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PRELIMINARY Reserve Study

9/00/2024

Introduction:

The purpose and intent of this study is to attempt to look forward a period of 30 years, analyze the physical common elements of the association, assess their physical condition, estimated remaining life, and current replacement cost. The study then plots those expected expenses over time, in an effort to provide a road map for the community to plan for future expenses.

In its current preliminary stage, this is the opportunity for the Board to review the study, and determine if certain elements need to be added, removed or adjusted. The addition of further items or increase in cost will add to the recommended cost to fully fund the community. It will also reduce the risk exposure to the community, the more items that are included, and the more funded the plan becomes.

Per the previous discussions with the Board, items that were specifically included in this report are: Light bollards, Community Entry Building/Signs, Lawn Irrigation System, Mail Kiosks, Long Term Tree Removal, Driveways, Storm Drainage, Gutters, Roofing, and Roads. As per the discussions, these were the identified items that have an estimated life expectancy, could be assessed a cost, and exceeded a cost threshold of $20,000.

Only a few discussed items were intentionally left out of this study. Among them is the long term maintenance of the wetlands area, including the bridge on S Drive. At the present time, the regulations are unclear as to what can be done in the future, and there is not a way to accurately predict future costs. Another item left out of the report is the siding/painting that has been ongoing. Although the item is a large ticket, this study is not intended for maintenance, and siding was not included. If it is the intent to use reserve monies for future painting/siding, it may be work adding a piece of that element back into the study.

There are several items included that, after research, we believed should be further discussed by the Board and possibly altered based on new information. Each of these will be discussed below in subsections, but include: Light Bollards, Entry Building/Sign, Mail Kiosks, and Tree Removal.

Summary:

As seen in the table below, ten physical elements were identified and evaluated for the study. All elements were found to be well maintained and aging consistently within initial life expectancies of the elements. With many of the larger items recently addressed, such as roofs and gutters, the most significant of the future repairs are still more than a decade away, allowing time for planning.

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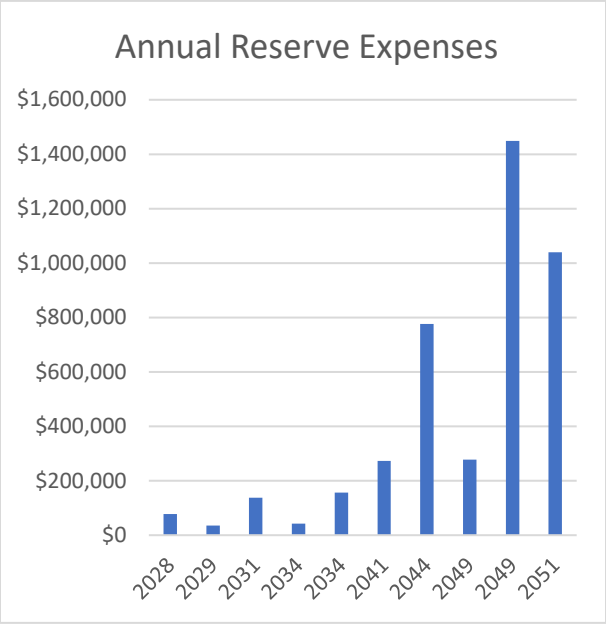
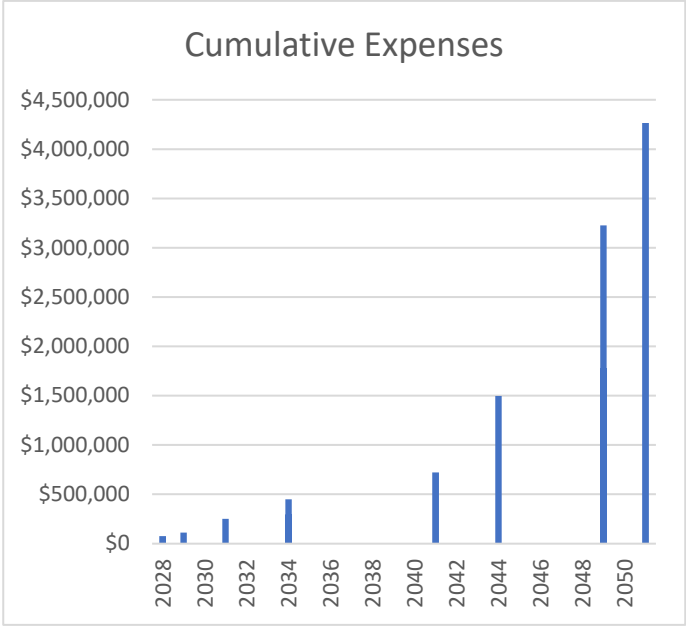
The chart below indicates the items evaluated and their anticipated cost and remaining life.

