

## **ADMINISTRATIVE NOTICE 98-15**

**SUBJECT:** Property Tax -- State Tax Commissioner's Statement  
Concerning Methods By Which Residential Real  
Estate Is Appraised Statewide.

This notice will discuss the method by which local county assessors appraise residential real estate statewide through the use of a Computer Assisted Mass Appraisal System (CAMA).

### DISCUSSION

Several years ago the State Tax Commission purchased real estate mass appraisal software called Computer Assisted Mass Appraisal or CAMA. This software is installed on the mainframe computer in Charleston and is accessed through on-line terminals in each County Assessor's office.

Generally, CAMA will separately value raw land and structures. This software provides for the entry of data by the local Assessor concerning "comparable sales" of land in particular "neighborhoods" in the county and then prices the value of this land on a "price per front foot" or by acreage. All such data is entered by tax map and parcel number. In addition, this software contains "replacement cost" pricing features for structures that will allow the local Assessor to enter data such as the size and dimensions of a structure and its rooms, construction materials utilized, quality of construction, date of construction, present condition, style, mechanical systems such as air conditioning and/or furnace, bathrooms, porches, decks, garages, basements, chimneys, exterior and outbuildings. Data collected by the field data collectors/appraisers is entered upon a field card called a "property record card" which corresponds to a CAMA data entry screen. A data entry clerk then will enter the information taken from the field card into a local terminal. The CAMA software then prices the improvements utilizing construction cost data particularized for that area of the State. A county modifier is utilized to modify the price of the improvements based upon current construction costs.

The local Assessor divides his or her county into "neighborhoods" giving consideration to similarities such as parcel size, roads, topography, costs, type and quality of improvements for land pricing. A neighborhood is "a geographical area exhibiting a high degree of homogeneity in residential amenities, land use, economic and social trends and

housing characteristics". Sometimes a large subdivision, town or city will contain several "neighborhoods". Other times a subdivision or agricultural area will be unique and will stand alone as a single neighborhood.

The County Clerk prepares a "Certificate of Transfer" which will state change of ownership, legal description and whether the transfer is deed stamp exempt or not and whether consideration was paid. The County Clerk provides these "Certificates of Transfer" to the Assessor.

The Assessor will receive a copy of the "Certificate of Transfer" for each such conveyance. The Assessor, by tax map and parcel number, will enter into the computer these "transfers" indicating the "consideration" paid for a particular parcel but also indicating by "validity code" whether the sale is a "valid sale", "involved additional parcels", "not open market", "changed after sale", "related person", "forced sale", "land contract", "construction costs" or "included personal property".

Based upon the "transfer" values, that are identified by the assessor as being valid arms-length sales as per the West Virginia Code, the Assessor will generate a "price per front foot" for smaller parcels or a monetary per acre value for larger parcels in each neighborhood. Again all data is entered by tax map and parcel number. In those "neighborhoods" where there have been insufficient numbers of "transfers" of unimproved land to generate a "price per front foot" or a monetary per acre value, the Assessor will take a valid "transfer" price for an improved parcel, value the improvements and subtract the price of the improvements to arrive at a value for the land. This method, commonly referred to as a "land residual method", will then generate a "price per front foot" or a per acre value for the raw land in that neighborhood. Each parcel is physically reviewed and adjustments applied to reflect individual variations with each neighborhood.

Mapping is crucial to any mass appraisal. The county tax maps have been generated over the years utilizing recorded plats, recorded descriptions and aerial photography. Tax map and parcel numbers are assigned to each parcel in the county. Based upon lot measurement or acreage derived by mapping, lot dimensions or acreage is entered into the CAMA system by tax map and parcel number for each lot or parcel. The "price per front foot" or acreage value for that neighborhood is then applied to each lot or parcel in that neighborhood, as the case may be, to arrive at an appraised value for the land. This appraised value will reflect market value for the subject land.

Field data collection is the key to "pricing" an improvement. The field data collector or appraiser will visit the structure. He will note on the "property record card" the type of structure, the exterior walls, the style of the structure, the age of the structure, the living accommodations to include total number of rooms, bedrooms, family rooms, plumbing, basement, heating, attic, physical condition, other features such as recreation room area, finished basement living area, basement garage, unfinished area, grade factor, cost and design factor and CDU (condition, desirability and utility factor). The field data collector or appraiser will measure the structure and other structures on the lot or parcel and note on the "property record card" the dimensions of each structure and will draw a ground floor

sketch of the dwelling or main structure and additions. Finally, the field data collector or appraiser will visit the "other buildings and yard improvements" and note on the "property record card" the "type code", "quantity", "year", "size", "grade", and "condition" of the other improvements. The data entered on the "property record card" is then entered into the CAMA system by the data entry clerk and the CAMA system then generates the depreciated replacement cost value, which is market value of the improvements.

The appraised values for improved real property thus determined are compared to the arms-length selling prices of properties that have recently sold to develop an appraisal/sales ratio for each neighborhood. Results from the appraisal/sales ratio are analyzed and neighborhood pricing factors adjusted to bring the ratio in each neighborhood to within 10% plus or minus of average selling price.

For additional information concerning the appraisal of residential property using the CAMA system, please contact the Property Tax Division of the State Tax Commission at (304) 558-3940.

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