

The use of replacement cost can eliminate the need to measure some, but not all, forms of functional obsolescence such as superadequacies and poor design. Replacement structures usually cost less than identical structures (i.e., reproductions) because they are constructed with materials and techniques that are more modern, more readily available, and less expensive in the current market. Also, correcting deficiencies may result in lower costs. Thus, a replacement cost estimate is usually lower and may provide a better indication of the existing structure's contribution to value. A replacement structure typically does not suffer functional obsolescence resulting from superadequacies. However, if functional problems persist in the hypothetical replacement structure, an amount must be deducted from the replacement cost. Estimating replacement cost generally simplifies the procedure for measuring depreciation in components of superadequate construction. An example of functional obsolescence would be the absence of a desirable feature such as air-conditioning in an existing improvement in a market where this feature is standard. This form of obsolescence would be corrected in a replacement building.

Estimating reproduction cost can be complicated because the improvements may include materials that are no longer available and construction standards or codes may have changed. Nevertheless, reproduction cost usually provides a better basis for measuring depreciation from all causes when that sort of measurement is necessary.

Cost Estimates

To develop cost estimates for the total building, appraisers must consider direct costs (also known as *hard costs*) and indirect costs (also known as *soft costs*). Both direct and indirect costs are essential to a reliable cost estimate. (The traditional data sources and appraisal techniques used to estimate building costs are discussed in Chapter 30.)

Direct construction costs include the costs of material and labor as well as the contractor's profit required to construct the improvement on the effective appraisal date. The entrepreneurial incentive or profit is separate and apart from the contractor's profit. The overhead and profit of the general contractor and various subcontractors are usually part of the construction contract and therefore are direct costs that should always be included in the cost estimate. In more complex projects, where multiple contractors, construction staging, or other complications are involved, a management fee may be required. Indirect costs are expenditures or allowances that are necessary for construction but are not typically part of the construction contract. These costs can include, but are not limited to, the cost of architectural and engineering services, loan origination fees, carrying costs during construction, title insurance fees, appraisal and legal fees, leasing and marketing costs, and developer's overhead and anticipated profit. Because the entrepreneur provides the inspiration, drive, and coordination necessary to the overall project, the cost approach should include an appropriate entrepreneurial incentive or anticipated profit, which is discussed later in this chapter. A construction contingency is not usually a soft cost but rather a hard cost.

The quality of materials and labor greatly influences costs, and appraisers should be familiar with the costs of the materials used in the property being appraised. A building can cost substantially more than is typical if items such as walls and windows are overinsulated or thicker slabs are used to accommodate greater floor loads. Many newer structures contain elements that may not be found in older buildings with which they compete. At one time the market may have considered features such