Item Inspected	Predicted Useful life	Estimated Remaining Useful Life	Est. Year Needed Replaced	Current Average Cost Repair/Replace
Light Bollards	30	4	2028	$78,000
Entry Building/Sign	35	5	2029	$35,000
Lawn Irrigation	30	7	2031	$138,073
Mail Kiosks	25	10	2034	$42,500
Tree Removal	20	10	2034	$156,250
Driveways	30	17	2041	$273,000
Storm Sewer Drainage	40	20	2044	$775,900
Gutters	30	25	2049	$278,100
Roofing	30	25	2049	$1,448,800
Roads	40	27	2051	$1,040,000
			Total Cost	$4,265,623

Based on these expectations, expenses will stay moderately low, well below $200,000 in any given year, until the year 2044, when some of the other large expenses begin materializing. Below is a graph showing the expected expenditures from reserves over the next 30 years. The second graph shows that the cumulative reserve expenses will not exceed $500,000 until 2041.





It should be noted that all these current numbers assume a starting reserve balance of $0, which can be adjusted for the final report. In the discussions to be held, it should be determined what the minimum acceptable reserve balance is, and what the current monthly contributions are.

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Furthermore, it should be discussed what additional amount should remain in the reserve to deal with expenses not outlined in this study. Of significance is the lower limit of what was included in this study. As this study did not anticipate expenses below $20,000, it should be evaluated how often those expenses exist historically and account for them.

As the study stands, with the included physical elements being accounted for, assuming a starting balance of $0, for the community to fully fund the reserve account, and avoid special assessments, the additional dues requirement would be $138 per month, per unit. Several other funding options are also presented and will be discussed further.

Identified Items:

Light Bollards –

The light bollards that are currently in the community are original to the construction of the association. The bollards themselves have been maintained, and sustainable sources identified for the majority of replacement parts. The long-term failure mode for these lights will be the infrastructure that supports them. This includes the underground wires and the concrete bases they are attached to. As these have deteriorated in some cases beyond repair, the cost for repair exceeds that of replacement. With advancements in lighting, and availability of new products, at significantly lower cost than straight replacement of just the concrete and electric, the case for repair is less attractive. The cost included in this report is assuming the electric and concrete will continue to fail at the current pace and require at a minimum a system overhaul in about four years. The cost included is highly subjective and is roughly about the same cost of replacement with new solar systems, or replacement of the below ground infrastructure.

Community Entry Building/Sign –

Currently the community has a masonry sign and a faux guard building that is at the front entrance to the building. As a structure that has an identifiable and expected life span, and an expected cost exceeding $20,000, this was included in the study. The costs associated are based on the current construction costs, and the costs experienced by Briarwood previously with the rebuilding of the sign. Based on the discussions with the Board, this would be an element of the study which may be necessary to change. If there are other considerations for how to maintain this in the near future, the number could be adjusted as necessary to meet the association's needs.

Lawn Irrigation System –

The current irrigation system is original to the community and has an expected remaining lifespan of about seven years. As these systems age, the two most significant issues are the degradation of the plastics in the pipe connections and valves, and the disruption of lines from tree roots. Though a system can theoretically be repaired indefinitely, typically after thirty years the repair costs exceed those of a full replacement.

Mail Kiosks –

Although these are durable, they do have a life expectancy of about twenty-five years, and they will need replacement. With the current expected replacement cost to exceed the threshold, the cost of similar models with similar capacity were identified and priced for replacement costs. Based on their age and condition, it is estimated that these units will last for an additional ten years.

