

RESERVE FUND STUDY UPDATE (WITH SITE VISIT)
MIDDLESEX STANDARD
CONDOMINIUM CORPORATION No. 644
1040 RIVERSIDE DRIVE
LONDON, ONTARIO

PREPARED FOR: MIDDLESEX STANDARD CONDOMINIUM CORPORATION No. 644
1040 RIVERSIDE DRIVE
LONDON, ONTARIO

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1 INTRODUCTION

This report presents an updated engineered reserve fund study (with site visit) for the Condominium Corporation. This update with a site visit was undertaken as mandated by the Condominium Act to provide data on future costs based upon the review and assessment of the current life expectancy of these common elements and their current replacement costs. This data can then be used by the Corporation to review and adjust current reserve fund contributions so that forecast expenditure requirements can be met.

The study is based upon the list of common elements as determined from the Declaration. This list defines the components to which the reserve fund applies. Components defined as the responsibility of the individual unit owner are not included in the study as the reserve fund does not apply to them.

Once the list of common elements is determined, data is collected on their repair and/or replacement history from authorized representatives of the Corporation. A visual site visit investigation then follows which provides information on the current condition of the common elements.

The current repair and/or replacement costs are then reviewed and estimated. The results are presented in tabular spreadsheet form showing the quantities and expected replacement costs for each element along with the expected remaining life expectancy. Provided further to this is a thirty-year schedule of expected reserve fund expenditures on a year by year basis along with a table of projected cash flows adjusted to account for an assumed rate of escalation.

2 DESCRIPTION

Middlesex Standard Condominium Corporation No. 644 (M.S.C.C. 644) is comprised of 69 one storey condominium units at 1040 Riverside Drive, London, Ontario. The complex was originally developed as a series of eight individual condominium corporations registered between June 7, 1990 and September 29, 1999. The individual corporations were amalgamated and registered as Middlesex Standard Condominium Corporation No. 644.

There are two entrances to the complex; the main entrance from Riverside Drive and the other from Hazel Avenue. Each entrance has an associated masonry entrance wall. There is a common roadway which winds through the complex to the units comprising the corporation. Along the roadway are various visitors parking areas. There are also a few areas where there are sidewalks adjacent to the roadway. The roadway is asphalt while the parking area and the sidewalks are laid with pavers.

The complex also has a pool facility which is enclosed by a masonry wall and contains a pool along with a small changeroom/equipment building.

In general, there are no perimeter fences along the property boundaries of the complex.

3 SITE ELEMENTS

The site was reviewed visually for assessment of the common elements comprising the study. The following describes, in summary, the assessment of these items for the purposes of the study. It should be noted that repairs/replacements to paver parking spaces and common walkways were previously deemed a maintenance item and are therefore not included in the study.

3.1 Sewers & Watermains

Location: Underground throughout the site.

Current Age: Twenty-two to twenty-nine years old.

Remarks: Sewers and watermains should generally last 40 to 60 years. Replacement is expected during the current thirty year scope of this study. It is recommended that the Corporation continue video inspection of the sewers at periodic intervals to monitor the sewer system. Regular maintenance should continue to include cleaning the catchbasins of sediment and the sewers flushing. The cycle of replacements continue in this update study to be separated according to the previously assumed phased installation dates.

Assessed Remaining Life: 26 to 33 years

3.2 Asphalt - Roadways

Location: Roadways.

Current Age: Twenty-two to twenty-nine years old.

Remarks: The asphalt roadway appeared to be in reasonably good condition. There continue to be numerous transverse and longitudinal cracks along with parallel cracks near the curblines. The majority of the cracks appeared to be sealed and well maintained. It is recommended that sealing be done as necessary to help minimize deterioration from freeze/thaw cycles. Sealing of asphalt would be considered a maintenance item and is not included in the study. As with the previous study update, replacement of the asphalt has been shown at 40 year intervals with re-surfacing of the asphalt only in between replacement cycles. The cycle of replacements continues in this

update study to be separated according to the previously assumed phased installation dates.

Assessed Remaining Life: 6 to 13 years to next re-surfacing; 26 to 33 years to next replacement.

3.3 Concrete Curbs

Location: At edges of roadways.

Current Age: Twenty-two years old.

Remarks: The concrete curbs continue to appear to be weathering well. There are only a few isolated sections that are cracked. The cracks do not appear to affect serviceability. The study has been continued to allow for the replacement of approximately twenty percent of the curbs every ten years. The next replacement has been extended out to coincide with the next asphalt resurfacing.

