost for the existing wood fence is for a vinyl fence to match the other 2 locations.



The Association maintains a wood split rail fence along Port Republic Road. This fence is in good condition and has many years of remaining life.

The Association converted the sand volleyball court to a 90' x 60' dog park with grass in 2016. The dog park is shared with the neighboring condominium association, with Camden Townes responsible for 40% of the cost. The dog park contains 4' vinyl coated fence (250 feet), a pet run station, 2 benches, a trash receptacle and a wood picnic table. All components are in good condition. We have included only 40% of the replacement cost for each component in the Replacement Reserve Inventory.



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.

For more information on fencing, visit our [website link](#) to the American Fence Association.

Storm Water Drainage System. The community contains a detention pond that is designed to hold and slowly drain storm water to the City or County storm water management system after heavy rains. These ponds seldom retain water and therefore do not typically require dredging. Ongoing landscape maintenance will be required and we presume it will be paid for using other funds.

The Association is responsible to replace damaged sections or components of the storm water management system. Many of these components are long life items and complete replacement is not anticipated. We have

included an allowance to be spent every 20 years replacing underground pipes or physically damaged catch basins.



Mailboxes. Metal mailbox clusters are located near the community entrance along Bradley Drive. The units were manufactured in June 2009 and are in good condition. Mailboxes should be maintained to the extent that rust does not develop on the structure or pedestal. All mail slot doors remain intact and hinges and locks remain operable. Our replacement estimate assumes that these units will be replaced with similar units.



Bus Stop Shelter. The Association maintains a bus stop shelter with picnic area along Bradley Drive. The shelter contains wood columns, asphalt shingle roof and vinyl siding at the gable roof ends. The components have been maintained and are in good condition. The picnic area contains a picnic table, trash receptacle and grill.



Entry Monument. The Association maintains a community entrance sign at the intersection of Port Republic Rd and Bradley Drive. The sign contains stone pillars and an HDU-type composite sign. The sign is illuminated at night with a ground mounted solar light. All components are in good condition.



In addition to these directory signs, the Association is responsible for other signs in the parking areas. These signs are not considered in this study and should be replaced using other funds.

CONDOMINIUM BUILDING EXTERIORS

Building Structures. The building structures are considered to be long life items. We have scheduled replacement of all exterior components that have a life expectancy of 40 years or less in the reserve study. The exterior components include asphalt shingle roofing, aluminum gutters and downspouts, and vinyl siding and trim.



Canvas awnings are owned by individual unit owners but are included for Association maintenance at the Community Manager's request.

Windows, doors, deck and patios are owned by individual unit owners and are excluded from the Replacement Reserve Inventory.



Building Roofing. The buildings are roofed in an asphalt system that is in generally good condition. The roofs were replaced around 2009 according to the Community Manager. Only one leak has been reported and that was due to shingles blowing off during heavy winds.



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

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

We have phased replacement of the roofs over a 3-year period to make the project more manageable and to spread this significant reserve expenditure over multiple years.

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

Gutters and Downspouts. The buildings have aluminum gutters and downspouts. The gutters and downspouts were replaced in 2012 to 2016 with the vinyl siding and are in good condition.



A gutter and downspout system will remove rainwater from the area of the building roof, siding, and foundation. This will protect building's exterior surfaces from water damage. Gutters should run the full length of all drip edges of the building roof. Even with full gutters, it is important to inspect the function of the gutters during heavy rain to identify any deficiencies. It may be necessary to periodically adjust the slope of sections, repair connections, replace hangers, and install shrouds to the gutters. Downspouts should be securely attached to the side of the structure. Any broken straps should be replaced. The area of the outlet should be inspected to promote run-off in the desired direction. Long straight runs should have an elbow at the bottom. Splash blocks should be installed to fray the water out-letting from the downspout.

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

Siding and Trim. The exteriors of the buildings are clad in vinyl siding with vinyl and PVC trim at windows, doors and balconies/decks. The siding and trim materials were replaced in 2012 to 2016 and are in good condition.

Vinyl can have an extended useful life if not damaged by impact, heat, or other physical reasons. However, the coatings and finishes typically have a useful life and over time begin to weather, chalk, and show their age. For these reasons, and because the buildings are located in a windy area, we have modeled for the replacement of the siding and trim every 25 years. The variability of the siding age was not considered when establishing the replacement cycle for the vinyl siding.

We have phased replacement of the roofs over a 3-year period to make the project more manageable and to spread this significant reserve expenditure over multiple years.



