

What is a Reserve Study?

A reserve study is essentially a budget planning tool. A reserve study is concerned with an association's assets that are expensive to replace and have a useful life of more than 1 year. A study will inventory a community's assets and then provide a funding strategy to cover the costs associated with the repair or replacement of these assets. Retaining walls, streets, tennis courts, pools, roofs, siding.... These are the most obvious reserve items, but there are many more.

To better understand what a reserve study is, it might be helpful to explain...

What a Reserve Study Does NOT Include

Any expense that occurs annually, no matter how large should be part of the annual budget. For example, if a condo community paints one of its buildings every year this expense should be included in the annual budget.

Small expenses that occur periodically are usually funded through the annual budget. Light fixtures or interior doors are good examples. What's a small expense? It depends on the community. The threshold between the annual budget and reserve budget maybe \$300, it could be \$3,000. A recent project of mine was an upscale condo in the downtown, and it had a threshold of \$15,000.

A Reserve Study does NOT include Acts of God. It accounts for predictable future costs. A bartender serves somebody one drink too

many, and next thing you know you have a car parked where your monument used to be. You won't find that in your reserve study. That's where your insurance comes in.

How does a Reserve Study help a Community?

A study minimizes uncertainty. It does this by providing a timeline for future expenses and establishes if the association has saved enough money AND is still saving enough.

As communities get older, they tend to put less into reserves because their annual expenses continue to rise, but boards are reluctant to raise dues. The sooner a reserve study is performed the less likely an assessment will be required. Assessments are always unfair to somebody. Why should current homeowners shoulder the expense that earlier homeowners should have been saving for? This is a common cause for lawsuits. Family friends of ours own a unit in an older condo tower in Florida. Their association just had a reserve study performed. It turns out that they are a million dollars underfunded! That'll keep you up at night.

If a community is underfunded, a reserve study provides direction on how to properly restore the reserves to a healthy level.

A good reserve study is an excellent tool when bidding out construction work since it includes both unit prices and material quantities.

If a community is planning a new project, perhaps an addition to the clubhouse or a new playground; we can include this in the study. However, we need a quote from your contractor, since estimating new construction falls outside the scope of a reserve study. *I can't accurately price the installation of a tennis court, I don't know what the soil conditions are, where the ABC (aggregate base course) stone is coming from, surveying costs, permit fees, erosions control, etc. This is especially true if design drawings will be needed.*

It may also be easier for prospective buyers to find financing. When I was HOA president a prospective buyer in my community was having trouble with the lender because the lender insisted that FHA required a reserve study and we didn't have one. I honestly don't recall how the issue was resolved and the lender may have ended up being wrong, but with the recent housing crisis and a general trend toward more regulation, at some point in the future it may become a requirement, if it isn't already.

Funding Strategies

Ideally, a reserve study's goal is to reach full funding.

Fully funded explained: If an asset has a 10 year life and cost \$10,000 to replace, that asset is fully funded if at 3 years old there is \$3,000 saved for this item. If the asset is 8 years old there should be \$8,000. If a reserve account has the appropriate funding for each of its assets it is "fully funded".

There are 2 main funding methods: Cash Flow Method and Component Method and each takes a different approach to full funding.

The Component Method calculates funding for each individual component, then adds up all the individual costs by year, while the Cash Flow looks at the aggregate costs of all the components within a defined set of time, typically 30 years. This is a little difficult to explain so let's look at a very simple example, which ignores interest, taxes, inflation and has only 2 components.

We have Item A with a useful life of 5 years that will require \$10,000 to replace and Item B with a useful life of 6 years and a cost of \$2,000.

| Method | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 6 |
|-----------|--------|--------|--------|--------|--------|--------|
| Component | 2333 | 2333 | 2333 | 2333 | 2333 | 333 |
| Cash Flow | 2000 | 2000 | 2000 | 2000 | 2000 | 2000 |

The Component Method funds Item A, \$2,000 for 5 years (for a total of \$10,000) and Item B, \$333 for 6 years (for a total of \$2,000). This results in a higher contribution for years 1-5, ie. \$2,333, and a small contribution of \$333 for year 6. The Cash Flow Method adds up all the money, \$12,000, and then distributes it evenly over 6 years or \$2,000 each year.