Assessed Remaining Life: 6 years to next replacement.

3.4 Pool Complex

Location: Central area of complex.

Current Age: Four years since the last expenditure.

Remarks: A lump sum allowance for all components of the pool complex continues to be included in the update study at five year intervals. The allowance is intended to cover costs associated with the pool finishes, decking, equipment, perimeter wall and the changeroom structure. It was reported that the pool received restoration in the current year however review of the pool finishes was not possible as the pool was closed for the season. The concrete deck surround continued to appear to be in good condition however there continues to be some step cracking noted to the south perimeter masonry wall and at the east wall of the changeroom where the perimeter wall adjoins. The metal railings appeared to have been recently painted. The vertical interface of the perimeter wall with the piers along with the underside of the capping appeared to have been newly caulked but only on the inside. Joints between the capping sections were noted to need recaulking as evidenced by the discolouring of bricks immediately below.

Assessed Remaining Life: Costs incurred in the current year.

3.5 Irrigation Central Controller

Location: Added element in 2009 for landscape irrigation.

Current Age: Ten years old.

Remarks: No issues were reported with the irrigation central controller however repairs and/or replacement is expected soon.

Assessed Remaining Life: 1 year.

3.6 Landscape/Drainage Allowance

Location: Added element.

Current Age: New element.

Remarks: An annual landscape and drainage allowance has been added to the study at the request of the Corporation.

Assessed Remaining Life: Costs shown in the current year.

4 RESERVE FUND SPREADSHEET

Following this section are the detailed reserve fund spreadsheets.

Table 1 provides the list of common elements for the complex and present material quantities and current replacement costs along with the expected remaining life, as determined during the review.

Future expenditures for repairs/replacement are summarized in the next set of spreadsheets, Table 2, which show indexed costs at intervals corresponding to the element lifespan. Annual totals are also provided for each year. The expenditures are projected forward 30 years (to year 2048). The index is included to allow for an assumed inflation of 2%. It can be seen that a number of expenditures are anticipated over the thirty-year scope of the study. It is important to ensure that contributions to the reserve fund are sufficient to build up the balance in order to take advantage of the interest effect. It should be noted that the total of indexed replacement costs over the thirty year projections as shown in Table 1 is approximately \$3,032,100 for the complex.

Also included in the projected expenditures are budget costs for future updates to the study. It should be noted that these are budget estimates only and should not be construed as firm price proposals.

Projected cashflows are given in the next spreadsheet (Table 3). For each year, a summary of annual expenditures is given along with the annual contribution to the reserve fund and the corresponding balance. The balance at the beginning of the current fiscal year beginning January 1, 2019 was reported to be approximately \$307,015. Table 3 includes earned interest at a rate of 3%. The current contribution level for 2019 was reported to be \$25,493. This corresponds to a monthly per unit reserve fund contribution of approximately \$31. The cashflow spreadsheets provide information on the effect of various options for contribution levels along with the current

contribution level. The current contribution level shows the effect of the present course with an annual index of 5.6%. The cashflow projections confirm that at this contribution level, the reserve fund is not expected to be adequate to meet the projected expenditures over the thirty-year scope of the update study.

Alternate contribution options were proposed for consideration which if adopted, would also ensure that the future expected costs were met. New contribution levels are proposed to begin in 2020. The selected option includes a regular annual reserve fund contribution of \$33,700 in 2020 followed by a 5.6% increase thereafter. This corresponds to a monthly per unit reserve fund contribution of approximately \$41 in 2020.

The assumed annual interest earned rate for all Options is 3%. The contributions shown in the cashflow spreadsheets are annualized totals for all units. Note that these annualized average contributions assume equal weighting per unit. Actual monthly per unit contributions may vary according to actual weightings as determined by the condominium declaration.

It should be noted that the minimum balance used in Table 3 is \$20,000. A higher minimum balance requirement, as determined by the Condominium Corporation, would require associated increases in the recommended contribution levels. It is recommended that the Corporation periodically review the minimum balance requirement so that it reflects their needs.

The Condominium Act requires that the study be updated every three years after the initial study. This allow the study to reflect new adjustments in the assessment of remaining life, changing market conditions relating to future cost estimates, actual expenditures made, and actual contributions realized. It also allows for adjustments due to actual inflation indices as well as actual interest achieved on reserve balances. It should be noted that inflation and interest rates can have a significant effect of the projected expenditures and reserve balance. This study has used an inflation index of 2% and an interest rate of 3%. The monthly contribution required to meet the future costs would likely be lower if the spread between the inflation and earned interest

rates was larger; however, if the spread was smaller, then the monthly contribution would likely need to be higher. Of course, future earnings cannot be guaranteed and the Corporation should consult with an appropriate advisor.

