Instructions for Creating a Reserve Study Report

The RFA includes an embedded Word template which is used as the basis for creating your own Reserve Study Report. Once populated with relevant data from the RFA, a complete Reserve Study report is the result. This report meets or exceeds industry standards for a Reserve Study Report.

The Reserve Study Report that is created has the following features:

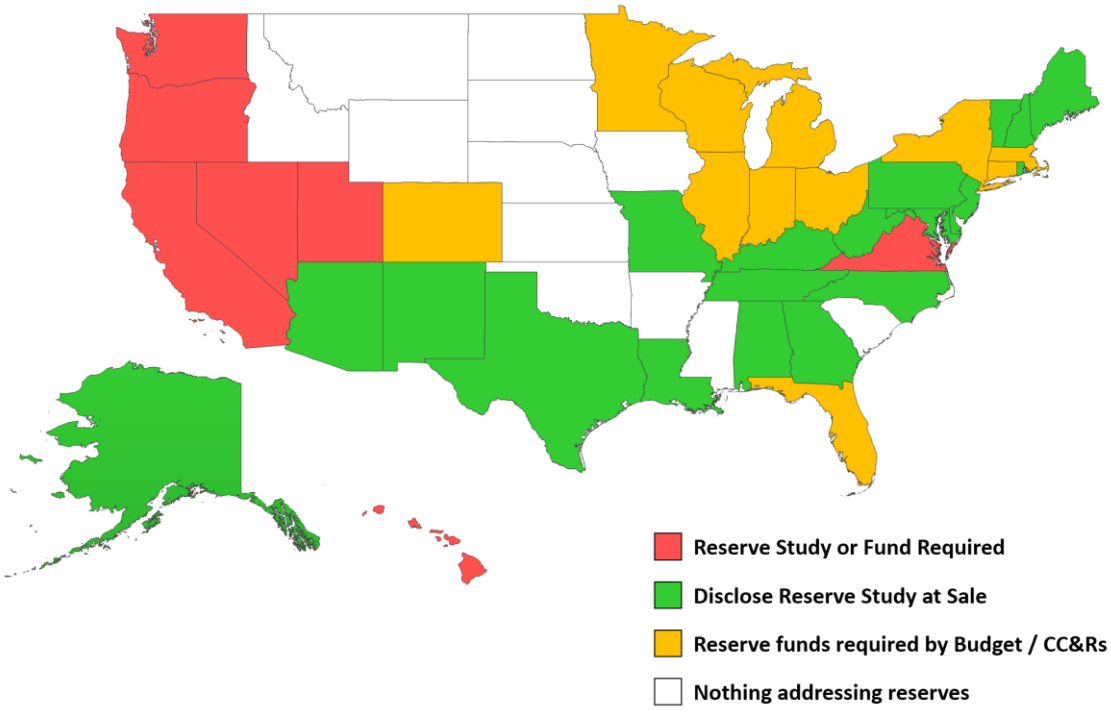
- Data from the RFA is used to populate the report.
- The text in the template is written to have relevance for any association although the detail may be more or less than you want. Feel free to edit and make changes.
- There are two specific fields that you will have to update – the date of the report and a summary statement. They are marked within the report.
- Tables and Graphs in the template are copied from the Reserve Fund Analyzer (RFA) application. You can use the RFA as a source for these tables and graphs or you can create your own.
- You can also generate the tables and graphs into a separate Word document and then use the resulting Word docs to create your own report. The RFA contains utilities to create a new Word document and copy tables and graphs for the RFA pasting them into the new document.
- After you have finished editing the new Report, remember to save your work.

Some Requirements

Depending on your locale, here are some requirements for conducting / updating a Reserve Study vary.

USA

Within the USA, requirements for reserve studies vary by state. Community associations are legally mandated in 30 states to have some form of reserve planning or disclosures.



