

CAPITAL RESERVE STUDY

FOR THE

Tanyard Springs Homeowners Association

Glen Burnie, Maryland



Management Company: Community Management
Contact Name: Tamru Demsash

Project Number: 19-0218
Date: August 26, 2019

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Executive Summary

The Tanyard Springs Homeowners Association is a 1,424 unit community located in Glen Burnie, Maryland. The complex consists of single family and townhouse units. Amenities include a clubhouse and pool facility, with a fitness room, tennis courts and tot lots.

Level of Service	Level 3: Update without Visit
Fiscal Year of Study	2019

Current Status of Reserve Fund (Component Method)

Current Balance	\$1,323,764
Fully Funded Balance	\$1,927,981
Percent Funded	68.66%

Reserve Budget Recommendations

	Prior Budget Year Contribution	Component Method *	5% Threshold *	10% Threshold *
Contribution/Year	\$156,463	\$310,924	\$111,751	\$126,439
Contribution/Unit	\$110	\$218	\$78	\$89
Contribution/Unit/Month	\$9	\$18	\$7	\$7

* Please note that this is the contribution for the period of September 2019 through August 2020.

Reserve Study Disclosures

General - Becht Engineering BT is not aware of any involvement with this Association, which would lead to an actual or perceived conflict of interest.

Physical Analysis - The inspections performed to determine the current physical condition of the common elements were visual in nature; no destructive testing or invasive inspections were performed. Quantities were taken from a combination of field counts/measurements and plan take-offs.

Personnel Credentials - Preparation of this Reserve Study was performed by a CAI designated Reserve Specialist and licensed Building Inspector.

Completeness - This Reserve Study assumes that proper preventative and corrective maintenance has been and will continue to be performed on the common elements. Failure to properly maintain the common elements may lead to premature failure. It should be noted that higher rates of inflation, lower earned interest rates or prematurely failing components can result in a negative closing cash balance. In addition, it is important to note that the capital fund contributions each year are assumed to rise at the assumed rate of inflation. Failure to raise the annual contributions with inflation will reduce the closing balance and may lead to a future shortfall.

Reliance on Client Data - This Reserve Study was prepared based on certain information provided by an official representative of the Association. This information includes the current asset balance of the Reserve Fund and the ages of the common elements and dates of most recent replacements.

Scope - This Reserve Study is a reflection of the information provided to us and assembled for the Association's use for budgeting purposes, not for the purpose of performing an audit, quality/forensic analysis or background checks of historical records. Interpretation of contradictions that may exist within the governing document's definition of common elements is not within the scope of this Study.

Reserve Balance - The actual and projected Reserve Fund Balance is based upon information provided by the Association and was not audited.

Component Quantities - Where this Reserve Study is an update of a previously prepared Study, the Association is considered to have deemed previously developed component listings and quantities as accurate and reliable.

Estimated Replacement Costs - Replacement costs are to be considered estimated projections of the cost to replace common elements in kind. These cost estimates are to be considered preliminary until such time as a project specific design or scope of work is developed. These costs can be affected by many variables including inflation, project scope and hidden damage conditions.

Reserve Projects - While the information provided in this Study is to be considered reliable, on-site inspections are not to be considered a project audit or quality inspection.

Introduction

The purpose of a Capital Reserve Study is to estimate the amount of money that must be funded annually to replace those common element components that will require replacement before the end of the effective life of the project.

Mortgage lenders recognize the conditions of inadequate reserves. Reserves are important in preserving the qualities of a particular complex or building and therefore can affect property values. Consequently, capital reserves are directly related to the security and risk of a lender's investment and the marketability of the property.

The Capital Reserve Study develops a recommended basic annual contribution based upon current replacement costs. Inflation may increase future costs unpredictably, and the accumulation of interest on the reserve fund deposits increases available funds. Accurate projection of these factors is not possible. However, the effects of inflation and interest are shown via cash flow projections using assumed inflation and interest rates. Accurate reserve funding requires regular updates. The Community Associations Institute recommends yearly reviews and a formal study every three years.

Capital Reserve Methodology

In preparing this study, when provided, we reviewed the master deed and offering statement to identify the common element components. The Association owns these building and site components. Only components with estimated remaining lives of 30 years or less have been included in the capital reserve fund. Components with estimated remaining lives that are greater than 30 years, such as building structures, piping and electrical wiring are usually replaced during a major renovation and financed at that time. Including these components in the reserve fund would result in an unrealistically high-recommended annual contribution to the capital reserve.

Quantities of the components to be included in the reserve fund were then determined by field measurements, as well as a review of building and site plans, if available.

Estimates of the costs to replace each component were derived from published industry standards, such as the R.S. Means Company cost-estimating guides and from our own experience in designing and supervising construction of similar projects. These cost estimates are to be considered preliminary until such time as a project specific design or scope of work is developed.

Finally, estimated remaining lives were determined for each of the included components based on the reported or evident present age, available industry data related to typical useful lives and the condition of the component, as determined by our physical inspection.

The capital reserve fund is not intended to cover annual maintenance. If maintenance items are included in the Capital Reserve Study, the tax status of the reserve fund can be jeopardized. However, expected lives are based on the assumption that proper annual maintenance is being performed. Therefore, this annual maintenance should be included in the Association's budget and maintenance fee. Without proper maintenance, accelerated deterioration can be expected, with shortened lives. Please note, it is only possible to reserve for future expenditures and that a current need must be financed separately by borrowing or assessments.

This Capital Reserve Study is developed as an aid in the proper financial planning of the Association. As such, the common element components included are evaluated for their physical condition and only for the purpose of estimating their remaining lives. Identification of possible deficient conditions is beyond the intent and scope of the Capital Reserve Study.

Capital Reserve Calculation

We have provided two Capital Reserve calculation methods as described below.

Component Method

The first method provided in this reserve study is what is known as the Component Method. This is the most conservative approach to calculating the reserve requirement. The Component Method analyzes each component individually and assumes that the money collected for each item will only be used to replace that item. Our program uses assumed rates of interest and inflation in the calculation of the annual contribution and fully funded balance. We compare the actual balance in the Association's Reserve Fund with the calculated fully funded balance and determine if a surplus or deficit condition exists. If a deficit condition exists, an additional contribution is calculated for each component to offset the deficit.

Threshold Funding Method

The second calculation method is known as the Threshold Funding Method. This method pools all the components and assumes that the money contributed to the fund is available for replacement of any item. Looking out over the next 30 years, the annual contribution is determined by lowering the contribution until the closing balance for any given year reaches a predetermined threshold. We typically provide two Threshold Method scenarios. These thresholds are based on a percentage of the current replacement cost of all the components in the Reserve Study. Basing the threshold on a percentage of the replacement cost of all components keeps the minimum proportional to the needs of a specific community.

This minimizes the annual contribution while maintaining a minimum closing balance. Determining the optimum minimum closing balance is a subjective task. Certainly, the lower the minimum acceptable balance is the greater the risk that the fund will experience a deficit. It should be noted that this method only considers Reserve Account balances over the next 30 years. Large capital expenditures just beyond the 30-year window will not be considered using this method until in the future they fall within the 30-year window.

Capital Reserve Recommendations

Tanyard Springs Homeowners Association has a total of 48 components in the reserve fund with a current Replacement Cost of \$4,879,495. Tanyard Springs Homeowners Association presently has a total of \$1,323,764 in the reserve fund. Using the Component Method, we have determined that the Basic Annual Contribution to the reserve fund should be \$252,851. The fully funded balance required is \$1,927,981. This leaves deficit of \$604,217 in the reserve fund. The deficit will be offset on an annual basis, for each reserve component, based on the estimated remaining lives. The total of the next budget year contribution to the Contribution Adjustment is \$58,073. This results in a Total Contribution to the reserve fund for the next budget year of \$310,924. Please see the Executive Summary page for our Threshold Method recommendations.

Based on your evaluation of the preferred calculation method, we suggest that you plan your annual contributions over the next few years according to the appropriate cash flow schedule. Each year for the next three years, you may choose to review these assumptions. At no later than three years, we suggest that you contact us for an update based on a proper engineering review of the facility and replacement costs.

It should be noted that higher rates of inflation, lower earned interest rates or prematurely failing components can result in a negative closing cash balance. In addition, it is important to note that the capital fund contributions each year are assumed to rise at the assumed rate of inflation. Failure to raise the annual contributions with inflation will reduce the closing balance. We recommend that the Association review this Capital Reserve Study with their Certified Public Accountant to be utilized in the preparation of their annual budget.



James H. Stegemerten RS
Senior Project Manager
CAI Reserve Specialist #145



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Architectural

Description: Carpeting, Clubhouse

Quantity: 105 SY	Cost Per Unit: \$42.00	Replacement Cost: \$4,410
	Typical Life: 10	Est Rem Life: 1

Comment:
 The estimated cost is for the removal and replacement of the carpeting located in the clubhouse.



Description: Doors, Exterior, Clubhouse

Quantity: 1 LS	Cost Per Unit: \$4,800.00	Replacement Cost: \$4,800
	Typical Life: 25	Est Rem Life: 16

Comment:
 The estimated cost is for the replacement of the exterior doors on the clubhouse building.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Architectural

Description: Gutters And Leaders, Clubhouse

Quantity: 510 LF	Cost Per Unit: \$7.50	Replacement Cost: \$3,825
	Typical Life: 25	Est Rem Life: 16

Comment:
 The estimated cost is for the replacement of the aluminum gutter system on the clubhouse.



Description: Roof Shingles, Clubhouse

Quantity: 10,086 SF	Cost Per Unit: \$3.75	Replacement Cost: \$37,823
	Typical Life: 20	Est Rem Life: 11

Comment:
 The estimated cost is for the replacement of the asphalt shingles on the clubhouse.



