RESERVE STUDIES 103 – THE FUNDING PLAN

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Note: This course is approved by the Community Association Managers International Certification Board (CAMICB) to fulfill continuing education requirements for the CMCA® certification. www.camicb.org

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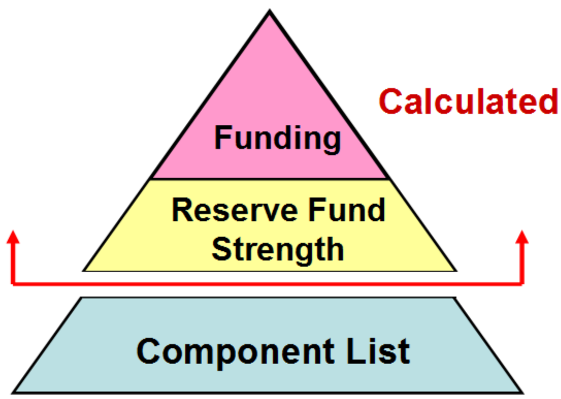
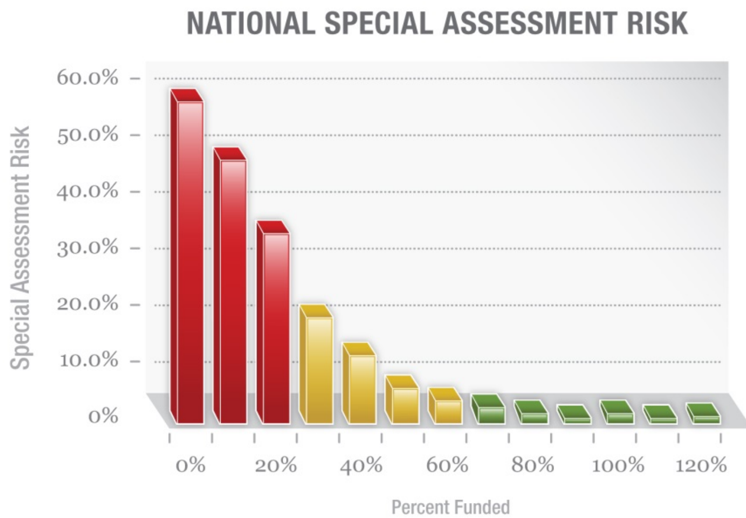
Reserve Studies help the board make informed decisions about the care of the main physical and financial assets of the association. Reserve Studies help *minimize surprises* by accurately identifying the association's major, predictable common area repair and replacement projects, giving the association years to prepare financially. The association's Reserve Component List forms the foundation of every Reserve Study. It is on that solid foundation that Reserve Fund Strength and Funding Plans are calculated.



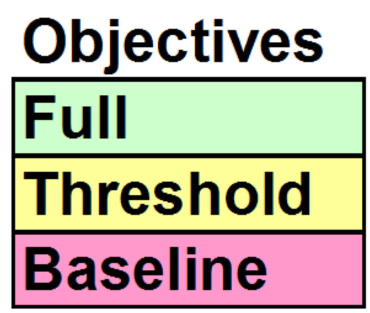
Every Funding Plan is to pursue the four Funding Principles found in National Reserve Study Standards (NRSS):

RESERVE FUNDING PRINCIPLES

But how much to set aside? Funding Principle #1 is to have "Sufficient Cash" to pay for the predictable Reserve projects. A measure of "sufficient" is lack of special assessments. Special assessments are not random, they are very predictable, and occur largely based on Reserve Fund strength. Associations with a strong Reserve Fund (over the 70% level) regularly have Sufficient Cash to perform their Reserve projects on time.

