

# best practices

R E P O R T # 1

## Reserve Studies/ Management

*Published by  
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# best practices

*The Community Associations Institute (CAI) and the Foundation for Community Association Research are dedicated to conducting research and acting as a clearinghouse for information on innovations and best practices in community association creation and management. As part of the newly developed Best Practices project, operations related to various function areas of community associations—governance, resident involvement and conflict resolution, and reserve studies/management were presented during CAI's 50th National Conference in May 2001. Additional Best Practices in the areas of financial operations, strategic planning, and community harmony/spirit/involvement will debut in October 2001 at CAI's Community Leadership Forum.*

## **What Are Best Practices?**

The development of function-specific best practices in the community association industry has been a goal of CAI and the Foundation for Community Association Research for several years. The Foundation is currently developing best practices in select topic areas using a variety of sources—including, but not limited to, past winners of the National Community Association of the Year Award, recommendations from industry experts, various industry-related publications and, once developed, recommendations from those communities scoring highly on the Community Performance Index. The subject areas for the initial best practices were selected through a survey of the CAI and the Foundation for Community Association Research national leaders.

The anticipated outcomes of the Best Practices project include:

- documented criteria for function-specific best practices,
- case studies of community associations that have demonstrated successes in specific areas, and
- the development of a showcase on community excellence.

The benefits of benchmarking and best practices include: improved quality; setting high performance targets; helping to overcome the disbelief that stretched goals are possible; strengthened cost positions; more innovative approaches to operating and managing practices; accelerating culture change by making an organization look outward rather than focusing inwardly; and, bringing accountability to the organization because it is an ongoing process for measuring performance and ensuring improvement relative to the leaders in the field.

Accordingly, this project represents an ongoing exploration of best practices used in community associations. The first series of best practices will set the bar, which applied research will then continue to raise.

## **Overview**

Community associations come in all sizes. They vary in age, amenities provided, and maintenance obligations. Careful planning for future repairs and replacements is not only in the best physical and fiscal interests of the community association, it is required by law in some states. Maintaining a reserve fund not only meets legal, fiduciary and professional requirements, it also minimizes the need for special assessments and enhances resale values.

Every community association requires a different amount of cash in reserves to com-

plete repair or replacement projects on schedule without special assessments or loans. How does an association properly determine and compile adequate reserves to fund necessary repair and replacement costs? By conducting reserve studies.

## Definition of Reserve Studies

There are two components of a reserve study—a physical analysis and a financial analysis. During the physical analysis, a reserve provider evaluates information regarding the physical status and repair/replacement cost of the association's major common area components. To do so, the provider conducts a component inventory, a condition assessment, and life and valuation estimates. A financial analysis assesses only the association's reserve balance or fund status (measured in cash or as percent funded) to determine a recommendation for an appropriate reserve contribution rate (funding plan).

## Types of Reserve Studies

Reserve studies fit into one of three categories: *Full*, *Update, With-Site-Visit/On-Site Review*, and *Update, No-Site-Visit/Off Site Review* (listed from exhaustive to minimal).

- In a *Full* reserve study, the reserve provider conducts a component inventory, a condition assessment (based upon on-site visual observations), and life and valuation estimates to determine both a fund status and a funding plan.
- In an *Update, With-Site-Visit/On-Site Review*, the reserve provider conducts a component inventory (verification only, not quantification), a condition assessment (based on on-site visual observations), and life and valuation estimates to determine both a fund status and a funding plan.
- In an *Update, No-Site-Visit/Off Site Review*, the reserve provider conducts life and valuation estimates to determine a fund status and a funding plan.

## Contents of a Reserve Study

A reserve study should include the following:

- A summary of the association, including the number of units, physical description, and the financial condition of the reserve fund.
- A projection of the reserve starting balance, recommended reserve contributions, projected reserve expenses, and the projected ending reserve fund balance for a minimum of 20 years.
- A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life, and current replacement cost.
- A description of the methods and objectives utilized in computing the fund status and in the development of the funding plan.
- Source(s) utilized to obtain component repair or replacement cost estimates.
- A description of the level of service by which the reserve study was prepared and the fiscal year for which the reserve study was prepared.

