TAX MAPS AND THEIR LAND USE IMPLICATIONS

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THE NATURE OF PROPERTY TAXATION

There remain almost 66,000 primarily local units of government in the United States which have the power to levy property taxes. They do so to such an extent that the yield from such taxes almost reached $51 billion for the 12 months ending with March of 1975, 1 well past the $50 billion annual level for the first time. Most of the total consists of local taxes, still dominated by levies on property, primarily realty. In calendar 1974 property taxes accounted for 82.8 percent of total tax revenue of $58 billion 2/ collected by local governments. This is slightly lower than the corresponding proportion of 86 percent represented by $33 billion in local property taxes five years earlier, but in absolute terms the trend is still definitely upward.

What people pay as property taxes results from applying a tax rate, or combination of rates, to assessed values. Arriving at such values is the climactic third element in the public function known as assessing. The two rather crucial preliminary tasks are discovery and listing of the taxable property. In some countries the national government does the job as part of administering a net wealth tax. In the United States, assessors are still primarily local officials, though in recent years the States of Maryland and Montana have joined Hawaii in making the assessing function a State responsibility.

At any level, assessors are basically appraisers, their assignment being to estimate a value for each taxable property in the jurisdiction concerned as of a specified date, at the "highest and best use" of the property. "Highest and best use" is generally deemed the one most congenial to the site and thus likely to yield the optimum net return, actual or imputed, to the property owner. It is often the same as "zoned use" or "actual use" but need be neither. 3/

Assessing is considered done well if the values resulting from it are uniform, at the level prescribed in governing constitutional provisions and statutes. In one-third of the 50 States that prescribed level is "market value," or something with the same meaning. In the other States legal provisions specify one or more levels or relationships to market value for all or specified types of property. Though attained more frequently than in the past, the legal standards remain important goals in several places. The study of sales prices and assessed values for the 1972 Census of Governments produced, for single-family houses, median area assessment-sales price ratios more than 25 percent below the legal standard in 27 out of 37.

Editor's Note: The views expressed are those of the author and do not necessarily represent those of the Bureau of the Census.
Uniformity evident at the de facto assessment levels actually existing is reflected in a median area coefficient of dispersion of 20.2 percent, for 1971. This means that any given assessed value in the county or other jurisdiction involved can be as much as 20 percent higher or lower than what the median relationship between assessed values and sales prices would indicate.

TAX MAPS AS PART OF THE ASSESSMENT PROCESS

Obviously an assessor is necessarily continuously interested in the parcels of realty situated within the jurisdiction -- where they are located, how they are used, how much they are worth, and what changes occur in any of such respects. As a natural consequence assessors as a group possess the most complete inventory of land parcels available in the United States. Taken together, and with due allowance for the many variations comprising so decentralized a whole, the entire assemblage of tax maps, parcel identification systems, and property information records in the care of assessors can be looked upon as America's locally autonomous fiscal cadastre, encompassing something more than 83 million taxable and 2 million exempt parcels. Tax maps (also called "assessment maps") and an associated parcel identification system are fundamental essentials conditioning assessment effectiveness. In many areas they have also become important reference elements in improvements achieved for other governmental functions such as deed or title registration, land use planning, zoning, and the siting of public facilities. Even property not taxed is affected, not only because assessors must gauge its influence, if any, on the taxable component, but also because exemption and tax immunity can be transitory, beginning or terminating in response to a change in ownership or use.

In the contemporary setting of public sensitivity to property taxation, influenced by an impatient technology and by disputes about its burdens and beneficiaries, tax maps are receiving comprehensive attention. New York State embarked on a program four years ago to promote standardization among tax maps existing in its local assessing jurisdictions, as part of a computer-assisted reassessment effort. In June of this year the Massachusetts Department of Corporations and Taxation recommended, to local boards of assessors in that State, certain guidelines for tax mapping. At the same time the assessment standards committee of the International Association of Assessing Officers is circulating among the IAAO membership a draft of recommended standards for maps to be used by assessors.

