

Summit Chase HOA-FY19

Reston, VA

Level II Update Reserve Study

October 19, 2018

C/o Mr. Kim Hendon CMCA, AMS
TWC Association Management
397 Herndon Parkway, Suite 100
Herndon, VA 20170

Dear Mr. Hendon:

Enclosed please find the Level II Update Reserve Study for Summit Chase HOA.

This is the "Final Report" if there are no concerns to be addressed after it is reviewed. If desired, we will attend a meeting to discuss this study at a mutually agreeable time. In the meantime, please let us know if there are any questions.

We thank the Board of Directors and TWC Management for selecting **PM+** for this study and hope you call upon us when you need another study.

Sincerely,



Ronald P. Kirby, Jr., RS
Executive in Charge of Reserve Studies



Mario B. "Ben" Ginnetti, PRA, RS, P.E.
President

Enclosure:
Study - PDF File

Summit Chase HOA-FY19

Reston, VA

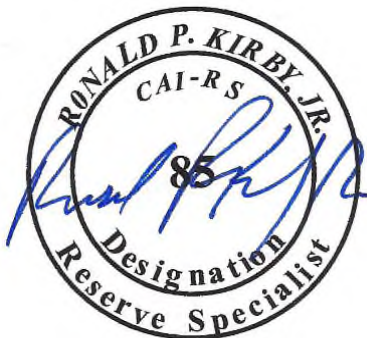
Level II Update Reserve Study

October 19, 2018



Prepared for:

Board of Directors



Ronald P. Kirby, RS



Mario B. "Ben" Ginnetti, PRA, RS, P.E.

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EXECUTIVE SUMMARY

KEY TO UNDERSTANDING STUDY RESULTS – The purpose of a reserve study is to establish a financial plan for keeping the property’s common and limited common elements in good repair. The plan is developed by identifying the component, assessing its condition, and estimating both the time when work will be needed and cost of work. In a **PM+** study these entries can be found beginning on page A1, columns (1), (4) and (5). Those entries combined with reserve savings, current reserve contribution, interest, and inflation rates and how much of a contingency should be preserved to fund unforeseen events are the factors that determine the reserve contribution.

RELEVANT DATA

1st Study Year FY19	\$110,000 AOH Start FY18
FY Begins 1-Jan-19	29,780 Your Contribution in FY19
Inspection Date(s) 9-Oct-18	1.69% Inflation
# Units 90	2.59% Interest

AOH (cash/investments start of fiscal year) and **Current Year Contribution** were provided to **PM+** and were best estimates available when provided, they are not audited amounts.

INTEREST AND INFLATION¹ best project future needs of the property. Inflation is based on the last 10-year Consumer Price Index (CPI) average; interest on savings on the 10-year average of the Constant Maturity Yield for the 10-Year U.S. Treasury note. Recommended owner contribution assumes savings interest will be applied to the reserves and not used to offset operating account expenses or for other purposes. If interest is not applied to the reserves, the annual contribution will need to be increased by the interest amount.

SUMMARY OF PM+ RECOMMENDED RESERVE FINANCIAL PLAN

Contribution Needed in FY19	\$33,600
Avg Owner Contribution FY19	373
Avg Owner Contribution/Month	31.11
30-Year Income	1,723,710
Income From Interest	259,560
Income From Assessments	1,464,150
30-Year Min Balance	52,370
30-Year Max Balance	906,940
50-Year Min Balance	52,370
50-Year Max Balance	2,366,810

ANALYSIS:

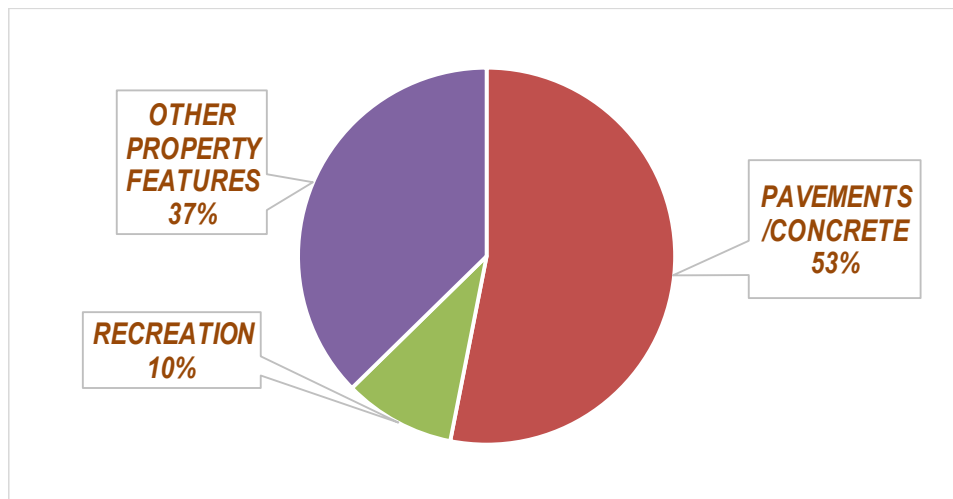
- Our analysis indicates the association will need to contribute \$33,600 in FY19 if it is to meet the reserve needs of the property. That amount will need to be increased by 5% through FY23 to build up the reserves for drainage improvements. See page A3, column (14) for yearly contributions the association should be prepared to collect over the life of this study.
- The recommended contribution complies with the “Cash Flow” method as defined by the Community Association Institute (CAI) and the Association of Professional Reserve Analysts (APRA) for determining reserve requirements. In addition to the cash flow method this study also calculates the reserve requirement using the component method. A comparison of both plans is shown in the 30-Year Financial Plans chart in the appendix.

1. Although factors used may not prove to be precise they should be reasonable predictors of cost increases and contributions needed to support the reserve requirement over the life of the study.

- Amounts shown on 30-Financial Plan chart in columns (15) and (18) are approximate year end balances, both minimum and maximum, that can be expected if the plans are funded as shown. Properly funded plans will meet the following objectives: 1) funds are always available for needed work, 2) there is always a minimum savings balance available to provide for unforeseen contingencies, and 3) when studies are updated, there is not a substantial increase needed to meet the reserve requirement. To avoid substantial increases **PM+** studies take into consideration the first thirty-years of the study and an additional twenty-years, making the "look at" period a total of fifty-years. The 50-year projection is to assure the recommended contribution is based on a sound long range analysis of the property's reserve needs.

RECOMMENDATION:

Fund the reserves to the recommended amount using the cash flow method.

WHERE CONTRIBUTIONS TO THE RESERVES GO OVER 30-YEARS:

STUDY INFORMATION

THIS STUDY was performed with an on-site visit and is the fifth (Last **PM+** study – April 18, 2014) engagement for the property by **PM+**. **PM+** has neither collaborated with nor provided consulting advice to others about property issues. Interested parties should refer to earlier studies for previous assumptions and comments.

STUDY WAS DONE by Mario B. “Ben” Ginnetti, **PRA, RS, P.E.** and Ronald P. Kirby, Jr., **RS**.