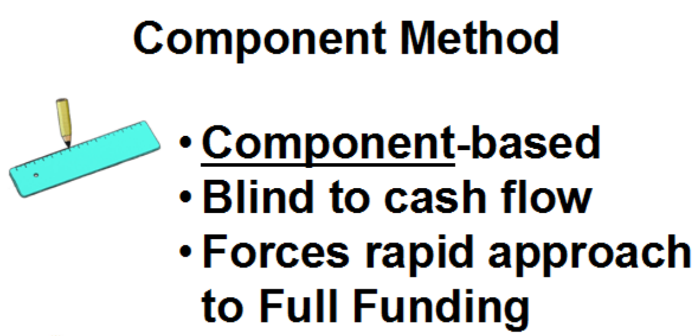


A conservative Funding Objective (low risk of special assessment), is Full Funding (striving to be 100% funded). An aggressive Funding Objective (high risk of special assessment) is Baseline Funding (staying cash-positive, allowing Reserve Fund Strength to drop down to 0% Funded). An in-between objective (a chosen cash minimum or Percent Funded minimum) is called Threshold Funding. Your association's tolerance for risk of special assessment (having insufficient funds), and Boardmember interpretation of "Fiscally Responsible" guides your choice of a Funding Objective. Your Reserve Study provider often has a strong recommendation on this point. While Baseline plans contributions are lower, special assessments (the great equalizer) often occur because there is no margin when expenses occur sooner or larger than expected.

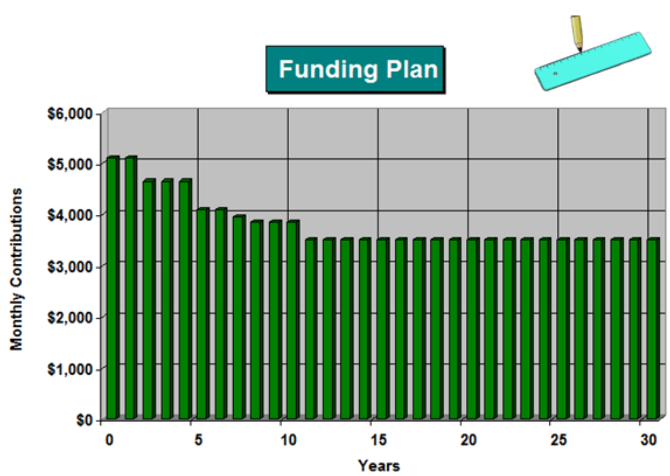


Next is the issue of Funding (calculation) Methods. The two primary methods are the Component Method (straight line), and the Cash Flow Method (pooling). <u>Both are designed to provide for exactly the same expenses</u>.

The Component Method, as its name suggests, is based on component-by-component calculations, preparing every component separately for its upcoming repair or replacement expense. As such, this method segregates the Reserve Fund into many tiny "funds", each preparing for its own upcoming expense. Strictly interpreted, there is no sharing between funds. As each component becomes prepared for its upcoming expense, the Reserve Fund rapidly approaches Full Funding.



For the majority of associations that are underfunded, this unfortunately means Reserve contributions are temporarily high in the first few years while the association is in rapid "catch-up" mode, trying to become Fully Funded before the first expense of each component.