## Disclosure

Experts recommend the following items be included in a comprehensive reserve study:

- A statement disclosing other involvement(s) with the association that could result in actual or perceived conflicts of interest.
- A narrative description of the physical analysis that details how the on-site observations were performed, i.e. representative sampling vs. all common areas, destructive

- testing or not, field measurements vs. drawing take-offs, etc.
- A description of the assumptions utilized for interest and inflation, tax and other outside factors for the financial analysis.
- A written explanation of the credentials (state or organizational licenses/credentials) held by the individual who prepared the reserve study or oversight.
- A report on how the current work is reliant on the validity of prior reserve studies.
- Discussion of material issues which, if not disclosed, would cause a distortion of the association's situation.
- Reliable information provided by the association's official representative regarding financial, physical, quantity or historical issues. The reserve study will be a reflection of information provided to the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analyses, or background checks of historical records.
- The actual or projected reserve balance total presented in the reserve study based upon information provided.
- Accurate reserve components as determined in the *Update With-Site-Visit* and *Update With No-Site-Visit* levels of service.
- A description of reserve projects which is considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.

## **Determining a Reserve Schedule**

A reserve schedule is the financial summary of the reserve study. Its format depends on the funding method used (see "Selecting a Funding Plan" section). During the development of a reserve schedule, the association and its reserve specialist should follow the steps detailed in Figure 1 on the opposite page.

## **Establishing a Preventive Maintenance Schedule**

Once you've determined which items are reserve components, it's time to establish a preventive maintenance schedule. Associations should establish a preventive maintenance schedule for two primary reasons:

1. If associations do not maintain the components on the reserve schedule, they will not attain their full useful life. Consequently, the components will need to be replaced earlier and the replacement cost will need to be collected over a shorter period of time. This could result in possible special assessments.
2. If associations do not maintain the components that are not included in the reserve schedule, they may require replacement whereas if they were maintained, they would not. For example, wood siding, when maintained properly, will last indefinitely. Without proper maintenance, it may need to be completely replaced in the future.

Figure 2 on the opposite page is a flowchart to assist you in developing a preventive maintenance schedule.

## **Selecting a Funding Plan**

Once your association has established its funding goals, the association can select an appropriate funding plan. There are four basic strategies from which most associations



select. It is recommended that associations consult professionals to determine the best strategy or combination of plans that best suit the association's need. Additionally, associations should consult with their financial advisor to determine the tax implications of selecting a particular plan. Further, consult with the American Institute of Certified Public Accountants (AICPA) for their reporting requirements (see Financial Reporting section on page 7). The four funding plans and descriptions of each are detailed below. Associations will need to update their reserve studies more or less frequently depending on the funding strategy they select.

- **Full funding**—The goal of this funding strategy is to attain and maintain the reserves at or near 100 percent. For example, if an association has a component with a 10-year life and a \$10,000 replacement cost, it should have \$3,000 set aside for its replacement after three years ( $\$10,000 \div 10 \text{ years} = \$1,000 \text{ per year} \times 3 \text{ years} = \$3,000$ ). In this case, \$3,000 equals full funding.
- **Baseline funding**—The goal of this funding method is to keep the reserve cash balance above zero. This means that while each individual component may not be fully funded, the reserve balance does not drop below zero during the projected period. An association using this funding method must understand that even a minor reduction in a component's remaining useful life can result in a deficit in the reserve cash balance. Associations can implement this funding method more safely by conducting annual reserve updates that include field observations.
- **Threshold funding**—This method is based on the baseline funding concept. The minimum reserve cash balance in threshold funding; however, is set at a predetermined dollar amount.
- **Statutory funding**—This method is based on local statutes. To use it, associations set aside a specific minimum amount of reserves as required by statutes.

## Developing an Investment Policy

Developing an investment policy is suggested to set a standard and procedure for investing reserve funds. It also allows boards to make consistent choices and brings structure and continuity to the decision. When developing an investment policy, the board should discuss and evaluate the following topics: general policy, goals and objectives, investment strategy, investment securities' selection criteria, and review and control policies.