RESERVE STUDY criteria are defined by the Community Association Institute (CAI) and the Association of Professional Reserve Analysts (APRA). In complying with the criteria this study compares the “Associations” current funding plan to the two recommended methods for preparing reserve studies, “Cash Flow (AKA Pooling)” and “Component.” This is a reserve study only - no other use is intended.

COMPILED in accordance with generally accepted standards and represents our professional opinion on the components, timing and costs needed for repair and replacement. Study information was obtained from field measurements, visual observations, and management (information provided by management is reliable). Also, taken into consideration are construction features, current conditions, and component age. Testing was not performed, nor was demolition done or panels removed to determine conditions that are not obvious. Based on our observations and the information gained during the visit this study contains, to the best of our ability, all material issues required to determine the funding needed to meet the property’s reserve requirement.

FOR PROPERTIES LOCATED IN THE STATE OF VIRGINIA, Virginia Statutes, 2003 Condominium and Property Owner’s Association Act requires associations to conduct reserve studies at least every five years, review results at least annually and adjust as necessary unless the condominium instruments/declaration imposes more stringent requirements. See Sections 55-79.83:1 or 55-514.1 of the Statutes for the complete text.

AGE, UNITS, STYLE, AND AMENITIES

Constructed in the mid 80’s.
90-units, townhome configuration.
Major amenities – tot-lot.

CASH FLOW AND COMPONENT STUDIES (THIS STUDY DOES BOTH METHODS) – Note: Most professional reserve providers, accountants and managers agree cash flow is the preferred method for funding reserves.

CASH FLOW METHOD - This method develops the funding plan by having the annual contributions offset the variable annual expenses. All expenses are averaged over the life of the study to calculate the annual contribution needed to support the reserve requirement. Yearly contribution increases are mostly attributed to inflation.

COMPONENT METHOD - This method develops the funding plan by dividing the remaining useful life into the balance needed to fund the component for only the next cycle of work. Yearly contributions can vary significantly from year to year depending on where the components are in their life cycle. Contributions needed to pay expenses will equal the cash flow method over the life of the study. If this method is chosen studies should be updated annually.

FUNDING GOAL

This study complies with the “Threshold Funding Plan” established by the CA for reserve studies. Funding goal objective is to keep the reserve balance above a specified dollar or Percent Funded amount.

COMPONENT CLASSIFICATION

PREDICTABLE LIFE CYCLE

Components have a predictable life cycle (average useful life). Total replacement needed at end of life.

ANNUAL ALLOWANCES

We reserve an average annual amount for these components. They are typically “life of the property” or long-lasting components that do not have a predictable life cycle. We assume the association will keep these components in satisfactory condition with timely spot repairs.

FOLLOWING CONSIDERATIONS should be taken into account to properly manage the reserves: 1) properly funded reserves avoids “special assessments”, 2) each owner should pay their fair share for the time they use the component, 3) when reserve funds are available the Association is more inclined not to defer work; deferral results in additional deterioration and “catch-up” costs to restore the component to a good condition, 4) government mortgage guarantees agencies, i.e. FHA, require a current reserve study to be available before backing a loan, and 5) some state laws require them. In addition to these considerations, a new factor has recently become apparent. Years ago, owners were poorly informed on the importance of the reserves and paid very little attention to whether a property had an adequate plan for funding the reserves. With the inclusion of reserve tables in resale packages and other publicity, many potential buyers are now verifying the reserve status before they buy.

ALTHOUGH we use generally accepted techniques and best information available, it is possible actual costs and useful lives can vary significantly from our estimates. We recognize that possibility and attempt with our methodology to arrive at the overall funding recommendation that will avoid or minimize the amount of funding if a special assessment is needed to do reserve work.

FOR THE RESERVES to be an effective budget management tool it will need periodic updates. Because reserves on hand, current costs, quality of maintenance, acts of God, vandalism, and useful life can vary from year to year, a periodic review will assure it remains an effective management tool. We recommend studies be updated every 3 years.

UNLESS OTHERWISE NOTED this study does not take into consideration any work the association may need to correct hazardous or defective conditions, such as issues with asbestos, radon, lead, mold, FRT, etc., nor will it fund major projects to repair/replace facades, building tension cables, utilities, and other essential systems. Projects of this nature require the services of engineers or other consultants to determine scope, timing, and projects costs. If requested, once costs and project timing are known, we will provide a revised study at no additional cost.

FOR ANY RESERVE PROJECTS in progress on the date(s) of our visit our observation of the work should not be considered a project audit or quality control inspection. We leave that to others to determine.

IF WE DESCRIBE PREVENTIVE MAINTENANCE recommendations in this study they are intended to be general in nature and the most common tasks needed to extend useful life. They are not all inclusive; we do not imply that is all that is necessary for good maintenance. Manufacturers’ brochures, service specialty companies, and other qualified sources should be consulted to establish the full array of actions needed for proper preventive maintenance.

FUNDING FROM RESERVE VERSUS OPERATING ACCOUNT - There could be components in this study the association is funding from the operating account. When there are we recommend they be funded from the reserves. When components are worked on it usually extends their useful life - a proper reserve expense. Reserve funds are intended to keep property components in good repair and to replace those that need replacing; operating funds are intended for maintenance and reoccurring operating expenses.

READING and UNDERSTANDING TABLES/CHARTS**RELEVANT DATA**

Study fiscal year, inspection date(s), units, association's financial data, and interest/inflation rates.

SUMMARY OF THE ASSOCIATION'S RESERVE FINANCIAL PLAN

Financial summary of study results.

TABLE OF REPAIR & REPLACEMENT RESERVES

The Repair and Replacement Table shows the common or limited common element, average and remaining useful life, and estimated cost for work. This information, for the most part, is self-explanatory; however, when we believe more information is needed, we provide comments or use photographs.

Column

- (1) The property components the association should include in the reserves. Where a 15%, 30%, etc., is shown it means total replacement of the item is not anticipated. If we have omitted or added components that are not common or limited common area responsibility, please inform us so we can provide a revised table. It also applies if the association accomplishes the work from their annual operating expense and a reserve set-aside is not needed. If components are included that are operating expenses, we leave it to others to determine the correct tax consequence of the component.

- (2) Approximate quantity and unit of measure. The following abbreviations are used; however, they may not all appear in this study:

AC – Acres	LF - Linear Feet	TN - Tons
AOH - Amount-On-Hand	LS - Lump Sum	UN - Units
AnAvg - Annual Average	HP – Horsepower	> - Greater Than
BLD - Building	RC - Replacement Cost	< - Less Than
EA - Each	SF - Square Feet	
CY - Cubic Yards	SY - Square Yards	

- (3) The components' average useful life (Avg). Leading publications on useful life data, our own experiences and historical trends are used to determine average useful life.
- (4) Our best estimate of the remaining useful life (RUL). Some components in the table may not fail precisely as shown. We use the remaining useful life in conjunction with the estimated cost to calculate the annual contribution needed to fund the component. Actual remaining useful life can be significantly different.
- (5) Estimated costs are in current dollars; actual cost can be significantly different. Estimates are based on similar work in the greater Washington area, association experience, industry publications, such as R.S. Means and HomeTech, contractors and other reliable sources. It assumes the association will competitively seek bids and obtain a fair price in today's market. Some work, such as balconies, roofing, garages, façade, boiler, and chiller replacements, etc. may need the services of an engineer or architect to determine scope and oversee repairs. Those estimates take precedence over those shown in the table. Some costs can be more predictable than others, i.e., when roofs and pavements are replaced the entire component will most likely be replaced so a total replacement costs can be estimated. Other components, i.e., closed loop piping, plumbing, electrical and fire protection systems may not need total replacement and will continue to perform with sub-system repairs. For these components, we reserve a reasonable amount for this work.
- (6) Distribution of the funds the association had (is projected to have) at the start of their fiscal year or the amount we were requested to use. The program distributes a prorated amount to each component.
- (7) The amount needed to fund the balance of the requirement.

