

CHAPTER 6

COST INDEX AND SALES RATIO

COST INDEX

The cost approach to valuation of improvements is an effective method of valuation in the mass appraisal process. Cost consists of direct labor, materials, indirect expenditures, architectural and engineers design fees, miscellaneous expenses, contractors' overhead and profit which are included in the price of the building. Cost is considered the avenue to value.

Cost manuals are generally used by every state in the appraisal of improvements. There are current cost manuals and historical cost manuals. The Alabama Appraisal Manual is based on historical cost and a classification system. Alabama uses a base cost year and a cost index (time and location adjustment) to arrive at the current cost. The classification system recognizes that buildings of similar design and construction quality have similar cost per construction unit. This system has the advantage that, in cost determination, the class of a building would remain constant regardless of the market. The process we use to determine the cost index is called the "Index Study".

INDEX STUDY

In order to convert the base year cost to current replacement cost new, there must be data collected and a study made of the current construction cost by types of improvements, building components, and material. New construction and building cost will be gathered from the six-month period preceding the October 1 for which the index is being established. Where there is not sufficient data from the six-month period, additional period of time, and/or expansion of geographical area may be used if approved by the Property Tax Division. The development of the cost index is the responsibility of the county. However, the Alabama Department of Revenue, Property Tax Division, makes the final approval of the cost index, or any change in a current index.

The data required to develop a cost (county) index should be gathered and verified in the regular course of business as the appraiser measures and inventories new and old properties. Sales should be gathered on a regular basis and confirmed as soon as possible because parties to sales tend to forget the details as time passes. All data collected and used in establishing the cost index must be maintained in a separate file.

The basic procedures for the index study are as follows:

1. Locate and identify parcels with new construction.
2. Measure and list the improvements on an Alabama Property Record Card and attach a photograph of the subject improvement.
3. Verify the land value (whenever possible) and enter on the PRC.

4. Contact the architect, contractor or owner and obtain a breakdown of all cost involved.
5. Compute the base year cost of the improvement in strict accordance with the Alabama Appraisal Manual to determine the Base Cost.
6. Statistically analyze the data to determine if any special conditions exist. (Additional research may be needed on the “outliers”.)
7. Analyze the data again after it has been “cleaned up” and determine the proposed index.
8. Utilize the CAMA package to perform a “what if” test to further validate the proposed index.
9. Proof the index using samples other than those used in the development of the index.
10. Submit the proposed index and all data used to determine and proof the index to the Property Tax Division for final approval prior to use.

DEVELOPMENT OF THE COST INDEX

Discovery

The first step in the development of a cost index is the process of discovery. Discovery simply means locating and identifying as many new construction samples as possible. The most obvious source of this information is from the records kept in the tax office itself. New splits recorded on the mapping register, annual appraisal maintenance updates, new assessments, BOE hearing records, etc. Outside sources may include building permits, local contractors and realtors.

Field inspection

Each improvement used in the study must be visited. The improvement must be measured and listed in strict accordance with the Alabama Appraisal Manual. Every effort should be made to obtain any available sales or cost information concerning the land and the improvements thereon. The information is then recorded on an Alabama Property Record Card and a sketch and photograph of the subject improvement attached. All properties used in the index study are to be maintained in a separate file for future reference; therefore, it may be necessary to make more than one copy of the required information.

Verify the land value

If the sample is derived from a sale, rather than from construction cost, the current market value of the land must be determined and entered on the property record card and abstracted from the property sale price. Determination of the land value can also be from market data collected on the sale of comparable residential lots and then abstracted from the property sale price.

Obtain cost breakdown of improvements

Architects, contractors and builders have a cost breakdown for each improvement that they build. Every attempt should be made to obtain a copy of these cost breakdowns as they provide the most accurate information for calculating the current cost of the improvement. Care should be taken to ensure that the cost breakdown contains all the cost involved in the project, both direct and indirect. For example, a contractor's breakdown on a residence may not contain some of the indirect ("soft") cost such as architect's fees or cost of permits and testing that are a legitimate expense in the calculation of cost. On the other hand, a cost breakdown may contain expense items that should be excluded such as earth moving expenses for extensive site preparation or demolition cost for a preexisting building.