Additionally, many states have laws protecting community associations from making what some would consider risky investments. It is suggested that associations review state laws related to reserves; review association documents regarding reserves; consult with service providers such as an attorney, an accountant and a community association manager; and conduct yearly reserve policy reviews.

See the sample investment policy on the opposite page.

## investment policy

### *The XYZ Condominium, Rockville, Maryland*

BE IT RESOLVED that the replacement reserves shall be invested in such amounts as may be authorized by the Board of Directors in accordance with the following policy:

- A. No funds shall be deposited or invested except in authorized investments. Authorized investments are those that are in accordance with the Maryland Condominium Act and with the declaration and bylaws of the XYZ condominium and that are obligations of, or fully guaranteed by, the U.S. government.
- B. All accounts, instruments, and other documentation of such investments shall be subject to the approval of, and may from time to time be amended by, the board of directors as appropriate, and they shall be reviewed at least annually.
- C. Investments shall be guided by the following goals, listed in decreasing order

of importance:

- a. *Safety of principal.* The long-term goal is safety of the replacement reserves.
- b. *Liquidity and accessibility.* Funds should be readily available for projected or unexpected expenditures.
- c. *Minimal costs.* Investment costs (redemption fees, commissions, and other transaction costs) should be minimized.
- d. *Professional management.* Funds should be invested with professional managers who have good reputations and sound credentials.
- e. *Return.* Funds should be invested to seek the highest level of return that is consistent with preservation of the purchasing power of the principal and accumulated interest.

Approved by the XYZ Condominium Board of Directors, February 27, 1995

## Financial Reporting

In the early 1990s, the AICPA developed the *AICPA Audit and Accounting Guide: Audits of Common Interest Realty Associations (CIRA)* to establish accounting standards for accountants to use when composing the financial statements for common interest realty associations. The guide outlines what needs to be included in the financial statements and has requirements for information pertaining to future repairs and replacements.

The following should be included (see the AICPA's guide for a comprehensive list):

- Requirements, if any, in state statutes or association documents to accumulate funds for future major repairs and replacements and the CIRA's compliance or lack of compliance with them.
- A description of the CIRA's funding policy, if any, and compliance with it.
- A statement that funds are accumulated based on estimated future (or current) costs, that actual expenditures may vary from these estimates and that the variations may be material.
- Amounts assessed for major repairs and replacements in the current period, if any.
- A statement indicating whether a study was conducted to estimate remaining useful lives, future major repairs and/or future replacement costs.
- Information regarding special assessments if associations fund major repairs and replacements using them.

# case study #1

## RR Community Association

*Age:* 15 years  
*Size:* 312 units  
*Location:* South Orange County, California

RR Community Association ("RRCA") is a condominium association located in South Orange County, California. RRCA, which was constructed from the mid- to late-1980s, consists of 312 units contained in 39 nearly identical 8-unit buildings. There are private roadways, two pool areas and extensive landscaped areas. The association's reserve components include the following:

- Roadways (asphalt and concrete)
- Roofs (flat and pitched composition shingle)
- Paint (stucco, woodwork, and tubular steel)
- Fencing, Walls and Gates
- Lighting (buildings, walkways, streets and pool areas)
- Two Pool Areas (each with pool, spa and restroom building)
- Tot Lot
- Deck Surfaces (entrance stairways and balconies)
- Doors (garage and utility closets)
- Landscaping (irrigation system, slopes, tree trimming)
- Miscellaneous Components (awnings, rain gutters, etc.)

Steve Jackson, RS, started working with RRCA in the early-1990s. His first analyses concluded that while the association had a significant reserve fund, it was underfunded by approximately 40 percent. Based on his analyses and recommendations, the association contributed to their reserve fund to cover the normal deterioration of reserve components and also to correct their underfunded reserve position through time. With 312 units contributing to the reserve fund, the total reserve fund grew rapidly. However, everything is relative. With 312 units, the association also faced significant reserve expenditures in the future to properly maintain the community.

During the early- to mid-1990s, deterioration of the reserve components occurred at a more rapid rate than had been estimated. The association was becoming increasingly underfunded. Investigation found that the association had significant construction defects. Now, not only was the association faced with funding their reserve for normal deterioration of components and to correct their underfunded position, they also had to finance litigation against the community's developer.