- (8) The contribution needed to fund the 1st year applying the cash flow method. Contributions from year to year are mainly adjustments for inflation.
- (9) The contribution needed to fund the 1st year applying the component method. Contributions from year to year can vary significantly.

30-YEAR COMPARISON OF FINANCIAL PLANS

Column

- (10) - Fiscal Year.
- (11) - Projected annual expenses.
- (12) - Cumulative expenses over 30-years.
- (13) and (16) - Interest earned per funding plan based on previous year-end balance.
- (14) and (17) - Contribution per funding plan, inflation applied.
- (15) and (18) - Projected year-end balance per funding plan.

GRAPHS

Graphs depict the projected contributions and year end balances for each plan. The contribution objective should be to have a consistent contribution, year after year, that can be maintained with inflation adjustments. Avoid fluctuating contributions as they can impose financial hardships on owners. The plot objective for the reserve balance is to have the year end balances always above the “X” axis. If it falls below, it indicates a special assessment or loan will be needed to support the reserves.

SUMMARY

- 30-Year Income - projected from interest and owners.
- 30 & 50-Year Minimum/Maximum Balances - includes contingency for unforeseen events.

PROPERTY COMPARISON (NOT SHOWN IN SOME STUDIES)

The “Property Comparison” chart compares the property’s current funding to the last properties we have studied. The comparison shows the maximums, minimums, property averages and medians compared to your property. Property features differ from one property to another so consider these as averages only and not a true comparison on your property to another similar property. Three comparisons are made:

- % Funded - Ratio of the current to the ideal Reserve Balance for each component in the Reserve Table. The ratio is a product of the “used-up” life, useful life, and component cost.
- Reserve Depletion Factor - Number of years amount-on-hand will fund (It's the same as the “go broke” date if no more money is added to the reserves).
- AOH-Dedicated reserve funds at start of study fiscal year.
- Cost Per Owner – Average contribution per owner needed to meet the reserve requirement. Dollar amounts will vary from property to property based on construction features, common/limited common elements, past contributions to the reserves and other factors that may not result in a true comparison.