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Tree Removal –

In a community of this size, with the number of mature trees, it should be anticipated that within twenty years of reaching maturity a significant portion will have to be removed, and new trees planted. For the purposes of the study, only the trees that were fully mature, and within the maintained, landscaped area of the community were included. Trees in the wetlands and forest were not included in this study. Overall, it appears the community has about 250-275 fully mature trees throughout the property. Based on averages, and how many are in close proximity to foundations and roofs, the study assumes that by twenty years after maturity, 25% of them will have to be removed. The removal cost was based on current prices for removal of full-grown mature trees within a housing community.

Driveways –

The driveways throughout the community have been well maintained and with the roads, went through significant repair/overhaul in 2011. As long as the roads continue to be well maintained, the remaining life expectancy of seventeen years should be fully achievable. This will be an important aspect to revisit in detail every 4-5 years. During this interval, both the wearing of the road, as well as the industry costs for replacement should be looked at as these can often change dramatically. The costs used for replacement of these was a combination of the extrapolated cost from 2011 and the current cost in today's market. Changes in oil prices have a large impact on paving products and pricing.

Storm Sewer Drainage –

The community has an extensive drain system for storm water that runs through the community. While several of the road catch basins had previously suffered from deferred maintenance, many have now been repaired to be fully functional. With an expected initial lifespan of about forty years, and based on the current condition, and commitment to maintenance and repair, we believe the remaining life is about twenty years. While the basins are easy to maintain, there is not much other than cleaning that can be done to the pipes. As there is a history of algae issues in the area, I would expect there to be significant repairs near the end of the system life span. Costs for this are based primarily on current costs for new developments in the area.

Gutters/Roofs –

While called out separately, both of these elements were just replaced and upgraded by the community in the last four years. All elements are new, with post installation inspections and it is expected they will serve their full intended lifespan. The costs for these elements are based on the exact current cost experienced by the community for their replacement.

Roads –

Though the roads have been well maintained, there is an expected lifespan of about 40-50 years. As this road has not been regularly seal coated, it was estimated at 40 years. Much of the road was repaired/replaced in 2011 by ASI and we were able to verify that the base was good, thereby hopefully reducing future costs. If the roads are periodically seal coated, and inspected /repaired for ground shifting, then the community should be able to achieve another twenty seven years out of the roadway. Maintenance is critical to the road for the base to last the full expected time.