During the investigation and litigation, which lasted approximately 2 years, the association's board of directors had a legal duty (according to California Civil Code) to analyze and disclose to the homeowners the association's reserve fund status on an annual basis. Contrary to the opinion of some in the legal community, this duty cannot be put on hold due to ongoing litigation. Each year, upon direction from the association's legal counsel, a reserve analysis was prepared that showed the reserve fund status *as if* the reserve components were designed and constructed properly. These analyses made it possible for



## case study #1, continued

the association to develop budgets based on normal circumstances with the anticipation that additional expenses or accelerated expenses caused by defective conditions would be awarded to the association through litigation. Each year the association developed their budget based on this analysis and disclosed to the homeowners the assumptions used.

As the investigation progressed, the association's construction experts formulated a repair plan and estimated the total cost to correct construction deficiencies at roughly \$3.5 million. Negotiations with the community's developer lead to a proposed settlement of \$3.75 million to be paid over a one-year timeframe. Sounds great, right? Wrong. After paying accumulated legal and expert fees as well as repaying a line of credit, the association would be left with a net settlement of \$3 million, resulting in a shortfall of approximately \$500,000. How would the association make the necessary repairs with such a settlement?

The reconstruction, which would last approximately 18 months, called for repairs, modification or replacement of many reserve components. However, the association's board of directors had only a vague idea with regard to what the impact would be to the reserve components and subsequent changes to the reserve fund status. At this time, the association had approximately \$300,000 in their reserve fund and was funding their reserves at a rate of approximately \$15,000 per month.

The association's board of directors embarked on a series of analyses addressing the big picture, not just the defective conditions and proposed settlement. RRCA's property manager and legal counsel put together a panel of experts. The board of directors relied on the analyses and recommendations of their construction experts, reserve analyst, investment advisor, management firm and legal counsel. Here's what each party did:

**Manager/Legal Counsel**—Coordinated efforts of the experts and provided information as required.

**Construction Expert**—Identified most likely reconstruction schedule including cash flow requirements. Worked with reserve analyst to determine what the impact of the reconstruction plan would be to the reserve components.

**Investment Advisor**—Developed an investment strategy that would maximize interest income during the reconstruction period and provide necessary cash flow for reconstruction activities.

**Reserve Analyst**—Developed *pro forma* reserve analysis that projected the reserve fund status post reconstruction. Determined what information was critical to this analysis and collected it from management, legal counsel and the other experts. Performed analysis (described on page 10) and reported results to the board of directors.

**Board of Directors**—Listened to the advice of management, legal counsel and experts. The board asked the right questions and did their own due diligence to confirm what they were being told.

The experts concluded that the only way this reconstruction could be completed was if the association was willing to use not only the proposed settlement, but also the

## case study #1, continued

association's entire reserve fund (including reserve contributions to be made during the reconstruction period).

The question for the reserve analyst became, "what will the impact to the membership be if the existing reserve funds are spent on the reconstruction project?" The board of directors relied on the reserve analyst to determine if the settlement would be sufficient to make the association whole again...both *physically and fiscally*. The board of directors was confident that the repair plan would make the association whole *physically*. Ultimately, the board of directors wanted to know if the existing reserve funds were spent on the reconstruction project, would the reserve contribution (and likely the assessments) need to be increased. If the reserve contribution did not require an increase after the reconstruction, the board would feel that this settlement would make them whole fiscally as well.

The reserve analyst found that the following would occur:

1. By the end of the reconstruction period, the association would spend nearly all of their reserve funds to finance the reconstruction. This would bring the reserve fund status from approximately 60 percent funded down to nearly zero.
2. Most of the major reserve components, which had been scheduled in previous reserve analyses to be addressed in the near future (i.e., flat roofs, painting, deck maintenance, etc.), would be addressed during the reconstruction period.
3. While the association's reserve fund status would be "weak" post reconstruction, the association would be able to pay for reserve expenses as they occurred and rebuild their reserve fund to a suitable level within approximately three years. After approximately five years, the association would be approaching "ideal" reserve fund status (i.e., 90% to 100% funded). All of this would be accomplished with no initial increase to the reserve fund contribution and only minimal increases through time.