Computation of samples

Compute the base cost of the improvement in strict accordance with the Alabama Appraisal Manual to determine the base year cost. Calculate the current cost of the improvement by the appropriate method. When cost breakdowns are available, the current cost is derived by totaling all legitimate expenses. When sales are involved, the current cost of the improvement is extracted from the sale by removing the value of the land. Divide the current cost of the improvement by the base year cost (calculated using the Alabama Appraisal Manual) to obtain the index between base year and current year cost.

Example: Property sold for \$111,250; the land value was determined to be \$20,000;
Property value \$111,250 minus the land value of \$20,000 leaves an improvement
current cost of \$91,250. Divide the improvement current cost by the base
year cost to obtain the "index" for this property.

$$\frac{\text{current cost} \text{ ---- } \$91,250}{\text{base year cost} \text{ --- } \$89,880} = 1.02$$

Perform this computation for as many samples as you have been able to collect.

Statistically analyze the data

After the index computations have been performed, analyze the data to determine if any special conditions exist.

Example: The following sample indexes have been calculated and arrayed from low to high

0.62	1.01	1.03
0.89	1.02	1.03
0.91	1.02	1.04
0.93	1.02	1.04
0.94	1.02	1.05
0.95	1.03	1.05
0.99	1.03	1.06
1.00	1.03	1.26

This array of the data shows an “outlier” at both the low end and the high end of the array. These two samples require additional research to determine if they are valid samples and whether or not they should be included in the data sample. After this determination has been made and the data is considered “cleaned up”, the data should be analyzed again and the proposed index determined. The example above produces a mean of 1.00, a median of 1.02 and a mode of 1.03, therefore the most likely index indicated by this data would be 1.02.

What if

Utilize the Computer Assisted Mass Appraisal (CAMA) software to perform a “what if” test to further validate the proposed index. Those CAMA systems that meet the State of Alabama Department of Revenue Computer Assisted Mass Appraisal Specifications will have the capability to perform “what if” testing. This testing, simply put, allows the appraised value of recent sales file samples to be recalculated using the proposed new index, a sales ratio computed, and the results statistically analyzed to see if the new index will bring appraised values up to current indicated market values.

Proof the index

Samples of recent sales of various ages, class and improvement type properties should be collected and the appraised value recalculated using the new index. A sales ratio analysis is then performed to determine if the new index brings the properties’ appraised values up to indicated current market values. Note: this step must be performed manually if sufficient and appropriate computer software is not available.

Submit the proposed index for approval

Submit a letter requesting approval of the proposed index to the Alabama Department of Revenue, Property Tax Division. Copies of all data used to determine and proof the index should be submitted. This data should include, as a minimum, copies of property record cards for each sample, pictures of the improvements, copies of cost breakdowns and copies of any other spreadsheets or information pertinent to the determination and proofing of the index.

SALES RATIO STUDY

The Property Tax Division Valuation Analysts, with the assistance of county appraisers will conduct a sales ratio study for determination of sales ratio to market value as of October 1 each year. The purpose of the Sales Ratio Study is to measure property appraisal equalization, evaluate the level and uniformity of appraisals, determine the need for reappraisal, and establish the priorities for reappraisal of selected groups of properties and identify potential problems with appraisal procedures. This study is required by the Property Tax Division and will be conducted using the Property Tax Equalization Plan procedures and guidelines.

PROCEDURES

All qualified sales from October 1 through September 30 will be used for the sales ratio study. The appraised value of properties involved in sales will be the valuation as of October 1 immediately following the study period.

Data sources

- a. Recorded vesting instruments
- b. Multiple listings service
- c. County records
 1. Current Use Application
 2. Assessment records and interviews
 3. Sales obtained by Board of Equalization hearings
 4. Sales data records

Verification procedures

All sales must be verified in order to be included in the sales ratio study. The verification procedures outlined below should be used in order of preference.

- a. Interviews with buyers, sellers, agents, or other persons having personal knowledge of sale
- b. Approved sales questionnaires (See Alabama Appraisal Manual)
- c. Multiple listing services where available
- d. Stated consideration on vesting instruments supported by mortgage data

Samples

Samples collected for analysis will be representative of the county parcel population by geography and property type. The sample overall population count should be at least 1% of the county parcel count total. A minimum of 20 sales is desirable for analysis of each property type.

Appraised value

The appraised value of properties involved in sales will be that value assessed as of October 1, following the period in which sales data was gathered. The appraised value will be taken from the property tax administration computer system record.

