

Reserve Studies (Part I): “Myths and Realities of the Percent-Funded Estimate”

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If you've just received your reserve study indicating your association is 110% funded, does that mean your Board of Directors can decrease your annual reserve budget?

Conversely, if your reserve study indicates your association is 62.7% funded, does that mean you should increase your annual reserve budget?

The answer to each of the foregoing questions is “not necessarily.” The percent-funded estimate is one of the most commonly misunderstood results of reserve studies (see definition below if you're not yet familiar with the term).

Unfortunately, many association board members make reserve budget decisions based on how well their association fared in the percent-funded category: If the association scored low on the percent-funded estimate, they assume they must increase the annual reserve budget to ramp the association up to the 100% funded level. If the association scored over 100% on the percent-funded estimate, they assume they are “overfunded,” when, in fact, they may be not funding enough.

The missing link in the foregoing analysis is that the Board needs to verify whether or not the association's annual contribution to reserves is healthy enough. That can be proven by a reserve cash flow analysis, preferably a 30-year projection. “Cash flow analysis” refers to the practice of tracking the inflows and outflows of cash from year to year over an extended period. Without studying cash flow to determine whether reserve account deficits might occur in the future, the percent-funded estimate can actually be misleading if used as a budgeting tool.

Many associations overemphasize the percent-funded estimate as the sole measure of financial health, partly because it is a required annual disclosure per California Civil Code 1365(a)(2)(C). Rather than focusing on percent funded results, associations should be evaluating whether projected income to their reserve account can fund future reserve expenses such as roofing, paving, pool replastering, etc.

“Percent-Funded Estimate” Defined

Let's take a simplified example to define the percent-funded estimate for those not familiar with the term:

Suppose your association is a simple planned unit development that has only one reserve component such as paving of road surfaces. And suppose for this example that your roads need to be re-paved every 10 years at a cost of \$100,000. If your roads were last repaved 5 years ago,

you should theoretically have one half of \$100,000 (ignoring inflation for now), or \$50,000 in reserve at this point in time.

If your association currently has \$50,000 in reserves at that point, it would indeed be 100% funded for the depreciation that has occurred to date. So, we see that the Percent Funded Estimate is defined as:

$$\frac{\text{(Amount of money in Reserve Account)}}{\text{(Total depreciation to-date of the association's capital assets)}}$$

And “depreciation” is simply a measure, in dollars, of how much of an asset (roof, pool, paving, etc.) has been “used up” since it was new.

Examples of Percent-Funded Estimate “Contradictions”

Now, let us suppose your association only has \$30,000 in reserve. The reserve study would indicate the association’s reserve account is only 60% funded ($\$30,000/\$50,000 = 60\%$).

Is the association “underfunded?” Yes, by the standard definition.

However, just because your association clocks in at 60% funded, that doesn’t justify setting off alarm bells! Before doing so, we first need to look at reserve cash flow.

Suppose, upon evaluating the association’s current and projected reserve budget, we find the association plans to budget \$15,000 per year to reserves. When that \$15,000 annual funding is modeled in a cash flow analysis, it would show that the association will actually have \$105,000 in five years (\$30,000 reserve balance saved during the first 5 years) plus (5 years X \$15,000). This will be more than enough reserve cash to pay for the \$100,000 re-paving costs.

A reserve cash flow analysis would actually recommend that a \$14,000 per year reserve budget will be sufficient to fund the future repaving. (Note that after-tax interest earnings on reserve cash is not included in this basic example). So even though the association’s reserve account is 60% funded, the cash flow analysis would indicate that your current level of reserve funding was actually slightly excessive. In other words: No cause for alarm in spite of a percent-funded estimate that is shy of 100%.

If we take the prior example to the other extreme, let’s assume during the prior 5 years, the board members had been generously funding to reserves each year. Thankfully, the association has \$60,000 in reserve and the paving is 5 years old. The association would therefore be 120% funded ($\$60,000 \text{ reserves}/\$50,000 \text{ required}$). Yet if the current Board is funding to reserves at \$7,000 per year, they’re only going to add \$35,000 to their reserve account during the last 5 years of life of the paving, leaving them with just \$95,000 to try to buy a \$100,000 paving job.

In the foregoing case, a 120% percent-funded estimate from the reserve study could conceivably coax board members into being unnecessarily complacent with their reserve budget such that future boards would be saddled with a reserve shortfall.

The ultimate example demonstrating how the percent-funded estimate can be misleading is if our sample association had just repaved their streets yesterday and had spent all their money to do so, leaving \$0.00 in the reserve account. A reserve study would indicate that they're 0% percent funded at that point in time. In this case, a 0% funded figure is meaningless as a measure of financial health because all their cash is now invested in the paving that has only depreciated for one day. In fact, after completing the paving work, the association is actually in very good financial health because they won't have another reserve expense for 10 more years and the main reserve expense item has just been completely paid for.

How soon the funds will be needed is a factor...

A key factor in determining whether a low percent-funded estimate should set off alarm bells is how near is the "day of reckoning" when those funds will be needed. Using our paving example, suppose the reserve study is done in the ninth year of the 10-year paving cycle, showing the association is 33% funded (\$30,000 in reserve for \$90,000 of "depreciation-to-date" on a \$100,000 paving job). Since there is only one year remaining to fund the remaining \$70,000, it is very likely that the percent-funded estimate is indeed cause for concern. Unless the Board wants to impose a steep increase in regular monthly assessments, the members of this association are probably going to be hit with a substantial special assessment.

However, suppose the reserve study is done after the first year of the 10-year paving cycle and the association has absolutely nothing in their reserve account. The association would be 0% funded (\$0.00 in reserves to offset one-tenth depreciation of a \$100,000 future paving job). Indeed, the 0% funding estimate shows the board has been complacent, or even negligent. Yet it isn't necessarily cause for alarm, provided the board takes corrective action and uses the 9 remaining years to "catch up" for the prior year's improper funding.

Keep in mind, however, the foregoing example isn't meant to encourage skipping a year of reserve funding! Uneven reserve funding doesn't fairly distribute the costs of depreciation over all owners for those 10 years. Some owners who move out may avoid paying for the depreciation that occurred during their stay, while new owners who move in have to foot the bill! Unfortunately, this happens in many associations.

Having a reserve study that accurately determines the correct annual reserve funding – and having a Board that consistently follows the reserve funding plans specified in the reserve study – results in the most equitable distribution of the burden of depreciation over all owners.

In summary, once you think of the percent-funded estimate as a snapshot of the strength of your reserves relative to depreciation of your reserve assets (roof, pool, paving, etc.), then you'll see that it is not a forward-looking measure. Rather, it is as if you are looking in a rear-view mirror to evaluate how diligent prior board members have been in setting aside sufficient reserve funds.

However, in order to determine your next year's reserve budget, you'll need to be looking forward. Evaluating anticipated future reserve income against future reserve expenses, otherwise known as cash flow analysis, is a good start. Once your association has a diligently-prepared 30-

year cash flow analysis with realistic capital replacement expense projections, then your Board can have the confidence to say, “We have a reserve funding plan designed to fund 100% of projected capital expenses in the next 30 years.”