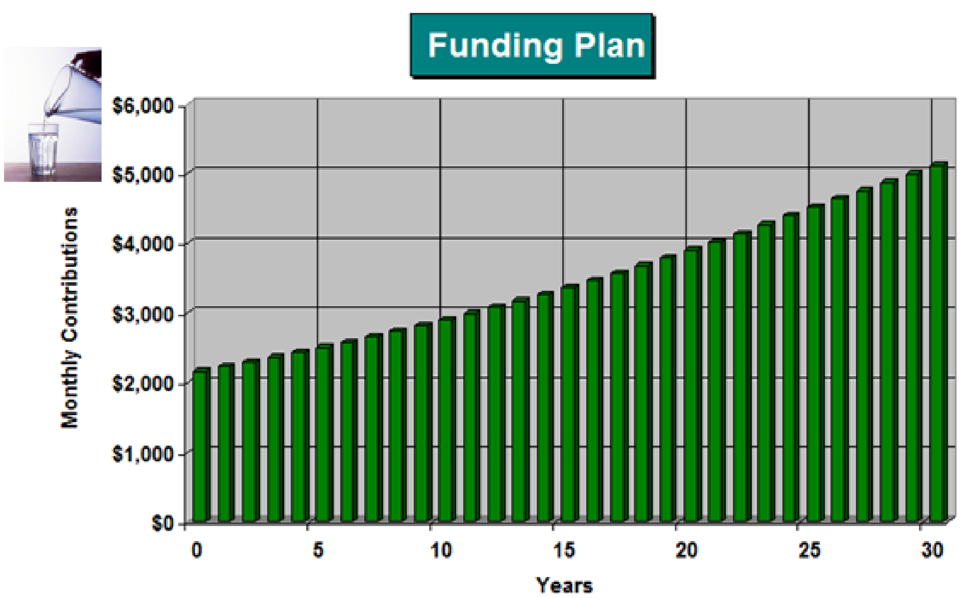


The Cash Flow Method is different in that it is entirely expense-based, blind to *what type or how many* Reserve expenses happen each year. It is a "test and see" process, where the user tests different Funding Plans until an acceptable solution is found. But what is an acceptable solution? This reveals its weakness: the Cash Flow Method's flexibility allows it to be used (recklessly) to plan for just barely enough cash (Baseline Funding), which often leads to special assessments.

Cash Flow Method

- **<u>Expense</u>-based**
- **Blind to components**
- **Extreme flexibility**

The strength of the Cash Flow Method is that Funding Plan profiles can be designed to gradually <u>increase</u> over the years, providing funds for projected expenses, budget stability and an even distribution of the contribution burden over the owners over the years, and a gradual strengthening of the Reserve Fund as shown below.



The two Methods provide the same net cash to the association. The primary difference is that typically the Component Method contributions are significantly higher in the early years (while the association is in rapid "catch-up" mode), while Cash Flow contributions *can be* designed to be smoother over the years.

Because of its flexibilities (one total Reserve Fund used for whatever Reserve expense is scheduled, and the ability to choose the profile of the contributions over the years, and ability to just barely provide sufficient cash or provide cash plus a margin of safety), Cash Flow Funding Plans can achieve any of the three Reserve Funding Objectives. In contrast, Component Method Funding Plans pursue only the Full Funding Objective.

Our recommendation is to pursue an Objective that suits the risk-tolerance of your association, utilizing a Calculation Method (or a Reserve Study provider) that provides a Funding solution for your association that most effectively meets the four Reserve Funding Principles: sufficient funds when needed, budget stability, evenly distributed over the owners, and fiscally responsible. Often, that takes a seasoned guide, someone who has crafted successful solutions for their clients hundreds of times before. Watch the complete webinar to see the relative influences of all the different factors: interest & inflation, objectives, and calculation method.

More questions? Download our eBook on [Funding Plans](), find more information in our online [Library](), or contact Association Reserves at [www.ReserveStudy.com]() or at 800/733-1365. Don't expose your association to unsettling surprises because of poor Reserve Funding choices!

Webinar Questions Asked by Attendees

Q: How can different Reserve contributions be calculated when using the same component list?

A: As shown in this slide in the webinar, the difference between the Component Method contributions and the Cash Flow Full Funding contributions is due to the shape of the Funding Plan profile over the years: Component Funding Profiles are typically high in the early years, decreasing in later years, while well designed Cash Flow Funding Plan profiles are just the opposite… starting lower but gradually increasing with inflation. The lower contributions ($1900/mo and $1790/mo) reflect lower objectives… meaning the Reserve Fund will be smaller and have less and less margin for the unexpected. They do not represent an "apples to apples" comparison as there was between the two Full Funding contribution plans.

Results…

Method	Objective	Contribs/mo
Component	Full	$2,724
Cash Flow	Full	$2,140
Cash Flow	Threshold	$1,900
Cash Flow	Baseline	$1,790

Q: Looking at my Reserve Study, how do I find out if our contributions were calculated using the Component or Cash Flow method?

A: According to National Reserve Study Standards, a disclosure of the funding methodology (Component or Cash Flow) is a required disclosure within in the Reserve Study.

Q: What do you find is the average annual budget increase needed by your clients?

A: Our average <u>Reserve Contribution</u> recommendation is 9% higher than the association's current Reserve contribution rate. That typically translates to a 2-4% increase in <u>overall</u> assessment rate.

Q: How often do you calculate Fully Funded Balance and Percent Funded?

A: Once a year as part of Reserve Study preparation (with figures projected forward to the first day of the Fiscal Year, as part of the budget planning process for the upcoming year).

Q: If mid-year Reserve expenses or your contributions are very different than budgeted, should you re-compute your Reserve contributions mid-year?