Canada

Legislation governing condominium and strata corporation is provincial. Most provinces have some form of requirement for reserve funding / reserve studies. Reserve studies are referred to as a Reserve Fund Study, Contingency Reserve Fund Study, Replacement Reserve Study and Depreciation Report (British Columbia).

Reserve Study Recommendations by Professional Organizations

International Capital Budgeting Institute

According to their web site, a Reserve Study "funding plan should be prepared on the cash flow basis"; however, the purpose of the financial portion of Reserve Studies is to calculate "the current status of the reserve fund and a stable and equitable funding plan to offset ongoing deterioration, resulting in sufficient funds when those anticipated major common area expenditures actually occur."

The CBI publishes guidelines and standards for Reserve Studies. The CBI states that reserve studies should be updated on a regular, periodic basis. They recommend that at a minimum, a reserve study update with no site visit be performed at least annually.

Community Associations Institute (CAI)

The Community Associations Institute (CAI) publishes guidelines and standards for Reserve Studies which reinforce the CBI standards.

Fannie Mae

Fannie Mae does not require that a standard format be used for the reserve study, however the following items must be addressed:

- All major components and elements of the project's common areas for which repair, maintenance, or replacement is expected;
- The condition and remaining useful life of each major component;
- An estimate of the cost of repair, replacement, restoration, or maintenance of major components;
- An estimate of the total annual contributions required to defray costs (minus the existing reserves funded for this purpose), including inflation;
- An analysis of existing funded reserves; and
- A suggested reserve funding plan.

What are the Basic Standards for a Reserve Study?

A reserve study consists of two parts.

1. Information about the physical assets that the association is obliged to maintain
2. Evaluation and analysis of the association's reserve balance, income and expenses.

Physical Analysis

- Component inventory (i.e., a reserve component list)
- Reserve components assessment of condition
- Estimated useful life of each component
- Estimated remaining useful life of each component
- Estimated current cost for replacement or maintenance

Financial Analysis

- The current status of the reserve fund
- Identification of cash reserves set aside for reserve component maintenance / replacement
- A projected reserve account balance for 30 years and a funding plan to pay for projected costs from the reserve fund
- Determine a stable and equitable funding plan to offset ongoing reserve component deterioration with the projected sources of income required to meet future expenses
- Funding plan should be prepared on the cash flow basis

Community Associations Institute Recommendations

The CAI has established that the following required elements that should be included in a reserve study:

1. A summary of the association's number of units and physical description (legal or physical narrative).

2. General statement or opinion describing the association's current reserve fund status and the percent funded.
3. General statement describing the methods and objectives utilized in computing or evaluating the association's Reserve Fund status (Percent Funded or otherwise).
4. Fiscal Year (start and end) for which the Reserve study is prepared.
5. A projection of starting reserve cash balance (as-of above start date) and a general statement describing the development or computation of the association's starting Reserve Fund balance.
6. Recommended reserve contributions, the projected reserve expenses and the projected ending reserve fund balance for each year for a minimum of 20 years.
7. A tabular listing of the components in the Reserve Study to include:
    a. Quantities or identifying descriptions
    b. Useful Life
    c. Remaining Useful Life
    d. Current Replacement Cost
8. A general statement describing the Methods (cash flow, component, etc.) and Goals (Full Funding, Threshold Funding, Baseline Funding) of the Funding Plan, using National Standard terminology.
9. A clear statement of assumptions used for Interest and inflation (whether zero or otherwise).

Which Components Should be Included in the Reserve Study?

