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HIGHLIGHTS

Over a span of 25 years ending in 1981 the Nation's base of taxable property reached almost $3 trillion, more than 10 times the 1956 total. To this can be added almost $10.6 billion in taxable property value located in Guam, Puerto Rico, and the Virgin Islands.

Nearly two-thirds of the nationwide increase since 1956 came during the last 5 years, as the combination of inflation, rising statutory assessment levels, and reassessment brought the total from $1,229.1 billion in 1976 to $2,958.2 billion in 1981.

Between 1971 and 1976 assessed values had for the first time increased by a greater percentage outside standard metropolitan statistical areas (SMSA's) than inside. Now, however, there is again relatively greater metropolitan growth. Net assessed value within SMSA's slightly exceeded $2 trillion in 1981, 145 percent higher than the total of $854 billion 5 years earlier. Outside SMSA's the increase since 1976, though substantial at 122 percent, was proportionately less. The aggregate net assessed value outside SMSA's climbed from $335 billion in 1976 to $745 billion in 1981.

Locally assessed realty in 1981 accounted for $2.5 trillion of the property tax base, almost 12 times the total a quarter century earlier. Three of every 5 dollars of such assessed value in 1981 represented residential realty, a proportion over 6 percentage points higher than what prevailed in 1956. The number of parcels show a corresponding relationship. Of the total of 98.4 million taxable parcels in 1981, almost 60 percent, or 58.2 million, are improved residential properties, primarily in the single-family use category.

Property tax revenue, primarily collected by local governments, has increased dramatically. During the period immediately after voter approval of Proposition 13 in California, property tax revenues decreased from $66.4 billion in fiscal 1978 to $64.9 billion a year later. Since then, they have soared to $81.9 billion in fiscal 1982, up by 9.3 percent over fiscal 1981. Preliminary figures for fiscal 1983 totaled $90 billion, an amount 10 percent greater than fiscal 1982. With respect to personal income, however, property taxes have declined since the passage of Proposition 13. They stood at $49.15 per $1,000 of personal income in fiscal 1972, up from $45.27 5 years earlier. By fiscal 1977 the corresponding figure had become $45.53. Then the plunge occurred, down to $34.05 per $1,000 of personal income in fiscal 1982. Over the same 15-year period, the relationship of all State and local taxes to $1,000 of personal income went from $105.50 in 1966-67, up to $128.05 a decade later, and then down to $110.70 in 1981-82.

Average sales prices for single-family houses continue to climb, but less sharply than in the early seventies. In 1956, when the survey began, the average sales price for a single-family house was at $10,900 for a previously occupied single-family house, and $15,600 for a new house. Corresponding figures a decade later were $15,900 and $22,100, respectively. By 1976, they had reached $34,600 and $44,800. The present survey yielded averages of $66,600 for previously occupied houses and $84,400 for new single-family houses. While sales prices increased, effective tax rates went down. The median area rate dropped

from 1.85 percent in 1976 to 1.09 percent in 1981.

To study realty sales prices and their relationship to assessed values for this survey, a sample was selected and enumerated for approximately 181,000 real property sales occurring in 1,996 jurisdictions during a 6-month period in 1981. Usable responses came from about 55,000 transacting parties, the majority of them grantees. Subsequent processing and calculating produced a nationwide assessment-sales price ratio, for all realty (considered as a single use category), of 40 percent. If that unadjusted ratio is applied to (divided into) the nationwide total of $2,514.9 billion (real property assessed value), the sales generated market value estimate for all locally assessed realty in 1981 is about $6,287.2 billion. If the size-weighted ratio of 37.2 percent is used instead, the market value estimate becomes $6,760.4 billion.

The coefficient of intra-area dispersion for single-family houses, which measures the scatter of individual assessment-sales ratios around the median ratio, stood at 21.3 percent for 1981, down from a corresponding 22 percent for 1976. For 1981 this means that, if the coefficient of intra-area dispersion for each of the 1,367 sample assessing areas with enough sales to support calculation were arrayed from lowest to highest, the one with an equal number of coefficients below and above it would be 21.3 percent.