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

End of Condition Assessment

CASH FLOW METHOD ACCOUNTING SUMMARY

This Camden Townes - Cash Flow Method Accounting Summary is an attachment to the Camden Townes - Replacement Reserve Study dated Revised December 23, 2016 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2017, 2018, and 2019 Cash Flow Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- CASH FLOW METHOD CATEGORY FUNDING REPORT, 2017, 2018, and 2019. Each of the 33 Projected Replacements listed in the Camden Townes Replacement Reserve Inventory has been assigned to one of 4 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 \$38,465 Beginning Balance (at the start of the Study Year) and the \$161,517 of additional Replacement Reserve Funding in 2017 through 2019 (as calculated in the Replacement Reserve Analysis) to each of the 33 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made using Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and discussed below. The calculated data includes:
 - Identification and estimated cost of each Projected Replacement scheduled in years 2017 through 2019.
 - Allocation of the \$38,465 Beginning Balance to the Projected Replacements by Chronological Allocation.
 - Allocation of the \$161,517 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2017 through 2019, 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 \$38,465 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 Camden Townes the Beginning Balance funds 97.9% of Scheduled Replacements in the Study Year.
 - The next step is the allocation of the \$53,839 of 2017 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 Camden Townes the Beginning Balance and the 2017 Replacement Reserve Funding, funds replacements through 2021 and partial funds (9.0%) replacements in 2022.
 - Allocations of the 2018 and 2019 Reserve Funding are done using the same methodology.
 - The Three-Year Replacement Funding Report details component by component allocations made by Chronological Allocation.

2017 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CF1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of \$38,465 as of the first day of the Study Year, January 1, 2017.
- Total reserve funding (including the Beginning Balance) of \$92,304 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 2017 being accomplished in 2017 at a cost of \$39,289.

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.

2017 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENTS	5 to 45 years	0 to 21 years	\$208,632	\$35,844	\$17,228	(\$36,612)	\$16,460
SITE COMPONENTS (cont.)	20 to 30 years	8 to 29 years	\$16,800				
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	0 to 5 years	\$98,586	\$2,621	\$36,611	(\$2,678)	\$36,555
BUILDING EXTERIORS	25 years	16 to 23 years	\$762,503				

2018 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CF2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$53,015 on January 1, 2018.
- Total reserve funding (including the Beginning Balance) of \$146,143 from 2017 through 2018.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

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

2018 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF2								
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE	
SITE COMPONENTS	5 to 45 years	1 to 20 years	\$208,632	\$16,460	\$35,964		\$52,424	
SITE COMPONENTS (cont.)	20 to 30 years	7 to 28 years	\$16,800					
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	2 to 5 years	\$98,586	\$36,555	\$17,875		\$54,430	
BUILDING EXTERIORS	25 years	15 to 22 years	\$762,503					

2019 - CASH FLOW METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CF3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$106,854 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of \$199,982 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of \$4,660.

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

2019 - CASH FLOW METHOD CATEGORY FUNDING - TABLE CF3							
CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2019 BEGINNING BALANCE	2019 RESERVE FUNDING	2019 PROJECTED REPLACEMENTS	2019 END OF YEAR BALANCE
SITE COMPONENTS	5 to 45 years	0 to 19 years	\$208,632	\$52,424	\$35,964	(\$4,660)	\$83,728
SITE COMPONENTS (cont.)	20 to 30 years	6 to 27 years	\$16,800				
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	1 to 4 years	\$98,586	\$54,430	\$17,875		\$72,304
BUILDING EXTERIORS	25 years	14 to 21 years	\$762,503				