To qualify for reserve budget funding, a component needs to have all four of these characteristics:

- The component must be a common area maintenance responsibility.
  These are typically defined in the association's governing documents, but can also be established in looking at the Association's past actions and precedents.
- The component must have a limited Useful Life.
  Components with extremely long lives or components that can function indefinitely with only minor ongoing maintenance or repair may be excluded. But caution should be used if at the end of an extremely long life the cost of replacement is high … for example, a road surface or walkway.
- The component must have a predictable Remaining Useful Life.
  Components with unpredictable or random replacement / maintenance are difficult to accurately be included. A future expenditure needs to be reasonably anticipated to be defined and incorporated into a plan. Consider establishing a contingency fund to cover unpredictable or random costs.
- The scope of work must be above a minimum threshold cost.
  Avoid cluttering the reserve budget with insignificant expenses that are better handled through the ongoing operating budget. Establish a reasonable threshold. Consider setting the threshold in the range of 0.5% to 1.5% of the Association's annual budget. Components that do not meet this test should be included in the operational budget.

What Should be Excluded from a Reserve Study?

Typically, components that have a very long life with no predictable useful life are excluded from a Reserve Study. Some typical components include:

- Plumbing System
  Generally, plumbing systems will last indefinitely and any failures are unpredictable. Repairs are generally locally contained. Should a pattern of repairs emerge, then these components can be incorporated into the reserve study.
- Electrical System
  Similar to plumbing systems, electrical system failure is unpredictable and repairs can be locally contained.
- Retaining Walls
  If properly installed, retaining walls are a very long-life component with no predictable life. Retaining walls should be inspected annually and only incorporated into a reserve study based on qualified professional assessment of a future predictable expense.
- Components Below Threshold Costs
  Component repair and/or replacement costs that are deemed too small to be considered capital expenses are typically included in the operational or maintenance budget of the association. Minimal threshold costs are determined by the Association.

Who can perform a reserve study?

With the exception of the State of Nevada, reserve studies can be created by volunteer board members, their professional managers, one of many professionals specializing in the preparation of reserve studies, or any person whom the HOA board deems qualified to conduct the study.

In Nevada, the person conducting the study must be registered and background checked by the Nevada State Department of Real Estate – unless the community contains less than 20 units and is located in a county with a population less than 55,000.

Steps to Conduct a Reserve Study

Conducting a reserve study (or – even easier, updating an existing study) is not difficult. It only requires reasonable diligence to detail and some basic knowledge of finance. If you have a financial analysis tool, such as this Reserve Funding Analyzer, you then do not need as much knowledge about financial analysis.

A Reserve Study is made of two parts: the Physical Analysis and the Financial Analysis.

- **The Physical Analysis** provides information about the physical status and repair/replacement cost of the area components the association is obligated to maintain. The Physical Analysis is comprised of the Component Inventory, Condition Evaluation, Age Adjustment [based on useful life (total) and remaining life of the components] and the Costs to Replace. The Component Inventory should remain relatively "stable" from year to year, while the Condition Evaluation, Age Adjustment and Cost to Replace and Valuation will clearly change from year to year.
- **The Financial Analysis** is the analysis of the association's Reserve income and expenses. The Financial Analysis is made up of a finding of the current Reserve Fund strength (measured in cash or as a Percent Funded) and a recommendation for an appropriate Reserve contribution rate (Funding Plan). For most people who may be new at financial analysis, this is the most daunting part. Performing the financial analysis requires a good understanding of capital funding methods – or a good tool or application that allows you to perform this analysis. The *Reserve Funding Analyzer* can be put to good use as it allows anyone to perform this financial analysis.

Conduct the Physical Analysis

The goals of a physical analysis are to:

- Estimate the useful and remaining life of major components
- Estimate current replacement costs of major components

A sound physical analysis is the most important step in the development of your Reserve Study Report. It is most important that you:

- Identify all reserve components for inclusion
- Document any components for exclusion
- Determine a reasonable estimate of each component’s useful life
- Determine a reasonable estimate of each component’s remaining useful life
- Determine a reasonable estimate of each component’s cost

The determination of useful life and remaining useful life is made by consulting:

