

STANDARDS

1. ASSOCIATION OF PROFESSIONAL RESERVE ANALYSTS (APRA)

- 1.1. WHO WE ARE - The Association of Professional Reserve Analysts, a nonprofit corporation, was created in 1995 by principals of the nation's leading Reserve Study companies. The purpose of APRA is to provide a forum and structure to establish a common base of knowledge, standards of care and professionalism within the Reserve Study industry.
- 1.2. MEMBERSHIP - The APRA Applicant for Membership shall pay an initial membership fee as designated by the Board and Member in Good Standing shall pay annual membership renewal fee as designated by the Board; and will abide by these Standards and the APRA Code of Ethics.

2. RESERVE STUDY

- 2.1. A RESERVE STUDY COMPRISES TWO PARTS - 1) information about the physical condition and repair/replacement cost of the property components the client is obligated to maintain (Physical Analysis), and 2) the evaluation and analysis of the client's reserve income and expenditures (Financial Analysis). The Physical Analysis comprises the Component Inventory, Condition Assessment, Estimated Useful Life and Estimated Replacement Cost. The Component Inventory should be relatively "stable" over time while the Condition Assessment, Estimated Useful Life and Estimated Replacement Cost will change over time. The Financial Analysis opines on the current Reserve Fund Status (measured in cash or as Percent Funded) and Funding Plan which recommends an appropriate reserve contribution.
 - 2.1.1. PHYSICAL ANALYSIS
 - 2.1.1.1. Component Inventory
 - 2.1.1.2. Condition Assessment
 - 2.1.1.3. Estimated Useful Life and Remaining Useful Life
 - 2.1.1.4. Estimated Replacement Cost
 - 2.1.2. FINANCIAL ANALYSIS
 - 2.1.2.1. Reserve Fund Status
 - 2.1.2.2. Funding Plan
- 2.2. LEVELS OF SERVICE
 - 2.2.1. Full Reserve Study
 - 2.2.1.1. Component Inventory
 - 2.2.1.2. Condition Assessment
 - 2.2.1.3. Estimated Useful Life and Remaining Useful Life
 - 2.2.1.4. Estimated Replacement Cost
 - 2.2.1.5. Fund Status
 - 2.2.1.6. Funding Plan
 - 2.2.2. Update With Site Visit
 - 2.2.2.1. Review and Adjustment of Prior Reserve Study
 - 2.2.2.2. Component Inventory

- 2.2.2.3. Condition Assessment
- 2.2.2.4. Estimated Useful Life and Remaining Useful Life
- 2.2.2.5. Estimated Replacement Cost
- 2.2.2.6. Fund Status
- 2.2.2.7. Funding Plan
- 2.2.3. Update Without Site Visit
 - 2.2.3.1. Review and Adjustment of Prior Reserve Study
 - 2.2.3.2. Component Inventory
 - 2.2.3.3. Condition Assessment
 - 2.2.3.4. Estimated Useful Life and Remaining Useful Life
 - 2.2.3.5. Estimated Replacement Cost
 - 2.2.3.6. Fund Status
 - 2.2.3.7. Funding Plan
- 2.3. REQUIRED DISCLOSURES
 - 2.3.1. Level of Services
 - 2.3.2. Type of Inspection – uses either visual only invasive testing (if invasive testing is used, to what extent
 - 2.3.3. Assumptions Regarding Determination of Client Component List
 - 2.3.4. Assumptions Regarding Ongoing Maintenance
 - 2.3.5. Assumptions Regarding Defect in Design or Construction
 - 2.3.6. Basis of Cost Estimates
 - 2.3.7. Limitations on Use of Report
 - 2.3.8. If Study was Prepared or Reviewed by a “Professional Reserve Analyst” (PRA) or “APRA Member without PRA Designation”
- 3. PROFESSIONAL RESERVE ANALYST (PRA) - A credential for designated members based on education, experience and demonstrated performance. PRAs must meet the initial qualifications and sustained requirements as detailed in these Standards and the APRA Code of Ethics.**
 - 3.1. PRA QUALIFICATIONS - Qualifications for PRA applicants shall be based on a 500 point system. It shall include any combination of points scored from the following sections. The exception will be applicant must score a minimum of 300 points as specified in Section 3.1.1. of conducting reserve studies, towards the total of 500 points.
 - 3.1.1. RESERVE STUDY EXPERIENCE
 - 3.1.1.1. A Minimum of 50 Full Reserve Studies
 - 3.1.1.2. Each Year of Preparing Reserve Studies (100 Points)
 - 3.1.1.3. Two Years Experience being Supervised by a PRA (100 Points)
 - 3.1.2. PROFESSIONAL EXPERIENCE
 - 3.1.2.1. Each Year of Constructed Associated Employment (10 Points)
 - 3.1.2.2. General Contractors License (100 Points)
 - 3.1.2.3. Registered Engineer or Architect Working in Construction Industry (200 Points)
 - 3.1.2.4. Each Year of Employment as a Professional Construction Estimator (30 Points)
 - 3.1.2.5. Each Year of Employment as a Professional Property Manager (10 Points)
 - 3.1.2.6. I.C.B.O. or Equivalent Certified Building Inspector (50 Points)

