RS

National Reserve Study Standards
General Information about Reserve Studies

One of the primary responsibilities of the board of directors of a community association is to protect, maintain, and enhance the assets of the association. To accomplish this objective, associations must develop multi-year plans to help them anticipate and responsibly prepare for the timely repair and replacement of common area components such as roofs, roads, mechanical equipment, and other portions of the community's common elements.

Originally published in 1998, the National Reserve Study Standards provide a consistent set of terminology, calculations, and expectations so reserve study providers and those they serve together can build a successful future for millions of community association homeowners across the country.

A reserve study is made up of two parts, the physical analysis and the financial analysis. The physical analysis includes the component inventory, condition assessment, and life and valuation estimates. The component inventory should be relatively stable from year to year, while the condition assessment and life and valuation estimate change from year to year.

The financial analysis is made up of an analysis of the client's current reserve fund status (measured in cash or as percent funded) and a recommendation for an appropriate reserve contribution rate (a funding plan).

Physical Analysis

- Component Inventory
- Condition Assessment
- Life and Valuation Estimates

Financial Analysis

- Fund Status
- Funding Plan
Levels of Service

The following four categories describe the various types of reserve studies, from exhaustive to minimal.

**Full:** A reserve study in which the following five reserve study tasks are performed:
- Component Inventory (including quantification)
- Condition assessment (based on on-site visual observations)
- Life and valuation estimates
- Fund status
- Funding plan

**Update, With Site Visit/On-Site Review:** A reserve study update in which the following five reserve study tasks are performed:
- Component inventory (verification only, not quantification)
- Condition assessment (based on on-site visual observations)
- Life and valuation estimates
- Fund status
- Funding plan

**Update, No Site Visit/Off-Site Review:** A reserve study update with no on-site visual observations in which the following three reserve study tasks are performed:
- Life and valuation estimates
- Fund status
- Funding plan

**Preliminary, Community Not Yet Constructed:** A reserve study prepared before construction that is generally used for budget estimates. It is based on design documents such as the architectural and engineering plans. The following three tasks are performed to prepare this type of study.
- Component inventory
- Life and valuation estimates
- Funding plan
Terms and Definitions

**CAPITAL IMPROVEMENTS:** Additions to the association’s common elements that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction should not be taken from the reserve fund.

**CASH FLOW METHOD:** A method of developing a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

**COMPONENT:** The individual line items in the reserve study developed or updated in the physical analysis. These elements form the building blocks for the reserve study. These components comprise the common elements of the community and typically are: 1. association responsibility, 2. with limited useful life expectancies, 3. predictable remaining useful life expectancies, and 4. above a minimum threshold cost. It should be noted that in certain jurisdictions there may be statutory requirements for including components or groups of components in the reserve study.

**COMPONENT INVENTORY:** The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

**COMPONENT METHOD:** A method of developing a reserve funding plan where the total contribution is based on the sum of contributions for the individual components.

**CONDITION ASSESSMENT:** The task of evaluating the current condition of the component based on observed or reported characteristics.

**EFFECTIVE AGE:** The difference between useful life and remaining useful life. Not always equivalent to chronological age, since some components age irregularly. Used primarily in computations.

**FINANCIAL ANALYSIS:** The portion of a reserve study where the current status of the reserves (measured as cash or percent funded) and a recommended reserve contribution rate (funding plan) are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study.

**FULLY FUNDED:** 100 percent funded. When the actual (or projected) reserve balance is equal to the fully funded balance.
FULLY FUNDED BALANCE (FFB): An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life “used up” of the current repair or replacement cost. This number is calculated for each component, and then summed for an association total.

\[ \text{FFB} = \text{Current Cost} \times \frac{\text{Effective Age}}{\text{Useful Life}} \]

Example:
For a component with a $10,000 current replacement cost, a 10-year useful life and effective age of 4 years the fully funded balance would be $4,000.

FUND STATUS: The status of the reserve fund reported in terms of cash or percent funded.

FUNDING GOALS: Independent of methodology used, the following represent the basic categories of funding plan goals. They are presented in order of greatest risk to least risk. Risk includes, but is not limited to, cash problems, special assessments, and deferred maintenance.