Component Narrative

Project Name:	Tanyard Springs Homeowners Association		Interest Rate:	1.00%
Project Location:	Glen Burnie, Maryland		Inflation Rate:	3.00%
Project Number:	19-0218			
Date of Study:	August 2019			
Month Contributions Commence:	September 2019			

Electrical

Description:	Interior Lighting Allowance				
Quantity:	1 LS	Cost Per Unit:	\$28,000.00	Replacement Cost:	\$28,000
		Typical Life:	25	Est Rem Life:	16

Comment:
This lighting budget is grouped as an allowance due to the number and type of fixtures.

Description:	Security/Entry System				
Quantity:	1 LS	Cost Per Unit:	\$4,500.00	Replacement Cost:	\$4,500
		Typical Life:	20	Est Rem Life:	11

Comment:
The estimated cost is for the replacement of the entry security system in the clubhouse.

Component Narrative

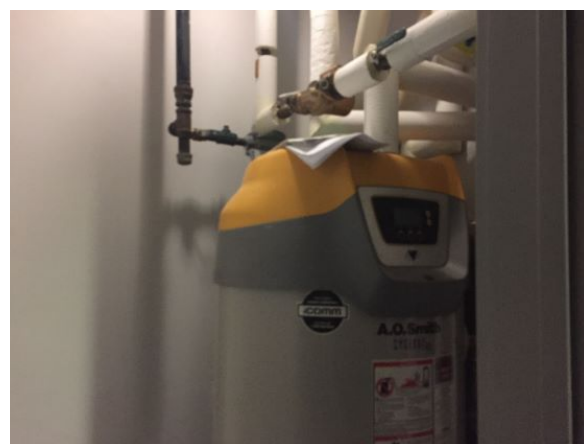
Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Mechanical

Description:	Domestic Water Heater, 100gal		
Quantity:	1 EA	Cost Per Unit:	\$3,400.00
		Typical Life:	15
		Replacement Cost:	\$3,400
		Est Rem Life:	6

Comment:
 The estimated cost is for the replacement of the hot water heater located in a closet near the bathroom area.



Description:	Energy Recovery Unit		
Quantity:	1 EA	Cost Per Unit:	\$6,500.00
		Typical Life:	15
		Replacement Cost:	\$6,500
		Est Rem Life:	6

Comment:
 The estimated cost is for the replacement of the energy recovery units located in the ceiling area near the bathrooms.

Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Mechanical

Description:	HVAC Split Systems, Clubhouse		
Quantity:	1 LS	Cost Per Unit:	\$32,500.00
		Typical Life:	15
		Replacement Cost:	\$32,500
		Est Rem Life:	6

Comment:
 The estimated cost is for the replacement of the five HVAC split systems.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Asphalt Path

Quantity: 1,703 SY	Cost Per Unit: \$25.00	Replacement Cost: \$42,575
	Typical Life: 20	Est Rem Life: 17

Comment:

The estimated cost is for the overlay of the asphalt path, and includes funding for approximately 10% of full depth repairs. The areas included were reported to be recently installed and include the areas to the Oak Pointe area and around the play field off Heritage Crossing.



Description: Asphalt Path

Quantity: 1,817 SY	Cost Per Unit: \$25.00	Replacement Cost: \$45,425
	Typical Life: 20	Est Rem Life: 11

Comment:

The estimated cost is for the overlay of the asphalt path, and includes funding for approximately 10% of full depth repairs.



Component Narrative

Project Name:	Tanyard Springs Homeowners Association	Interest Rate:	1.00%
Project Location:	Glen Burnie, Maryland	Inflation Rate:	3.00%
Project Number:	19-0218		
Date of Study:	August 2019		
Month Contributions Commence:	September 2019		

Site

Description: Asphalt Paving, Section B off Ellsworth Terrace			
Quantity:	8,452 SY	Cost Per Unit:	\$20.00
		Typical Life:	20
		Replacement Cost:	\$169,040
		Est Rem Life:	19

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.

Description: Asphalt Paving, Areas of Section D an Oak Pointe			
Quantity:	22,313 SY	Cost Per Unit:	\$22.00
		Typical Life:	20
		Replacement Cost:	\$490,886
		Est Rem Life:	12

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.

Description: Asphalt Paving, Clubhouse Parking			
Quantity:	2,289 SY	Cost Per Unit:	\$20.00
		Typical Life:	20
		Replacement Cost:	\$45,780
		Est Rem Life:	7

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.



Component Narrative

Project Name:	Tanyard Springs Homeowners Association		Interest Rate:	1.00%
Project Location:	Glen Burnie, Maryland		Inflation Rate:	3.00%
Project Number:	19-0218			
Date of Study:	August 2019			
Month Contributions Commence:	September 2019			

Site

Description: Asphalt Paving, Section B off Stonebriar Drive				
Quantity:	26,664 SY	Cost Per Unit:	\$20.00	Replacement Cost: \$533,280
		Typical Life:	20	Est Rem Life: 11

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.

Description: Asphalt Paving, Sections A off Briarwood Lane				
Quantity:	10,309 SY	Cost Per Unit:	\$20.00	Replacement Cost: \$206,180
		Typical Life:	20	Est Rem Life: 11

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.

Description: Asphalt Paving, Sections C off Mockingbird Circle				
Quantity:	16,910 SY	Cost Per Unit:	\$20.00	Replacement Cost: \$338,200
		Typical Life:	20	Est Rem Life: 12

Comment:
 The estimated cost is for the full milling and overlay of 2 inches of the top wearing course. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.

Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description:	Asphalt Seal Coating, Clubhouse		
Quantity:	2,289 SY	Cost Per Unit:	\$3.25
		Typical Life:	10
		Replacement Cost:	\$7,439
		Est Rem Life:	1

Comment:
 The parking area was showing signs of age with cracking observed. Asphalt paving requires regular maintenance, including crack filling and pot hole repair to prevent accelerated damage.



Description:	Concrete Curb and Gutter Allowance		
Quantity:	26,901 LF	Cost Per Unit:	\$28.00
		Typical Life:	40
		Replacement Cost:	\$753,228
		Est Rem Life:	31

Comment:
 The estimated cost is for the removal and replacement of the concrete curbing. Additional areas, including Section D and Oak Pointe were added. Concrete curbs can have an extended useful life, and are budgeted for replacement in 35-40 years. However, area replacements are anticipated for various reasons and can be made from the budgeted funds for these replacements as required. Future Reserve updates should reflect any changes.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Concrete Pool Apron

Quantity: 11,985 SF **Cost Per Unit:** \$8.00
 Typical Life: 30

Replacement Cost: \$95,880
Est Rem Life: 21



Description: Concrete Walks

Quantity: 152,800 SF **Cost Per Unit:** \$7.50
 Typical Life: 40

Replacement Cost: \$1,146,000
Est Rem Life: 31

Comment:

The estimated cost is for the replacement of the concrete walks located throughout the neighborhoods, Community center area, and includes the new area added in 2017 (Section D and Oak Pointe). Concrete walks can have an extended useful life, and are budgeted for replacement in 35-40 years. However, area replacements are anticipated for various reasons and can be made from the budgeted funds for these replacements as required. Future Reserve updates should reflect any changes.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Courts Rehabilitation

Quantity: 16,584 SF	Cost Per Unit: \$1.53	Replacement Cost: \$25,374
	Typical Life: 15	Est Rem Life: 14

Comment:
 The estimated cost is for the resurfacing of the tennis and basket ball courts at the clubhouse facility.

Description: Fence, Chain Link, Dog Parks

Quantity: 1,077 LF	Cost Per Unit: \$20.00	Replacement Cost: \$21,540
	Typical Life: 20	Est Rem Life: 11

Comment:
 The estimated cost is for the removal and replacement of the fencing located at both dog park areas.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Fence, Split Rail, Play Area.

Quantity: 362 LF	Cost Per Unit: \$18.00	Replacement Cost: \$6,516
	Typical Life: 20	Est Rem Life: 17

Comment:
 The estimated cost is for the replacement of the wood split rail fencing located around the new play field area off Heritage Crossing.



Description: Fencing and Arbors, Community Garden Area

Quantity: 1 LS	Cost Per Unit: \$8,500.00	Replacement Cost: \$8,500
	Typical Life: 20	Est Rem Life: 14

Comment:
 The estimated cost is for the removal and replacement of the split rail fencing, including the arbors at the community garden area.



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Fencing, Aluminum, Graveyard					
Quantity: 889 LF	Cost Per Unit: \$33.50	Replacement Cost: \$29,782			
	Typical Life: 25	Est Rem Life: 16			
Description: Fencing, Aluminum, Pool Area					
Quantity: 492 LF	Cost Per Unit: \$33.50	Replacement Cost: \$16,482			
	Typical Life: 25	Est Rem Life: 16			
Description: Fencing, PVC At Momuments					
Quantity: 162 LF	Cost Per Unit: \$20.00	Replacement Cost: \$3,240			
	Typical Life: 20	Est Rem Life: 18			



Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description: Fencing, PVC At Momuments

Quantity: 130 LF	Cost Per Unit: \$20.00	Replacement Cost: \$2,600
	Typical Life: 20	Est Rem Life: 11



Description: Fencing, Split Rail, Conservation Areas

Quantity: 6,251 LF	Cost Per Unit: \$18.00	Replacement Cost: \$112,518
	Typical Life: 20	Est Rem Life: 14

Comment:

The estimated cost is for the replacement of the wood split rail fencing located around the conservation/SWM, and the community garden areas.