COMPONENT METHOD

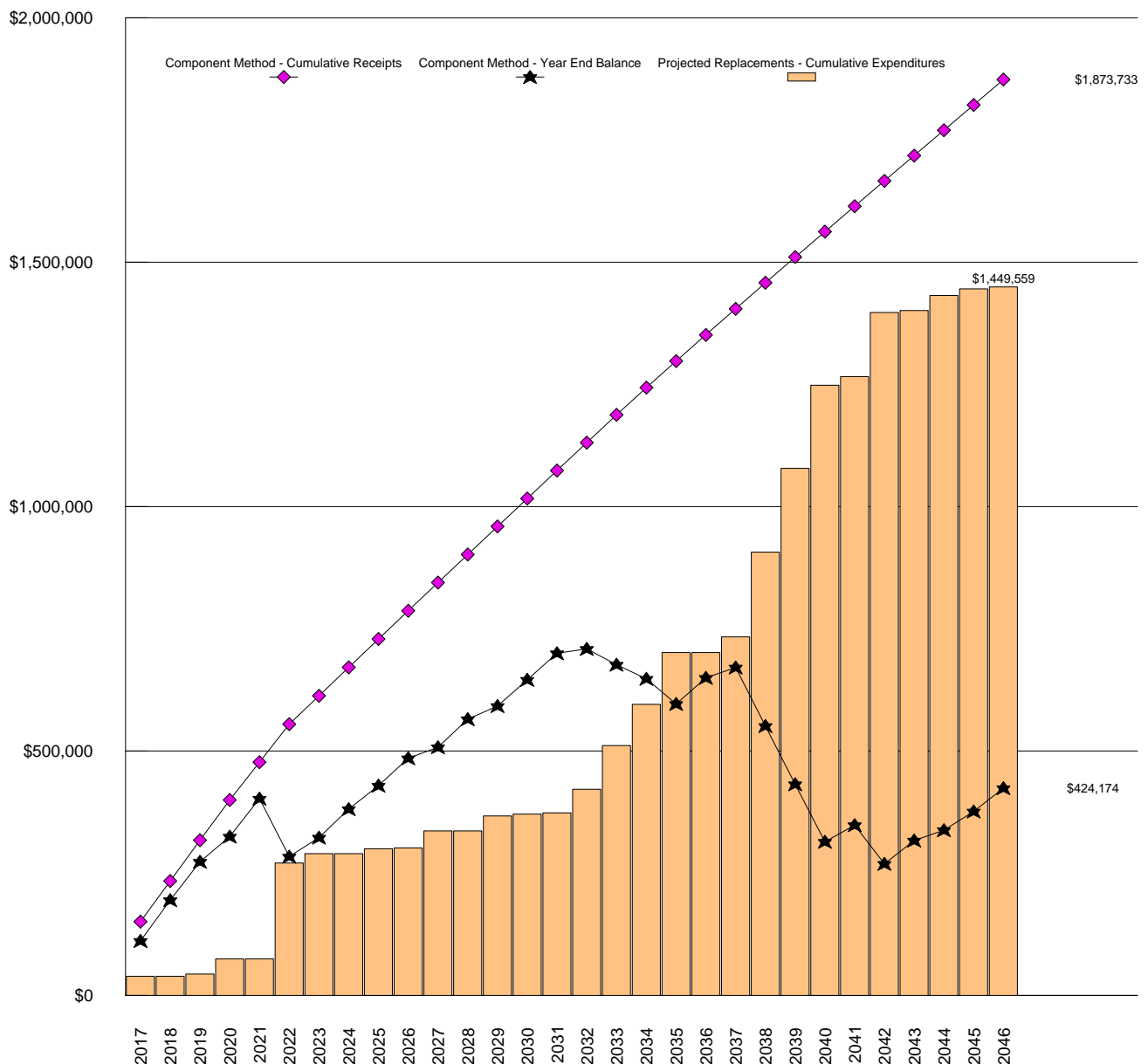


\$112,502 COMPONENT METHOD RECOMMENDED ANNUAL FUNDING OF REPLACEMENT RESERVES IN THE STUDY YEAR, 2017.

\$94.70 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 33 Projected Replacements listed in the Replacement Reserve Inventory is treated as a separate account. The Beginning Balance is allocated to each of the individual accounts, as is all subsequent funding of Replacement Reserves. These funds are "locked" in these individual accounts and are not available to fund other Projected Replacements. The calculation of Recommended Annual Funding of Replacement Reserves is a multi-step process outlined in more detail on Page CM2.

Component Method - Cumulative Receipts and Expenditures Graph



COMPONENT METHOD (cont'd)

- **Current Funding Objective.** A Current Funding Objective is calculated for each of the Projected Replacements listed in the Replacement Reserve Inventory. Replacement Cost is divided by the Normal Economic Life to determine the nominal annual contribution. The Remaining Economic Life is then subtracted from the Normal Economic Life to calculate the number of years that the nominal annual contribution should have been made. The two values are then multiplied to determine the Current Funding Objective. This is repeated for each of the 33 Projected Replacements. The total, \$326,278, 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 (\$38,465) by the Current Funding Objective (\$326,278). At Camden Townes the Funding Percentage is 11.8%
- **Allocation of the Beginning Balance.** The Beginning Balance is divided among the 33 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 11.8 percent funded, there is \$94 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 \$112,502, the Component Method Recommended Annual Funding of Replacement Reserves in the Study Year (2017).