During 1998, based on the analyses of their experts, the board of directors accepted the proposed settlement on behalf of the association. The reconstruction of the community was completed (ahead of schedule and within budget) during 1999. Almost the association's entire reserve fund was used to finance the reconstruction.

As of January 2000, the association's reserve fund was 22 percent funded. As planned, the 2000 fiscal year budget called for only a modest increase (consistent with the cost of living) to the reserve fund contribution. By the end of 2000, the association will be 36 percent funded. By the end of 2002, the association expects to be near 60 percent funded and by the end of 2005, they expect to be approaching an ideal reserve fund status.

*Submitted by Steve Jackson, RS, Advanced Reserve Solutions, Inc.*

## case study #2

### **“ABC” Community Association**

Age: 25 years  
 Size: 134 units  
 Location: Kauai, Hawaii

Located in Kauai, Hawaii, this 134-unit large resort condominium (apartment style) property was built in 1976. The association was originally designed to be a timeshare tennis club. However, that concept did not appeal to buyers and the plan was adjusted to present units in the association for sale as homes. It has experienced its share of trials through the years. The original developer took its time withdrawing from the association and turning it over to homeowner control. There were threats of converting the association to timeshare. There was the major rebuilding effort after Hurricane Iniki in September 1992. On the bright side, the community is now under a new management organization that has its roots in hotel and vacation ownership management and an appreciation for quality, cost-effective maintenance rather than a continuation of band-aid projects. Currently, there are 48 owners—47 individual owners and one large owner who operates their portfolio of units in a vacation club (timeshare) concept.

This association has had a mixture of reserve studies over the years. The first reserve study was a professional *Full* reserve study done in 1995 for fiscal year (FY) 1996. It found that the association was 17 percent funded and recommended monthly reserve contributions (MRC) of \$17,700.

In 1996, the association performed a Do-It-Yourself Reserve Study Kit, in which they assembled the physical information on the property and obtained professional assistance in crunching the numbers and generating a report. In this report for FY 1997, they were found to be 29 percent funded and an effective MRC was computed to be \$12,700. In 1997, a professional *No-Site-Visit Update* reserve study was done for FY 1998. That reserve study found them to be 45 percent funded and recommended a MRC of \$12,600.

In 1998, the association had a professional *No-Site-Visit Update* reserve study done for FY 1999. That reserve study found them to be again 45 percent funded, and recommended a MRC of \$13,000. In 1999 they also had a professional *No-Site-Visit Update* reserve study done for FY 2000, which found them to be 47 percent funded and recommended a MRC of \$14,500. In 2000 they had a professional *With-Site-Visit Update* reserve study done for FY 2001. That reserve study found them to be 44 percent funded and again recommended a MRC of \$14,500.

Despite starting at a weak 17 percent funded and even through the expenditures of many large repainting, asphalt resurfacing, and repair projects, the community association has increased its reserve fund strength to the 40-50 percent range over the last few years. Their expectation is continued growth in the strength of their reserve fund, judicious use of their maintenance budget, wise expenditures of reserves, and a strong reserve contribution rate. The association has never experienced a special assessment.

*Submitted by Robert M. Nordlund, P.E., RS, Association Reserves, Inc.*

## case study #3

### **The Woodlands at West Orange Condominium Association**

*Age:* 13–15 years

*Size:* 174 units

*Location:* West Orange, New Jersey

Since transition from developer control, the board of directors at The Woodlands at West Orange Condominium Association has funded the reserves in accordance with the recommendations in the initial capital reserve study and subsequent bi-annual updates. This strong belief in adequate reserves recently helped the association through a major roof replacement. Like many communities built in the 1980's, the roofs at The Woodlands contained fire-retardant treated (FRT) plywood that was subsequently found to be unsuitable for the construction of roofs. In 1996, within the statutory limit of ten years since construction, the association began procedures to prepare the necessary back-up to file a claim for reimbursement of replacement costs with the State of New Jersey. In 1998, the State awarded the association \$254,000 toward the cost of the roof replacement project, which was anticipated to cost approximately \$1.2 million including approximately \$150,000 in roof-related enhancements.