Component Narrative

Project Name:	Tanyard Springs Homeowners Association		Interest Rate:	1.00%
Project Location:	Glen Burnie, Maryland		Inflation Rate:	3.00%
Project Number:	19-0218			
Date of Study:	August 2019			
Month Contributions Commence:	September 2019			

Site

Description:	Fencing, Tennis & All Purpose Court			
Quantity:	530 LF	Cost Per Unit:	\$27.00	Replacement Cost: \$14,310
		Typical Life:	25	Est Rem Life: 16

Comment:
The estimated cost is for the chain link fencing located around the tennis court and all purpose courts at the clubhouse.

Description:	Playground Equipment, 4 Locations			
Quantity:	1 LS	Cost Per Unit:	\$136,000.00	Replacement Cost: \$136,000
		Typical Life:	25	Est Rem Life: 19

Comment:
The estimated cost is for the replacement of the playground located at the clubhouse, sections C and D, and at the play field area.



Description:	Pool Chemical Feed			
Quantity:	1 EA	Cost Per Unit:	\$550.00	Replacement Cost: \$550
		Typical Life:	10	Est Rem Life: 1

Description:	Pool Filtration System, Main & Wade			
Quantity:	1 LS	Cost Per Unit:	\$6,500.00	Replacement Cost: \$6,500
		Typical Life:	12	Est Rem Life: 3

Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site

Description:	Pool Pumps, 10hp & 3/4hp		
Quantity:	1 LS	Cost Per Unit:	\$11,000.00
		Typical Life:	15
		Replacement Cost:	\$11,000
		Est Rem Life:	6

Description:	Pool Tile Coping, Main & Wade		
Quantity:	520 LF	Cost Per Unit:	\$25.00
		Typical Life:	20
		Replacement Cost:	\$13,000
		Est Rem Life:	11

Description:	Pool White Coating		
Quantity:	6,436 SF	Cost Per Unit:	\$6.00
		Typical Life:	12
		Replacement Cost:	\$38,616
		Est Rem Life:	9

Comment:
 The estimated cost is to refinish the pool surface. This was reported by Management to have had extensive repairs recently performed.



Description:	Railing, Aluminum At Retaining Wall		
Quantity:	576 LF	Cost Per Unit:	\$67.00
		Typical Life:	25
		Replacement Cost:	\$38,592
		Est Rem Life:	16

Description:	Retaining Wall, Wood. Archibald Dr.		
Quantity:	291 SF	Cost Per Unit:	\$30.00
		Typical Life:	20
		Replacement Cost:	\$8,730
		Est Rem Life:	11

Component Narrative

Project Name:	Tanyard Springs Homeowners Association		
Project Location:	Glen Burnie, Maryland	Interest Rate:	1.00%
Project Number:	19-0218	Inflation Rate:	3.00%
Date of Study:	August 2019		
Month Contributions Commence:	September 2019		

Site

Description:	Walking Bridge Decking, 2x		
Quantity:	3,200 SF	Cost Per Unit:	\$12.00
		Replacement Cost:	\$38,400
		Typical Life:	25
		Est Rem Life:	16

Component Narrative

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
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Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Miscellaneous

Description: Basketball Backboards

Quantity: 1 LS	Cost Per Unit: \$3,700.00	Replacement Cost: \$3,700
	Typical Life: 20	Est Rem Life: 9

Comment:

The estimated cost is for replacement of the two basketball backboards and posts. One is located at the clubhouse and the other in the playfield area off Heritage Crossing.



Description: Basketball Court Matting

Quantity: 1,500 SF	Cost Per Unit: \$6.25	Replacement Cost: \$9,375
	Typical Life: 12	Est Rem Life: 10



Component Narrative

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Date of Study: August 2019
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Interest Rate: 1.00%
Inflation Rate: 3.00%

Miscellaneous

Description: Clubhouse Furniture Allowance

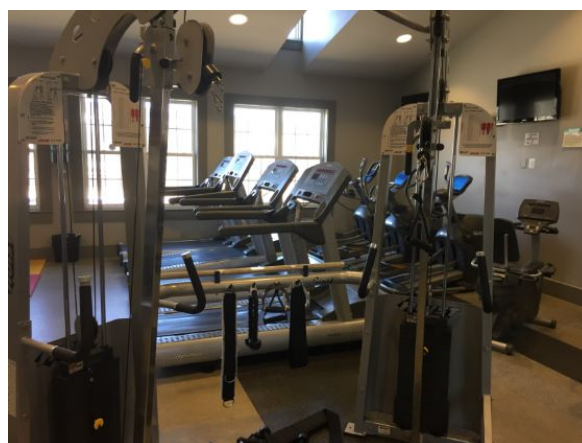
Quantity: 1 LS	Cost Per Unit: \$245,000.00	Replacement Cost: \$245,000
	Typical Life: 20	Est Rem Life: 11

Comment:
 The estimated cost is for the replacement of the furniture in the clubhouse. This cost was provided to us from Management.



Description: Exercise Equipment

Quantity: 1 LS	Cost Per Unit: \$65,000.00	Replacement Cost: \$65,000
	Typical Life: 20	Est Rem Life: 11



Component Narrative

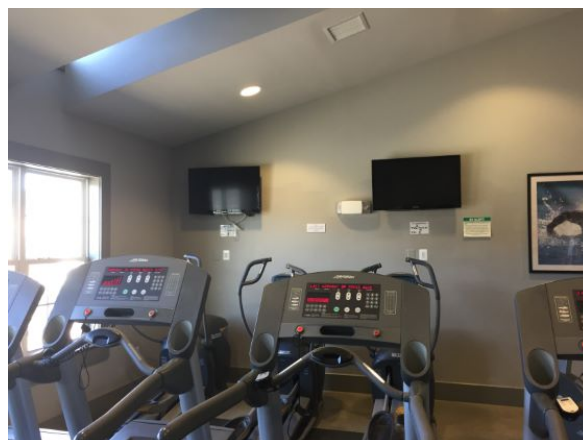
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Interest Rate: 1.00%
Inflation Rate: 3.00%

Miscellaneous

Description:	Irrigation System Clubhouse		
Quantity:	1 LS	Cost Per Unit:	\$3,500.00
		Typical Life:	10
		Replacement Cost:	\$3,500
		Est Rem Life:	1

Description:	Media Systems Clubhouse		
Quantity:	1 LS	Cost Per Unit:	\$8,000.00
		Typical Life:	10
		Replacement Cost:	\$8,000
		Est Rem Life:	1



Description:	Signage Allowance Community		
Quantity:	1 LS	Cost Per Unit:	\$8,500.00
		Typical Life:	20
		Replacement Cost:	\$8,500
		Est Rem Life:	11

Comment:
 The estimated cost is for the periodic repairs to the community signs and monuments located at the dog park, the clubhouse, the main community entry, the two new areas located at Section D and Oak Pointe, the community garden, and dog park areas.

Component Narrative

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Miscellaneous

Description:	Trash Enclosure		
Quantity:	1 LS	Cost Per Unit:	\$4,500.00
		Typical Life:	15
		Replacement Cost:	\$4,500
		Est Rem Life:	6



Capital Reserve Calculations



Reserve Summary

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Architectural	Replacement Cost	RESERVES			CONTRIBUTION		
		Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Architectural	\$50,858	\$19,117	\$27,843	(\$8,726)	\$3,355	\$2,052	\$5,408
Electrical	\$32,500	\$10,143	\$14,772	(\$4,629)	\$1,743	\$378	\$2,121
Mechanical	\$42,400	\$19,294	\$28,100	(\$8,806)	\$3,447	\$1,621	\$5,068
Site	\$4,406,162	\$1,147,549	\$1,671,334	(\$523,786)	\$221,285	\$44,693	\$265,978
Miscellaneous	\$347,575	\$127,662	\$185,931	(\$58,270)	\$23,021	\$9,328	\$32,349
TOTALS	\$4,879,495	\$1,323,764	\$1,927,981	(\$604,217)	\$252,851	\$58,073	\$310,924



Component Schedule

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Description	Replacement Cost	Est. Rem. Life	Typical Life	Basic Annual Contrib.	Percent Total	Present Fund	Required Fund	Surplus (Deficit)	Contrib. Adjustment
Architectural									
Carpeting, Clubhouse	\$4,410	1	10	\$512	0.21%	\$2,778	\$4,045	(\$1,268)	\$1,292
Doors, Exterior, Clubhouse	\$4,800	16	25	\$250	0.11%	\$1,459	\$2,125	(\$666)	\$51
Gutters And Leaders, Clubhouse	\$3,825	16	25	\$199	0.09%	\$1,163	\$1,693	(\$531)	\$41
Roof Shingles, Clubhouse	\$37,823	11	20	\$2,394	1.04%	\$13,718	\$19,980	(\$6,262)	\$668
Electrical									
Interior Lighting Allowance	\$28,000	16	25	\$1,458	0.64%	\$8,510	\$12,395	(\$3,884)	\$299
Security/Entry System	\$4,500	11	20	\$285	0.12%	\$1,632	\$2,377	(\$745)	\$80
Mechanical									
Domestic Water Heater, 100gal	\$3,400	6	15	\$276	0.12%	\$1,547	\$2,253	(\$706)	\$130
Energy Recovery Unit	\$6,500	6	15	\$528	0.22%	\$2,958	\$4,308	(\$1,350)	\$249
HVAC Split Systems, Clubhouse	\$32,500	6	15	\$2,642	1.12%	\$14,789	\$21,539	(\$6,750)	\$1,243
Site									
Asphalt Path	\$42,575	17	20	\$2,695	0.41%	\$5,434	\$7,915	(\$2,480)	\$181
Asphalt Path	\$45,425	11	20	\$2,875	1.24%	\$16,476	\$23,996	(\$7,520)	\$803
Asphalt Paving, Section B off Ellsworth Terrace	\$169,040	19	20	\$10,699	0.55%	\$7,297	\$10,628	(\$3,331)	\$220
Asphalt Paving, Areas of Section D an Oak Pointe	\$490,886	12	20	\$31,070	12.08%	\$159,904	\$232,890	(\$72,986)	\$7,214
Asphalt Paving, Clubhouse Parking	\$45,780	7	20	\$2,898	1.73%	\$22,875	\$33,317	(\$10,441)	\$1,670
Asphalt Paving, Section B off Stonebriar Drive	\$533,280	11	20	\$33,753	14.61%	\$193,423	\$281,708	(\$88,286)	\$9,422
Asphalt Paving, Sections A off Briarwood Lane	\$206,180	11	20	\$13,050	5.65%	\$74,782	\$108,916	(\$34,134)	\$3,643
Asphalt Paving, Sections C off Mockingbird Circle	\$338,200	12	20	\$21,406	8.32%	\$110,167	\$160,451	(\$50,284)	\$4,970
Asphalt Seal Coating, Clubhouse	\$7,439	1	10	\$864	0.35%	\$4,685	\$6,824	(\$2,139)	\$2,180



