



MEMORANDUM

DATE: October 14, 2019

TO: Mr. Kent Blumenthal, Ph.D., CAE
Chief Executive Officer – Green Valley Recreation, Inc.

FROM: Robert W. Browning, PCAM, RS
Browning Reserve Group

RE: Option to Increase Percent Funded

Thank you for this opportunity to provide more information on the reserve study for GVR. Instead of sending a bunch of drafts, and the amount of resources that often takes, I have written a narrative that explains the answers to the question, and I am using exhibits which are screengrabs from the study. Your printer will appreciate this.

When we recommend a reserve contribution goal, our main concern is to meet any objectives the client may have. Absent direction from the client, we use a combination of what we feel is in the best interest of the members along with best practices.

The challenge comes when a client has a goal, they are currently nowhere near achieving. For example, at GVR, the goal in the CPM calls for a target of 85% funding. But currently the funding for the 2020 budget year is projected at 68.5%. So, what do we do? Stick in a big increase for 2020? Ramp up the contribution to get there at some point? And once you get to a goal set this high, in most cases, the fund overbuilds so the contribution has to drop. The result is to ramp up the contribution, just to bring it back down.

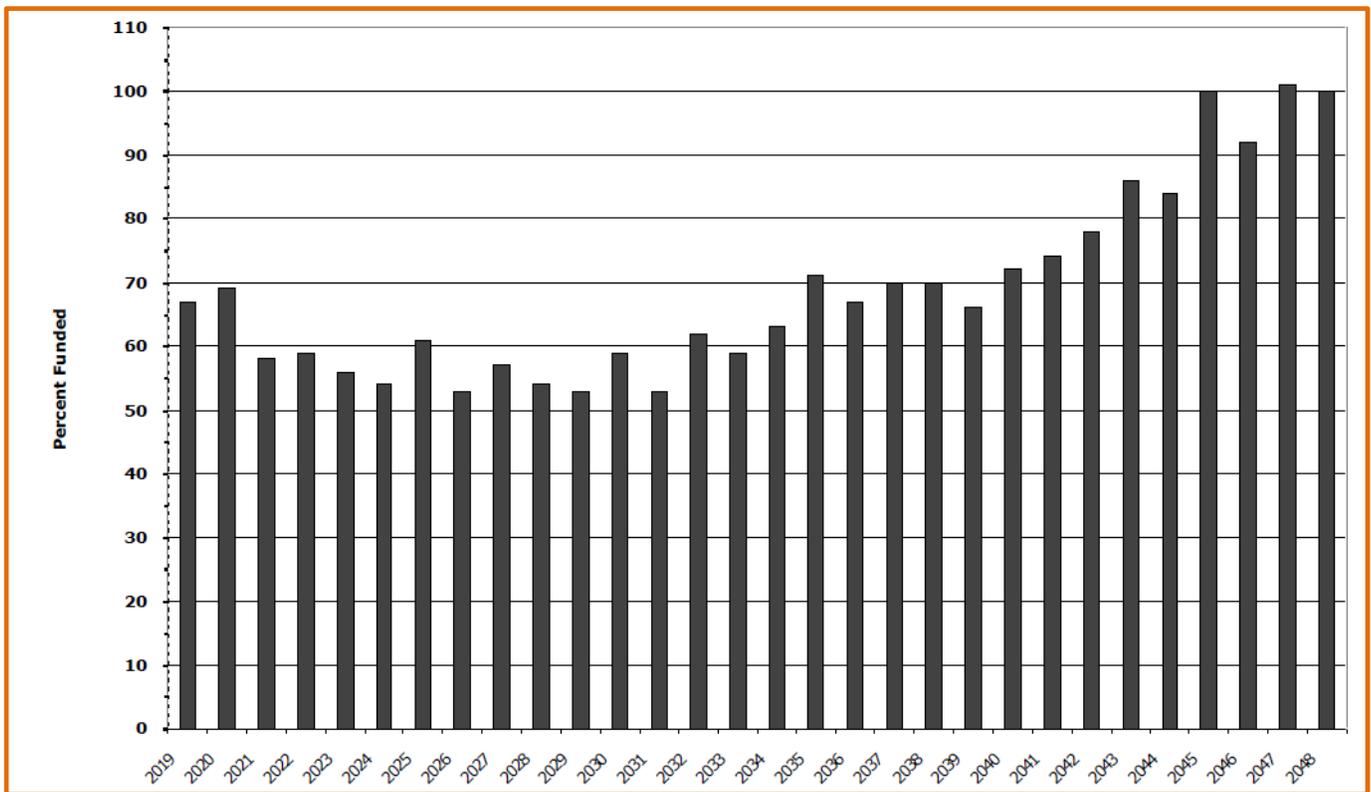
The board member's request to see the impact of what would be needed as an extra one-time infusion so future increases are inflationary at 2.5%, is exactly what we think demonstrates a reserve fund that is adequate. I mentioned this in my last letter. Provided the reserve fund in its lowest year has an adequate buffer. Here is where we may part company on this plan. By using