APPENDIX A

TABLE OF REPAIR/REPLACEMENT RESERVES AND YEARS 1-10 EXPENSES

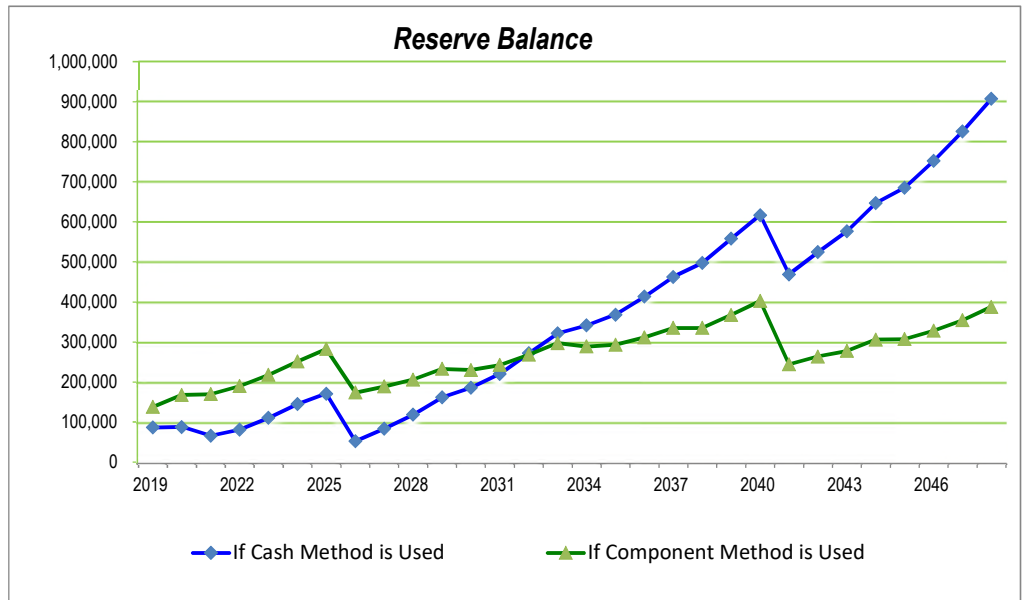
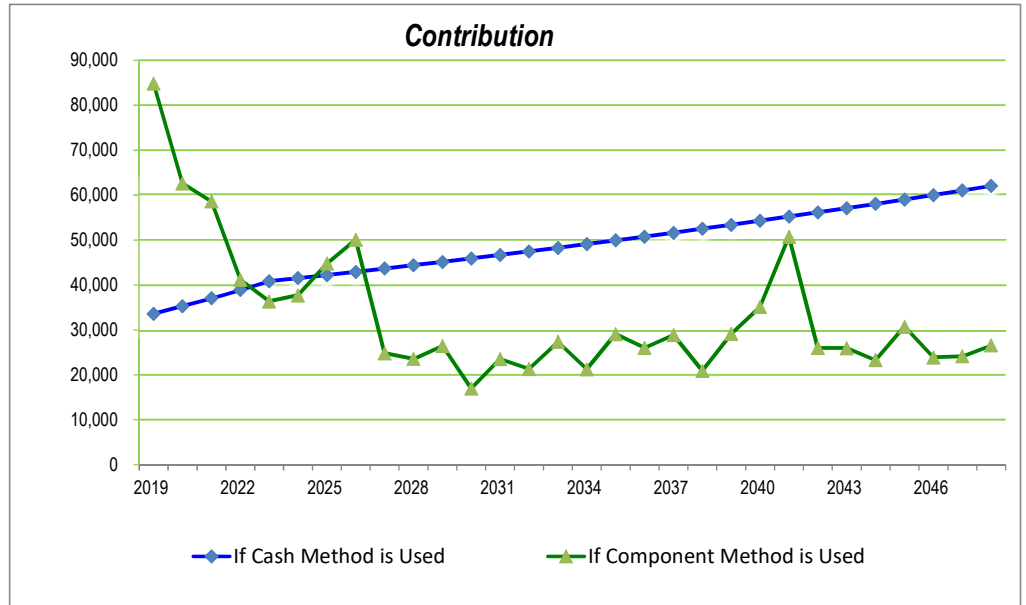
COMPONENT (1)	APPROX'MT QUANTITY (2)	USEFUL LIFE AVG REM (YRS) (3) (4)	ESTIMATED COST IN CURRENT \$ (5)	DISTR'BTN OF AOH AS OF 1-Jan-19 (6)	BALANCE NEEDED TO FUND RESERVE (7)	FY19 CONTRIBUTION CASH FLOW COMPONENT METHODS (8)	(9)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
PAVEMENTS/CONCRETE																	
PAVEMENTS																	
PREVENTIVE MAINTENANCE	8,349 SY	4 3	15,030	4,670	10,360	1,370	3,450	0	0	15,540	0	0	0	0	0	0	0
PAVEMENT OVERLAY	8,349 SY	15 8	118,970	36,950	82,020	4,060	10,250	0	0	0	0	0	0	0	133,780	0	0
BASE/SUB-BASE/REPAIRS	417 SY	15 8	14,190	4,410	9,780	480	1,220	0	0	0	0	0	0	0	15,960	0	0
IMMEDIATE REPAIRS FOR LIFE EXTENSION	LS	NA 3	7,700	2,390	5,310	700	1,770	0	0	7,960	0	0	0	0	0	0	0
CONCRETE																	
SIDEWALKS/CURBS/GUTTERS OTHER CONCRETE	LS	4 3	5,000	1,550	3,450	460	1,150	0	0	5,170	0	0	0	0	5,622	0	0
TOTAL PAVEMENTS/CONCRETE			160,890	49,970	110,920	7,070	17,840										
RECREATION																	
TOT LOT(S)																	
PLASTIC EQUIPMENT	1 EA	15 3	10,000	3,110	6,890	910	2,300	0	0	10,340	0	0	0	0	0	0	0
MULCH REPLENISHMENT	1,350 SF	2 1	2,700	840	1,860	740	1,860	2,700	0	2,790	0	2,890	0	2,990	0	3,090	0
TIMBER BORDER	150 LF	20 3	4,130	1,280	2,850	380	950	0	0	4,270	0	0	0	0	0	0	0
3-RAIL WOOD FENCE	145 LF	20 16	2,320	720	1,600	40	100	0	0	0	0	0	0	0	0	0	0
TOTAL RECREATION			19,150	5,950	13,200	2,070	5,210										
OTHER PROPERTY FEATURES																	
ENTRANCE SIGNAGE	LS	15 10	2,800	870	1,930	80	190	0	0	0	0	0	0	0	0	0	3,260
DRAINAGE RENOVATIONS - 1494-1500	LS	N/A 1	50,000	15,530	34,470	13,650	34,470	50,000	0	0	0	0	0	0	0	0	0
DRAINAGE RENOVATIONS - 1577-1585	LS	N/A 2	14,000	4,350	9,650	1,910	4,830	0	14,240	0	0	0	0	0	0	0	0
DRAINAGE RENOVATIONS - 1529 - 1541	LS	N/A 3	13,000	4,040	8,960	1,180	2,990	0	0	13,440	0	0	0	0	0	0	0
DRAINAGE RENOVATIONS - 1520 - 1524	LS	N/A 4	10,000	3,110	6,890	680	1,720	0	0	0	10,520	0	0	0	0	0	0
DRAINAGE RENOVATIONS - 1595 - 1597	LS	N/A 5	8,500	2,640	5,860	460	1,170	0	0	0	0	9,090	0	0	0	0	0
DRAINAGE RENOVATIONS - 1523 - 1527	LS	N/A 6	7,500	2,330	5,170	340	860	0	0	0	0	0	8,160	0	0	0	0
DRAINAGE RENOVATIONS - 1481 & 1519	LS	N/A 7	8,500	2,640	5,860	330	840	0	0	0	0	0	0	9,400	0	0	0
DRAINAGE RENOVATIONS - 1569 - 1573 & 1557 - 1549	LS	N/A 8	8,000	2,480	5,520	270	690	0	0	0	0	0	0	0	9,000	0	0
DRAINAGE RENOVATIONS - 1487 - 1491 & 1605	LS	N/A 9	8,000	2,480	5,520	240	610	0	0	0	0	0	0	0	0	9,150	0
ASPHALT PATHS	178 SY	20 13	4,280	1,330	2,950	90	230	0	0	0	0	0	0	0	0	0	0
TREES/LANDSCAPING REPLACEMENT	LS	3 1	5,500	1,710	3,790	1,500	3,790	5,500	0	0	5,780	0	0	6,080	0	0	6,400
TIMBER STEPS & RAILING	LS	20 4	7,280	2,260	5,020	500	1,260	0	0	0	7,660	0	0	0	0	0	0
MODULAR BLOCK RETAINING WALL	25 LF	35 23	5,000	1,550	3,450	60	150	0	0	0	0	0	0	0	0	0	0
MAILBOX-STREET	90 EA	15 2	20,250	6,290	13,960	2,760	6,980	0	20,590	0	0	0	0	0	0	0	0
SITE ITEMS	LS	1 1	1,500	470	1,030	410	1,030	1,500	1,530	1,550	1,580	1,600	1,630	1,660	1,690	1,720	1,740
TOTAL OTHER PROPERTY FEATURES			174,110	54,080	120,030	24,460	61,810										
TOTAL RESERVES			\$354,150	\$110,000	\$244,150	\$33,600	\$84,860	\$59,700	\$36,360	\$61,060	\$25,540	\$13,580	\$9,790	\$20,130	\$166,052	\$13,960	\$11,400

Notes:
 All dollars rounded to nearest \$10. Totals may not add due to rounding.
 One year remaining useful life indicates the useful life of the component is used up.