The board of directors then faced the challenge of informing the unit owners that they were going to spend \$1.2 million. To do so, the board president called a special meeting of all unit owners on April 30, 1998—a meeting that drew the largest attendance of any meeting ever held at The Woodlands. Under the guidance of the president and the Reserve Specialist, the project was analyzed for the owners. The association had \$114,000 in available cash, of which \$60,000 would be used toward the roof project. In addition, \$606,000 was to be borrowed from the capital reserve fund and \$78,000 was to be utilized from the escrow fund. Combined with the award from the state, the association was still facing a deficit of more than \$221,000. To cover that deficit, a one-time assessment of \$1,500 per unit was levied. To ease the burden, the assessment was made payable over a twelve-month period.

Luckily, the roof replacement project was completed ahead of schedule and at a cost savings of \$61,000. The association was then faced with rebuilding its reserves and repaying the money borrowed from the capital reserve fund. At this time, the Reserve Specialist conducted another reserve analysis and found that a smaller contribution to the capital reserve fund would be sufficient to meet the association's needs. Prior to the roof project, the association was spending \$30,000 a year in repairs. Since the new roofs were installed, that expenditure was added to the annual contribution to the reserve fund. The decision to continue to make contributions to the reserve fund at the higher rate was key to the association's ability to fully restore both the reserve fund and the escrow fund in an acceptable time frame.

Thanks to a true team effort by the association board members, the Reserve Specialist, the investment consultant, and the accountant, the association is once again fully funded—with a current reserve fund of \$900,000—and the escrow fund completely restored. Moreover, the association has not had an increase in maintenance fees in seven years. This ongoing focus on reserves and quality maintenance of property has resulted in an extremely high demand for homes in The Woodlands at West Orange Condominium Association.

*Submitted by Jerome M. Fien, President, The Woodlands at West Orange Condominium Association*

## Common Terms

For those not trained to perform reserve studies, some of the terminology may seem daunting. Here are some commonly used terms:

**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 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, a review of established association precedents, and discussion with appropriate association representative(s).

**Component Method:** A method of developing a reserve funding plan where the total contribution is based on the sum of contributions for individual components. See "cash-flow method."

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

**Current Replacement Cost:** See "replacement cost."

**Deficit:** An actual or projected reserve balance less than the fully funded balance. The opposite would be a surplus.

**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 (reserve funding plan) are derived, and the projected reserve income and expense over time is presented. The financial analysis is one of the two parts of a reserve study.

**Component Full Funding:** When the actual or projected cumulative reserve balance for all components is equal to the fully funded balance.

**Accrued Fund Balance (AFB):** The total accrued depreciation. It's an indicator against which the actual or projected reserve balance can be compared to identify the direct proportion of the "used up" life of the current repair or replacement cost. This number is calculated for each component, and then summed together for an association total. The following formula can be utilized.  $AFB = \text{Current Cost} \times \text{Effective Age/Useful Life}$

**Fund Status:** The status of the reserve fund as compared to an established benchmark such as percent funding.

**Funding Goals:** Independent of methodology utilized, the following represent the basic categories of funding plan goals:

- *Baseline Funding:* Establishing a reserve funding goal of keeping the reserve cash balance above zero.

- *Component Full Funding*: Setting a reserve funding goal of attaining and maintaining cumulative reserves at or near 100% funded.
- *Statutory Funding*: Establishing a reserve funding goal of setting aside the specific minimum amount of reserves of component required by local statutes.
- *Threshold Funding*: Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold, this may be more or less conservative than component full funding.

**Funding Plan:** An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund.

**Funding Principles:**

- *Sufficient Funds When Required*
- *Stable Contribution Rate over the Years*
- *Evenly Distributed Contributions over the Years*
- *Fiscally Responsible*

**Life and Valuation Estimates:** The task of estimating useful life, remaining useful life, and repair or replacement costs for the reserve components.

**Percent Funded:** The ratio, at a particular point of time (typically the beginning of the fiscal year), of the actual (or projected) reserve balance to the accrued fund balance, expressed as a percentage.

**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 continue to serve its intended function. Projects anticipated to occur in the initial year have "zero" remaining useful life.