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85% funding as the “low-year” we will be displaying a reserve fund that is extremely conservative. This is because the balance will be high in the low year using 85% as the floor. If you think about it, GVR is a small step from the 2.5% contribution increase goal anyway. We have 4% increases, which are only 1.5% over the 2.5% inflation rate for the components. And the fund never drops below \$4M over the life of the study, and \$6M within 13 years. That is a big buffer.

Let’s take a closer look.

Current Funding Plan Percent Funded Chart- 85% achieved in 2043. This is a long time to get to the 85% goal, but at the low year in 2026, the cash balance is at \$4M+. This is really saying, if we have misjudged expenses by \$3.5M by 2026, GVR will still have \$500K in the fund at the end of the year as a buffer! This is incredible. Please see below for a copy of the chart in the Final study published in August 2019. **Notice the trend over 30 years is upwards.**



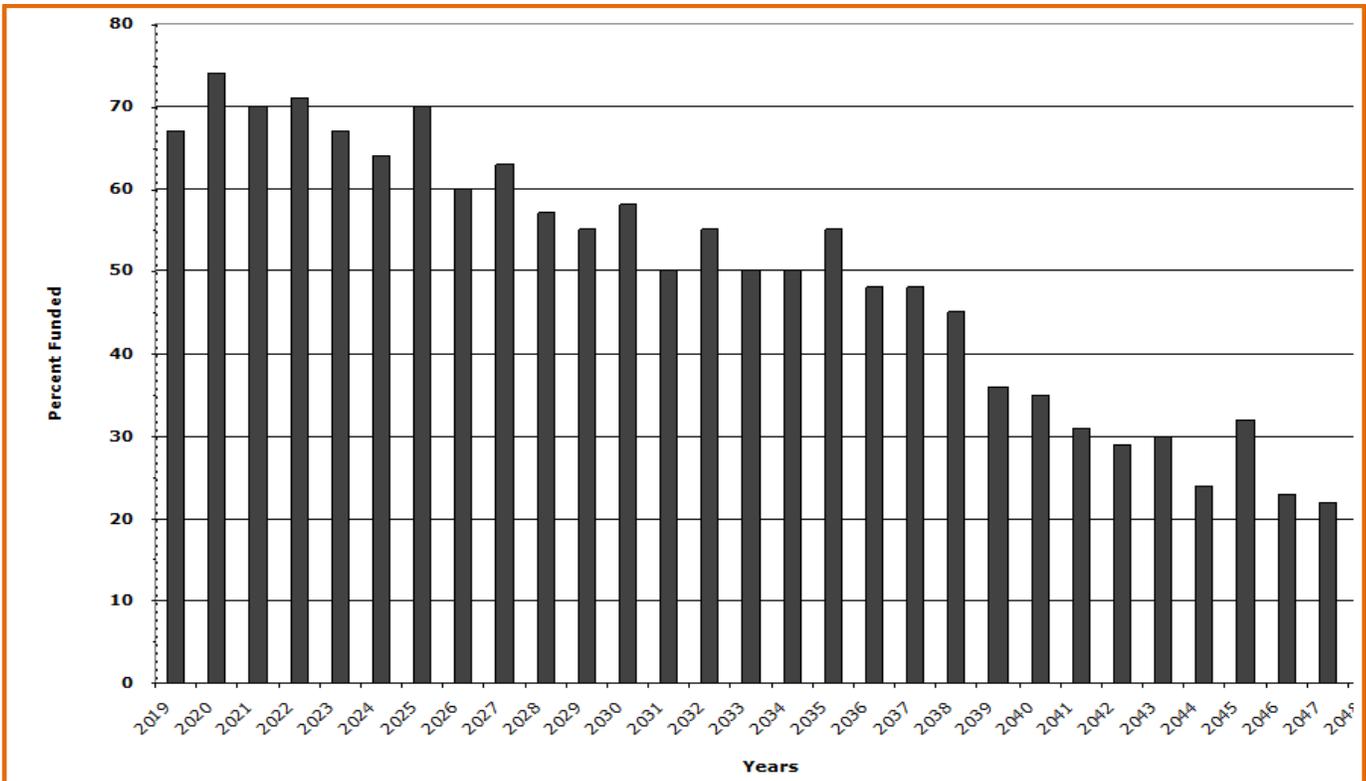
Now, on the next page, let’s look at what happens to the above chart by inserting \$500K in 2020 and \$500K in 2021. And starting in 2020, increases are reduced to an inflationary 2.5%.