In our fence example, the \$94 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 \$453. Next year, the deposit remains \$453, but in the third year, the fence is replaced and the annual funding adjusts to \$100.

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

Component Method Data - Years 1 through 30

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Beginning balance	\$38,465									
Recommended annual funding	\$112,502	\$83,285	\$83,285	\$82,201	\$77,689	\$77,689	\$57,963	\$58,165	\$58,165	\$57,626
Interest on reserves										
Expenditures	\$39,289		\$4,660	\$30,690		\$196,437	\$19,017		\$10,000	\$1,650
Year end balance	\$111,678	\$194,963	\$273,588	\$325,099	\$402,787	\$284,039	\$322,985	\$381,150	\$429,316	\$485,292
Cumulative Expenditures	\$39,289	\$39,289	\$43,949	\$74,639	\$74,639	\$271,076	\$290,093	\$290,093	\$300,093	\$301,743
Cumulative Receipts	\$150,967	\$234,252	\$317,537	\$399,738	\$477,426	\$555,115	\$613,078	\$671,243	\$729,408	\$787,034
Year	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Recommended annual funding	\$57,553	\$57,454	\$57,454	\$57,145	\$57,130	\$57,130	\$57,050	\$55,533	\$54,375	\$53,426
Interest on reserves										
Expenditures	\$34,903		\$30,737	\$3,500	\$2,740	\$48,289	\$89,290	\$84,390	\$105,947	
Year end balance	\$507,943	\$565,397	\$592,114	\$645,759	\$700,150	\$708,991	\$676,751	\$647,894	\$596,323	\$649,748
Cumulative Expenditures	\$336,645	\$336,645	\$367,382	\$370,882	\$373,622	\$421,911	\$511,201	\$595,591	\$701,538	\$701,538
Cumulative Receipts	\$844,588	\$902,042	\$959,496	\$1,016,641	\$1,073,772	\$1,130,902	\$1,187,952	\$1,243,485	\$1,297,860	\$1,351,286
Year	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Recommended annual funding	\$53,426	\$53,426	\$52,592	\$52,072	\$51,822	\$51,822	\$51,822	\$51,822	\$51,822	\$51,822
Interest on reserves										
Expenditures	\$32,153	\$173,178	\$171,698	\$169,778	\$17,717	\$131,219	\$4,040	\$30,690	\$13,500	\$4,050
Year end balance	\$671,021	\$551,269	\$432,164	\$314,458	\$348,564	\$269,167	\$316,949	\$338,081	\$376,402	\$424,174
Cumulative Expenditures	\$733,691	\$906,868	\$1,078,566	\$1,248,343	\$1,266,060	\$1,397,279	\$1,401,319	\$1,432,009	\$1,445,509	\$1,449,559
Cumulative Receipts	\$1,404,712	\$1,458,137	\$1,510,730	\$1,562,801	\$1,614,623	\$1,666,445	\$1,718,267	\$1,770,089	\$1,821,911	\$1,873,733

COMPONENT METHOD ACCOUNTING SUMMARY

This Camden Townes - Component Method Accounting Summary is an attachment to the Camden Townes - Replacement Reserve Study dated Revised December 23, 2016 and is for use by accounting and reserve professionals experienced in Association funding and accounting principles. This Summary consists of four reports, the 2017, 2018, and 2019 Component Method Category Funding Reports (3) and a Three-Year Replacement Funding Report.

- COMPONENT METHOD CATEGORY FUNDING REPORT, 2017, 2018, and 2019. Each of the 33 Projected Replacements listed in the Camden Townes Replacement Reserve Inventory has been assigned to one of 4 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 \$38,465 Beginning Balance (at the start of the Study Year) and the \$279,072 of additional Replacement Reserve funding from 2017 to 2019 (as calculated in the Replacement Reserve Analysis) to each of the 33 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 2017 through 2019.
 - Allocation of the \$38,465 Beginning Balance to the Projected Replacements by the Component Method.
 - Allocation of the \$279,072 of additional Replacement Reserve Funding recommended in the Replacement Reserve Analysis in years 2017 through 2019, by the Component Method.

2017 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CM1 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- A Beginning Balance of \$38,465 as of the first day of the Study Year, January 1, 2017.
- Total reserve funding (including the Beginning Balance) of \$150,967 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 2017 being accomplished in 2017 at a cost of \$39,289.

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.