NATURE OF TAX MAPS

Because their basic purpose is to make possible the discovery, listing and valuation of taxable realty, tax maps necessarily show boundary lines, dimensions, and a unique identifier for each parcel. In its draft, the IAAO committee suggests that the basic record is a "map drawn to scale and delineated for lot lines or property lines, or both, with dimensions or areas, and identifying numbers, letters, or names for all delineated lots or parcels." Going further by way of a description from the California State Board of Equalization, the committee refers to the basic map as a "graphic description or picture of land. It shows the relative size and position of the land with respect to other properties, to roads, highways, and to major topographic features."
The maps are actually parts of an identification system, interrelated via parcel identification so that those using it can find any given property and trace its history through any succession of changes in ownership and use.

As the Massachusetts guidelines make evident, modern day systems often include basic aerial photography and its associated photo indexes, ground control standards base manuscript maps, the tax maps themselves with associated planimetric and topographic maps, and also an index card file or similar component providing cross-referenced ownership information and parcel identification numbers.

Map sheet sizes and map scales are uniform within individual States. In Massachusetts the recommended sheet size is 24 inches by 36 inches. New York State uses sheets measuring 30 inches by 42 inches. Maps scales are commonly set with regard to the density of settlement. In rural areas, for example, the scale may be one inch to 400 feet, or one inch to 200 feet. Semi-rural areas would have a scale of one inch to 100 feet, while in heavily populated places the scale would become one inch to 50 feet.

The maps naturally show the rights-of-way of roads and streets, highways, railroads, power and transmission lines. Also plotted are water and sewer easements, streams, lakes, and even ditches. Townships, range, and government lot numbers are also shown for areas included in the government survey.

USES OF TAX MAPS

As their nature implies, tax maps constitute the initial resource available to the assessor for accomplishing the discovery function. Unless all parcels in the jurisdiction are represented on the maps, there can be no assurance that all taxable realty will in fact be assessed and taxed.

Using the maps to discover property naturally leads to their use in valuation activity. The assessor's basic estimate of value, for any given property, is always in relation to estimates of value for all others. This is the essence of uniformity, a fundamental goal of assessing. Tax maps, together with associated records in the system, provide the means for an overall view of a block or neighborhood or entire city, and thus contribute to uniformity among resulting assessed values.

Because values are constantly subject to change, however, in response to or in spite of a change in ownership, or a change in the physical characteristics of the parcel, or a change in external circumstances affecting the parcel, tax maps are also subject to change and must reflect those which have mapping consequence. The assessor necessarily uses tax maps to keep abreast of change, hence maintaining them is essential to their usefulness.

The major uses mentioned above have given rise to a consensus among assessors to keep tax maps as simple as possible, restricting their data coverage largely to physical aspects cited. Many assessors, for example, omit house numbers, assessed values, and names of owners from tax maps, including such data on associated maps or records in the information system.

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The same is true for land use information. The assessor is always aware of zoned, actual, and highest and best use of parcels, because the assessor necessarily considers such information in arriving at value. The linkage between tax maps and land use occurs via parcel identification, and the associated records in the system.

**LAND USE IMPLICATIONS**

Because tax maps are basic and complete, they lend themselves to integration with a comprehensive land data system sensitive to the needs of officials other than the assessors, and to needs of the general public. In some cities and counties today, planning and other officials already make effective use of tax maps or associated records in accomplishing specific objectives.

An added stimulus to all this, of course, is computer technology. Assessors in many places long ago mechanized assessment roll preparation, and at least 50 of their number have begun computer-assisted valuation for residential properties, via multiple regression analysis. Computerized mapping is being similarly explored, and in some instances, adapted to use. One example is Forsyth County, North Carolina, where it is hoped that a fully integrated land records information system will begin serving the public by April 1976. Mr. Cam Easton, the Tax Administrator, and Ms. Eunice Ayers, Register of Deeds, have cooperated from the outset on a system that will provide instant access to data in the assessor's and recorder's offices, the planning and zoning department, the building inspectors office, and other local departments. Census data, down to census tract coverage, can also be used with the system.

The assessor, of course, is most conscious of immediate responsibilities involved in the assessing function, just as other officials are of their own priority tasks. As land data systems become multi-purpose, therefore, in keeping with optimum use, the need for coordination, at all stages, can be expected to become more important.

**REFERENCES**


NOTES


3. Ibid., p. 1.