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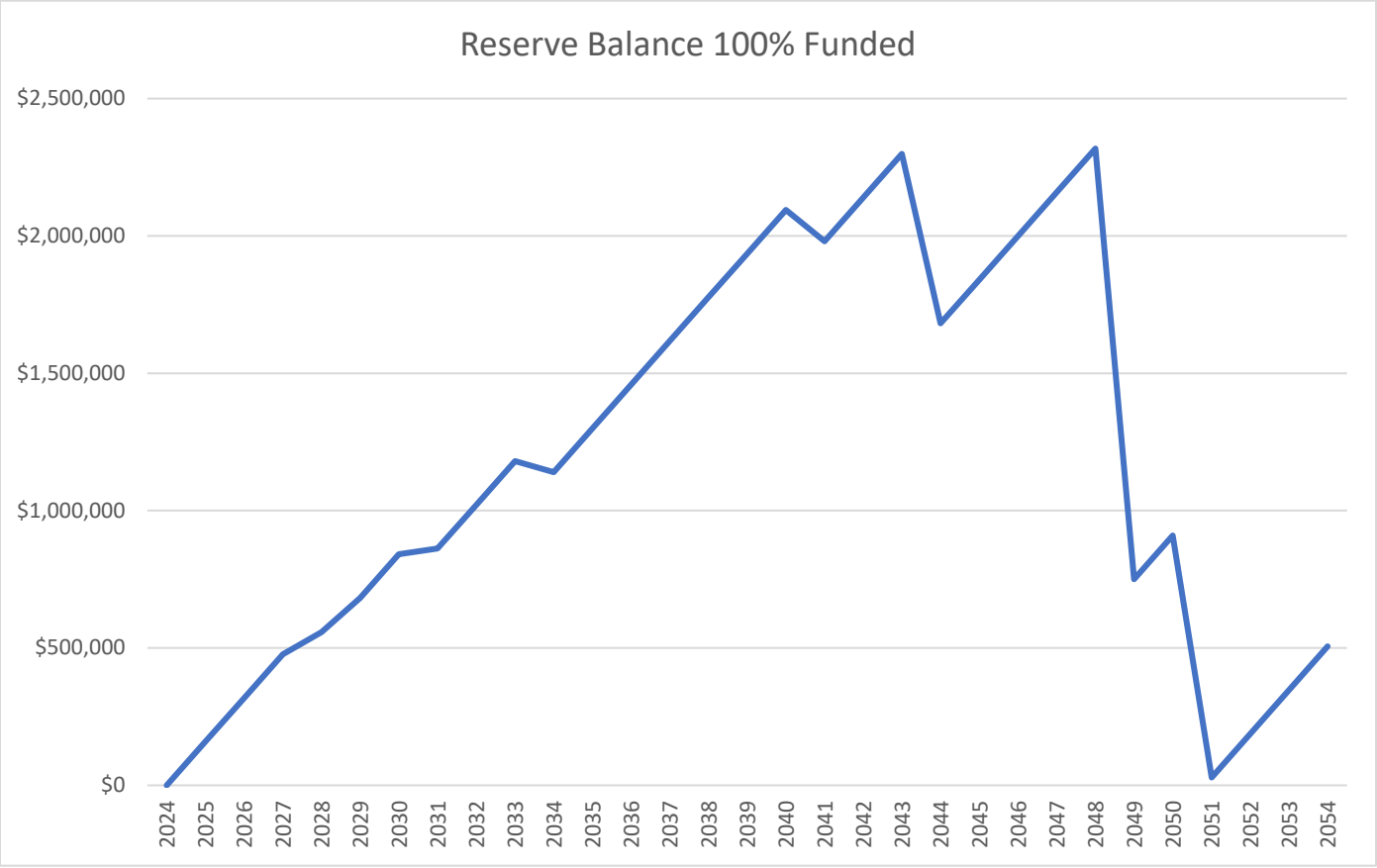
Funding –

When considering how to adequately fund a Reserve Savings, it is important to remember this study is only a map, providing different options based on what the community finds acceptable in terms of planning and risk. It is also important to revisit the study on a regular basis to ensure that both the anticipated life span has not dramatically changed, and also to adjust on a regular basis for fluctuations in the construction market.

To achieve 100% funding per this report, in order to balance the payments evenly over the next 30 years, and assuming a starting balance of $0, it would require dues increase of $138.05 per month per unit. As the majority of the upcoming future expenses within the next decade are fairly small in comparison, much of the increase is due to the major costs that will not occur for 20-30 years and would be a way to build that amount slowly. The largest drawback to trying to achieve 100% funding now is much of that increase is due to the cost of preparing for the next roof and gutter replacement, which is the single largest cost, and a cost that was just incurred by special assessment. Unfortunately, this significant cost for roofing is also likely to fall near the expected replacement of roads, which is also a very significant cost. The graph of what 100% funding would look like over the next 30 years is shown below.



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The accompanying table below shows what the actual balance of the Reserve Balance would be year to year.

Reserve Savings Total 100%	
Dues Increase/Unit $138.05	
2024	$0
2025	$159,033
2026	$318,067
2027	$477,100
2028	$558,134
2029	$682,167
2030	$841,201
2031	$862,161
2032	$1,021,194
2033	$1,180,228
2034	$1,140,511
2035	$1,299,545
2036	$1,458,578
2037	$1,617,611
2038	$1,776,645
2039	$1,935,678
2040	$2,094,712
2041	$1,980,745
2042	$2,139,779
2043	$2,298,812
2044	$1,681,946
2045	$1,840,979
2046	$2,000,012
2047	$2,159,046
2048	$2,318,079
2049	$750,213
2050	$909,246
2051	$28,280
2052	$187,313
2053	$346,347
2054	$505,380