A: No. Your owners deserve stability. A Reserve Study is an annual document. Don't update it more than once a year. Everything changes, so issues like this are another good reason to update your Reserve Study annually, and not let multiple years go by.

Q: How can you calculate contributions using the Cash Flow method yet use "straight line" calculations for Reserve Fund strength (Percent Funded)?

A: Reserve Fund Strength calculations and Funding Plan calculations are two different tasks. Compare your actual (or projected) Reserve cash to the calculated Fully Funded Balance to find your Percent Funded. With that done, choose between the two calculation methods and develop your Funding Plan.

Q: Our Funding Plan is calculated using the Cash Flow method. How important is it that we also calculate Percent Funded?

A: No matter which method (Cash Flow or Straight Line) you use to calculate your Funding Plan, it is very useful to know the measured strength of your current Reserve fund. An association that is 15% Funded (high risk of special assessment) cannot casually address needed Reserve contribution increases. An association that is 85% Funded (low risk of special assessment) likely has more margin to perhaps spread a necessary increase over a few years, instead of immediately.

Q: Do you recommend including estimates for interest and inflation?

A: Absolutely. Interest and inflation are very real. Interest rates are currently small, but they provide significant interest over the years as the earnings compound! While we may not know future inflation rates exactly, based on prior years we can make a reasonable projection. Note that inflation is much more significant than interest since it has its effect on the entire replacement cost of all components, while interest is only earned on reserve cash actually on-hand. So interest and inflation are not close to offsetting each other. Inflation effects are always going to significantly outpace interest earnings.

Q: How do you adjust for future costs in a funding plan?

A: See above. Incorporate inflation in the funding model, so projected costs in the future are larger than "current cost" values.

Q: How do you calculate Percent Funded for a future year?

A: First calculate the Fully Funded Balance for that future year, which for each component is the fraction of life used up in that future year times the projected current cost in that future year (an inflated number). Sum those to get the total FFB for that future year, and compare that to the projected Reserve Fund Balance in that year to compute that year's Percent Funded.

Q: What do you do if you can't make the Reserve contributions? We want to start strengthening our Reserve fund.

A: The primary responsibility of the Board is to protect, maintain, and enhance the assets of the corporation. It is the Board's <u>job</u> to protect and maintain the assets of the corporation, so their <u>job</u> is to set an appropriate budget that provides the necessary income. If you believe it would cripple the association to make the size of Reserve contributions that are currently recommended, budget for an increase you can manage. And increase those contributions next year, and the year after, until three to five years from now your Reserve contributions will have grown to where they offset ongoing deterioration and owners are paying their fair share.

Q: What's the best way to get your association taking Reserve contributions seriously? Our board has a "fix it when it beaks" mentality.

A: That's unfortunate. Reserve expenses are large, and they are predictable. To have sufficient funds available for timely repairs and replacements requires years of financial preparation. Ignoring that financial reality, exposing owners to special assessments and the high cost of deferred maintenance is fiscally irresponsible. Suggestion: characterize Reserve contributions as "offsetting ongoing deterioration". This way Reserve contributions are correctly characterized as a bill as real as any other bill at the association. Ignoring a bill that needs to be paid is irresponsible.

Q: What are best practices for boards to persuade <u>members</u> (who can vote to reject the budget) that it is unfair and wrong to pass major costs on to future owners?

A: As above, characterize Reserve contributions as offsetting the ongoing cost of deterioration, a cost as real as any other bill. It's only fair that people owning homes in the association pay for the deterioration of the assets they've enjoyed using. In addition, Reserve costs are minimized (saving owners $) when Reserve projects are done on time because deferred maintenance can be avoided, and home values are maximized (making owners $) when the facility is well maintained. So stress the fundamental fairness of everyone paying as they go, and their desire to keep assessments low while maximizing home values.

Q: How important is maintaining consistent Reserve contributions as opposed to changing it each year by 25% - 30%?

A: A National Reserve Study Standard Funding Principle is for Budget Stability. So it is good to have relatively consistent Reserve contributions through the years. But if they are too low to provide for the Reserve needs of the association, they need to be raised. Raising them 25-30%/yr (if you have time before a large upcoming expense) is more stable and palatable to your owners than doubling them immediately. It is a tradeoff.