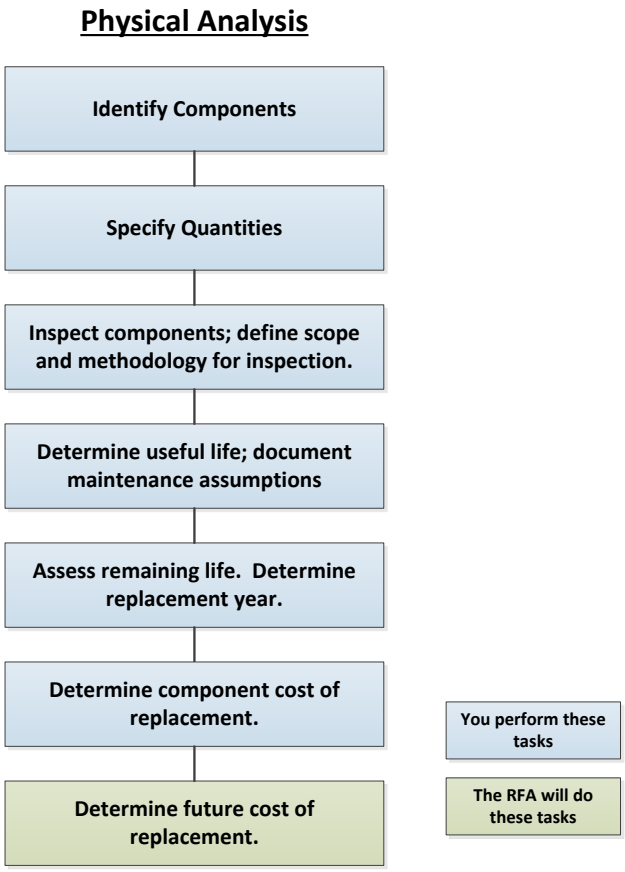
- Historical maintenance records
- Seeking subject matter experts such as manufacturers or service providers
- Useful life tables published by various agencies (government and non-government)

Cost estimates are derived by:

- Obtaining current cost estimates from manufacturers, vendors or service providers
- Consulting past maintenance records and adjusting for inflation
- Cost tables published by various agencies (government and non-government)

The steps one should take to accomplish this are shown below. An excellent reference is the *Reserve Study Guidelines* published by the State of California Department of Real Estate. This document is very comprehensive with details and recommendation for each

of the following steps. This document is included with your RFA package and is available online at http://www.dre.ca.gov/files/pdf/re25.pdf