- 3.1.2.7. Licensed CPA (100 Points)
 - 3.1.3. EDUCATION
 - 3.1.3.1. Construction trade school degree (30 Points)
 - 3.1.3.2. Four (4) Year Degree in Construction Management (50 Points)
 - 3.1.3.3. Four (4) Year Degree in Architecture (50 Points)
 - 3.1.3.4. Four (4) Year Degree in Engineering (50 Points)
 - 3.1.3.5. Four (4) Year Degree in Business (25 points)
 - 3.1.3.6. Trade School Diploma in Construction Estimating (25 points)
 - 3.1.4. CASE STUDY - Applicant shall submit a sample Reserve Study from a project completed within the last year. It shall include both a Physical Analysis and Financial Analysis. Applicant shall also include the names and phone numbers of three (3) professional references.
 - 3.2. PRA APPLICATION - There shall be a nonrefundable PRA application fee as designated by the Board. The Board shall notify the PRA applicant within ninety (90) days of receiving the application. The applicant shall be notified in writing by APRA with the results. All denials shall include reasons for said denial. Denied applicant may reapply for PRA designation after a one (1) year period from date of denial.
 - 3.3. PRA RENEWAL - The PRA designation must be renewed annually based upon a peer review, continued education, a review by the Designation Committee and payment of the PRA Renewal Fee.
- 4. TERMS AND DEFINITIONS**
- 4.1. Cash Flow Method - A method of calculating Reserve contributions 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.
 - 4.2. Component - An individual line item in the Reserve Study developed or updated in the Physical Analysis. These elements form the building blocks of the Reserve Study. Components typically are: 1) Association responsibility, 2) with limited Useful Life expectancies, 3) predictable Remaining Useful Life expectancies, 4) above a minimum threshold cost, and 5) as required by local codes.
 - 4.3. Component Assessment and Valuation - The task of estimating Useful Life, Remaining Useful Life, and Repair or Replacement Costs for the Reserve components. This task is accomplished either with or without onsite visual observations, based on Level of Service selected by the client.
 - 4.4. Component Inventory - The task of selecting and quantifying Reserve Components. This task is accomplished through onsite visual observations, review of association design and organizational documents, and a review of established association precedents.
 - 4.5. Component Method - A method of calculating Reserve contributions where the total reserve contribution is based on the sum of contributions for individual components.
 - 4.6. Deficit - An actual (or projected) Reserve Balance less than the Fully Funded Balance. The opposite would be a Surplus.
 - 4.7. 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 computation.

- 4.8. Financial Analysis - The portion of a Reserve Study where current status of the Reserves (measured as cash or Percent Funded) and a recommended Reserve contribution rate (Reserve Funding Plan) are derived. The Financial Analysis is one of the two parts of a Reserve Study.
- 4.9. Fully Funded - 100% Funded. When the actual (or projected) Reserve balance is equal to the Fully Funded Balance.
- 4.10. Fully Funded Balance (FFB) - Total Accrued Depreciation. An indicator against which Actual (or projected) Reserve balance can be compared. In essence, it is the Reserve balance that is proportional to the current Repair/replacement cost and the fraction of life “used up”. This number is calculated for each component, then summed together for an association total. Two formulae can be utilized, depending on the provider’s sensitivity to interest and inflation effects. Note: both yield identical results when interest and inflation are equivalent.

$$\mathbf{FFB} = \mathbf{Current\ Cost\ x\ Effective\ Age\ \div\ Useful\ Life}$$

$$\mathbf{FFB} = \left(\frac{\mathbf{Current\ Cost}}{\mathbf{Useful\ Life}} \times \mathbf{Current\ Life} \right) + \left(\frac{\mathbf{Current\ Cost}}{\mathbf{Useful\ Life}} \times \mathbf{Current\ Life} \right) \div \left(\mathbf{1 + Interest\ Rate} \right)^{\mathbf{Remaining\ Life}} - \left(\frac{\mathbf{Current\ Cost}}{\mathbf{Useful\ Life}} \times \mathbf{Current\ Life} \right) \div \left(\mathbf{1 + Inflation\ Rate} \right)^{\mathbf{Remaining\ Life}}$$