Q: What is Threshold Funding?

A: Threshold Funding is when the Board selects a particular cash or Percent Funded target, usually in-between the Baseline Funding (zero) level and the 100% Funded (Full Funding) level.

Q: Are you recommending trying to get 100% Funded using Component Method (Straight Line) calculations?

A: I illustrated that Component Method calculations lead only to 100% Funded. Pursuing the goal of being 100% Funded is responsible. It is more smoothly and fairly achieved using Cash Flow Method calculations.

Q: Is it possible for an experienced association manager to prepare the Reserve Study?

A: It is possible. It is not advisable, because preparing the Reserve Study is rarely the manager's expertise, and the manager has no independence from the association being managed (creating possible conflicts of interest). Best practice is for at least the more significant With-Site-Visit Updates to be prepared by an independent, credentialed professional.

Q: How much does a Reserve Study prepared by an independent, credentialed professional cost?

A: The wonders of supply and demand have created a growing network of qualified and credentialed Reserve Study professionals serving the needs of associations across the country. Request a proposal for your association here.

Q: What period of time should be used when figuring reserve expenses and contributions? Next year? Next 5 years? Next 30 years?

A: National Reserve Study Standards require that a minimum of 20 yrs of income and expense projections be displayed in your Reserve Study. Many Reserve Study providers expand that horizon to 30 years.

Q: I don't understand your statement that Reserve contributions are typically 15-40% of total monthly association fees, especially if our other fees are low because owners do maintenance work themselves.

A: The cost of Reserve component deterioration is high. Most associations require 15-40% of their total income going towards Reserve contributions. If your common area maintenance responsibilities are atypical, or if your operational expenses are atypical, expect that you'll be at one end of this 15-40% spectrum or the other, or even outside this range. Get a well-founded Reserve Study to find the correct Reserve contribution rate (and thus fraction of your overall budget) for your association. Don't rely on "typical" or "average" figures.

Q: We have a large association with a large budget that includes significant payroll, management, legal, and other contracted services. So 15-40% of what?

A: Reserve contributions are commonly 15-40% of your total assessment income.

Q: What do you do when the board chooses not to have a Reserve account?

A: If you mean "don't contribute to Reserves", you'll end up with deferred maintenance, special assessments, lower property values, and board members will have a significant liability exposure for not meeting one of their responsibilities. If you mean "no Reserve account", and your Reserve Funds are co-mingled with your Operating Funds, note that a separate Reserve account is often required by the association's Governing Documents. Having a separate account makes it harder to mistakenly spend Reserve funds for Operating expenses, or vice-versa. In addition, the size of the Reserve Fund and the infrequency with which withdrawals are made allows an association to take advantage of an interest-earning savings account.

Q: Reserves are taxed. What expenses can be used to offset that tax?

A: Only interest earned on the Reserve Fund is taxed, so taxes are a relatively minor amount. Check with your accountant for particular tax-planning strategies.

Q: We have around $40,000 in Reserves and a very small common area. Is it necessary for us to have a Reserve Study?

A: If you are not sure of your situation, you need a Reserve Study. If that Reserve Study shows that your Reserve Fund and Reserve Funding needs are truly minimal, then money spent on that Reserve Study was well spent because you now conclusively know the answer to that question (you didn't just base the future of your association on a presumption). If your association has minimal Reserve needs, you may not need to update it for many years (until some future Treasurer asks that same question!).

Q: How do I to calculate Reserve Contributions using the Cash Flow (pooled) method?

A: Many individuals prepare a Cash Flow analysis using a spreadsheet, which you can set up to lay out the future irregular annual expenditure totals from all the components. Knowing your starting balance, you then begin testing different steady multi-yr Funding Plans that provide for all those anticipated expenses with an appropriate amount of margin. A free online reserve funding tool is www.QuickReserves.com. It will calculate your Reserve contributions using the Cash Flow method.

Q: How do I calculate Reserve Contributions using the Straight Line (Component) method?

A: One component at a time. At its simplest, take the projected (future) expense for a component, subtract the funds already set aside for that project, and divide the funds still to be collected over the Remaining Useful Life of the component. That gives you the contributions necessary to provide for the future expense of that component. Then do that same calculation for all the other components, summing all those individual contribution elements together to find the recommended current year Reserve contribution.