5 LIMITATIONS OF THE STUDY

In the course of conducting the reserve fund study, there were several limitations which should be noted.

Information provided by the authorized agent of the Corporation to conduct this update study included the financial statement for the year ended December 31, 2018 along with an unaudited summary of reserve expenditures from 2017 to date. Some interpretation of these statements may have been necessary to determine replacement histories.

The tabulated current replacement costs reflect an opinion of probable costs for each element and are based mainly on published cost data. No guarantee is implied or otherwise provided for these amounts. Actual costs at the time of replacement may vary depending on market conditions, actual inflation indices and material and/or product advances. In addition, actual costs may be higher should the repair and/or replacement work be phased or done on a unit by unit basis. The costs included in the study assume that repair and/or replacements of a particular element occur all at the same time. It is recommended that the replacement of elements be tendered to obtain competitive pricing on equal scopes of work.

The scope of any associated site review was limited to a visual assessment of included common elements which were exposed to view and made accessible. No physical testing was carried out nor were any in depth examinations of components conducted to ascertain structural and performance adequacy. It should be noted that the severity of certain deficiencies may not be visually detectable at initial stages and may require periodic monitoring for further assessment. As such, this report should not be considered as a warranty of remaining service life of the assessed elements.

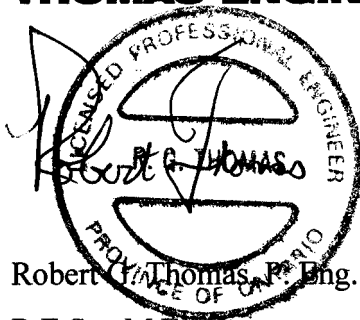
It should be noted that the actual remaining life of an element may differ from the assessed

remaining life shown in this report. Building elements seldom exhaust their usefulness overnight. Instead they generally deteriorate to an extent that requires increasing frequency and cost of maintenance. Therefore, the assessed remaining life is an average estimate of how long the element should reasonably last with proper maintenance and under normal weather conditions. The degree of certainty in the assessed remaining life increases as the projected time for repair and/or replacement approaches. Therefore, updates to the study can be beneficial prior to major expenditures so that potentially critical cash flow situations are minimized or even avoided.

We trust that this report provides sufficient information for your current needs. Should there be any questions, please do not hesitate to call.

Yours truly,

THOMAS ENGINEERING



Robert G. Thomas, P. Eng.
B.E.Sc., M.Eng.

ACKNOWLEDGEMENT

It is hereby acknowledged that the Limitations of the Study section of the Reserve Fund Study Update (with site visit) has been read and understood with respect to the interpretation and use of the Study in planning for the future funding of the reserve fund for the Corporation.

Date: Jan 15/20

(signature)

(print name) J. WAGNER.

(signature)

(print name) J. GIRVAN

The above signatories have the authority to bind the corporation.

Middlesex Standard Condominium Corporation No. 644

Reserve Fund Study Update (with site visit)