As noted above, survey ratio and dispersion findings stem from a sample of realty sales. The universe of sales from which the sample is selected constitutes only a small part of the entire base of taxable property. There is not necessarily a correlation between what happens in such a small part and what exists throughout the base.

The above comments only suggest the types of data the Bureau of the Census enumerates and processes to arrive at survey findings. Each survey deals with property values and property taxes, in accordance with requirements of Title 13, United States Code, Section 161. Each census necessarily includes "data on taxes and tax valuations . . . of States, counties, cities, and other governmental units."

SCOPE OF THE SURVEY

"Taxable property values" are assessed values. Survey responses reported here consist of aggregates of individual official determinations by more than 13,500 local assessors of the value, officially set in 1981 for tax purposes, for each of about 100 million real property parcels and additional millions of personal property accounts. A parcel in this survey is whatever the local assessor defines to be a parcel (see appendix E).

Specifically, the survey includes the following major data collection activities:

1. Contact with appropriate officials of each State, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands to obtain values officially assessed in 1981 for property subject to local general property taxation, for each State, individual county (or equivalent unit), and for each city or town having a population of 50,000 or more as of July 1, 1978.

2. Enumeration, on a sample basis, from grantor-grantee indexes, deed books, assessment rolls, and similar public records in recording and assessing offices of 1,996 counties and equivalent units, of sales of real property parcels occurring during a 6-month period of 1981 (usually July to December). Data enumerated for each sale include the names and addresses of grantor and grantee, street address or similar unique description of parcel sold, date of sale and/or recording, type of conveying document (usually warranty deed), and assessed value as of applicable 1981 date.

   For sales of realty located in each city or town of 200,000 population or more as of July 1, 1978, and surrounding county, if any. For cities of 50,000 population or more in these counties only, data include property taxes billed in 1982 against applicable 1981 assessed value.

3. Enumeration within the sample 1,996 jurisdictions of data on actual use and assessed value of individual parcels selected from 1981 assessment roll or equivalent public record on a sample basis.

4. Questionnaire canvass, by mail, of all grantees (or alternatively, grantors) involved in sales selected for the sample and post-enumeration screening, in order to obtain sales price and actual use

of sold properties. In the 1982 survey, replies were received from 79,500 of the 138,000 questionnaires mailed out. These responses yielded data on 55,300 measurable sales.

5. Assembly, from State and local sources, on the basis of mail canvass, of 1981 assessed value amounts applicable to intangible and six use categories of tangible personal property.

As the foregoing indicates, the survey is a nationwide aggregation of assessments (parcel-oriented for realty and account-oriented for personalty), since the totals from all primary assessing jurisdictions providing the base for county or equivalent taxes become survey benchmark data that are nationwide in scope.

Individual assessments reflect a multitude of assessment levels with respect to market value. This fact underscores another distinctive aspect of survey scope. The assessment-sales price ratio study is the only such effort conducted on a nationwide basis. Hence the survey's ratios and coefficients indicate de facto assessment levels, together with the degree of uniformity reflected in each, for jurisdictions around the country.

SURVEY METHODOLOGY

Survey findings depend on a carefully controlled two-stage probability sample for the enumeration and assembly of individual parcel assessed values and uses, and on individual parcel transactions (sales) with their sales prices, assessed values, and uses.

To implement the first stage of the sampling design, a selection is made of a sample of primary assessing jurisdictions. This consists of counties in 40 States. In the 10 States[1] where the assessing jurisdictions are municipalities or townships, the sample consists of such units rather than counties.

The first stage or jurisdiction sample has two basic components, namely, certainty and noncertainty jurisdictions. Certainty jurisdictions consist of the following:

1. Each county or county-equivalent primary assessing jurisdiction with a population as of July 1, 1978, of 100,000 or more.