Component Schedule

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Description	Replacement Cost	Est. Rem. Life	Typical Life	Basic Annual Contrib.	Percent Total	Present Fund	Required Fund	Surplus (Deficit)	Contrib. Adjustment
Concrete Curb and Gutter Allowance	\$753,228	31	40	\$25,706	11.73%	\$155,298	\$226,181	(\$70,884)	\$3,052
Concrete Pool Apron	\$95,880	21	30	\$4,250	1.90%	\$25,159	\$36,642	(\$11,483)	\$697
Concrete Walks	\$1,146,000	31	40	\$39,110	17.85%	\$236,278	\$344,124	(\$107,846)	\$4,643
Courts Rehabilitation	\$25,374	14	15	\$2,063	0.11%	\$1,404	\$2,045	(\$641)	\$55
Fence, Chain Link, Dog Parks	\$21,540	11	20	\$1,363	0.59%	\$7,813	\$11,379	(\$3,566)	\$381
Fence, Split Rail, Play Area.	\$6,516	17	20	\$412	0.06%	\$832	\$1,211	(\$380)	\$28
Fencing and Arbors, Community Garden Area	\$8,500	14	20	\$538	0.16%	\$2,117	\$3,083	(\$966)	\$83
Fencing, Aluminum, Graveyard	\$29,782	16	25	\$1,551	0.68%	\$9,052	\$13,184	(\$4,132)	\$318
Fencing, Aluminum, Pool Area	\$16,482	16	25	\$858	0.38%	\$5,010	\$7,296	(\$2,287)	\$176
Fencing, PVC At Momuments	\$3,240	18	20	\$205	0.02%	\$278	\$405	(\$127)	\$9
Fencing, PVC At Momuments	\$2,600	11	20	\$165	0.07%	\$943	\$1,373	(\$430)	\$46
Fencing, Split Rail, Conservation Areas	\$112,518	14	20	\$7,122	2.12%	\$28,017	\$40,805	(\$12,788)	\$1,104
Fencing, Tennis & All Purpose Court	\$14,310	16	25	\$745	0.33%	\$4,349	\$6,335	(\$1,985)	\$153
Playground Equipment, 4 Locations	\$136,000	19	25	\$7,084	2.13%	\$28,181	\$41,043	(\$12,863)	\$851
Pool Chemical Feed	\$550	1	10	\$64	0.03%	\$346	\$505	(\$158)	\$161
Pool Filtration System, Main & Wade	\$6,500	3	12	\$642	0.27%	\$3,533	\$5,145	(\$1,613)	\$567
Pool Pumps, 10hp & 3/4hp	\$11,000	6	15	\$894	0.38%	\$5,005	\$7,290	(\$2,285)	\$421
Pool Tile Coping, Main & Wade	\$13,000	11	20	\$823	0.36%	\$4,715	\$6,867	(\$2,152)	\$230
Pool White Coating	\$38,616	9	12	\$3,817	0.57%	\$7,609	\$11,082	(\$3,473)	\$443
Railing, Aluminum At Retaining Wall	\$38,592	16	25	\$2,010	0.89%	\$11,730	\$17,084	(\$5,354)	\$411
Retaining Wall, Wood. Archibald Dr.	\$8,730	11	20	\$553	0.24%	\$3,166	\$4,612	(\$1,445)	\$154
Walking Bridge Decking, 2x	\$38,400	16	25	\$2,000	0.88%	\$11,671	\$16,999	(\$5,327)	\$409



Component Schedule

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Description	Replacement Cost	Est. Rem. Life	Typical Life	Basic Annual Contrib.	Percent Total	Present Fund	Required Fund	Surplus (Deficit)	Contrib. Adjustment
Miscellaneous									
Basketball Backboards	\$3,700	9	20	\$234	0.12%	\$1,604	\$2,336	(\$732)	\$93
Basketball Court Matting	\$9,375	10	12	\$927	0.09%	\$1,246	\$1,814	(\$569)	\$66
Clubhouse Furniture Allowance	\$245,000	11	20	\$15,507	6.71%	\$88,862	\$129,423	(\$40,560)	\$4,329
Exercise Equipment	\$65,000	11	20	\$4,114	1.78%	\$23,576	\$34,337	(\$10,761)	\$1,148
Irrigation System Clubhouse	\$3,500	1	10	\$406	0.17%	\$2,204	\$3,211	(\$1,006)	\$1,026
Media Systems Clubhouse	\$8,000	1	10	\$929	0.38%	\$5,039	\$7,338	(\$2,300)	\$2,344
Signage Allowance Community	\$8,500	11	20	\$538	0.23%	\$3,083	\$4,490	(\$1,407)	\$150
Trash Enclosure	\$4,500	6	15	\$366	0.15%	\$2,048	\$2,982	(\$935)	\$172
Totals	\$4,879,495			\$252,851	100.00%	\$1,323,764	\$1,927,981	(\$604,217)	\$58,073



Component Detail

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Architectural	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Carpeting, Clubhouse	105 SY	\$4,410	\$2,778	\$4,045	(\$1,268)	\$512	\$1,292	\$1,804
Doors, Exterior, Clubhouse	1 LS	\$4,800	\$1,459	\$2,125	(\$666)	\$250	\$51	\$301
Gutters And Leaders, Clubhouse	510 LF	\$3,825	\$1,163	\$1,693	(\$531)	\$199	\$41	\$240
Roof Shingles, Clubhouse	10,086 SF	\$37,823	\$13,718	\$19,980	(\$6,262)	\$2,394	\$668	\$3,062
TOTALS		\$50,858	\$19,117	\$27,843	(\$8,726)	\$3,355	\$2,052	\$5,408



Component Detail

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Electrical	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Interior Lighting Allowance	1 LS	\$28,000	\$8,510	\$12,395	(\$3,884)	\$1,458	\$299	\$1,757
Security/Entry System	1 LS	\$4,500	\$1,632	\$2,377	(\$745)	\$285	\$80	\$364
TOTALS		\$32,500	\$10,143	\$14,772	(\$4,629)	\$1,743	\$378	\$2,121



Component Detail

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Mechanical	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Domestic Water Heater, 100gal	1 EA	\$3,400	\$1,547	\$2,253	(\$706)	\$276	\$130	\$406
Energy Recovery Unit	1 EA	\$6,500	\$2,958	\$4,308	(\$1,350)	\$528	\$249	\$777
HVAC Split Systems, Clubhouse	1 LS	\$32,500	\$14,789	\$21,539	(\$6,750)	\$2,642	\$1,243	\$3,885
TOTALS		\$42,400	\$19,294	\$28,100	(\$8,806)	\$3,447	\$1,621	\$5,068

Component Detail

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Asphalt Path	1,703 SY	\$42,575	\$5,434	\$7,915	(\$2,480)	\$2,695	\$181	\$2,876
Asphalt Path	1,817 SY	\$45,425	\$16,476	\$23,996	(\$7,520)	\$2,875	\$803	\$3,678
Asphalt Paving, Section B off Ellsworth Terrace	8,452 SY	\$169,040	\$7,297	\$10,628	(\$3,331)	\$10,699	\$220	\$10,920
Asphalt Paving, Areas of Section D an Oak Pointe	22,313 SY	\$490,886	\$159,904	\$232,890	(\$72,986)	\$31,070	\$7,214	\$38,284
Asphalt Paving, Clubhouse Parking	2,289 SY	\$45,780	\$22,875	\$33,317	(\$10,441)	\$2,898	\$1,670	\$4,568
Asphalt Paving, Section B off Stonebriar Drive	26,664 SY	\$533,280	\$193,423	\$281,708	(\$88,286)	\$33,753	\$9,422	\$43,175
Asphalt Paving, Sections A off Briarwood Lane	10,309 SY	\$206,180	\$74,782	\$108,916	(\$34,134)	\$13,050	\$3,643	\$16,693
Asphalt Paving, Sections C off Mockingbird Circle	16,910 SY	\$338,200	\$110,167	\$160,451	(\$50,284)	\$21,406	\$4,970	\$26,376
Asphalt Seal Coating, Clubhouse	2,289 SY	\$7,439	\$4,685	\$6,824	(\$2,139)	\$864	\$2,180	\$3,044
Concrete Curb and Gutter Allowance	26,901 LF	\$753,228	\$155,298	\$226,181	(\$70,884)	\$25,706	\$3,052	\$28,757
Concrete Pool Apron	11,985 SF	\$95,880	\$25,159	\$36,642	(\$11,483)	\$4,250	\$697	\$4,947
Concrete Walks	152,800 SF	\$1,146,000	\$236,278	\$344,124	(\$107,846)	\$39,110	\$4,643	\$43,753
Courts Rehabilitation	16,584 SF	\$25,374	\$1,404	\$2,045	(\$641)	\$2,063	\$55	\$2,118
Fence, Chain Link, Dog Parks	1,077 LF	\$21,540	\$7,813	\$11,379	(\$3,566)	\$1,363	\$381	\$1,744
Fence, Split Rail, Play Area.	362 LF	\$6,516	\$832	\$1,211	(\$380)	\$412	\$28	\$440
Fencing and Arbors, Community Garden Area	1 LS	\$8,500	\$2,117	\$3,083	(\$966)	\$538	\$83	\$621
Fencing, Aluminum, Graveyard	889 LF	\$29,782	\$9,052	\$13,184	(\$4,132)	\$1,551	\$318	\$1,869
Fencing, Aluminum, Pool Area	492 LF	\$16,482	\$5,010	\$7,296	(\$2,287)	\$858	\$176	\$1,034