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	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Beginning Balance	5,881,453	5,584,742	6,153,981	5,972,951	5,730,498	5,408,832	5,125,993	5,541,177	5,150,840	5,283,590
Inflated Expenditures @ 2.5%	1,404,592	1,066,165	1,845,988	1,427,564	1,525,829	1,506,205	837,148	1,670,992	1,173,441	1,543,482
Reserve Contribution	966,323	990,481	1,015,243	1,040,624	1,066,640	1,093,306	1,120,639	1,148,655	1,177,371	1,206,805
<i>Household/yr @ 13,610</i>	71.00	72.78	74.60	76.46	78.37	80.33	82.34	84.40	86.51	88.67
<i>Percentage Increase</i>		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	500,000	500,000	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	141,558	144,923	149,715	144,487	137,523	130,060	131,693	132,000	128,820	127,881
Ending Balance	5,584,742	6,153,981	5,972,951	5,730,498	5,408,832	5,125,993	5,541,177	5,150,840	5,283,590	5,074,794

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beginning Balance	5,074,794	4,905,965	5,269,675	4,830,123	5,297,297	5,153,335	5,333,660	6,089,228	5,932,045	5,975,099
Inflated Expenditures @ 2.5%	1,529,024	1,029,814	1,863,837	989,943	1,638,370	1,348,667	819,966	1,775,968	1,611,081	1,899,485
Reserve Contribution	1,236,975	1,267,899	1,299,596	1,332,086	1,365,388	1,399,523	1,434,511	1,470,374	1,507,133	1,544,811
<i>Household/yr @ 13,610</i>	90.89	93.16	95.49	97.88	100.32	102.83	105.40	108.04	110.74	113.51
<i>Percentage Increase</i>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	0	0	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	123,219	125,625	124,689	125,030	129,020	129,469	141,023	148,411	147,002	144,944
Ending Balance	4,905,965	5,269,675	4,830,123	5,297,297	5,153,335	5,333,660	6,089,228	5,932,045	5,975,099	5,765,369

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Beginning Balance	5,765,369	4,732,648	4,389,753	3,877,239	3,599,640	3,851,022	3,195,863	4,278,737	3,521,226	3,351,923
Inflated Expenditures @ 2.5%	2,745,758	2,078,534	2,278,168	2,075,088	1,588,414	2,533,664	845,701	2,736,008	2,183,414	3,113,604
Reserve Contribution	1,583,431	1,623,017	1,663,592	1,705,182	1,747,812	1,791,507	1,836,295	1,882,202	1,929,257	1,977,488
<i>Household/yr @ 13,610</i>	116.34	119.25	122.23	125.29	128.42	131.63	134.92	138.30	141.75	145.30
<i>Percentage Increase</i>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	0	0	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	129,605	112,622	102,062	92,307	91,983	86,999	92,279	96,296	84,854	69,597
Ending Balance	4,732,648	4,389,753	3,877,239	3,599,640	3,851,022	3,195,863	4,278,737	3,521,226	3,351,923	2,285,404



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As you can see on the previous page, with an extra \$1 Million added over 2020 and 2021, and the contributions reduced to an inflationary rate of 2.5% per year, the percent funded trends downward and never reached 85% funded status. And the low year is now year 30 at \$2.2M. That is a small buffer for 30 years from now.