2017 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM1

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2017 BEGINNING BALANCE	2017 RESERVE FUNDING	2017 PROJECTED REPLACEMENTS	2017 END OF YEAR BALANCE
SITE COMPONENTS	5 to 45 years	0 to 21 years	\$208,632	\$15,842	\$56,077	\$36,612	\$35,308
SITE COMPONENTS (cont.)	20 to 30 years	8 to 29 years	\$16,800	\$892	\$1,511		\$2,403
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	0 to 5 years	\$98,586	\$8,571	\$19,327	\$2,678	\$25,221
BUILDING EXTERIORS	25 years	16 to 23 years	\$762,503	\$13,161	\$35,587		\$48,748

2018 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CM2 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$111,678 on January 1, 2018.
- Total reserve funding (including the Beginning Balance) of \$234,252 from 2017 through 2018.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.

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

2018 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM2

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2018 BEGINNING BALANCE	2018 RESERVE FUNDING	2018 PROJECTED REPLACEMENTS	2018 END OF YEAR BALANCE
SITE COMPONENTS	5 to 45 years	1 to 20 years	\$208,632	\$35,308	\$28,775		\$64,083
SITE COMPONENTS (cont.)	20 to 30 years	7 to 28 years	\$16,800	\$2,403	\$1,511		\$3,914
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	2 to 5 years	\$98,586	\$25,221	\$17,412		\$42,632
BUILDING EXTERIORS	25 years	15 to 22 years	\$762,503	\$48,748	\$35,587		\$84,335

2019 - COMPONENT METHOD CATEGORY FUNDING REPORT

Each of the 33 Projected Replacements included in the Camden Townes Replacement Reserve Inventory has been assigned to one of the 4 categories listed in TABLE CM3 below. This calculated data is a summary of data provided in the Three-Year Replacement Funding Report and Replacement Reserve Inventory. The accuracy of this data is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$194,963 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of \$317,537 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory in 2019 being accomplished in 2019 at a cost of \$4,660.

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

2019 - COMPONENT METHOD CATEGORY FUNDING - TABLE CM3

CATEGORY	NORMAL ECONOMIC LIFE	REMAINING ECONOMIC LIFE	ESTIMATED REPLACEMENT COST	2019 BEGINNING BALANCE	2019 RESERVE FUNDING	2019 PROJECTED REPLACEMENTS	2019 END OF YEAR BALANCE
SITE COMPONENTS	5 to 45 years	0 to 19 years	\$208,632	\$64,083	\$28,775	\$4,660	\$88,198
SITE COMPONENTS (cont.)	20 to 30 years	6 to 27 years	\$16,800	\$3,914	\$1,511		\$5,425
SITE COMPONENTS (cont.) - UNIT OWNED,	6 to 25 years	1 to 4 years	\$98,586	\$42,632	\$17,412		\$60,044
BUILDING EXTERIORS	25 years	14 to 21 years	\$762,503	\$84,335	\$35,587		\$119,922

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING REPORT

TABLE CM4 below details the allocation of the \$38,465 Beginning Balance, as reported by the Association and the \$279,072 of Replacement Reserve Funding calculated by the Cash Flow Method from 2017 to 2019, to the 33 Projected Replacements listed in the Replacement Reserve Inventory. These allocations have been made by Chronological Allocation, a method developed by Miller Dodson Associates, Inc., and outlined on Page CF1. The accuracy of the allocations is dependent upon many factors including the following critical financial data:

- Replacement Reserves on Deposit totaling \$38,465 on January 1, 2017.
- Replacement Reserves on Deposit totaling \$111,678 on January 1, 2018.
- Replacement Reserves on Deposit totaling \$194,963 on January 1, 2019.
- Total Replacement Reserve funding (including the Beginning Balance) of \$317,537 from 2017 to 2019.
- No expenditures from Replacement Reserves other than those specifically listed in the Replacement Reserve Inventory.
- All Projected Replacements scheduled in the Replacement Reserve Inventory from 2017 to 2019 being accomplished as scheduled in the Replacement Reserve Inventory at a cost of \$43,949.