Element Information

TABLE 1

Middlesex Standard Condominium Corporation No. 644

Final

Oct-19

Revision Date: 31-Jan-20

Section	Element	Total Quantity (units)	Percentage of Total for Replacement or Repair	2019 Replacement or Repair Costs	Normal Lifespan (yrs)	Year of Acquisition	Current Age (yrs)	Assessed Remaining Life
SITE ELEMENTS								
	Sewers/Watermains - Phase I	4970 LF	100%	\$399,200.00	55	1990	29	26
	Sewers/Watermains - Phase II	2370 LF	100%	\$190,400.00	55	1992	27	28
	Sewers/Watermains - Phase III	1950 LF	100%	\$156,500.00	55	1997	22	33
	Video Inspection - Sewers	Allowance	100%	\$10,000.00	12	2012	7	5
	Catchbasins/Manholes - Phase I	28#	33%	\$22,400.00	20	1990	29	6
	Catchbasins/Manholes - Phase II	14#	33%	\$11,200.00	20	1992	27	8
	Catchbasins/Manholes - Phase III	13#	33%	\$10,400.00	20	1997	22	13
	Asphalt (Resurface) - Phase I	46000 SF	100%	\$133,000.00	20	1990	29	6
	Asphalt (Resurface) - Phase II	17600 SF	100%	\$50,900.00	20	1992	27	8
	Asphalt (Resurface) - Phase III	18800 SF	100%	\$54,400.00	20	1997	22	13
	Asphalt (Replace) - Phase I	46000 SF	100%	\$221,700.00	40	1990	29	26
	Asphalt (Replace) - Phase II	17600 SF	100%	\$84,900.00	40	1992	27	28
	Asphalt (Replace) - Phase III	18800 SF	100%	\$90,600.00	40	1997	22	33
	Curbs	7000 LF	20%	\$57,000.00	10	1990	29	4
	Pool Complex	Allowance	100%	\$10,000.00	5	2015	4	0
	Irrigation System - Central Controller	Allowance	100%	\$5,000.00	10	2009	10	1
	Landscape/Drainage Allowance	Allowance	100%	\$10,000.00	1	2018	1	0
	Study Update - Site Visit	LS	100%	\$2,000.00	6	2012	7	0
	Study Update - No Visit	LS	100%	\$1,500.00	6	2012	7	3
TOTAL				\$1,521,100.00				
TOTAL 30 YR EXPENDITURE				\$3,032,109.18				

Reserve Fund Study Update (with site visit)

Middlesex Standard Condominium Corporation No. 644

Oct-19

Summary of Expected Expenditures

TABLE 2

Final

Revision Date: 31-Jan-20

	Fiscal Year		1-Jan-21		1-Jan-22		1-Jan-23		1-Jan-24		1-Jan-25		1-Jan-26		1-Jan-27		1-Jan-28		
	1-Jan-19	31-Dec-19	1-Jan-20	31-Dec-20	1-Jan-21	31-Dec-21	1-Jan-22	31-Dec-22	1-Jan-23	31-Dec-23	1-Jan-24	31-Dec-24	1-Jan-25	31-Dec-25	1-Jan-26	31-Dec-26	1-Jan-27	31-Dec-27	1-Jan-28
SITE ELEMENTS																			
Sewers/Watermains - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Sewers/Watermains - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Sewers/Watermains - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Video Inspection - Sewers	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$11,040.81		\$0.00		\$0.00		\$0.00		\$0.00
Catchbasins/Manholes - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$25,226.04		\$0.00		\$0.00		\$0.00
Catchbasins/Manholes - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$13,122.59		\$0.00
Catchbasins/Manholes - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Asphalt (Resurface) - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$149,779.60		\$0.00		\$0.00		\$0.00
Asphalt (Resurface) - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$59,637.46		\$0.00
Asphalt (Resurface) - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Asphalt (Replace) - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Asphalt (Replace) - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Asphalt (Replace) - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Curbs	\$0.00		\$0.00		\$0.00		\$0.00		\$61,698.63		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Pool Complex	\$27,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$11,040.81		\$0.00		\$0.00		\$0.00		\$0.00
Irrigation System - Central Controller	\$0.00		\$5,100.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00
Landscape/Drainage Allowance	\$10,000.00		\$10,200.00		\$10,404.00		\$10,612.08		\$10,824.32		\$11,040.81		\$11,261.62		\$11,486.86		\$11,716.59		\$11,950.93
Study Update - Site Visit	\$2,000.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$2,252.32		\$0.00		\$0.00		\$0.00
Study Update - No Visit	\$0.00		\$0.00		\$0.00		\$1,591.81		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$1,792.64
ANNUAL EXPENDITURE	\$39,000.00		\$15,300.00		\$10,404.00		\$12,203.89		\$72,522.95		\$33,122.42		\$188,519.59		\$11,486.86		\$84,476.64		\$13,743.56
CUMULATIVE EXPENDITURE	\$39,000.00		\$54,300.00		\$64,704.00		\$76,907.89		\$149,430.85		\$182,553.27		\$371,072.86		\$382,559.72		\$467,036.36		\$480,779.92

Reserve Fund Study Update (with site visit)

Middlesex Standard Condominium Corporation No. 644

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Summary of Expected Expenditures

TABLE 2 (cont'd)