Component Detail

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Site	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Fencing, PVC At Momuments	162 LF	\$3,240	\$278	\$405	(\$127)	\$205	\$9	\$214
Fencing, PVC At Momuments	130 LF	\$2,600	\$943	\$1,373	(\$430)	\$165	\$46	\$210
Fencing, Split Rail, Conservation Areas	6,251 LF	\$112,518	\$28,017	\$40,805	(\$12,788)	\$7,122	\$1,104	\$8,226
Fencing, Tennis & All Purpose Court	530 LF	\$14,310	\$4,349	\$6,335	(\$1,985)	\$745	\$153	\$898
Playground Equipment, 4 Locations	1 LS	\$136,000	\$28,181	\$41,043	(\$12,863)	\$7,084	\$851	\$7,935
Pool Chemical Feed	1 EA	\$550	\$346	\$505	(\$158)	\$64	\$161	\$225
Pool Filtration System, Main & Wade	1 LS	\$6,500	\$3,533	\$5,145	(\$1,613)	\$642	\$567	\$1,210
Pool Pumps, 10hp & 3/4hp	1 LS	\$11,000	\$5,005	\$7,290	(\$2,285)	\$894	\$421	\$1,315
Pool Tile Coping, Main & Wade	520 LF	\$13,000	\$4,715	\$6,867	(\$2,152)	\$823	\$230	\$1,052
Pool White Coating	6,436 SF	\$38,616	\$7,609	\$11,082	(\$3,473)	\$3,817	\$443	\$4,260
Railing, Aluminum At Retaining Wall	576 LF	\$38,592	\$11,730	\$17,084	(\$5,354)	\$2,010	\$411	\$2,422
Retaining Wall, Wood. Archibald Dr.	291 SF	\$8,730	\$3,166	\$4,612	(\$1,445)	\$553	\$154	\$707
Walking Bridge Decking, 2x	3,200 SF	\$38,400	\$11,671	\$16,999	(\$5,327)	\$2,000	\$409	\$2,410
TOTALS		\$4,406,162	\$1,147,549	\$1,671,334	(\$523,786)	\$221,285	\$44,693	\$265,978



Component Detail

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%

Miscellaneous	Quantity	Replacement Cost	RESERVES			CONTRIBUTION		
			Present Fund	Required Fund	Surplus (Deficit)	Basic Annual	Adjustment*	Total
Basketball Backboards	1 LS	\$3,700	\$1,604	\$2,336	(\$732)	\$234	\$93	\$328
Basketball Court Matting	1,500 SF	\$9,375	\$1,246	\$1,814	(\$569)	\$927	\$66	\$993
Clubhouse Furniture Allowance	1 LS	\$245,000	\$88,862	\$129,423	(\$40,560)	\$15,507	\$4,329	\$19,835
Exercise Equipment	1 LS	\$65,000	\$23,576	\$34,337	(\$10,761)	\$4,114	\$1,148	\$5,262
Irrigation System Clubhouse	1 LS	\$3,500	\$2,204	\$3,211	(\$1,006)	\$406	\$1,026	\$1,432
Media Systems Clubhouse	1 LS	\$8,000	\$5,039	\$7,338	(\$2,300)	\$929	\$2,344	\$3,273
Signage Allowance Community	1 LS	\$8,500	\$3,083	\$4,490	(\$1,407)	\$538	\$150	\$688
Trash Enclosure	1 LS	\$4,500	\$2,048	\$2,982	(\$935)	\$366	\$172	\$538
TOTALS		\$347,575	\$127,662	\$185,931	(\$58,270)	\$23,021	\$9,328	\$32,349



Disbursement Schedule

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Description	Base Cost	Future Replacement Cost
2020			
	Asphalt Seal Coating, Clubhouse	\$7,439	\$7,662
	Carpeting, Clubhouse	\$4,410	\$4,542
	Irrigation System Clubhouse	\$3,500	\$3,605
	Media Systems Clubhouse	\$8,000	\$8,240
	Pool Chemical Feed	\$550	\$567
		\$23,899	\$24,616
2022			
	Pool Filtration System, Main & Wade	\$6,500	\$7,103
		\$6,500	\$7,103
2025			
	Domestic Water Heater, 100gal	\$3,400	\$4,060
	Energy Recovery Unit	\$6,500	\$7,761
	HVAC Split Systems, Clubhouse	\$32,500	\$38,807
	Pool Pumps, 10hp & 3/4hp	\$11,000	\$13,135
	Trash Enclosure	\$4,500	\$5,373
		\$57,900	\$69,136
2026			
	Asphalt Paving, Clubhouse Parking	\$45,780	\$56,304
		\$45,780	\$56,304
2028			
	Basketball Backboards	\$3,700	\$4,828
	Pool White Coating	\$38,616	\$50,385
		\$42,316	\$55,213
2029			
	Basketball Court Matting	\$9,375	\$12,599
		\$9,375	\$12,599

Disbursement Schedule

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Description	Base Cost	Future Replacement Cost
2030			
	Asphalt Path	\$45,425	\$62,879
	Asphalt Paving, Section B off Stonebriar Drive	\$533,280	\$738,184
	Asphalt Paving, Sections A off Briarwood Lane	\$206,180	\$285,401
	Asphalt Seal Coating, Clubhouse	\$7,439	\$10,298
	Carpeting, Clubhouse	\$4,410	\$6,104
	Clubhouse Furniture Allowance	\$245,000	\$339,137
	Exercise Equipment	\$65,000	\$89,975
	Fence, Chain Link, Dog Parks	\$21,540	\$29,816
	Fencing, PVC At Momuments	\$2,600	\$3,599
	Irrigation System Clubhouse	\$3,500	\$4,845
	Media Systems Clubhouse	\$8,000	\$11,074
	Pool Chemical Feed	\$550	\$761
	Pool Tile Coping, Main & Wade	\$13,000	\$17,995
	Retaining Wall, Wood. Archibald Dr.	\$8,730	\$12,084
	Roof Shingles, Clubhouse	\$37,823	\$52,355
	Security/Entry System	\$4,500	\$6,229
	Signage Allowance Community	\$8,500	\$11,766
		\$1,215,477	\$1,682,504
2031			
	Asphalt Paving, Areas of Section D an Oak Pointe	\$490,886	\$699,886
	Asphalt Paving, Sections C off Mockingbird Circle	\$338,200	\$482,192
		\$829,086	\$1,182,078
2033			
	Courts Rehabilitation	\$25,374	\$38,380



Disbursement Schedule

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Description	Base Cost	Future Replacement Cost
	Fencing and Arbors, Community Garden Area	\$8,500	\$12,857
	Fencing, Split Rail, Conservation Areas	\$112,518	\$170,194
		\$146,392	\$221,430
2034			
	Pool Filtration System, Main & Wade	\$6,500	\$10,127
		\$6,500	\$10,127
2035			
	Doors, Exterior, Clubhouse	\$4,800	\$7,703
	Fencing, Aluminum, Graveyard	\$29,782	\$47,791
	Fencing, Aluminum, Pool Area	\$16,482	\$26,449
	Fencing, Tennis & All Purpose Court	\$14,310	\$22,963
	Gutters And Leaders, Clubhouse	\$3,825	\$6,138
	Interior Lighting Allowance	\$28,000	\$44,932
	Railing, Aluminum At Retaining Wall	\$38,592	\$61,929
	Walking Bridge Decking, 2x	\$38,400	\$61,621
		\$174,191	\$279,525
2036			
	Asphalt Path	\$42,575	\$70,370
	Fence, Split Rail, Play Area.	\$6,516	\$10,770
		\$49,091	\$81,140
2037			
	Fencing, PVC At Momuments	\$3,240	\$5,516
		\$3,240	\$5,516
2038			
	Asphalt Paving, Section B off Ellsworth Terrace	\$169,040	\$296,413
	Playground Equipment, 4 Locations	\$136,000	\$238,477
		\$305,040	\$534,889

Disbursement Schedule

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Description	Base Cost	Future Replacement Cost
2040			
	Asphalt Seal Coating, Clubhouse	\$7,439	\$13,839
	Carpeting, Clubhouse	\$4,410	\$8,204
	Concrete Pool Apron	\$95,880	\$178,365
	Domestic Water Heater, 100gal	\$3,400	\$6,325
	Energy Recovery Unit	\$6,500	\$12,092
	HVAC Split Systems, Clubhouse	\$32,500	\$60,460
	Irrigation System Clubhouse	\$3,500	\$6,511
	Media Systems Clubhouse	\$8,000	\$14,882
	Pool Chemical Feed	\$550	\$1,023
	Pool Pumps, 10hp & 3/4hp	\$11,000	\$20,463
	Pool White Coating	\$38,616	\$71,837
	Trash Enclosure	\$4,500	\$8,371
		\$216,295	\$402,373
2041			
	Basketball Court Matting	\$9,375	\$17,963
		\$9,375	\$17,963
2046			
	Asphalt Paving, Clubhouse Parking	\$45,780	\$101,691
	Pool Filtration System, Main & Wade	\$6,500	\$14,438
		\$52,280	\$116,129
2048			
	Basketball Backboards	\$3,700	\$8,719
	Courts Rehabilitation	\$25,374	\$59,794
		\$29,074	\$68,514