YEARS 11 - 30 EXPENSES

COMPONENT	USEFUL LIFE ESTIMATED																						
	AVG REM (YRS)	COST IN	CURRENT \$	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
(1)	(3)	(4)	(5)																				
PAVEMENTS/CONCRETE																							
PAVEMENTS																							
PREVENTIVE MAINTENANCE	4	3	15,030	0	18,070	0	0	0	19,330	0	0	0	20,670	0	0	0	0	0	0	23,240	0	0	0
PAVEMENT OVERLAY	15	8	118,970	0	0	0	0	0	0	0	0	0	0	0	172,010	0	0	0	0	0	0	0	
BASE/SUB-BASE/REPAIRS	15	8	14,190	0	0	0	0	0	0	0	0	0	0	0	20,520	0	0	0	0	0	0	0	
IMMEDIATE REPAIRS FOR LIFE EXTENSION	NA	3	7,700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CONCRETE																							
SIDEWALKS/CURBS/GUTTERS OTHER CONCRETE	4	3	5,000	0	6,012	0	0	0	6,429	0	0	0	6,875	0	0	7,229	0	0	0	7,730	0	0	0
TOTAL PAVEMENTS/CONCRETE			160,890																				
RECREATION																							
TOT LOT(S)																							
PLASTIC EQUIPMENT	15	3	10,000	0	0	0	0	0	0	13,300	0	0	0	0	0	0	0	0	0	0	0	0	
MULCH REPLENISHMENT	2	1	2,700	3,190	0	3,300	0	3,410	0	3,530	0	3,650	0	3,780	0	3,900	0	4,040	0	4,170	0	4,320	0
TIMBER BORDER	20	3	4,130	0	0	0	0	0	0	0	0	0	0	0	5,970	0	0	0	0	0	0	0	
3-RAIL WOOD FENCE	20	16	2,320	0	0	0	0	0	2,980	0	0	0	0	0	0	0	0	0	0	0	0	0	
TOTAL RECREATION			19,150																				
OTHER PROPERTY FEATURES																							
ENTRANCE SIGNAGE	15	10	2,800	0	0	0	0	0	0	0	0	0	0	0	0	0	4,190	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1494-1500	N/A	1	50,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1577-1585	N/A	2	14,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1529 - 1541	N/A	3	13,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1520 - 1524	N/A	4	10,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1595 - 1597	N/A	5	8,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1523 - 1527	N/A	6	7,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1481 & 1519	N/A	7	8,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1569 - 1573 & 1557 - 1549	N/A	8	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DRAINAGE RENOVATIONS - 1487 - 1491 & 1605	N/A	9	8,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ASPHALT PATHS	20	13	4,280	0	0	5,230	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
TREES/LANDSCAPING REPLACEMENT	3	1	5,500	0	0	6,730	0	0	7,070	0	0	7,440	0	0	7,820	0	8,220	0	0	8,650	0	0	
TIMBER STEPS & RAILING	20	4	7,280	0	0	0	0	0	0	0	0	0	0	0	0	10,700	0	0	0	0	0	0	
MODULAR BLOCK RETAINING WALL	35	23	5,000	0	0	0	0	0	0	0	0	0	0	0	7,230	0	0	0	0	0	0	0	
MAILBOX-STREET	15	2	20,250	0	0	0	0	0	0	26,480	0	0	0	0	0	0	0	0	0	0	0	0	
SITE ITEMS	1	1	1,500	1,770	1,800	1,830	1,870	1,900	1,930	1,960	1,990	2,030	2,060	2,100	2,130	2,170	2,210	2,240	2,280	2,320	2,360	2,400	2,440
TOTAL OTHER PROPERTY FEATURES			174,110																				
TOTAL RESERVES			\$354,150	\$4,960	\$25,882	\$17,090	\$1,870	\$5,310	\$37,739	\$31,970	\$15,290	\$13,120	\$29,605	\$5,880	\$9,950	\$219,029	\$12,910	\$18,690	\$2,280	\$37,460	\$11,010	\$6,720	\$2,440

FY (10)	Expenses		If Cash Method is Used			If Component Method is Used		
	Annual * (11)	Cumulative (12)	Interest (13)	Contr'btn (14)	Balance (15)	Interest (16)	Contr'btn (17)	Balance (18)
AOH					\$110,000			\$110,000
2019	59,700	59,700	2,850	33,600	86,750	2,850	84,860	138,010
2020	36,360	96,060	2,250	35,280	87,920	3,580	62,660	167,890
2021	61,060	157,120	2,280	37,040	66,180	4,350	58,620	169,800
2022	25,540	182,660	1,720	38,890	81,250	4,400	41,230	189,890
2023	13,580	196,240	2,110	40,830	110,610	4,920	36,390	217,620
2024	9,790	206,030	2,870	41,520	145,210	5,640	37,700	251,170
2025	20,130	226,160	3,760	42,220	171,060	6,510	44,810	282,360
2026	166,052	392,213	4,430	42,930	52,370	7,320	50,120	173,750
2027	13,960	406,173	1,360	43,660	83,430	4,500	24,830	189,120
2028	11,400	417,573	2,160	44,400	118,590	4,900	23,590	206,210
2029	4,960	422,533	3,070	45,150	161,850	5,340	26,450	233,040
2030	25,882	448,415	4,200	45,910	186,080	6,040	16,980	230,180
2031	17,090	465,505	4,820	46,690	220,500	5,970	23,530	242,590
2032	1,870	467,375	5,720	47,480	271,830	6,290	21,360	268,370
2033	5,310	472,685	7,050	48,280	321,850	6,960	27,350	297,370
2034	37,739	510,424	8,340	49,100	341,550	7,710	21,270	288,610
2035	31,970	542,394	8,850	49,930	368,360	7,480	29,090	293,210
2036	15,290	557,684	9,550	50,770	413,390	7,600	26,050	311,570
2037	13,120	570,804	10,720	51,630	462,620	8,080	28,880	335,410
2038	29,605	600,409	11,990	52,500	497,510	8,690	20,930	335,430
2039	5,880	606,289	12,900	53,390	557,920	8,690	29,190	367,430
2040	9,950	616,239	14,460	54,290	616,720	9,520	35,180	402,180
2041	219,029	835,268	15,990	55,210	468,890	10,420	50,770	244,340
2042	12,910	848,178	12,150	56,140	524,270	6,330	26,000	263,760
2043	18,690	866,868	13,590	57,090	576,260	6,840	25,950	277,860
2044	2,280	869,148	14,940	58,050	646,970	7,200	23,300	306,080
2045	37,460	906,608	16,770	59,030	685,310	7,930	30,730	307,280
2046	11,010	917,618	17,760	60,030	752,090	7,960	23,930	328,160
2047	6,720	924,338	19,490	61,040	825,900	8,510	24,150	354,100
2048	2,440	926,778	21,410	62,070	906,940	9,180	26,580	387,420
SUMMARY								
	30-Year Income =		259,560	1,464,150		201,710	1,002,480	
	30-Year Minimum Balance =				52,370			167,890
	30-Year Maximum Balance =				906,940			402,180
	50-Year Minimum Balance =				52,370			167,890
	50 Year Maximum Balance =				2,366,810			563,330



Notes:

* An annual average cost. Expenditures can change from year-to-year depending on when actual work is done.

Contribution and projections are based on the study fiscal year and will change if estimated cost, useful life, amount-on-hand, contribution and contingency to be preserved change.

Data should be considered a more accurate projection for years 1 - 5 than the out-years.

Minimum balance does not include the first year.