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

COMPONENT METHOD - THREE-YEAR REPLACEMENT FUNDING - TABLE CM4

Item #	Description of Projected Replacement	Estimated Replacement Costs	Allocation of Beginning Balance	2017 Reserve Funding	2017 Projected Replacements	2017 End of Year Balance	2018 Reserve Funding	2018 Projected Replacements	2018 End of Year Balance	2019 Reserve Funding	2019 Projected Replacements	2019 End of Year Balance
SITE COMPONENTS												
1	Asphalt pavement, mill & pave	120,870	9,975	18,483		28,457	18,483		46,940	18,483		65,422
2	Asphalt pavement, patch 10%	21,804	2,570	19,234	(21,804)		2,180		2,180	2,180		4,361
3	Asphalt pavement, seal coat	10,349	1,220	9,129	(10,349)		2,070		2,070	2,070		4,140
4	Concrete sidewalk/flatwork, 6%	4,459	526	3,933	(4,459)		743		743	743		1,486
5	Concrete dumpster pad, 20%	2,401		343		343	343		686	343		1,029
6	Concrete curb/gutter, 6%	8,180		1,169		1,169	1,169		2,337	1,169		3,506
7	Concrete steps, 10%	1,300	46	179		225	179		404	179		583
8	Metal handrail at steps	3,600	264	196		460	196		657	196		853
9	Dumpster enclosure, vinyl fence	3,840	23	201		224	201		424	201		625
10	Dumpster enclosure, wood fence	1,920	192	576		768	576		1,344	576	(1,920)	
11	Metal mailbox clusters	13,020	537	960		1,497	960		2,458	960		3,418
12	Pet waste stations	2,740	242	833		1,075	833		1,907	833	(2,740)	
13	Bike rack, metal	3,400	48	152		200	152		353	152		505
14	Entrance monument, allowance	3,500	28	248		276	248		524	248		772
15	Bus stop shelter, allowance	7,250	171	442		613	442		1,056	442		1,498
SITE COMPONENTS (cont.)												
16	Storm water management sytem, allow	10,000	648	1,039		1,687	1,039		2,727	1,039		3,766
17	Picnic grill/seating/trash	2,750	146	237		383	237		619	237		856
18	Dog park chaink link fence, 40%	2,400		80		80	80		160	80		240
19	Dog park seating/trash, 40%	1,650	97	155		253	155		408	155		563
SITE COMPONENTS (cont.) - UNIT												
20	Concrete lead walks, 6%	2,678	316	2,362	(2,678)		446		446	446		893
21	Wood steps/wood platforms, unit entry	13,936	1,249	2,115		3,363	2,115		5,478	2,115		7,592
22	Wood steps w/wood railings, unit entry	34,146	3,059	5,181		8,240	5,181		13,422	5,181		18,603
23	Wood retaining walls, 1' ave height	17,136	1,535	2,600		4,135	2,600		6,736	2,600		9,336
24	Entrance awnings, canvas	30,690	2,412	7,069		9,482	7,069		16,551	7,069		23,621
BUILDING EXTERIORS												
25	Asphalt shingle roof, 5 buildings	84,390	3,184	4,777		7,960	4,777		12,737	4,777		17,514
26	Asphalt shingle roof, 5 buildings	84,390	2,786	4,534		7,319	4,534		11,853	4,534		16,386
27	Asphalt shingle roof, 5 buildings	84,390	2,388	4,316		6,704	4,316		11,020	4,316		15,335
28	Alum gutters/downspouts, 5 buildings	12,478	177	559		736	559		1,295	559		1,854
29	Alum gutters/downspouts, 5 buildings	12,478	118	537		655	537		1,192	537		1,730
30	Alum gutters/downspouts, 5 buildings	12,478	59	517		576	517		1,094	517		1,611
31	Vinyl siding and trim, 5 buildings	157,300	2,225	7,049		9,274	7,049		16,323	7,049		23,372
32	Vinyl siding and trim, 5 buildings	157,300	1,484	6,775		8,258	6,775		15,033	6,775		21,807
33	Vinyl siding and trim, 5 buildings	157,300	742	6,523		7,265	6,523		13,788	6,523		20,312

1. COMMON INTEREST DEVELOPMENTS - AN OVERVIEW

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

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

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

2. REPLACEMENT RESERVE STUDY

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

- Replacement Reserve Study Introduction. The introduction provides a description of the property, reviews the intent of the Replacement Reserve Study, and lists documents and site evaluations upon which the Replacement Reserve Study is based.
- Section A Replacement Reserve Analysis. Many components owned by the Association have a limited life and require periodic replacement. Therefore, it is essential the Association have a financial plan that provides funding for the timely replacement of these components in order to protect the safety, appearance, and value of the community. In conformance with American Institute of Certified Public Accountant guidelines, a Replacement Reserve Analysis evaluates the current funding of Replacement Reserves as reported by the Association and recommends annual funding of Replacement Reserves by two generally accepted accounting methods; the Cash Flow Method and the Component Method. Miller - Dodson provides a replacement reserve recommendation based on the Cash Flow Method in Section A, and the Component Method in the Appendix of the report.
- Section B Replacement Reserve Inventory. The Replacement Reserve Inventory lists the commonly owned components within the community that require periodic replacement using funding from Replacement Reserves. The Replacement Reserve Inventory also provides information about components excluded from the Replacement Reserve Inventory whose replacement is not scheduled for funding from Replacement Reserves.