Reserve Fund Scenario

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Calculation Method: Component

Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2019	\$1,323,764	\$252,851	\$58,073	\$0	\$14,922	\$1,649,610
2020	\$1,649,610	\$260,437	\$52,602	\$24,616	\$18,192	\$1,956,225
2021	\$1,956,225	\$268,250	\$54,180	\$0	\$21,309	\$2,299,964
2022	\$2,299,964	\$276,298	\$55,186	\$7,103	\$24,795	\$2,649,139
2023	\$2,649,139	\$284,587	\$56,841	\$0	\$28,341	\$3,018,908
2024	\$3,018,908	\$293,124	\$58,547	\$0	\$32,094	\$3,402,673
2025	\$3,402,673	\$301,918	\$57,659	\$69,136	\$35,974	\$3,729,089
2026	\$3,729,089	\$310,975	\$57,335	\$56,304	\$39,286	\$4,080,382
2027	\$4,080,382	\$320,305	\$59,055	\$0	\$42,859	\$4,502,601
2028	\$4,502,601	\$329,914	\$60,127	\$55,213	\$47,139	\$4,884,567
2029	\$4,884,567	\$339,811	\$61,842	\$12,599	\$51,021	\$5,324,643
2030	\$5,324,643	\$350,006	\$34,556	\$1,682,504	\$55,329	\$4,082,031
2031	\$4,082,031	\$360,506	\$18,222	\$1,182,078	\$42,872	\$3,321,551
2032	\$3,321,551	\$371,321	\$18,768	\$0	\$35,328	\$3,746,969
2033	\$3,746,969	\$382,461	\$17,451	\$221,430	\$39,636	\$3,965,087
2034	\$3,965,087	\$393,934	\$17,975	\$10,127	\$41,882	\$4,408,751
2035	\$4,408,751	\$405,752	\$15,534	\$279,525	\$46,369	\$4,596,882
2036	\$4,596,882	\$417,925	\$15,655	\$81,140	\$48,317	\$4,997,640
2037	\$4,997,640	\$430,463	\$16,110	\$5,516	\$52,395	\$5,491,092
2038	\$5,491,092	\$443,377	\$14,714	\$534,889	\$57,392	\$5,471,685
2039	\$5,471,685	\$456,678	\$15,155	\$0	\$57,273	\$6,000,791
2040	\$6,000,791	\$470,378	\$14,314	\$402,373	\$62,633	\$6,145,744
2041	\$6,145,744	\$484,490	\$14,744	\$17,963	\$64,162	\$6,691,175
2042	\$6,691,175	\$499,024	\$15,186	\$0	\$69,697	\$7,275,083
2043	\$7,275,083	\$513,995	\$15,641	\$0	\$75,620	\$7,880,339
2044	\$7,880,339	\$529,415	\$16,111	\$0	\$81,758	\$8,507,623
2045	\$8,507,623	\$545,297	\$16,594	\$0	\$88,120	\$9,157,634
2046	\$9,157,634	\$561,656	\$17,092	\$116,129	\$94,711	\$9,714,964
2047	\$9,714,964	\$578,506	\$17,605	\$0	\$100,379	\$10,411,453
2048	\$10,411,453	\$595,861	\$18,133	\$68,514	\$107,440	\$11,064,374
2049	\$11,064,374	\$613,737	\$18,677	\$0	\$114,069	\$11,810,857



Reserve Fund Scenario

Project Name: Tanyard Springs Homeowners Association
 Project Location: Glen Burnie, Maryland
 Project Number: 19-0218
 Date of Study: August 2019
 Month Contributions Commence: September 2019

Calculation Method: 5% of Rep. Cost
 Minimum Balance: \$243,975
 Interest Rate: 1.00%
 Inflation Rate: 3.00%

Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2019	\$1,323,764	\$111,751	\$0	\$0	\$13,843	\$1,449,358
2020	\$1,449,358	\$115,104	\$0	\$24,616	\$15,117	\$1,554,963
2021	\$1,554,963	\$118,557	\$0	\$0	\$16,192	\$1,689,712
2022	\$1,689,712	\$122,114	\$0	\$7,103	\$17,559	\$1,822,282
2023	\$1,822,282	\$125,777	\$0	\$0	\$18,904	\$1,966,963
2024	\$1,966,963	\$129,550	\$0	\$0	\$20,371	\$2,116,884
2025	\$2,116,884	\$133,437	\$0	\$69,136	\$21,892	\$2,203,077
2026	\$2,203,077	\$137,440	\$0	\$56,304	\$22,775	\$2,306,988
2027	\$2,306,988	\$141,563	\$0	\$0	\$23,837	\$2,472,388
2028	\$2,472,388	\$145,810	\$0	\$55,213	\$25,514	\$2,588,499
2029	\$2,588,499	\$150,184	\$0	\$12,599	\$26,698	\$2,752,782
2030	\$2,752,782	\$154,690	\$0	\$1,682,504	\$28,366	\$1,253,334
2031	\$1,253,334	\$159,331	\$0	\$1,182,078	\$13,396	\$243,983
2032	\$243,983	\$164,111	\$0	\$0	\$3,329	\$411,423
2033	\$411,423	\$169,034	\$0	\$221,430	\$5,030	\$364,057
2034	\$364,057	\$174,105	\$0	\$10,127	\$4,584	\$532,619
2035	\$532,619	\$179,328	\$0	\$279,525	\$6,298	\$438,720
2036	\$438,720	\$184,708	\$0	\$81,140	\$5,388	\$547,676
2037	\$547,676	\$190,249	\$0	\$5,516	\$6,507	\$738,916
2038	\$738,916	\$195,956	\$0	\$534,889	\$8,451	\$408,434
2039	\$408,434	\$201,835	\$0	\$0	\$5,178	\$615,447
2040	\$615,447	\$207,890	\$0	\$402,373	\$7,281	\$428,245
2041	\$428,245	\$214,127	\$0	\$17,963	\$5,442	\$629,851
2042	\$629,851	\$220,551	\$0	\$0	\$7,493	\$857,895
2043	\$857,895	\$227,168	\$0	\$0	\$9,809	\$1,094,872
2044	\$1,094,872	\$233,983	\$0	\$0	\$12,216	\$1,341,071
2045	\$1,341,071	\$241,002	\$0	\$0	\$14,716	\$1,596,789
2046	\$1,596,789	\$248,232	\$0	\$116,129	\$17,312	\$1,746,204
2047	\$1,746,204	\$255,679	\$0	\$0	\$18,847	\$2,020,730
2048	\$2,020,730	\$263,349	\$0	\$68,514	\$21,634	\$2,237,199
2049	\$2,237,199	\$271,249	\$0	\$0	\$23,841	\$2,532,289



Reserve Fund Scenario

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019
Month Contributions Commence: September 2019

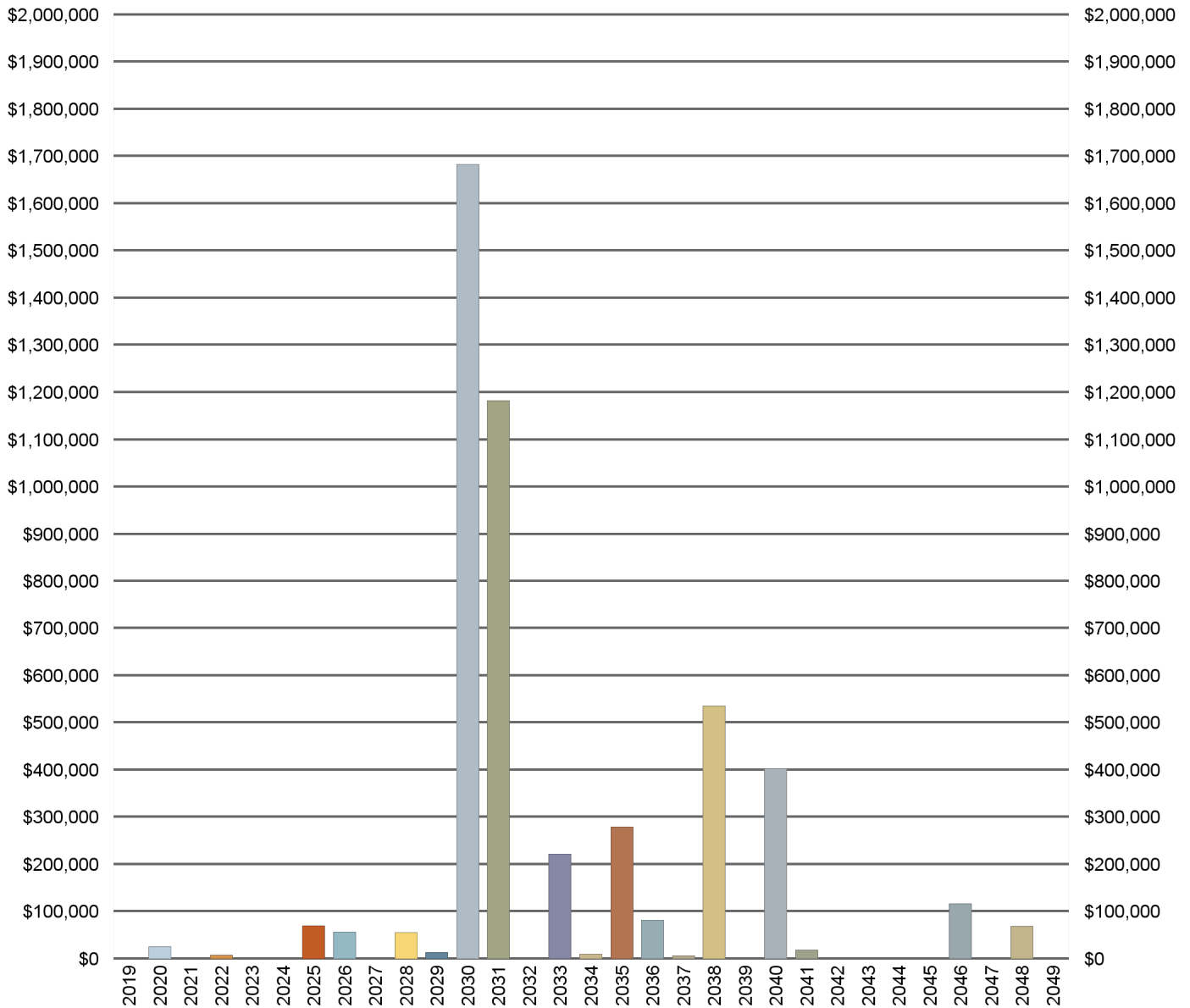
Calculation Method: 10% of Rep. Cost
Minimum Balance: \$487,949
Interest Rate: 1.00%
Inflation Rate: 3.00%