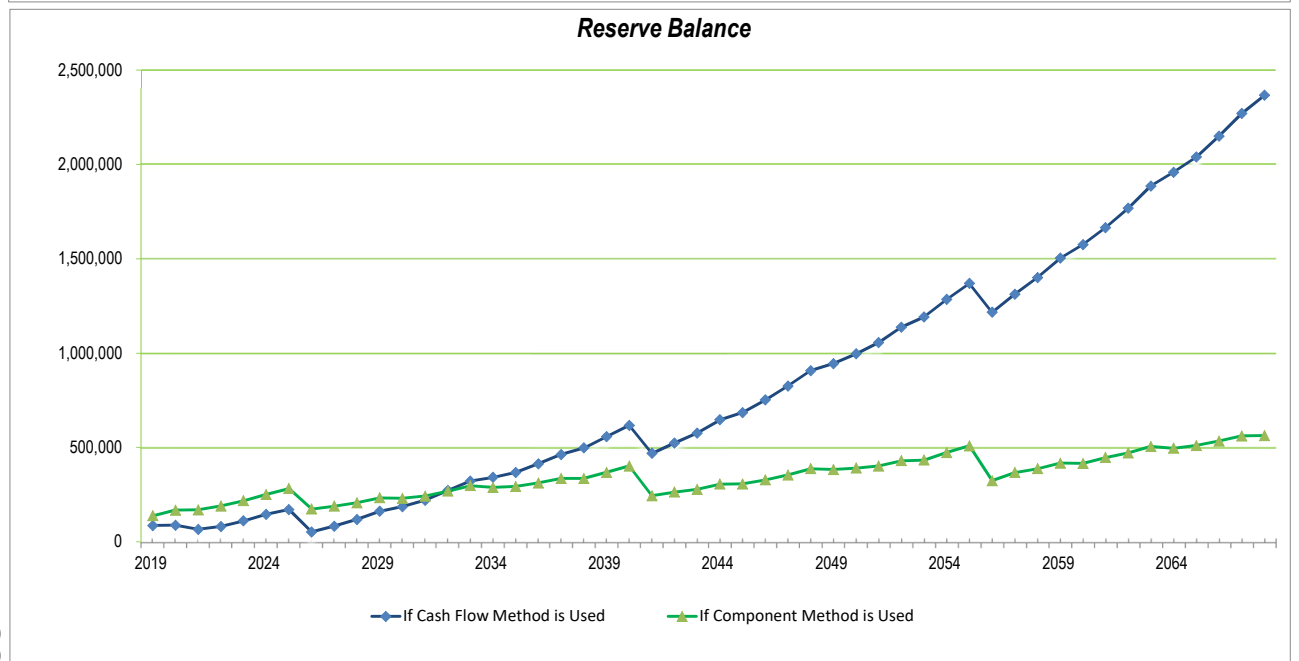
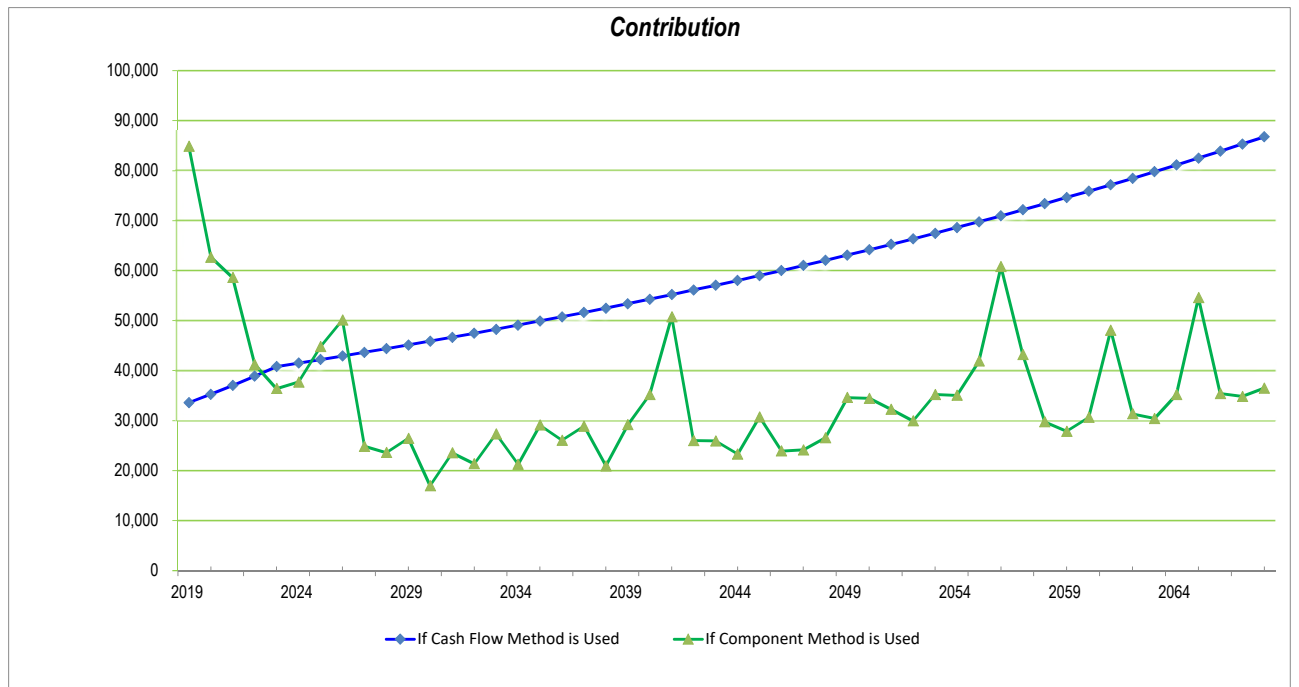
If Component method is chosen expect column (17) amounts to vary significantly from one year to the next.