Final

Revision Date: 31-Jan-20

	Fiscal Year		1-Jan-31		1-Jan-32		1-Jan-33		1-Jan-34		1-Jan-35		1-Jan-36		1-Jan-37		1-Jan-38				
	1-Jan-29	31-Dec-29	1-Jan-30	31-Dec-30	1-Jan-31	31-Dec-31	1-Jan-32	31-Dec-32	1-Jan-33	31-Dec-33	1-Jan-34	31-Dec-34	1-Jan-35	31-Dec-35	1-Jan-36	31-Dec-36	1-Jan-37	31-Dec-37	1-Jan-38	31-Dec-38	
SITE ELEMENTS																					
Sewers/Watermains - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Sewers/Watermains - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Sewers/Watermains - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Video Inspection - Sewers	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$14,002.41		\$0.00		\$0.00		
Catchbasins/Manholes - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Catchbasins/Manholes - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Catchbasins/Manholes - Phase III	\$0.00		\$0.00		\$0.00		\$13,453.51		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Resurface) - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Resurface) - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Resurface) - Phase III	\$0.00		\$0.00		\$0.00		\$70,372.20		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Replace) - Phase I	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Replace) - Phase II	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Asphalt (Replace) - Phase III	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Curbs	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Pool Complex	\$12,189.94		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		
Irrigation System - Central Controller	\$0.00		\$6,216.87		\$0.00		\$0.00		\$0.00		\$13,458.68		\$0.00		\$0.00		\$0.00		\$0.00		
Landscape/Drainage Allowance	\$12,189.94		\$12,433.74		\$12,682.42		\$12,936.07		\$13,194.79		\$13,458.68		\$13,727.86		\$14,002.41		\$14,282.46		\$14,568.11		
Study Update - Site Visit	\$0.00		\$0.00		\$2,536.48		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$2,856.49		\$0.00		
Study Update - No Visit	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$2,018.80		\$0.00		\$0.00		\$0.00		\$0.00		
ANNUAL EXPENDITURE	\$24,379.89		\$18,650.61		\$15,218.90		\$96,761.78		\$88,405.08		\$28,936.17		\$13,727.86		\$28,004.83		\$17,138.95		\$14,568.11		
CUMULATIVE EXPENDITURE	\$505,159.81		\$523,810.43		\$539,029.33		\$635,791.10		\$724,196.18		\$753,132.35		\$766,860.21		\$794,865.03		\$812,003.99		\$826,572.10		

Reserve Fund Study Update (with site visit)

Middlesex Standard Condominium Corporation No. 644

Oct-19

Cash Flow Summary

TABLE 3 (cont'd)