Q: What are the legal differences between straight line (component) and pooled (cash flow)?

A: Don't consider this legal advice, but to my knowledge only FL and HI associations have to stipulate which methodology they use to develop their Funding Plan. It is probably more correct to say they are mathematically different, not legally different. As stated in the webinar, the Component Method tends to front-load the contributions, making those plans more financially challenging for underfunded associations, so contributions developed with the Cash Flow method are easier to adopt (and thus arguably easier for a board to pursue in their interest to provide for the needs of the association). See more on legal issues between the two here.

Q: I thought you couldn't Reserve for painting or power-washing per IRS requirements?

A: Please visit our Reserve Studies 101 webinar and its outline on our Webinars page, which addresses the topic of Component selection. It is true that the IRS defines painting as a "maintenance" project (not Reserves). But the IRS creates rules for tax preparation, not Reserve Study preparation. Painting regularly meets the four-part test of a Reserve Component found in National Reserve Study Standards. Prepare taxes according to IRS standards, prepare your Reserve Study according to National Reserve Study Standards.

Q: Are Reserve contributions or a Reserve Fund required by law?

A: 30 states have laws on Reserve Funds, Reserve contributions, and Reserve Study-related disclosures, so it depends on your location. But the simple answer is that board members are held to standards of Fiscal Responsibility in all 50 states, so Reserve contributions and a Reserve Fund is a practical necessity.

Q: California's Davis-Stirling Act requires "Major Components" to be listed in the Reserve Study, but doesn't define what a "Major Component" is. Help!

A: This is another Component question, addressed in our Reserve Studies 101 webinar. Fortunately, California Civil Code (the Davis-Stirling Act) does not try to define a Reserve Component. The definition of a Reserve Component (Major Component) is left to National Reserve Study Standards. See article here on the topic.

Q: Is "sewer pipe" a major component that should be funded through Reserves?

A: If the expense meets the National Reserve Study Standard four-part test, it is appropriate to be funded through Reserves.

Q: Can we legitimately have a "contingency" Reserve component to pay for the significant projects that regularly hit our association (tree roots, water line breaks, sidewalk or fence repairs, etc.)?

A: According to the National Reserve Study Standard four-part test, the project needs to be predictable. If your association has a pattern of miscellaneous predictable projects ($10,000/yr, $20,000/yr, etc.) it passes the four-part test as being predictable and repeatable. Try to define it as tightly as possible, so the funds are not spent carelessly. A component like this often is an alternative to a similar component in the Operating budget, so it is more of a budget style consideration (not a "right" or "wrong" issue).

Q: How are accurate costs established? We don't want to Reserve for components that are incorrectly estimated.

A: Reserve Study professionals typically base their replacement cost estimates on association historical experience, the cost experience of other similar associations, interviews with local service providers, and standard reconstruction cost guides.

Q: Do we need to track reserve expenses by component in order to update the component list changes?

A: You need to know which components were repaired or replaced in order to update your component list. This is not an accounting issue, this is an issue of knowing what work was done.

Q: Our component information changes so much year after year that our contributions keep increasing. Is that a problem?

A: Only if component information is inaccurate. Hopefully your component information (Useful Life, Remaining Useful Life, and Current Replacement Cost) will stabilize, so the Funding Plan can begin to stabilize (one of the four Funding Principles!).

Q: Should we be paying for unpredictable repairs (roof leaks) from Reserves before the full asset is replaced?

A: Normal minor maintenance should be handled through the operating budget. If it is large or significant enough to change the Useful Life or Remaining Useful Life, then it is a legitimate Reserve expense.

Q: If our Reserve Study provider gives a low estimate for a specific repair or replacement, should the board correct it?

A: By all means communicate your knowledge of historical expenses to your Reserve Study provider. It helps sharpen their estimates of costs at your association. Note however that if there were special circumstances surrounding a particularly low (or high) expense and it is unlikely to be repeated, your Reserve Study provider may use a value they believe is more representative of a commercial price.

Q: If a component is noticed to be failing early (well in advance of its Useful Life expectancy), should we alert our Reserve Study preparer?