FY (10)	Expenses		If Cash Flow Method is Used			If Component Method is Used		
	Annual * (11)	Cumulative (12)	Interest (13)	Contr'b'n (14)	Balance (15)	Interest (16)	Contr'b'n (17)	Balance (18)
AOH					110,000			110,000
2019	59,700	59,700	2,850	33,600	86,750	2,850	84,860	138,010
2020	36,360	96,060	2,250	35,280	87,920	3,580	62,660	167,890
2021	61,060	157,120	2,280	37,040	66,180	4,350	58,620	169,800
2022	25,540	182,660	1,720	38,890	81,250	4,400	41,230	189,890
2023	13,580	196,240	2,110	40,830	110,610	4,920	36,390	217,620
2024	9,790	206,030	2,870	41,520	145,210	5,640	37,700	251,170
2025	20,130	226,160	3,760	42,220	171,060	6,510	44,810	282,360
2026	166,052	392,213	4,430	42,930	52,370	7,320	50,120	173,750
2027	13,960	406,173	1,360	43,660	83,430	4,500	24,830	189,120
2028	11,400	417,573	2,160	44,400	118,590	4,900	23,590	206,210
2029	4,960	422,533	3,070	45,150	161,850	5,340	26,450	233,040
2030	25,882	448,415	4,200	45,910	186,080	6,040	16,980	230,180
2031	17,090	465,505	4,820	46,690	220,500	5,970	23,530	242,590
2032	1,870	467,375	5,720	47,480	271,830	6,290	21,360	268,370
2033	5,310	472,685	7,050	48,280	321,850	6,960	27,350	297,370
2034	37,739	510,424	8,340	49,100	341,550	7,710	21,270	288,610
2035	31,970	542,394	8,850	49,930	368,360	7,480	29,090	293,210
2036	15,290	557,684	9,550	50,770	413,390	7,600	26,050	311,570
2037	13,120	570,804	10,720	51,630	462,620	8,080	28,880	335,410
2038	29,605	600,409	11,990	52,500	497,510	8,690	20,930	335,430
2039	5,880	606,289	12,900	53,390	557,920	8,690	29,190	367,430
2040	9,950	616,239	14,460	54,290	616,720	9,520	35,180	402,180
2041	219,029	835,268	15,990	55,210	468,890	10,420	50,770	244,340
2042	12,910	848,178	12,150	56,140	524,270	6,330	26,000	263,760
2043	18,690	866,868	13,590	57,090	576,260	6,840	25,950	277,860
2044	2,280	869,148	14,940	58,050	646,970	7,200	23,300	306,080
2045	37,460	906,608	16,770	59,030	685,310	7,930	30,730	307,280
2046	11,010	917,618	17,760	60,030	752,090	7,960	23,930	328,160
2047	6,720	924,338	19,490	61,040	825,900	8,510	24,150	354,100
2048	2,440	926,778	21,410	62,070	906,940	9,180	26,580	387,420
2049	49,146	975,925	23,510	63,120	944,420	10,040	34,620	382,930
2050	36,560	1,012,485	24,480	64,190	996,530	9,930	34,440	390,740
2051	31,600	1,044,085	25,830	65,270	1,056,030	10,130	32,230	401,500
2052	12,170	1,056,255	27,370	66,370	1,137,600	10,410	29,920	429,660
2053	42,830	1,099,084	29,490	67,490	1,191,750	11,140	35,220	433,190
2054	6,870	1,105,954	30,890	68,630	1,284,400	11,230	35,050	472,600
2055	17,730	1,123,684	33,290	69,790	1,369,750	12,250	41,910	509,030
2056	259,635	1,383,320	35,500	70,970	1,216,580	13,190	60,800	323,380
2057	7,940	1,391,260	31,530	72,170	1,312,340	8,380	43,230	367,050
2058	18,830	1,410,090	34,020	73,390	1,400,920	9,510	29,750	387,480
2059	8,210	1,418,300	36,310	74,630	1,503,650	10,040	27,840	417,150
2060	42,800	1,461,099	38,970	75,890	1,575,710	10,810	30,640	415,800
2061	27,960	1,489,059	40,840	77,170	1,665,760	10,780	48,070	446,690
2062	18,050	1,507,109	43,180	78,470	1,769,360	11,580	31,350	471,570
2063	8,780	1,515,889	45,860	79,800	1,886,240	12,220	30,430	505,440
2064	57,459	1,573,348	48,890	81,150	1,958,820	13,100	35,170	496,250
2065	52,850	1,626,198	50,770	82,520	2,039,260	12,860	54,590	510,850
2066	25,280	1,651,478	52,860	83,910	2,150,750	13,240	35,410	534,220
2067	21,680	1,673,158	55,750	85,330	2,270,150	13,850	34,840	561,230
2068	48,946	1,722,104	58,840	86,770	2,366,810	14,550	36,500	563,330

SUMMARY

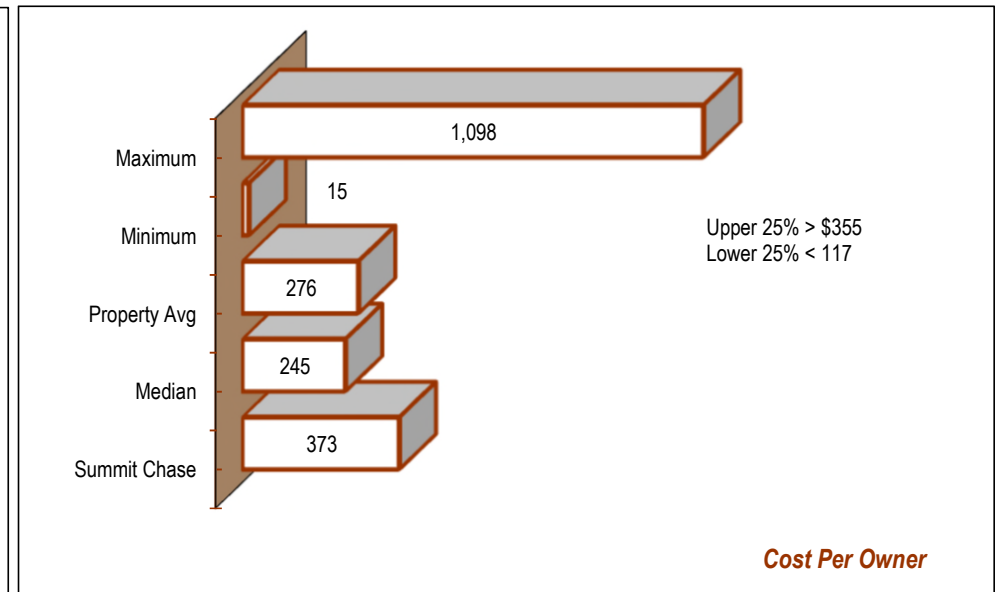
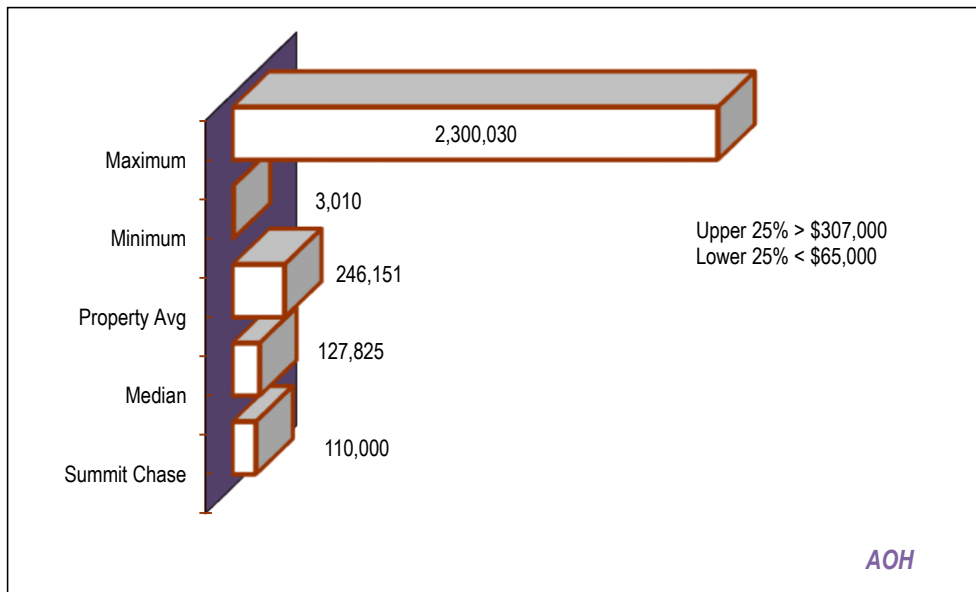
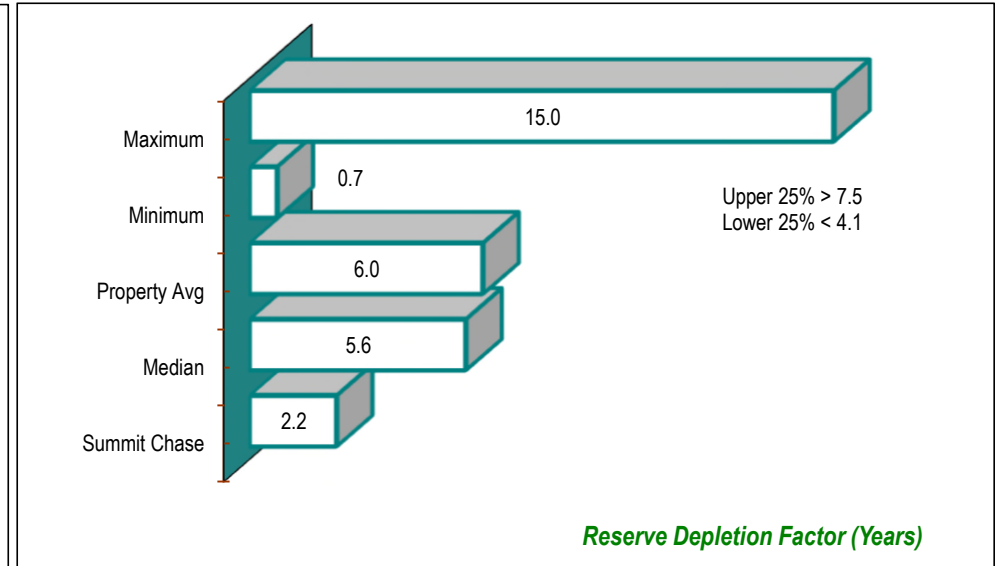
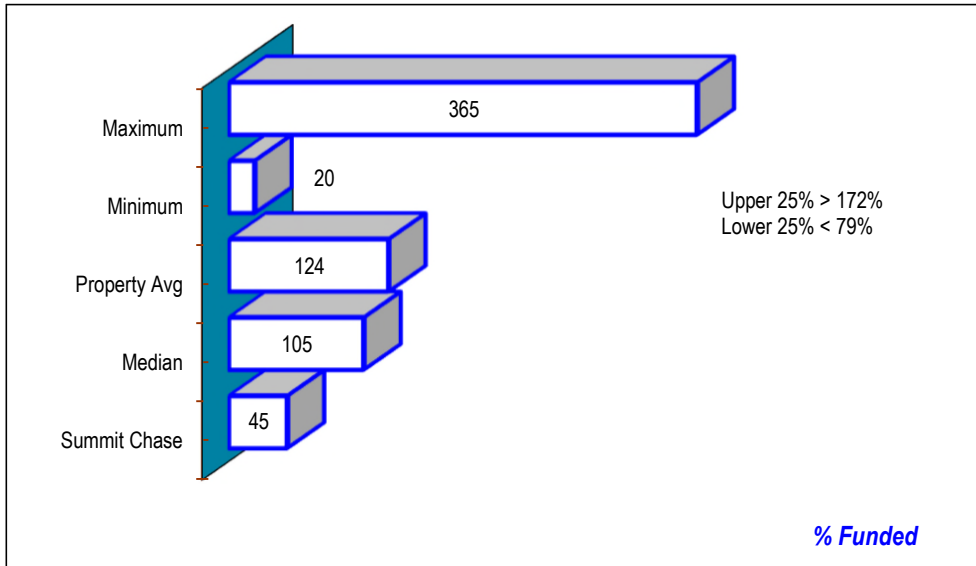
50-Year Minimum Balance =	52,370	167,890
50 Year Maximum Balance =	2,366,810	563,330