Let's look at how much would have to be added to the reserve fund in 2020, so that future increases are at 2.5% and GVR's goal of 85% funding is sought.

Please see below the \$4M deposit in 2020 & 2.5% increases throughout the plan.

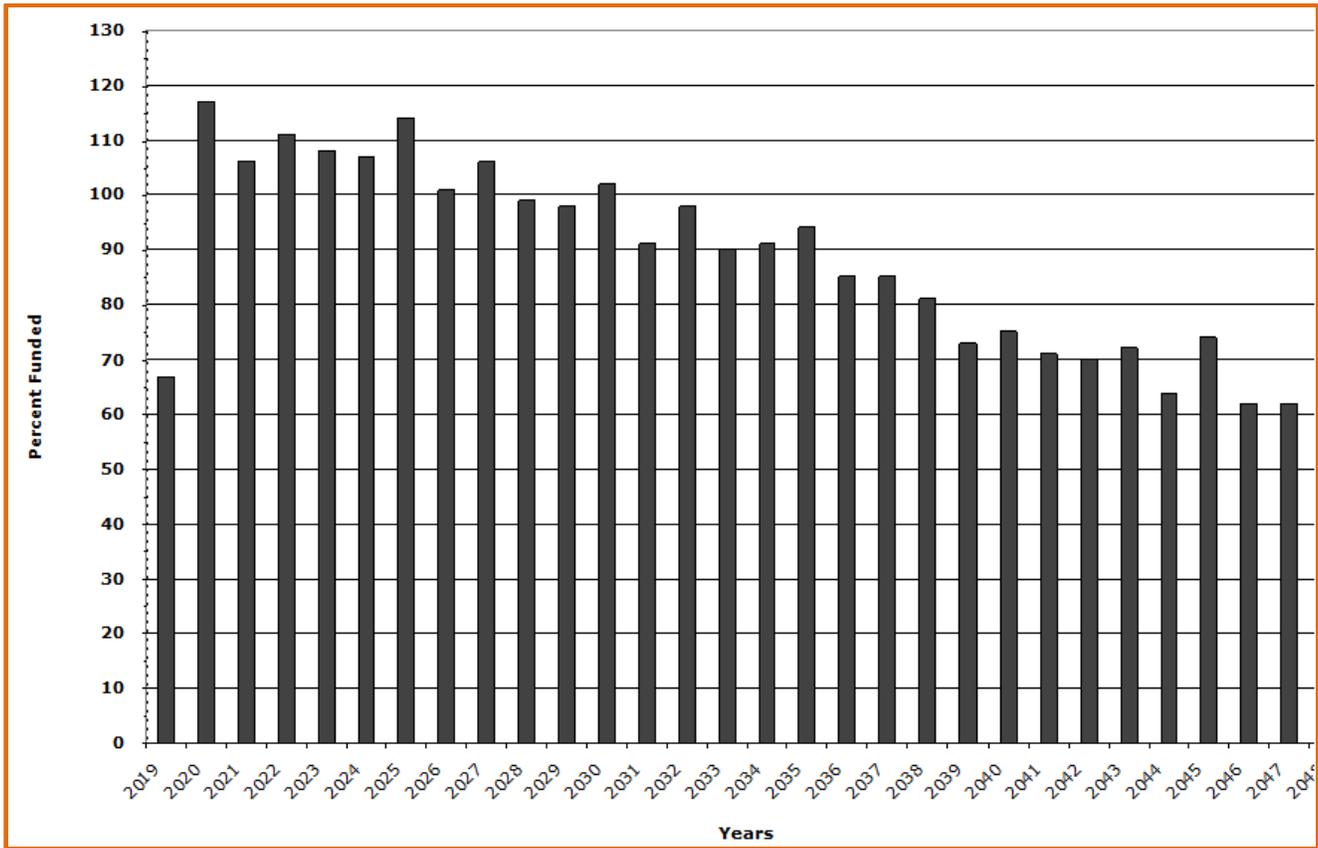
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Beginning Balance	5,881,453	5,584,742	9,697,731	9,099,045	8,934,744	8,693,184	8,492,454	8,991,800	8,687,728	8,908,900
Inflated Expenditures @ 2.5%	1,404,592	1,066,165	1,845,988	1,427,564	1,525,829	1,506,205	837,148	1,670,992	1,173,441	1,543,482
Reserve Contribution	966,323	990,481	1,015,243	1,040,624	1,066,640	1,093,306	1,120,639	1,148,655	1,177,371	1,206,805
<i>Household/yr @ 13,610</i>	71.00	72.78	74.60	76.46	78.37	80.33	82.34	84.40	86.51	88.67
<i>Percentage Increase</i>		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	4,000,000	0	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	141,558	188,673	232,059	222,639	217,629	212,168	215,855	218,266	217,242	218,514
Ending Balance	5,584,742	9,697,731	9,099,045	8,934,744	8,693,184	8,492,454	8,991,800	8,687,728	8,908,900	8,790,737