Final

Revision Date: 31-Jan-20

Fiscal Yr. Beginning Jan. 1	Annual Expenditure	CURRENT				SELECTED OPTION					
		Beginning Balance	Interest	Annual Contrib 5.60% Index	Other Contrib	Monthly Per Unit Contrib	Beginning Balance	Interest	Annual Contrib 5.60% Index	Other Contrib	Monthly Per Unit Contrib
2019	\$39,000.00	\$307,015.00	\$9,210.45	\$25,493.00	\$0.00	\$30.79	\$307,015.00	\$9,210.45	\$25,493.00	\$0.00	\$30.79
2020	\$15,300.00	\$302,718.45	\$9,081.55	\$26,920.61	\$0.00	\$32.51	\$302,718.45	\$9,081.55	\$33,700.00	\$0.00	\$40.70
2021	\$10,404.00	\$323,420.61	\$9,702.62	\$28,428.16	\$0.00	\$34.33	\$330,200.00	\$9,906.00	\$35,587.20	\$0.00	\$42.98
2022	\$12,203.89	\$351,147.39	\$10,534.42	\$30,020.14	\$0.00	\$36.26	\$365,289.20	\$10,958.68	\$37,580.08	\$0.00	\$45.39
2023	\$72,522.95	\$379,498.06	\$11,384.94	\$31,701.27	\$0.00	\$38.29	\$401,624.07	\$12,048.72	\$39,684.57	\$0.00	\$47.93
2024	\$33,122.42	\$350,061.31	\$10,501.84	\$33,476.54	\$0.00	\$40.43	\$380,834.41	\$11,425.03	\$41,906.90	\$0.00	\$50.61
2025	\$188,519.59	\$360,917.27	\$10,827.52	\$35,351.22	\$0.00	\$42.69	\$401,043.92	\$12,031.32	\$44,253.69	\$0.00	\$53.45
2026	\$11,486.86	\$218,576.42	\$6,557.29	\$37,330.89	\$0.00	\$45.09	\$268,809.34	\$8,064.28	\$46,731.90	\$0.00	\$56.44
2027	\$84,476.64	\$250,977.75	\$7,529.33	\$39,421.42	\$0.00	\$47.61	\$312,118.66	\$9,363.56	\$49,348.88	\$0.00	\$59.60
2028	\$13,743.56	\$213,451.86	\$6,403.56	\$41,629.02	\$0.00	\$50.28	\$286,354.46	\$8,590.63	\$52,112.42	\$0.00	\$62.94
2029	\$24,379.89	\$247,740.88	\$7,432.23	\$43,960.25	\$0.00	\$53.09	\$333,313.95	\$9,999.42	\$55,030.72	\$0.00	\$66.46
2030	\$18,650.61	\$274,753.46	\$8,242.60	\$46,422.02	\$0.00	\$56.07	\$373,984.19	\$11,218.93	\$58,112.44	\$0.00	\$70.18
2031	\$15,218.90	\$310,767.47	\$9,323.02	\$49,021.65	\$0.00	\$59.20	\$424,644.94	\$12,739.35	\$61,366.73	\$0.00	\$74.11
2032	\$96,761.78	\$353,893.25	\$10,616.80	\$51,766.87	\$0.00	\$62.52	\$483,532.12	\$14,505.96	\$64,803.27	\$0.00	\$78.26
2033	\$88,405.08	\$319,515.14	\$9,585.45	\$54,665.81	\$0.00	\$66.02	\$466,079.58	\$13,982.39	\$68,432.25	\$0.00	\$82.65
2034	\$28,936.17	\$295,361.33	\$8,860.84	\$57,727.10	\$0.00	\$69.72	\$460,089.14	\$13,802.67	\$72,264.46	\$0.00	\$87.28
2035	\$13,727.86	\$333,013.09	\$9,990.39	\$60,959.81	\$0.00	\$73.62	\$517,220.11	\$15,516.60	\$76,311.27	\$0.00	\$92.16
2036	\$28,004.83	\$390,235.44	\$11,707.06	\$64,373.56	\$0.00	\$77.75	\$595,320.12	\$17,859.60	\$80,584.70	\$0.00	\$97.32
2037	\$17,138.95	\$438,311.24	\$13,149.34	\$67,978.48	\$0.00	\$82.10	\$665,759.60	\$19,972.79	\$85,097.44	\$0.00	\$102.77
2038	\$14,568.11	\$502,300.11	\$15,069.00	\$71,785.28	\$0.00	\$86.70	\$753,690.87	\$22,610.73	\$89,862.90	\$0.00	\$108.53
2039	\$29,718.95	\$574,586.28	\$17,237.59	\$75,805.25	\$0.00	\$91.55	\$851,586.39	\$25,547.89	\$94,895.22	\$0.00	\$114.61
2040	\$25,008.49	\$637,910.18	\$19,137.31	\$80,050.35	\$0.00	\$96.68	\$942,320.55	\$28,269.62	\$100,209.35	\$0.00	\$121.03
2041	\$15,459.80	\$712,089.33	\$21,362.68	\$84,533.17	\$0.00	\$102.09	\$1,045,791.03	\$31,373.73	\$105,821.08	\$0.00	\$127.80
2042	\$15,768.99	\$802,525.39	\$24,075.76	\$89,267.03	\$0.00	\$107.81	\$1,167,526.04	\$35,025.78	\$111,747.06	\$0.00	\$134.96
2043	\$110,982.17	\$900,099.18	\$27,002.98	\$94,265.98	\$0.00	\$113.85	\$1,298,529.89	\$38,955.90	\$118,004.89	\$0.00	\$142.52
2044	\$32,812.12	\$910,385.97	\$27,311.58	\$99,544.87	\$0.00	\$120.22	\$1,344,508.51	\$40,335.26	\$124,613.17	\$0.00	\$150.50
2045	\$1,315,808.66	\$1,004,430.30	\$30,132.91	\$105,119.39	\$0.00	\$126.96	\$1,476,644.81	\$44,299.34	\$131,591.51	\$0.00	\$158.93
2046	\$19,629.19	-\$176,126.07	\$0.00	\$111,006.07	\$0.00	\$134.07	\$336,727.00	\$10,101.81	\$138,960.63	\$0.00	\$167.83
2047	\$604,831.81	-\$84,749.19	\$0.00	\$117,222.41	\$0.00	\$141.57	\$466,160.24	\$13,984.81	\$146,742.43	\$0.00	\$177.23
2048	\$35,516.89	-\$572,358.59	\$0.00	\$123,786.87	\$0.00	\$149.50	\$22,055.67	\$661.67	\$154,960.00	\$0.00	\$187.15

Interest Rate: 3.00%
 Inflation Rate: 2.00%
 Minimum Balance: \$20,000.00