Year	Opening Balance	Annual Contribution	Contribution Adjustment	Disbursements	Earned Interest	Closing Balance
2019	\$1,323,764	\$126,439	\$0	\$0	\$13,923	\$1,464,126
2020	\$1,464,126	\$130,232	\$0	\$24,616	\$15,347	\$1,585,089
2021	\$1,585,089	\$134,139	\$0	\$0	\$16,577	\$1,735,805
2022	\$1,735,805	\$138,163	\$0	\$7,103	\$18,106	\$1,884,971
2023	\$1,884,971	\$142,308	\$0	\$0	\$19,621	\$2,046,900
2024	\$2,046,900	\$146,577	\$0	\$0	\$21,263	\$2,214,740
2025	\$2,214,740	\$150,974	\$0	\$69,136	\$22,965	\$2,319,543
2026	\$2,319,543	\$155,503	\$0	\$56,304	\$24,038	\$2,442,780
2027	\$2,442,780	\$160,168	\$0	\$0	\$25,295	\$2,628,243
2028	\$2,628,243	\$164,973	\$0	\$55,213	\$27,176	\$2,765,179
2029	\$2,765,179	\$169,922	\$0	\$12,599	\$28,572	\$2,951,074
2030	\$2,951,074	\$175,020	\$0	\$1,682,504	\$30,459	\$1,474,049
2031	\$1,474,049	\$180,271	\$0	\$1,182,078	\$15,717	\$487,959
2032	\$487,959	\$185,679	\$0	\$0	\$5,885	\$679,523
2033	\$679,523	\$191,249	\$0	\$221,430	\$7,831	\$657,173
2034	\$657,173	\$196,986	\$0	\$10,127	\$7,639	\$851,671
2035	\$851,671	\$202,896	\$0	\$279,525	\$9,616	\$784,658
2036	\$784,658	\$208,983	\$0	\$81,140	\$8,979	\$921,480
2037	\$921,480	\$215,252	\$0	\$5,516	\$10,381	\$1,141,597
2038	\$1,141,597	\$221,710	\$0	\$534,889	\$12,617	\$841,035
2039	\$841,035	\$228,361	\$0	\$0	\$9,647	\$1,079,043
2040	\$1,079,043	\$235,212	\$0	\$402,373	\$12,064	\$923,946
2041	\$923,946	\$242,268	\$0	\$17,963	\$10,552	\$1,158,803
2042	\$1,158,803	\$249,536	\$0	\$0	\$12,940	\$1,421,279
2043	\$1,421,279	\$257,022	\$0	\$0	\$15,605	\$1,693,906
2044	\$1,693,906	\$264,733	\$0	\$0	\$18,373	\$1,977,012
2045	\$1,977,012	\$272,675	\$0	\$0	\$21,247	\$2,270,934
2046	\$2,270,934	\$280,855	\$0	\$116,129	\$24,231	\$2,459,891
2047	\$2,459,891	\$289,281	\$0	\$0	\$26,166	\$2,775,338
2048	\$2,775,338	\$297,959	\$0	\$68,514	\$29,367	\$3,034,150
2049	\$3,034,150	\$306,898	\$0	\$0	\$32,004	\$3,373,052

Disbursements by Year

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019

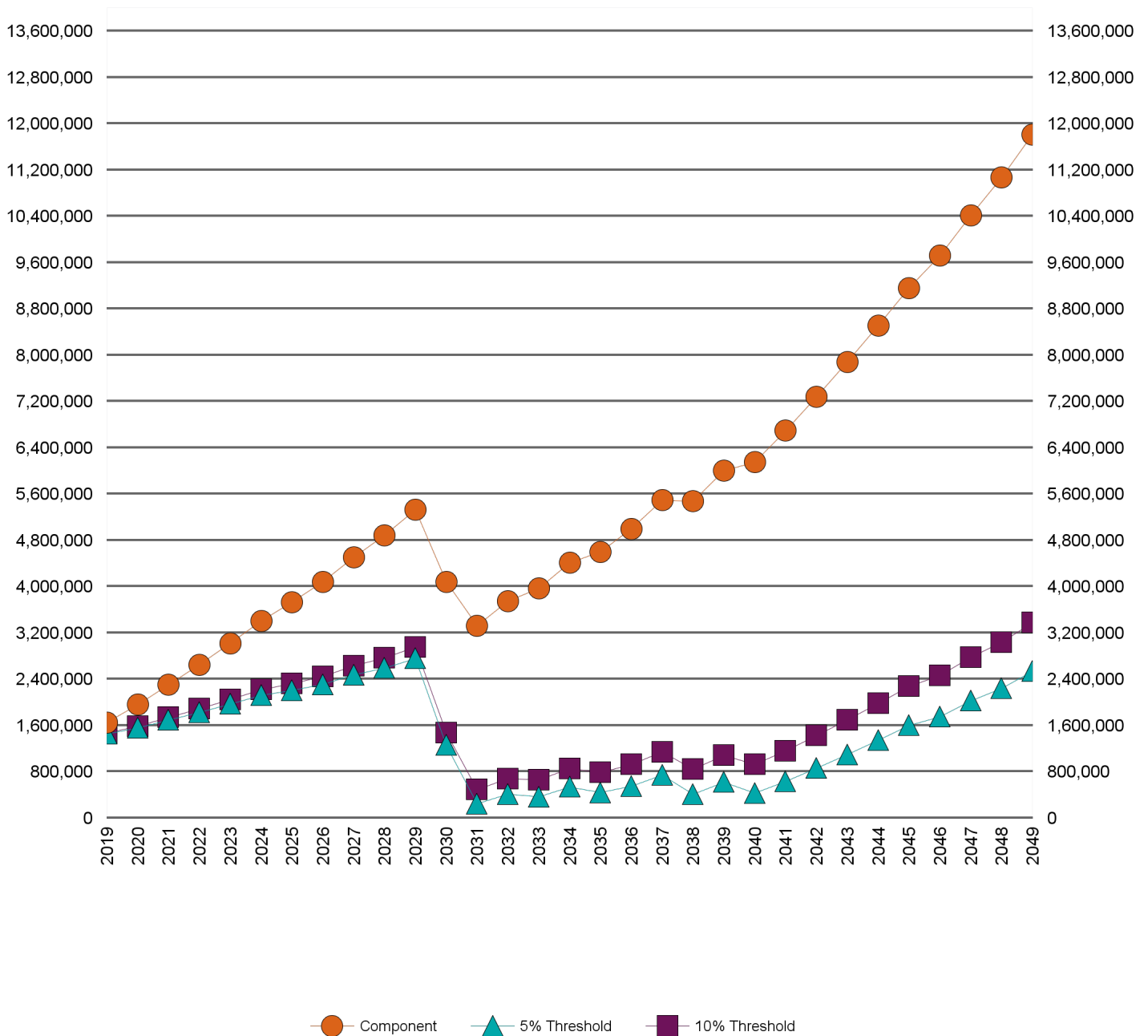
Interest Rate: 1.00%
Inflation Rate: 3.00%