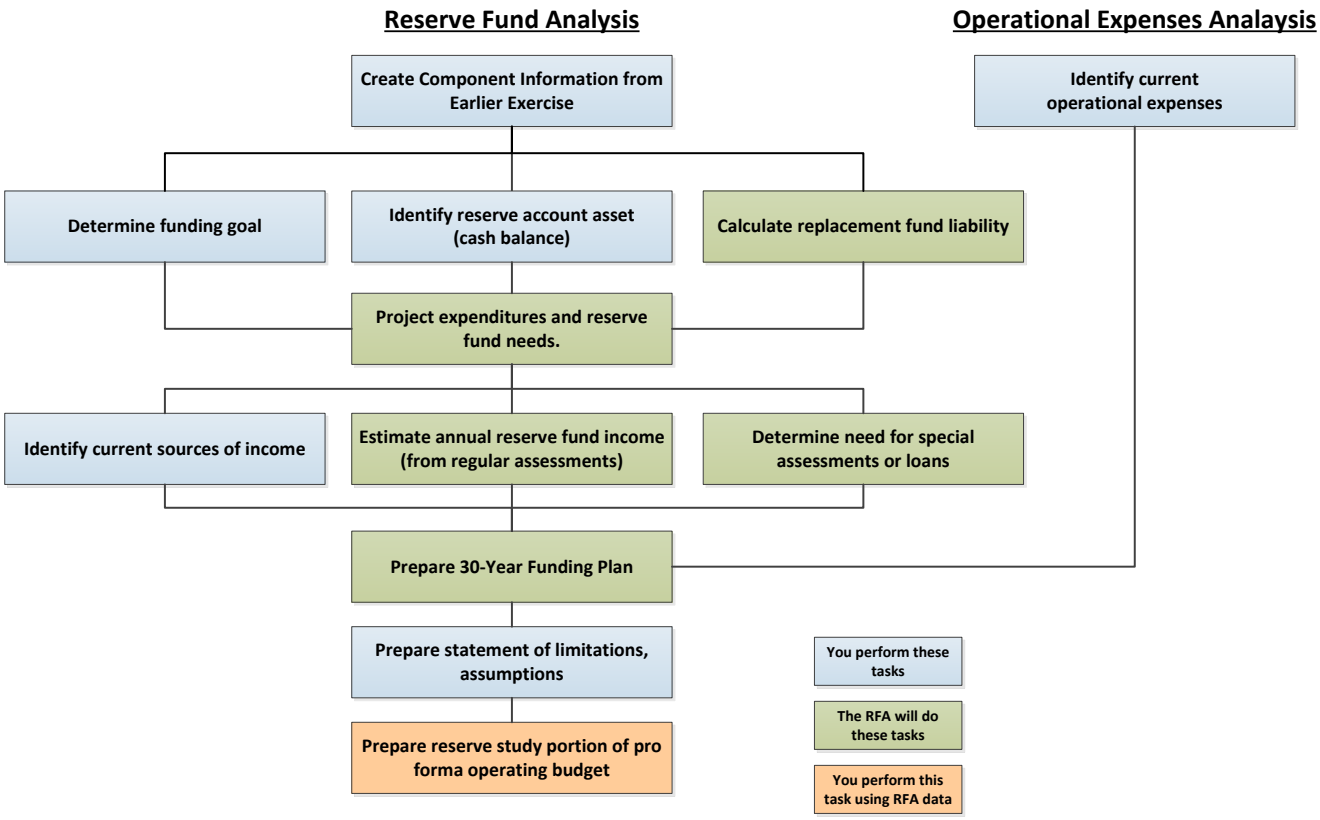


Once you have developed your component inventory, transcribe your data into the RFA component inventory sheet.

Perform Financial Analysis

If you have a good tool to assist you with the financial analysis, then at this point the heavy lifting is finished. Otherwise, performing a comprehensive financial analysis can be complex, even for the experienced professional. More so if you do not have experience with capital financial planning. The *Reserve Funding Analyzer* (RFA) is such a tool … the best tool available. If you do not have a good tool to assist you with this portion of the study, the tasks to create a financial analysis that meets requirements can be quite daunting.

Financial Analysis



Objective

The objective (or goals) of the financial analysis are:

- Establish funding goals
- Identify annual funding requirements
- Disclose limitations and assumptions

In preparing the funding plan, the association will have to make decisions about the amount of current assessments and the need for special assessments, balanced against projected liability. The law does not require the funding of projected replacement costs, only an explicit description of the plan for such funding, among other specific disclosures. Clearly, however, the financial viability of the association will depend a great deal on the ability of the association to replace components as they wear out and not to defer major maintenance items.

A product of the Funding Analysis process is the development of a funding plan (cash flow forecast or projection) to estimate future reserve cash receipts and disbursements. This is most easily presented in a spreadsheet format. All supporting assumptions and methodology should be carefully documented. Refer to *Reserve Study Guidelines for HOA Budgets* published by State of California Department of Real Estate for more detailed discussion.

What Must a Reserve Study Contain?