The Component Method is a more conservative funding approach, however contributions go up and down, which is hard to monitor and difficult to fund. It also frequently requires large sums of money in the first few years to compensate for underfunding.

The Cash Flow Method is usually the preferred method because it achieves full funding over a thirty year period* and does so with a stable payment schedule. Additionally, with the Cash Flow Method an association can either increase contributions to reserves each year to compensate for inflation or it can maintain a uniform but higher contribution.

The main limitation of the Cash Flow Method is that it considers only assets that expire within a reserve study's project window. If you have a component that is 4 years old with a 25 year useful life, its replacement would occur in 21 years. A reserve study utilizing the Cash Flow Method with a 20 year window would not include this asset. If the association waited 10 years to perform another study, they might have an unpleasant surprise. Unfortunately, reserve studies with 20 year windows are not uncommon.

Limitations of a Reserve Study

One of the main limitations is the difficulty in predicting the useful and remaining life of an asset. If you told me that a townhome's vinyl siding was 5 years old, I'd believe you. If you told me that same siding was 8 years old, I'd also believe you. Frequently, it is late in the useful life that wear or deterioration even begins to show and from that time on wear begins to accelerate. Sometimes, a material's deterioration actually occurs in the interior, away from the surface. Since a reserve study is noninvasive, meaning we do not remove siding or core samples of asphalt. We therefore must speculate to some degree about the extensiveness of unseen damage. For all these reasons it is so important to get the actual installation dates of an asset.

An asset's useful life can be subjective. Is the asset performing for what it was intended? My wife is from Costa Rica. You drive 1 block and you've hit more potholes than you do all year here. Is the asphalt still performing as intended? It depends on your perspective. Many assets have an aesthetic component, which is subjective. I could look at a monument sign and say it's fine, I can still read it, or I might say that it looks old and detracts from the community.

One significant limitation is the assumptions the reserve study is based on. How accurate is the predicted inflation rate? We use historical data to determine future inflation. Obviously this is not a perfect method. It's unlikely that a reserve study from 20 years ago accounted for the effect that China's growth would have on building material prices. What's the next 30 years going to look like? How much will oil cost?

A reserve study is the most accurate the day it is created and each day afterward it becomes a little less accurate. While a reserve study may project out 30 years, its useful life is maybe 3-5 years.

Things To Remember

It is important to remember that your responsibility is not just for the current homeowners, but future homeowners. Lawsuits involving associations who find they have insufficient funds do happen. At the very minimum, I would suggest that whenever the board meets to approve next year's annual budget, you make sure that it's included in the minutes that you suggested including a reserve study, if one has not been performed in the last 5 years.

Reviewing Reserve Study Proposals

It is important to confirm that a study will provide unit prices and quantities. Believe it or not some reserve studies have neither.

What funding method is used? Some prominent companies still use the component method even though it's thoroughly unrealistic for the most communities. How does a board work with a study like this? If the community is unable to follow the funding strategy the study is of little value despite the high price tag.

It is also important to find out how much an update study will cost. It is common to find that a reserve study provider charges the same amount to perform an update study even though much of the work has already been accomplished. The update should be cheaper. I can't stress this enough! I've seen board members reviewing ten year old studies like the ink was still wet. Why? The cost.

That's it! If you have any questions all my current contact information is listed on the website <u>http://www.ReserveStudyCarolinas.com</u>. Additionally, I have a blog that is written from the perspective of a long time HOA board member, which you may also find of value. The address is <u>http://www.ReserveStudyCarolinas.com/blog.</u>