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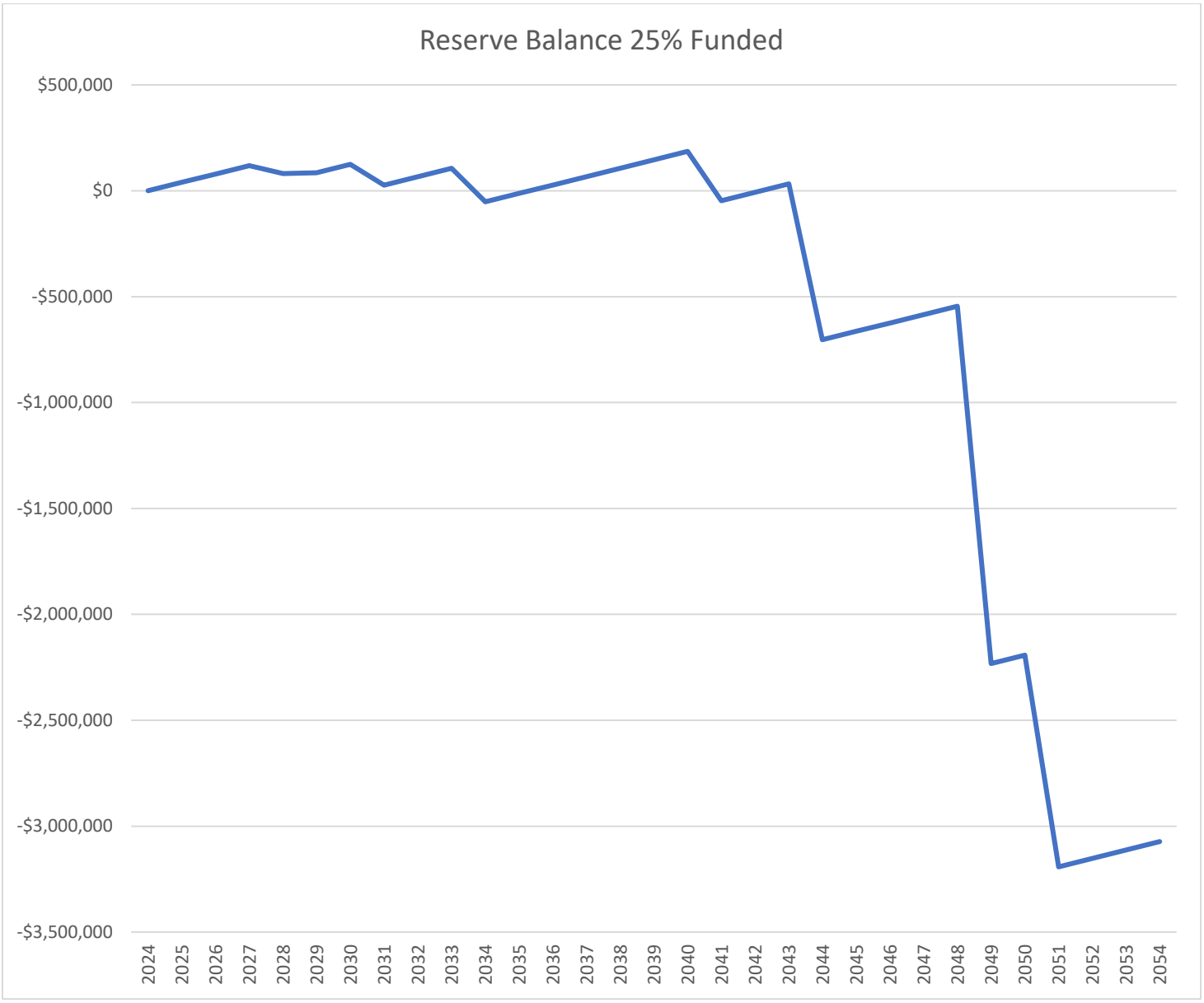
To look at the other end of the spectrum, and assume a funding goal of 25% funded, this would require an increase of just $34.51 per month per unit. Even assuming there are zero starting funds, this would keep the association without an expected shortage of money until 2034, and then not again until 2041. Assuming the starting balance of the reserve account is at least around $50,000, this would mean no significant money shortage for about 17 years. The significant drawback to this minimal level of funding, is that without significant changes, it would almost mandate there would have to be significant special assessments between 2048 and 2052, when the potential to be over $3,000,000 in repairs is likely, with the bulk of that hitting in just a small period.