A: Absolutely. Most components deteriorate on a very predictable schedule. If materials, weather, installation, or other factors are not allowing it to reach its designed Useful Life, tell your Reserve Study preparer so they can make appropriate adjustments in your next update.

Q: What is wrong with being consistently in the 40% Funded range? Why would that be inadvisable?

A: History shows that associations at 40% Funded have special assessments slightly above 10% of the time. As a board member, your job is to care for the assets of the association on behalf of the owners. Trying to get through 30 years with a 10% risk of special assessment in every one of those years is asking for a special assessment, no matter how good your intentions.

Q: How do you, or how does an association evaluate its own Special Assessment risk due to uncertain events? Would a Monte Carlo risk assessment work?

A: Great question! A Monte Carlo risk assessment allows the user to find the range of different outcomes when the underlying (uncertain) data is changed within a controlled range of possibilities. It is certainly possible to run such an assessment on an association's own Reserve Study data, but the Special Assessment risk chart shown in the webinar is based on <u>tens of thousands</u> of data points. This means the chart is based on an incredibly wide variety of circumstances and possibilities experienced by the associations in the data pool, providing the user a high confidence in its results and lowering the need for further evaluation of outcome sensitivities for an individual association.

Q: We have just created our Reserve Fund, so it is pretty small. But we need to spend money from it for necessary projects. How do we keep it above the "10% of total budget" threshold required by the FHA?

A: The FHA is looking only for the size of your Reserve contributions (wanting them to be at least 10% of total budget). The FHA doesn't care about the size of your Reserve Fund. Read more here.

Q: Our last audit noted we were not in compliance with State Law and FASB because we didn't have an independent Reserve Study. So we got one. Do we have to review it for accuracy and do anything with it, or just give it to our auditor upon request?

A: By all means – review it and incorporate its findings! Compliance is only one reason to get a Reserve Study update. Get a Reserve Study, review it, get it adjusted if needed, communicate its findings to your homeowners, and apply it to guide your association towards a fair assessment structure and maximized property values, minimizing your chances of deferred maintenance and special assessments.

Q: At our relatively new association, we commissioned an independent, professional Reserve Study. Not surprisingly, it recommended significantly higher Reserve contributions than the Developer put into our budget. It was prepared without board/staff input, so it is very conservative (Useful Life estimates short, replacement cost estimates high). Now I have two problems: the Board feels the Reserve Study needs adjustment, and any prospective buyer looking at it would be afraid and lower their offering price.

A: I'm sorry to hear of your predicament. As a Board member, get in touch with the Reserve Study provider and suggest changes. If too much time has lapsed and a revision is not possible, likely that means it is time to commission an update. Get involved in that process, and get a Reserve Study reflective of the component reality at your association. Then implement the Reserve contributions necessary to deal with the financial reality of keeping your association a great place to live. A truth-based, sustainable budget will point your association in the right direction, spreading contributions fairly over the current homeowners and giving prospective buyers appropriate expectations about what it will cost to live there.

Q: In your example of the cost of ongoing deterioration ($20,170/yr), is that affected by interest & inflation?

A: That figure was a “current rate of deterioration”, so interest or inflation do not apply.

Q: Our homeowner assessments are different for different units (larger units are charged more). In addition, some of the same size units have balconies and some don’t. So even within the same category of homeowner (2-bdrm owners), Reserve components are not distributed evenly. Do we attempt to charge Reserve contributions differently depending on what a unit has to enjoy?

A: In general, common areas are common areas. Owners on the first floor may not use elevators, while arguably only owners on the top floor use the roof. The common areas are usually not all enjoyed equally (some people swim or use the gym, some don’t). Still, they are common areas. Reserve contributions are designed to sustain the common areas, regardless of how much they are used or by whom. Each owner is obligated to pay their share of Reserve contributions as dictated by the governing documents. If in a 50-unit association each owner pays 1/50th, then that’s how the Reserve contributions are collected from each owner (just like the regular assessments), regardless of which common areas they’re attached to or use. If different size units pay different fractions of the total based on their size, that’s how the Reserve contributions are to be collected from each owner (just like the regular assessments), regardless of which common areas they’re attached to or use.