- 4.11. Funding Goals - Independent of methodology utilized, the following represent the basic categories of Funding Plan goals.
 - 4.11.1. Baseline Funding - Establishing a Reserve funding goal of keeping the Reserve cash balance above zero.
 - 4.11.2. Fully Funding - Setting a Reserve funding goal of attaining and maintaining Reserves at or near 100% funded.
 - 4.11.3. Statutory Funding - Establishing a Reserve funding goal of setting aside the specific minimum amount of Reserves required by local statutes. In Florida, for example.
 - 4.11.4. 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 “Fully Funded”.
- 4.12. Funding Plan - An Association’s plan to provide income to a Reserve fund to offset anticipated expenditures from that fund.
- 4.13. Inflated Expenditures - The combined annual expenditures for a given year inflated to reflect their estimated future replacement cost.
- 4.14. Inflationary Multiplier - The number multiplies by the annual expenditures to estimate the future replacement cost. If inflation was currently projected at 3%, the initial year multiplier would be 1.00, Next Year 1.03, Next year 1.061, etc.
- 4.15. Methodology - A statement which addresses the procedures and methods used to prepare a Reserve Study
- 4.16. Minimum Balance - A minimum Reserve balance established by the client.
- 4.17. 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 Fully Funded Balance, expressed as a percentage.

- 4.18. Physical Analysis - The portion of the Reserve Study where the Component inventory, Condition Assessment and Life Adjustment and Valuation tasks are performed. This represents one of the two parts of the Reserve Study.
- 4.19. Quantity - The total quantity of each component.
- 4.20. 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. Replacements anticipated to occur in the initial or base year have “zero” Remaining Useful Life.
- 4.21. Reserve Assessments - The portion of assessments contributed to the Reserve Fund.
- 4.22. 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.
- 4.23. Reserve Study - A budget planning tool which identified 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.
- 4.24. Special Assessment - An assessment levied on the members of an association in addition to regular assessments. Special Assessments are often regulated by Governing Documents or local statutes.
- 4.25. Straight Line - A formula used to calculate the annual reserve fund contribution for a specific component. Projected replacement cost divided by the useful life equals the annual payment.
- 4.26. Surplus - An actual (or projected) Reserve Balance greater than the Fully Funded Balance. See “Deficit”.
- 4.27. Unit Cost - The cost of a component. The unit cost is multiplied by the components quantity to obtain the total estimated replacement cost for the component.
- 4.28. Unit of Measure - Refers to the method of measurement applied to a particular component. The following are examples:
 - 4.28.1. Square Feet
 - 4.28.2. Lineal Feet
 - 4.28.3. Each
 - 4.28.4. Square Yards
 - 4.28.5. Lump Sum
 - 4.28.6. Squares
- 4.29. Useful Life (UL) - Total Useful Life or Depreciable Life. The estimated time, in years, that a reserve component can be expected to serve its intended function in its present application or installation.
- 5. ETHICS** - Members of the Association of Professional Reserve Analysts are dedicated to the highest standards of professionalism, integrity and competence. The following principles govern conduct of all members fulfilling those obligations. They apply to all professional activities, wherever they occur.
 - 5.1. Any member without PRA designation will comply with the following articles and clearly state in any reserve study product that the product was not reviewed by a PRA.

- 5.2. To encourage employees and colleagues to act in the best interest of the clients whom they represent and serve.
 - 5.3. To encourage employees and colleagues to enrich their capacity to serve clients by joining APRA and participating in its educational and other events.
 - 5.4. To never intentionally misrepresent APRA, its members or its activities.
 - 5.5. To not engage in any illegal or unethical conduct, or any activity which would constitute a conflict of interest.
 - 5.6. To neither copy nor reproduce the copyrighted works of other APRA members.
 - 5.7. To never use my role in an APRA event or committee to solicit a client or contract.
 - 5.8. To pursue my profession and serve my clients according to the highest standards of the industry.
 - 5.9. To exhibit the highest level of integrity in the performance of all professional assignments.
 - 5.10. To accept only assignments for which there is reasonable expectation that the assignment will be completed with professional competence.
 - 5.11. To reveal all material matters discovered during the course of a Reserve Study or update which, if omitted, could cause a distortion of the facts.
 - 5.12. To adhere to applicable laws and regulations. Members may rely on the advice of other qualified persons as to the intent and meaning of such regulations.
 - 5.13. To maintain a current and competent command of the industry's skills and knowledge to serve my clients.
 - 5.14. To fully cooperate with colleagues in related professions in the orderly transition of clients.
 - 5.15. To never betray the trust or confidentiality of my clients and fellow professionals' designation.
- 6. AMENDMENT** - The APRA Association standards may be amended by the convention of the Association under the same procedures as are necessary to amend the Associations Bylaws. The Association Standards may also be amended by the APRA Board of Directors upon a two-thirds vote of the entire Board.