The graph and table below show these trends at a 25% funding goal.



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The following table shows the reserve balance year to year at a 25% funding level.

	Reserve Savings Total 25% Dues Increase/Unit $ 34.51
2024	$0
2025	$39,758
2026	$79,517
2027	$119,275
2028	$81,033
2029	$85,792
2030	$125,550
2031	$27,235
2032	$66,993
2033	$106,752
2034	-$52,240
2035	-$12,481
2036	$27,277
2037	$67,035
2038	$106,794
2039	$146,552
2040	$186,310
2041	-$46,931
2042	-$7,173
2043	$32,585
2044	-$703,556
2045	-$663,798
2046	-$624,039
2047	-$584,281
2048	-$544,523
2049	-$2,231,664
2050	-$2,191,906
2051	-$3,192,148
2052	-$3,152,389
2053	-$3,112,631
2054	-$3,072,873

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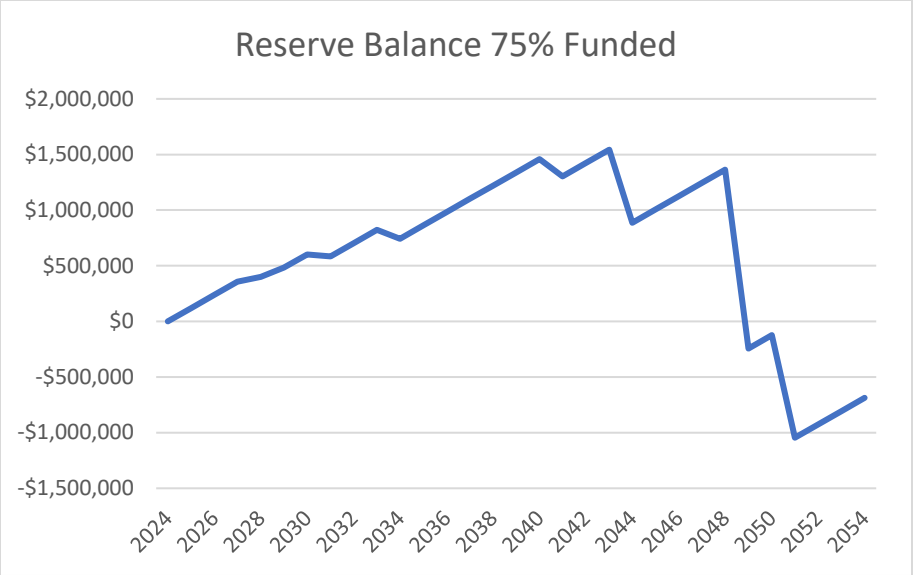
For comparative purposes, the numbers were also run at a funding level of 50% and then again at 75%. The accompanying graphs and tables will again show the respective cash flow available, and the potential risk points over the years for each.

The following graph shows 75% funding, and the accompanying table showing the reserve balance. This would require an increase of $103.54 per month per unit.



Reserve Savings Total 75% Dues Increase/Unit $103.54	
2024	$0
2025	$119,275
2026	$238,550
2027	$357,825
2028	$399,100
2029	$483,375
2030	$602,651
2031	$583,852
2032	$703,127
2033	$822,402
2034	$742,927
2035	$862,203
2036	$981,478
2037	$1,100,753
2038	$1,220,028
2039	$1,339,303
2040	$1,458,578
2041	$1,304,853
2042	$1,424,128
2043	$1,543,403
2044	$886,778
2045	$1,006,053
2046	$1,125,328
2047	$1,244,604
2048	$1,363,879
2049	-$243,746
2050	-$124,471
2051	-$1,045,196
2052	-$925,921
2053	-$806,646
2054	-$687,371

