

# Creating Reserve Fund Funding Plans. The “Best” Way.

## **First ... About our Book**

The chapter you are about to read (next page) is identical to the material in our book “Reserve Fund Essentials”. This 94-page book covers a wealth of need-to-know reserve-related wisdom. Its 17 chapters deliver insights, suggestions and processes designed to ensure that co-owned and co-managed properties create healthy reserve funds that can be managed to everyone’s satisfaction.

Thirteen chapters can be accessed from our website [oliver-group.com/rfund](http://oliver-group.com/rfund). (Click on Book/Articles). The four chapters that cannot be accessed are “**Reserve Fund Fundamentals**” and “**Reserve Funds: What Does Adequate Really Mean?**” These are major, significant chapters and are included in our “Reserve Fund Essentials” book. To find out more about the book and how to order it, please click [MORE](#).

## **Now ... About the Authors**

You may wish to learn more about the authors of “Reserve Fund Essentials” (and the chapter you are about to read). To do this click [MORE](#).

## **Next ... Your Selected Chapter Begins**

Next Page, please.

# Creating Reserve Fund Funding Plans. The “Best” Way.

## Arriving at Well-Constructed Contribution Schedules

Publications on reserve funds often refer to several methods for arriving at funding plans. This chapter explains what these methods are, and recommends one of them as superior to all the others.

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Articles, books, white papers and essays abound, regarding the various approaches for creating a reserve fund plan, and in particular the funding portion of it. Just for the record, a completed reserve fund plan will usually be in the form of a table or spreadsheet that, across it, covers a span of several years — at least 20 years, sometimes as many as 60. It includes the estimated annual expenditures, the annual funding dollars (owners’ contributions), and the interest on the invested funds. Thus, starting with an opening balance there are resulting opening and closing balances shown for every year over the span of the plan.

In a word or two, arriving at the total estimated expenditures is accomplished by adding up the expenditures for each component in each year that a repair or replacement is expected to occur. (Expenditures, by the way, are not the subject of this article. For insights into handling expenditures see our chapter “Make ‘em Smooth”). Arriving at the interest-earned

figures can be done using alternate formulas, and this is covered in our chapter “Reserve Fund Investment Interest”.

What we’re looking at here is the scheme for coming up with funding numbers for the reserve fund plan. As mentioned above, there are a number of procedures for doing it. They all arrive at useable numbers (some better than others) but choosing one of the methods over the others isn’t easy. Especially, since in our opinion, it’s not even necessary. We’ll explain that particular statement farther along.

First, what methods do you consider when you set out to explore your choices for your funding calculation options? As a rule, they pretty well all have one thing in common, so the differences between them suddenly become quite slight. What they have in common is that all of them are based on estimated expenditures for each individual component of the property and figuring out when a replacement is due.

The Fully Funded system calls for determining how much money is currently set aside to replace it, and calculating how much should be collected in future years to ensure that the funds are available when required. A lot of steps. And this is done for each and every component.

Once all this has been done, the requirements are added up in each column (there’s a column for each year) and you have the answer ... the annual funding requirements. That’s the Fully Funded system. Those who espouse it admit that it leads, if anything, to over-funding which means that the property is holding on to more of its unit owner’s money than necessary.

So there's a variation available that calls for setting the reserve fund balance for the lowest year at zero, and this results in a downward shift of all the balances, thus reducing the amount of annual funding in the plan. If this seems a bit perilous (and it is) it can be tweaked by setting the lowest reserve fund balance at some "minimum" and allowing the earlier and later balances to fall into line as determined by finding the annual funding level to accomplish this.

Still another method — and this one uses the component-by-component build-up too — is called the Functional Method. It differs from the Fully Funded method in that each component's funding requirements are calculated with the interactions of interest earned and the inflated values of the expenditure.

The mathematics for the Functional method are very complex, however, but in truth they can be programmed into a spreadsheet to side step the need for manual computations. (See our chapter on software, page 88, for more on this).

What you've read so far sums up the kind of approaches you'll run into in a lot of the literature out there. What surprises us is that one seldom sees mention of our favorite method called, simply, the Cash Flow Method.

The primary building block is the same as any of the others. It's the estimate of expenditures for each component. There are estimates on the spreadsheet for the cost of the replacement in every year that the replacement must be carried out. Just like the other methods.

Once having that information on the spreadsheet, we part company with the other approaches, because from this point on we just deal with year-by-year total expenditures for all components. You end up a row of annual totals for the predicted expenditures. We're not interested in funding each component individually. We're interested in establishing a fund that's sufficient to pay for the replacement of any component when it's required.

So we have then, a row that shows different values indicating the cost in each year for carrying out the replacements and repairs. The next job is to come up with an annual funding amount. Where do you get this amount? Well, let's say we start with the current funding amount and see what happens. Let's say it's \$100,000. Enter it on the spreadsheet. Enter \$100,000 in every year. If your computer is programmed correctly it will then calculate the interest on the balances and the balances themselves.

Job over? Not yet.

This is where the fun begins. If you're using a computer program that displays a graphical picture of your fund numbers, so much the better. In any case, look at the graph (or the numbers themselves), and check your yearly fund balances. You don't want to see any zeros or minus-values. If you do, try a higher annual finding level until you get to a point where your lowest yearly fund balance represents a comfortable minimum — a level below which you do not want to go.

Basically, once this has been accomplished, you may want to do "what-if" scenarios. That is, you say "the reserve fund

balances look too high in this five or six year span — what if we reduce the annual contributions (the funding) a little to bring them down a bit.” Or ... “the funding looks low for a few years in a row, and that could be dangerous, so what if we escalate the funding by a few percentage points a year to boost the balances up to a more comfortable level”. And so on.

We’re talking about funding plans, but let’s not forget that you can do what-ifs to re-distribute expenditures differently, as well. See our chapter “Reserve Fund Plans. Make ‘em Smoooooth”.

We like the Cash Flow method. It’s easy to understand. It takes interest into account. You can plan in uninflated dollars, but you can still see the results in inflated terms if you wish. It lends itself to updating when necessary (See our chapter on U.S.F. ... Update, Scan and Fix). It doesn’t require working with each property component separately.

We’re in good company as well. The very thorough Condominium Act of Ontario (our backyard) refers to cash flow in its regulations. And a highly respected, widely quoted, condominium lawyer here adds ...

“While deferring to the expertise of chartered accountants and qualified reserve fund analysts who may best be able to formulate the appropriate conceptual and applicable mathematical formulae, as well as the meaning of the key phrase “determined on a cash-flow basis” as set out in s. 29 (3) (B) (v) above<sup>1</sup>, it is our opinion that the words “the recommended amount of contributions to the reserve fund,

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<sup>1</sup> References are being made to the Condominium Act of Ontario

## RESERVE FUND ESSENTIALS

determined on a cash flow basis ...” indicates the usual understanding of the role of a reserve fund study in the condominium industry, in accordance with past practice, to the effect that a reserve fund study is not intended to be “fully funded” for the next 30 years (subject to inflation), but is only intended to ensure that there are sufficient funds in the reserve fund each year “that are required to offset adequately the expected costs in the year of the expected major repair or replacement of each item in the component inventory”.

To repeat — all the methods covered in this chapter work. None of them are “wrong”. We just think the Cash Flow method has a whole lot more going for it.