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

- Section C Projected Annual Replacements. The Calendar of Projected Annual Replacements provides a year-by-year listing of the Projected Replacements based on the data in the Replacement Reserve Inventory.
- Section D Condition Assessment. Several of the items listed in the Replacement Reserve Inventory are discussed in more detail. The Condition Assessment includes a narrative and photographs that document conditions at the property observed during our visual evaluation.
- The Appendix is provided as an attachment to the Replacement Reserve Study. Additional attachments may include supplemental photographs to document conditions at the property and additional information specific to the property cited in the Conditions Assessment (i.e. Consumer Product Safety Commission, Handbook for Public Playground Safety, information on segmental retaining walls, manufacturer recommendations for asphalt shingles or siding, etc). The Appendix also includes the Accounting Summary for the Cash Flow Method and the Component Method.

3. METHODS OF ANALYSIS

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

- **Cash Flow Method.** The Cash Flow Method is sometimes referred to as the "Pooling Method." It calculates the minimum constant annual contribution to reserves (Minimum Annual Deposit) required to meet projected expenditures without allowing total reserves on hand to fall below the specified minimum level in any year.

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

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

The Component Method treats each item in the replacement schedule as an individual line item budget. Generally, the Minimum Annual Contribution to Reserves is higher when calculated by the Component Method. The mathematical model for this method works as follows:

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

4. REPLACEMENT RESERVE STUDY DATA

- **Identification of Reserve Components.** The Reserve Analyst has only two methods of identifying Reserve Components: (1) information provided by the Association and (2) observations made at the site. It is important that the Reserve Analyst be provided with all available information detailing the components owned by the Association. It is our policy to request such information prior to bidding on a project and to meet with the individuals responsible for maintaining the community after acceptance of our proposal. After completion of the Study, the Study should be reviewed by the Board of Directors, individuals responsible for maintaining the community, and the Association's accounting professionals. We are dependent upon the Association for correct information, documentation, and drawings.
- **Unit Costs.** Unit costs are developed using nationally published standards and estimating guides and are adjusted by state or region. In some instances, recent data received in the course of our work is used to modify these figures.

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

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

5. DEFINITIONS

Adjusted Cash Flow Analysis. Cash flow analysis adjusted to take into account annual cost increases due to inflation and interest earned on invested reserves. In this method, the annual contribution is assumed to grow annually at the inflation rate.

Annual Deposit if Reserves Were Fully Funded. Shown on the Summary Sheet A1 in the Component Method summary, this would be the amount of the Annual Deposit needed if the Reserves Currently on Deposit were equal to the Total Current Objective.

Cash Flow Analysis. See Cash Flow Method, above.

Component Analysis. See Component Method, above.

Contingency. An allowance for unexpected requirements. Roughly the same as the Minimum Recommended Reserve Level to be Held on Account used in the Cash Flow Method of analysis.

Critical Year. In the Cash Flow Method, a year in which the reserves on hand are projected to fall to the established minimum level. See Minimum Recommended Reserve Level to be Held on Account.

Current Objective. This is the reserve amount that would have accumulated had the item been funded from initial construction at its current replacement cost. It is equal to the estimated replacement cost divided by the estimated economic life, times the number of years expended (the difference between the Estimated Economic Life and the Estimated Life Left). The Total Current Objective can be thought of as the amount of reserves the Association should now have on hand based on the sum of all of the Current Objectives.

Cyclic Replacement Item. A component item that typically begins to fail after an initial period (Estimated Initial Replacement), but which will be replaced in increments over a number of years (the Estimated Replacement Cycle). The Reserve Analysis program divides the number of years in the Estimated Replacement Cycle into five equal increments. It then allocates the Estimated Replacement Cost equally over those five increments. (As distinguished from Normal Replacement Items, see below)

Estimated Economic Life. Used in the Normal Replacement Schedules. This represents the industry average number of years that a new item should be expected to last until it has to be replaced. This figure is sometimes modified by climate, region, or original construction conditions.

Estimated Economic Life Left. Used in the Normal Replacement Schedules. Number of years until the item is expected to need replacement. Normally, this number would be considered to be the difference between the Estimated Economic Life and the age of the item. However, this number must be modified to reflect maintenance practice, climate, original construction and quality, or other conditions. For the purpose of this report, this number is determined by the Reserve Analyst based on the present condition of the item relative to the actual age.