Reserve Fund Closing Balance

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019

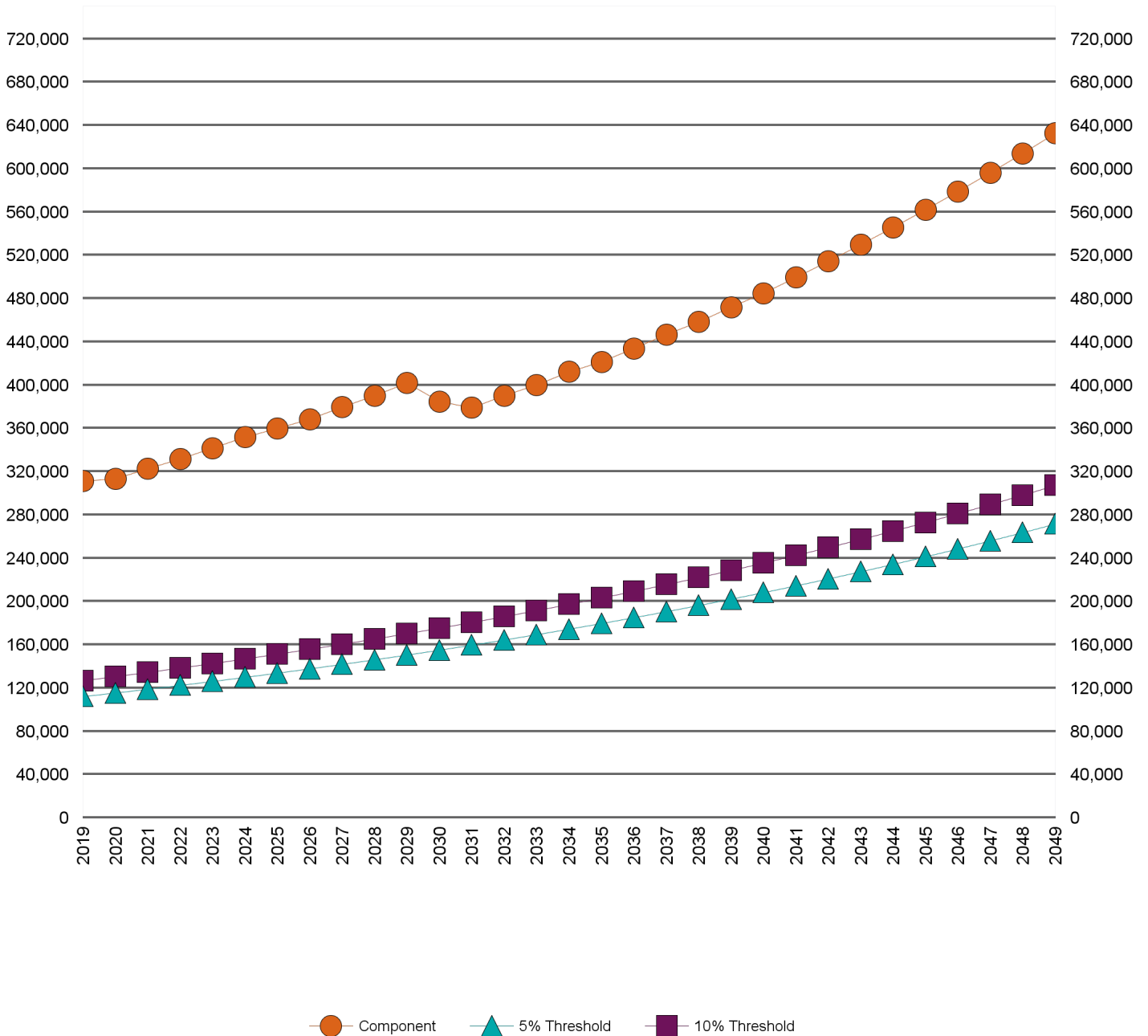
Interest Rate: 1.00%
Inflation Rate: 3.00%



Reserve Fund Contributions

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019

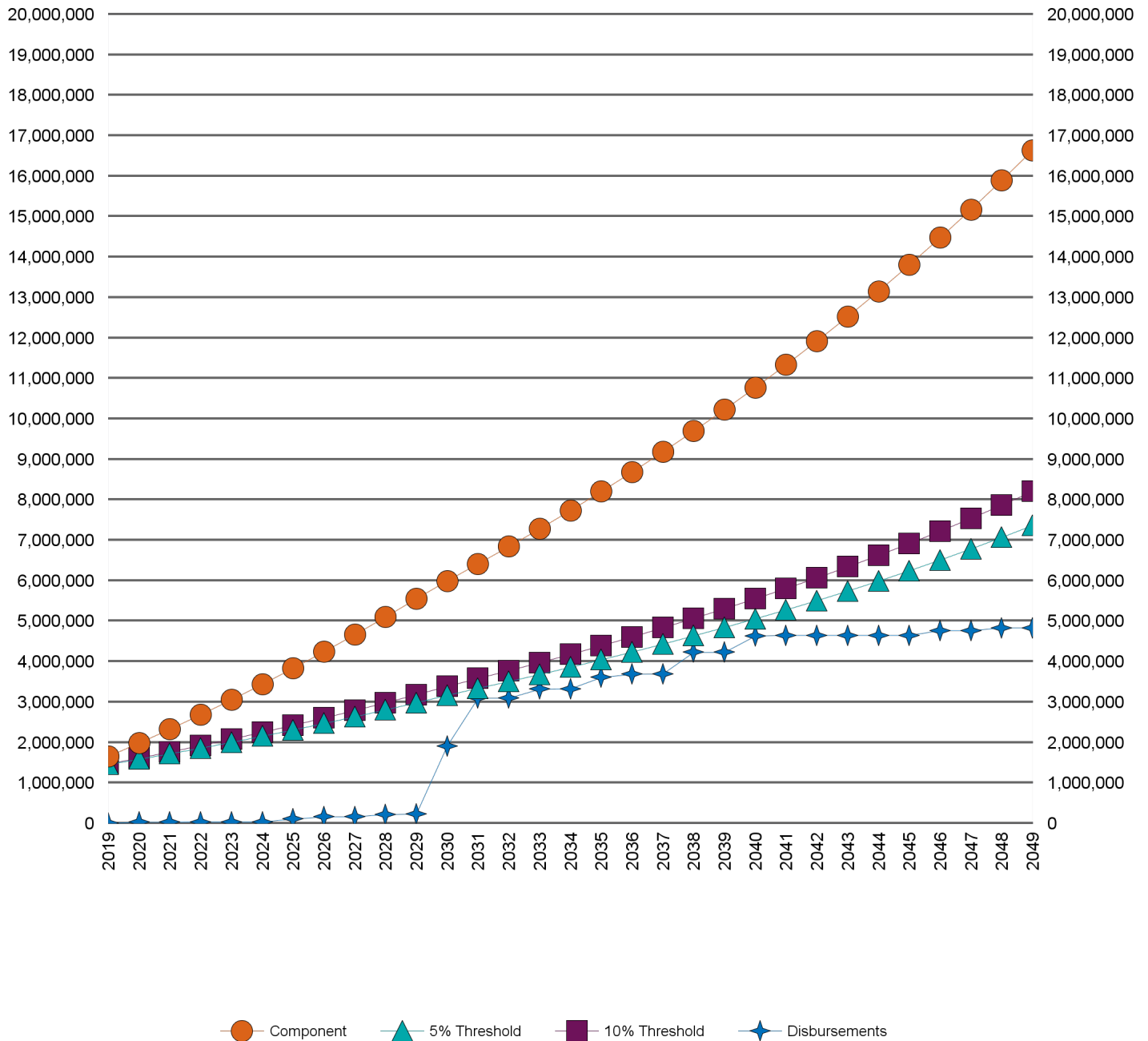
Interest Rate: 1.00%
Inflation Rate: 3.00%



Cumulative Contributions and Disbursements

Project Name: Tanyard Springs Homeowners Association
Project Location: Glen Burnie, Maryland
Project Number: 19-0218
Date of Study: August 2019

Interest Rate: 1.00%
Inflation Rate: 3.00%



Definitions

Definitions

Base Cost - See definition "Current Replacement Cost Allowance." This calculation, based on current costs, is increased according to the assumed rates of inflation in the "Disbursement Schedule."

Basic Annual Contribution - This is the amount that should have been contributed each year, while considering assumed rates of interest and inflation, to accumulate a reserve equal to the Current Replacement Cost at the anticipated replacement time (end-of-life). This is roughly calculated.

Contribution Adjustment - If the capital reserve fund for a component is not fully funded, this is the increase in annual contributions that would be required to fully fund the reserve before the estimated end-of-life. If the capital reserve fund for a component is over-funded, this is the decrease in annual contributions that would offset the over-funded condition.

Contribution, Total - This is the recommended Basic Annual Contribution plus the "Contribution Adjustment" (see definition) required to make up for past underfunding before replacement of the component is estimated to be required. The amount can decrease in future years because the required Contribution Adjustment decreases each year in which a reserve fund for a capital component is fully funded.

Current Replacement Cost - The estimated cost to replace a component in kind at the time of the Study.

Estimated Remaining Life - The anticipated number of years before replacement of this component can be expected to be necessary. This is based on the normal life, the current age, and an engineering assessment that considers site-specific condition.

Deficit - This shows the amount that the Present Fund is undercapitalized. It is the present fund minus the Required Fund, A positive number (surplus) means excess cash reserves have been set aside to date. A negative number indicates a deficit in the Present Fund; this underfunding can be made up in one of two ways: 1) an increase in the annual fees to catch up or, 2) a special assessment between now and when the component requires replacement. This Study assumes the second method is used and recommends annual makeup on that basis.

Interest - Interest accumulated on the capital reserve fund deposit based on the assumed interest rate listed at the top of the "Projected Cash Flow" pages.

Inflation - The increased cost of future replacement expenditures are based on an assumed rate of inflation.

Opening Balance - On the "Projected Cash Flow" pages, this is the reported total reserve fund on deposit

for the condominium Association.

Percent Funded - Represents the ratio of the Reserve Fund balance to the Required Fund or Fully Funded Balance. This is a measure of the financial health of the Reserve Fund and an indicator of the risk of the future necessity of special assessments.

Percentage Of Total - Percent of total recommended Basic Annual Contribution. This shows the significance of specific components relative to required contributions to the capital reserve fund.

Present Age - Age of the component at the time of this Study.

Present Fund - Present funds set aside for capital component replacement at this time. If present funds are not reserved for specific components but are an unallocated pool, the total present funds allocated between the components according to the Percentage Of Total column.

Required Fund - This amount should have been set aside for each component in the fund to be considered fully funded.

Surplus - This shows the amount that the Present Fund is overcapitalized. It is the present fund minus the Required Fund. A positive number (surplus) means excess cash reserves have been set aside to date.

Typical Life - The anticipated number of years that a component may be expected to provide adequate service. Please note that this is based on industry standards. A component may outlive, or require replacement prior to, its typical life.

Abbreviations:

EA - Each

LF - Linear Foot

LS - Lump Sum

SF - Square Foot

SY - Square Yard