Notes:
Same as 30-Year Comparison



COMPARISON TO OTHER PROPERTIES

Sample Size = 100 HOA's/POA's



Legend:
 This comparison only compares the first study year to other properties.
 % Funded -- Used-up life divided by Useful Life times Current Cost.
 Reserve Depletion Factor -- Number of years the amount-on-hand will fund if no more is contributed to the reserves.
 AOH - Reserve funds available at start of fiscal year.
 Cost Per Owner - The average cost per owner to meet the reserve requirement compared to other properties.

PAVEMENTS/CONCRETE

PAVEMENTS

Wearing surface repairs and seal coating done 2017. The following recommendations should be implemented to extend pavement useful life. 1) Have a preventive maintenance program - preventive maintenance consist of sealing open cracks (equal to or greater than 1/8"), repair wearing surface/base/sub-base areas that have failed (distinguished by "alligator" or "chicken wire" cracking), apply a seal coat to the entire surface and repaint traffic markings. An additional benefit of sealcoating and traffic markings is the pavement will look uniform and that enhances property appearance. Funding for this work is identified as "Preventive Maintenance" and/or "Immediate Repairs for Life Extension." Although we allow for preventive maintenance to be done every four years, if cracks open or asphalt failures occur sooner they should be repaired as needed. Contingency built into the funding plan should be more than adequate to fund this work, 2) Be prepared to repave all asphalt around the time period shown in the table. When repaving there are two possible courses of action, a) mill only near gutter pans to preserve proper drainage and place back 1-1/2" (or more) of compacted asphalt throughout, and b) total milling of all asphalt and repave to thickness removed. Notes: a) Asphalt is an oil based product - price varies with the cost of a barrel of oil, and b) When pavements are shared with adjacent properties quantity shown is one-half the shared amount. c) Although we allow for 100% of the asphalt to be repaved our experience supports a smaller percentage of the

IMMEDIATE REPAIRS FOR LIFE EXTENSION

Repairs to wearing surface and/or base prior to preventive maintenance work being done. Repairs minimize deterioration and extend time between overlays.

CONCRETE

Repairs as needed to keep components in good repair. Work should be done concurrently with pavement work; pricing should be better because contractor is on site.

RECREATION

PLASTIC EQUIPMENT

Because tot-lot is placed within gas pipe line, assumption is only plastic equipment will be used.

MULCH REPLENISHMENT

Keep running surfaces filled with "loose fill materials" to absorb falls or jumps. Children falling on non-absorbing materials cause 70% of tot lot injuries

TIMBER BORDER

We recommend installing new type polyethylene manufacture border when replacement is needed.

3-RAIL WOOD FENCE

Recently replaced. As needed spot repairs could extend useful life of this fence beyond our useful life estimate.

OTHER PROPERTY FEATURES

ENTRANCE SIGNAGE

Provides for name restoration, cleaning, repairs and other work needed to keep entrance feature in good condition.

DRAINAGE IMPROVEMENTS

Entries support associations master plan to improve drainage throughout the property. Cost are based on contractor estimates; actual will vary with work done.

MODULAR BLOCK RETAINING WALL

Holding up well.

MAILBOX-STREET

We assume when boxes are replaced wood stands will also be replaced.

SITE ITEMS

Repairs to entrance features, signs, sign posts, stone faced retaining walls and other miscellaneous items not reserved for elsewhere.

EXCLUSIONS

PRESSURE WASHING/PAINTING/STAINING

Not included in the reserves. Maintenance work, properly funded from the operating account.

CATASTROPHES

Are not predictable events - no reserve allowance. If one occurs funding from other sources may be needed if the contingency built into the reserves is insufficient to cover expenses.