Estimated Initial Replacement. For a Cyclic Replacement Item (see above), the number of years until the replacement cycle is expected to begin.

Estimated Replacement Cycle. For a Cyclic Replacement Item, the number of years over which the remainder of the component's replacement occurs.

Minimum Annual Deposit. Shown on the Summary Sheet A1. The calculated requirement for annual contribution to reserves as calculated by the Cash Flow Method (see above).

Minimum Deposit in the Study Year. Shown on the Summary Sheet A1. The calculated requirement for contribution to reserves in the study year as calculated by the Component Method (see above).

Minimum Recommended Reserve Level to be Held on Account. Shown on the Summary Sheet A1, this number is used in the Cash Flow Method only. This is the prescribed level below which the reserves will not be allowed to fall in any year. This amount is determined based on the age, condition, and replacement cost of the individual components. This number is normally given as a percentage of the total Estimated Replacement Cost of all reserve components.

Normal Replacement Item. A component of the property that, after an expected economic life, is replaced in its entirety. (As distinguished from Cyclic Replacement Items, see above.)

Normal Replacement Schedules. The list of Normal Replacement Items by category or location. These items appear on pages designated.

Number of Years of the Study. The numbers of years into the future for which expenditures are projected and reserve levels calculated. This number should be large enough to include the projected replacement of every item on the schedule, at least once. This study covers a 40-year period.

One Time Deposit Required to Fully Fund Reserves. Shown on the Summary Sheet A1 in the Component Method summary, this is the difference between the Total Current Objective and the Reserves Currently on Deposit.

Reserves Currently on Deposit. Shown on the Summary Sheet A1, this is the amount of accumulated reserves as reported by the Association in the current year.

Reserves on Hand. Shown in the Cyclic Replacement and Normal Replacement Schedules, this is the amount of reserves allocated to each component item in the Cyclic or Normal Replacement schedules. This figure is based on the ratio of Reserves Currently on Deposit divided by the total Current Objective.

Replacement Reserve Study. An analysis of all of the components of the common property of the Association for which a need for replacement should be anticipated within the economic life of the property as a whole. The analysis involves estimation for each component of its estimated Replacement Cost, Estimated Economic Life, and Estimated Life Left. The objective of the study is to calculate a recommended annual contribution to the Association's Replacement Reserve Fund.

Total Replacement Cost. Shown on the Summary Sheet A1, this is total of the Estimated Replacement Costs for all items on the schedule if they were to be replaced once.

Unit Replacement Cost. Estimated replacement cost for a single unit of a given item on the schedule.

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

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

What is a Reserve Study?
Who are we?



<http://bcove.me/nc0o69t7>

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



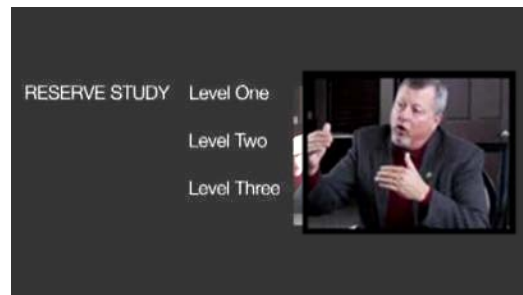
<http://bcove.me/stt373hj>

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



<http://bcove.me/81ch7kit>

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/81ch7kit>

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?



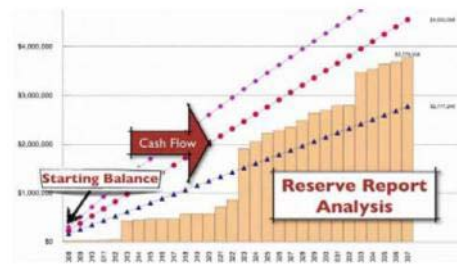
<http://bcove.me/2vfih1tz>

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?



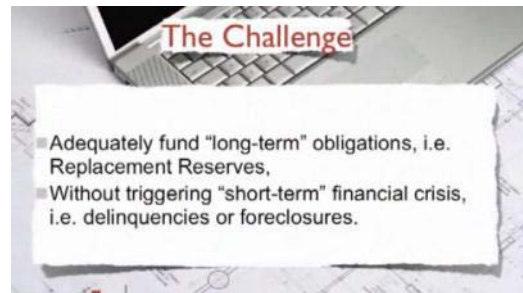
<http://bcove.me/7buer3n8>

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>