At a minimum, a reserve study must consist of the following elements:

- A reserve component list (aka asset inventory) that includes:
  - Location, age, useful life, remaining life and replacement costs for every asset
- Current status of reserve fund
- A positive identification of cash reserves set aside for reserve component maintenance or replacement

- The project's reserve account balance for 30 years and a funding plan to pay for projected costs
- A description of the methods and objectives utilized in computing the fund status and in the development of the funding plan
- The total cash reserves expressed as a percentage of current replacement costs and the current deficiency in reserve funding on a per-unit basis
- Statement of the methods used to develop the estimates and the funding plan
- A statement of any outstanding loans
- A description of the assumptions utilized for interest and inflation, tax and other outside factors for the financial analysis.
- Current reserve account contribution rate and the sources of the contributions
  - Annual dues
  - Special assessments
  - Other income sources

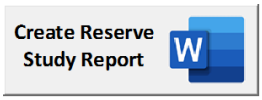
Using the Reserve Funding Analyzer (RFA)

To begin, transcribe the reserve component data that you have collected into the RFA. Next, you begin creating your funding plan using the RFA. The RFA will calculate your current and future costs so you can make decisions to balance these costs against your current income levels, the need to maintain or increase those income levels through increases in annual dues, special assessments or loans. The end result is a sound funding plan that you can use for planning and reporting a 30-year funding plan.

Using the Reserve Study Report Template

The template is typical of a reserve study report that would be created by an organization that performs reserve studies on a routine basis. As with most reserve study reports using this format, it may contain text that may not be specific to your community. Much of the text is an explanation of terms or methodologies.

The RFA will utilize the embedded report template in the creation of your reserve study report. Create your report by clicking on the command button on the home sheet of the RFA. Review the resulting report. The normal text paragraphs should be usable as-is. But you may wish make change to the text or the tables / graphs that were inserted.



There will be fields that are highlighted in red text that will need to be edited. One is the date of the report on the title page. The other field is located on the summary page and you will have to draft a statement that is appropriate for your community.

To tell the full story in your Reserve Study Report, charts and tables are employed. These charts and tables are copied from the RFA workbook and pasted into the report. As long as you are finished with data entry and analysis, the charts and tables used in the report will be those produced during your analysis. If you make changes to data entry, you will have either re-create the report or edit your report with the new data.

RFA Data Analysis Flowchart

Enter data of all reserve components

Data for Reserve Components will be derived from your physical analysis and will include:

- Item description, quantity and units of measure
- Useful life and Remaining Useful Life
- Estimated cost for servicing

Enter Current Financial Data

- Association name, number of units
- Current year for analysis
- Starting Reserve Balance
- Estimate the interest earned on reserve balance
- Current HOA Dues
- Any other current income
- Estimate the other current income annual percent increase. Enter 0% if unknown.
- Current operational expenses
- Estimate for annual inflation for both reserve expenses and operational expenses
- Enter any current plans for special assessments. If no current plans, leave blank.
- Select Funding Methodology … recommend select "Cash Flow"
- Enter initial target for funding % … recommend start at 75%. This is not critical and is only a performance indicator.
- If you have known "one-time-incomes", enter that data.

Enter Current Loan Data. If none, leave blank.

The RFA will determine your annual payments of loans and include them as operational expenses. You only need enter the principal, the interest and the term of the loan.

Review Reserve Expenses and effects of inflation

At this point, your financial outlook will be shown without any dues increases. Graphs and charts will depict expenditures over the next 30 years. The overall effect will show that without dues increases (or other means of increasing annual income, it is likely you will deplete the reserve fund and not be able to meet expenses.

Use Dues Increases to Evaluate Effect

Using an iterative approach, apply dues increases to evaluate the effect. Start by applying a percent increase in the first field. Adjust percent, start year and duration. You can have up to three increases and each can have a different percent increase, start year and duration. This process is one of trial and error. Work the three increases until the values yield satisfactory results.

Perform Additional What-If Analysis

Once you have established the dues increases, you can make adjustments to data values to evaluate the effect on the financial plan:

- Change Useful Life (+ or –) of reserve components … especially very large expenses with long useful life duration
- Try excluding items, e.g., special projects,
- Include / Exclude contingency fund
- Include / Exclude special assessments
- Evaluate effect small changes of inflation rate causes

Finalize plan and create report

Once your plan in finalized, you can proceed to create your Reserve Study Report.