- a. Appraisals used in the sales ratio study must match the property sold. Legal descriptions on sale documents must match appraisals. Physical characteristics of each sale property must match the property appraisal. Any values that have changed after the deed date will be flagged for review by the district supervisor in order to determine applicability for inclusion in the ratio study. A complete description of any value changes will be recorded for each parcel and remain in the sales file.
- b. Parcels that have had additions, renovations, added improvements, or demolitions will not be used in the sales ratio study.

Sales involving current use valuation

For any property which has sold and the assessed value is based on the current use value and the purchaser of such property is also entitled to current use, the current use value must be indicated in the ratio study program. You will enter the appropriate appraised value under the heading "appraised value".

Multi-parcel sales

Sales involving multiple parcels will be included in the ratio study. The total appraised value and sales price will be shown using one parcel number only. Additional parcel numbers will be indicated in the comments/notes section. Non-contiguous properties in a multi-parcel sale should be closely analyzed for applicability. Multi-parcel sales located in more than one county will be excluded.

Sales involving assumptions of long-term lease

Careful analysis of sales involving an assumption of a long-term lease is required to insure credibility of the sale.

Condominiums

Careful analysis of condominium sales is required to insure credibility of the sale.

- a. Insure all condominium property is located in the same county.
- b. Exclude sales where incomplete or planned but not yet constructed common properties are included in sales price.
- c. Exclude sales that include personal property values not typically regarded as real estate

SALES INVOLVING THE FOLLOWING PARTY OR PARTIES WILL BE OMITTED:

<u>Parties</u>	<u>As Grantor</u>	<u>As Grantee</u>
Family and corporate affiliates	Omit	Omit
Administrator	Omit	Omit
Guardian	Omit	Omit
Conservator	Omit	Omit
Master	Omit	Omit
Commissioner	Omit	Omit
Receiver or trustee in bankruptcy or equity	Omit	Omit
Sheriff	Omit	Omit
Bailiff	Omit	Omit
County Clerk or other (tax deeds)	Omit	Omit
Executor	Omit	Omit
Government Agency (Federal-State-County)	Omit	Omit
Mortgage or financial companies (Banks, etc.)	Omit	Omit
Non-Profit Organization	Abstract	Omit
Public Utilities	Omit	Omit

SALES INVOLVING THE FOLLOWING TRANSACTIONS WILL BE OMITTED:

- Property cannot be clearly identified on assessor's books
- Sale of property in more than one county
- Sale of cemetery lot
- Sale where interest such as life estate is retained
- Sale involving a trade or exchange of property
- Sale of mineral or timber rights
- Sale including personal property
- Sale of an unspecified or undivided part of property, or conveyance of a life estate
- Sale where possession is retained for over one year
- Sale involving transfer of patents
- Sale showing the consideration of "love and affection"

The sale price is the full consideration paid for a property including the cash down payment and amounts financed. Information must be furnished on sales having special or unusual financing when such financing affects the sales price. Sales involving relocation services require careful consideration and analysis before including in the ratio study.

When all required information has been entered, the sales ratio data will be delivered to the district supervisor for review prior to submission to the Property Tax Division Real Property Section. Sales ratio's will be computed for each sale in the sample and analyzed by group and the jurisdiction as a whole.

SALES CONFIRMATION QUESTIONNAIRE

- 1. Location (address): _____

- 2. Brief Legal description: _____

- 3. Use of the property at time of sale (e.g., single family residential, condominium, commercial, industrial, agricultural, vacant, other): _____

- 4. Description of the sale:
Seller: _____
Buyer: _____
Sale Date: _____ Deed Book & Page: _____
- 5. Total sale price: (cash down payment plus amount financed) \$ _____
- 6. Has the property been recently improved such as site preparations, new structures remodeling or additions. Please describe the changes:

- 7. Describe any personal property items included in the total sale price and give an estimate of their value. Estimated value: \$ _____
Description: _____
- 8. Describe any timber, growing crops, or allotments included in the total sale price and give an estimate of their value. Estimated value: \$ _____
Description: _____
- 9. Was a trade of property involved in this sale? _____ If yes, describe the traded Property and give an estimate of its value. Estimated value: \$ _____
Description: _____
- 10. Is this a sale between relatives? _____
- 11. Is this a sale between related businesses? _____
- 12. Is this a sale of convenience? (e.g., to correct defects in title, etc.) _____

Signature: _____ Date: _____