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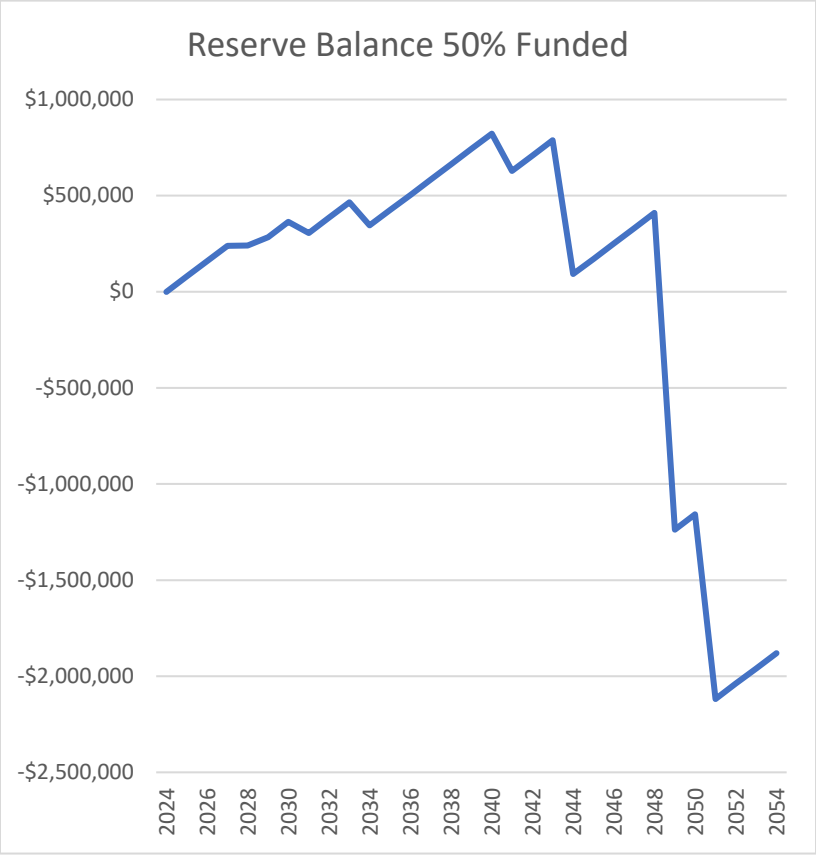
The following graph shows 50% funding, and the accompanying table showing the reserve balance. This would require dues increase of $69.02 per month, per unit.



Reserve Savings Total 50% Dues Increase/Unit $69.02	
2024	0
2025	$79,517
2026	$159,033
2027	$238,550
2028	$240,067
2029	$284,584
2030	$364,100
2031	$305,544
2032	$385,060
2033	$464,577
2034	$345,344
2035	$424,861
2036	$504,377
2037	$583,894
2038	$663,411
2039	$742,927
2040	$822,444
2041	$628,961
2042	$708,478
2043	$787,994
2044	$91,611
2045	$171,128
2046	$250,645
2047	$330,161
2048	$409,678
2049	-$1,237,705
2050	-$1,158,189
2051	-$2,118,672
2052	-$2,039,155
2053	-$1,959,638
2054	-$1,880,122

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Recommendation:

Given the overall continued maintenance of the community, the expected potential increases to reach even fully funded are not outrageous. The majority of repairs have been anticipated and accounted for.

The next step would be to incorporate the current reserve balance, determine a minimum level the Board is willing to allow, and account for the current monthly contribution to the reserve account. At that point the Board should be able to make an informed recommendation as to any required increase in the dues to mitigate future risks.

Based on what has been seen from the community, including the recent special assessment for roofing and gutters, I would likely recommend a staired and planned approach to rate increases, potentially removing the cost for the future roofs for a period of time from the increase. i.e. amortize the cost of new roofs over 15 years, but do not add that to the dues until 2039.

Overall, given the condition of the community, I feel there is time to make planned and informed decisions , as there are no major, or significant physical elements that were found to need immediate repair or replacement that could cause a special assessment.