**Replacement Cost:** The cost of replacing, repairing, or restoring a reserve component to its original functional condition. The current replacement cost would be the cost to replace, repair, or restore the component during that particular year.

**Reserve Balance:** Actual or projected funds as of a particular point in time that the association has identified for use to defray the future repair or replacement of those major components which the association is obligated to maintain. Also known as reserves, reserve accounts, cash reserves. Based upon information provided and not audited.

**Reserve 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. Components typically are the association responsibility, have limited useful life expectancies, have predictable remaining useful life expectancies, are above a minimum threshold cost, and are as required by local codes.

**Reserve Provider:** An individual that prepares reserve studies.

**Special Assessment:** An assessment levied on the members of an association in addition to regular assessments. Governing documents or local statutes often regulate special assessments.

**Surplus:** An actual or projected reserve balance greater than the fully funded balance.

**Useful Life (UL):** Total useful life or depreciable life is the estimated number of years that a reserve component can be expected to serve its intended function if it is properly constructed in its present application and/or installation.

## Additional Resources\*

*A Complete Guide to Reserve Funding & Reserve Investment Strategies, Gap Report #24, 4th Edition. Item #5606.*

*An Analysis of the AICPA Guidelines, Gary Porter, CPA, 2001, Item #5656.*

*Common Interest Realty Associations Audit and Accounting Guide, 2000/2001 Edition, Item #R3141.*

*National Reserve Study Standards of the Community Associations Institute, Revised August, 2000.*

*Reserves Videotape, Item #R6076.*

*\*All item numbers are taken from the 2001 Community Associations Press Bookstore. For more information, please call CAI Direct at 888-CAI-4321 or visit [www.caionline.org](http://www.caionline.org).*

## Acknowledgements

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## About Foundation for Community Association Research

Foundation for Community Association Research is a national, non-profit 501(c)3 organization founded by CAI in 1975. The Foundation is the driving force for common interest community research, development and scholarship. Both CAI and the Foundation for Community Association Research are the only organizations recording the history of and identifying trends in residential community association living. There are more than 231,000 community associations across the country, reflecting the growth of community-based solutions to modern housing problems.

The Foundation for Community Association Research serves as the catalyst for positive change in the community association industry by:

- Illuminating future trends and opportunities;
- Supporting and conducting research;
- Mobilizing resources.

Operating under the belief that community associations reflect a deep commitment to grassroots democracy, the Foundation has fostered the growth of associations by providing educational and research support through CAI's chapters. The Foundation is committed to providing quality research and publications for promoting academic interest in these phenomena.

For more information about the Foundation for Community Association Research, please call (703) 548-8600 or visit our website at [www.cairf.org](http://www.cairf.org).

## About Community Associations Institute (CAI)

Community Associations Institute (CAI) is a national, nonprofit 501(c)(6) association created in 1973 to provide resources and education to America's 231,000 residential condominium, cooperative and homeowner associations and related professionals and service providers. The Institute is dedicated to fostering vibrant, responsive, competent community associations that promote harmony, community and responsible leadership.

As a multidisciplinary alliance, CAI serves all stakeholders in community associations. CAI members include condominium and homeowner associations, cooperatives and association-governed planned communities of all sizes and architectural types; individual homeowners; community association managers and management firms; public officials; and lawyers, accountants, engineers, reserve specialists, builder/developers and other providers of professional services and products for community associations. CAI has nearly 17,000 members in its chapters throughout the U.S. and in several foreign countries.

CAI serves its members in the following ways:

- CAI advances excellence through seminars, workshops, conferences and education programs, some of which lead to professional designations.
- CAI publishes the largest collection of resources available on community associations, including books, guides, *Common Ground* magazine and specialized newsletters on community association finance, law and management.
- CAI advocates community association interests before legislatures, regulatory bodies and the courts.
- CAI conducts research and acts as a clearinghouse for information on innovations and best practices in community association creation and management.
- CAI provides networking and referral opportunities through both the national office and local CAI chapters, CAI-sponsored insurance programs for directors and officers, and discounts on products and services.

For membership or other information, call the national office at (888) CAI-4321 (M-F, 9-6:30 ET) or visit our "Why Join CAI?" section on the CAI website, [www.caionline.org](http://www.caionline.org).



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