	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beginning Balance	8,790,737	8,714,806	9,173,738	8,831,788	9,399,003	9,357,584	9,643,015	10,506,317	10,459,561	10,615,803
Inflated Expenditures @ 2.5%	1,529,024	1,029,814	1,863,837	989,943	1,638,370	1,348,667	819,966	1,775,968	1,611,081	1,899,485
Reserve Contribution	1,236,975	1,267,899	1,299,596	1,332,086	1,365,388	1,399,523	1,434,511	1,470,374	1,507,133	1,544,811
<i>Household/yr @ 13,610</i>	90.89	93.16	95.49	97.88	100.32	102.83	105.40	108.04	110.74	113.51
<i>Percentage Increase</i>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	0	0	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	216,118	220,846	222,290	225,071	231,563	234,575	248,757	258,838	260,190	260,962
Ending Balance	8,714,806	9,173,738	8,831,788	9,399,003	9,357,584	9,643,015	10,506,317	10,459,561	10,615,803	10,522,090

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Beginning Balance	10,522,090	9,608,287	9,387,283	8,999,707	8,850,170	9,232,815	8,712,202	9,932,984	9,316,829	9,292,417
Inflated Expenditures @ 2.5%	2,745,758	2,078,534	2,278,168	2,075,088	1,588,414	2,533,664	845,701	2,736,008	2,183,414	3,113,604
Reserve Contribution	1,583,431	1,623,017	1,663,592	1,705,182	1,747,812	1,791,507	1,836,295	1,882,202	1,929,257	1,977,488
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<i>Percentage Increase</i>	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
Special Assessments / Other	0	0	0	0	0	0	0	0	0	0
Interest Pre Tax @ 2.50%	248,523	234,513	227,000	220,369	223,247	221,543	230,187	237,652	229,744	218,109
Ending Balance	9,608,287	9,387,283	8,999,707	8,850,170	9,232,815	8,712,202	9,932,984	9,316,829	9,292,417	8,374,410

Please see next page for percent funded graph for the above funding plan.

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I tried to show a middle of the road presentation because the 85% funding goal moves closer to 2019, or further from 2019, depending on the size of the one-time infusion.

I am displaying the \$4M infusion. The result is the fund is overfunded in 2020 and the percent funded trend line drops like a rock, almost every year, with the inflationary increases. **With the \$4M infusion, the 85% goal passes downwards through 2038 and keeps falling.**

At a \$5M infusion, that buys a few more years and the fund is at 85% in 2044 and at \$6M it buys you until 2048, year 30, before the percentage drops to below 85%.

Generally, when our client wants to be more conservative than us, we let them, with not much push back. After all, it is your community and the board's responsibility, so we can recommend, but the board is the entity that has to address the members when things go bad.

I hope this gives you a good idea of how percent funded can be useful while sometimes being a false indicator of adequacy.

Thanks, Bob

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