Baseline Funding: Establishing a reserve funding goal of allowing the reserve cash balance to never be below zero during the cash flow projection. This is the funding goal with the greatest risk due to the variabilities encountered in the timing of component replacements and repair and replacement costs.

Threshold Funding: Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “Fully Funded” with respective higher risk or less risk of cash problems.

Full Funding: Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. This is the most conservative funding goal.

It should be noted that in certain jurisdictions there may be statutory funding requirements that would dictate the minimum requirements for funding.

FUNDING PLAN: An association’s plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of twenty (20) years.

FUNDING PRINCIPLES: The reserve provider must provide a funding plan addressing these principles.
- Sufficient funds when required
- Stable contribution rate over the years
- Equitable contribution rate over the years
- Fiscally responsible
**LIFE AND VALUATION ESTIMATES:** The task of estimating useful life, remaining useful life, and current repair or replacement costs for the reserve components.

**PERCENT FUNDED:** The ratio, at a particular point in time related to the fiscal year end, of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage. While percent funded is an indicator of an association’s reserve fund size, it should be viewed in the context of how it is changing due to the association’s reserve funding plan in light of the association’s risk tolerance.

**PHYSICAL ANALYSIS:** The portion of the reserve study where the component inventory, condition assessment, and life and valuation estimate tasks are performed. This represents one of the two parts of the reserve study.

**REMAINING USEFUL LIFE (RUL):** Also referred to as “remaining life” (RL). The estimated time, in years, that a reserve component can be expected to serve its intended function. Projects expected to occur in the initial year have zero remaining useful life.

**REPLACEMENT COST:** The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering and design, permits, installation, disposal, etc.).

**RESERVE BALANCE:** Actual or projected funds, as of a particular point in time that the association has identified, to defray the future repair or replacement cost of those major components that the association is obligated to maintain or replace. Also known as reserves, reserve accounts, cash reserves. Based on information provided and not audited.

**RESERVE PROVIDER:** An individual who prepares reserve studies. In many instances the reserve provider will possess a specialized designation such as the Reserve Specialist (RS) designation provided by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards.

**RESERVE PROVIDER FIRM:** A company that prepares reserve studies as one of its primary business activities.

**RESERVE STUDY:** A budget planning tool which identifies the components that the association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures. The reserve study consists of two parts: the physical analysis and the financial analysis.

**RESPONSIBLE CHARGE:** A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist.
A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;

2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;

3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and

4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

**SPECIAL ASSESSMENT:** A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

**USEFUL LIFE (UL):** The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.
Reserve Study Contents

The following is a list of the minimum contents to be included in the Reserve Study.

1. A summary of the association’s number of units, physical description and reserve fund financial condition.

2. A projection of reserve starting balance, recommended reserve contributions, projected reserve expenses, and projected ending reserve fund balance for a minimum of 20 years.

3. A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life and current replacement cost.

4. A description of methods and objectives utilized in computing the Fund Status and development of the Funding Plan.

5. Source(s) utilized to obtain component repair or replacement cost estimates.

6. A description of the level of service by which the Reserve Study was prepared.

7. Fiscal year for which the Reserve Study is prepared.
Disclosures

The following are the minimum disclosures to be included in the Reserve Study:

1. General: Description of the other involvement(s) with the association, which could result in actual or perceived conflicts of interest.

2. Physical Analysis: Description of how thorough the on-site observations were performed: representative samplings vs. all common areas, destructive testing or not, field measurements vs. drawing take-offs, etc.

3. Financial Analysis: Description of assumptions utilized for interest and inflation, tax and other outside factors.

4. Personnel Credentials: State or organizational licenses or credentials carried by the individual responsible for Reserve Study preparation or oversight.

5. Update Reports: Disclosure of how the current work is reliant on the validity of prior Reserve Studies.

6. Completeness: Material issues which, if not disclosed, would cause a distortion of the association’s situation.

7. Reliance on Client Data: Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant and assembled for the association’s use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.

8. Reserve Balance: The actual or projected total presented in the Reserve Study is based upon information provided and was not audited.

9. Component Quantities: For update with site visit and update no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.

10. Reserve Projects: Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.