2. Among the 10 township type jurisdiction States, each primary assessing jurisdiction named in the title of a standard metropolitan statistical area (SMSA) or a New England county metropolitan area (NECMA).

3. Additional jurisdictions selected to cover special circumstances.

4. Additional primary assessing jurisdictions needed to satisfy error goals.

Sample noncertainty jurisdictions were determined as follows: There was stratification of noncertainty jurisdictions within SMSA and non-SMSA groups, and within each of the above according to size of known assessed value aggregates for 1979 or 1978, with preference for the more recent year. Then occurred the selection of jurisdictions at random from each stratum in accordance with an optimum allocation criterion based on variances computed from 1976 or later assessed values.

Enough noncertainty jurisdictions were selected to ensure simple unbiased estimates of statewide and SMSA portion assessed value aggregates that would be subject to relative errors of no more than 2 percent for most States, and no more than 4 percent for the smallest States.

The above jurisdiction sample makes possible publication of statewide and SMSA portions of State totals. Data are published for individual SMSA totals, however, only when the sample happens to include each jurisdiction within the SMSA.

In the second stage of sample design, the enumeration covers a sample of individual transactions (sales) of real property, selected at random from the public record (usually grantor-grantee indexes or similar listings of realty sales in the local recording or assessing office), and individual parcel assessed values selected from the assessment roll (also a public record) of the jurisdiction involved.

Data are not available for stratifying or otherwise classifying parcels prior to selection of realty sales. Though certain individual local land information systems possess considerable sophistication, local recording officials do not

[1]New England States of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont, plus Michigan, New Jersey, New York and Wisconsin.

yet typically provide any consistent indication of parcel size or use in their public records.

In consequence, the survey confronts an "unclassified universe" and bases sampling rates on expected overall sales volume. Sampling rates were designed to yield the greatest precision for the largest States. For each sale selected, the applicable assessed value was obtained from the local assessment roll. This is one of the ingredients in the assessment-sales price ratio obtained from survey processing.

A second large sample survey of individual parcel assessed values was conducted from the same local assessment rolls. This yielded the sample that provided data on the number of locally assessed real properties and the distribution, by use category, of such properties and their assessed value.

To accomplish this latter enumeration, the sample was stratified. Criteria for "certainty" and "noncertainty" selection were established on the basis of previous and current assessed value summaries available from State and local governments, and from previous Bureau of the Census surveys. Field enumerators proceed through the assessment roll in each jurisdiction on a dual inspection basis. First the enumerator goes methodically through the entire assessment roll, selecting and then entering on a listing sheet each total assessed value[2] which equals or exceeds the "certainty" value assigned to the jurisdiction (see form GP-22, page 287). Thus, if the "certainty" value is $200,000, any total assessed value equal to or greater than $200,000 is selected.

Then proceeding through the roll a second time, the enumerator examines individual parcel values at a prescribed interval and selects the value encountered if it equals or exceeds the test value assigned for the applicable line on the sample listing sheet (see the alternative listing sheets in forms GP-23 series, pages 288 to 293). If the prescribed interval count is 10, for example, and the next applicable line on the listing sheet has a test value of $50,000, the enumerator looks at the tenth total assessed value encountered and selects it if it equals or exceeds $50,000. If the next listing sheet line has a test value of $20,000, the enumerator will select the succeeding tenth value encountered only if it equals or exceeds $20,000. The enumerator counts through the entire roll in this manner. In the process, a sample that contains differing but predetermined expected proportions of all real property parcels within particular ranges of assessed value is selected. In addition to recording the parcel value, the enumerator obtains the use classification of each sample parcel from the assessment roll or other records.

For the 1982 survey, a significant portion of the sample selection was accomplished by computer. This not only made the most of available resources, but also effected improvements in data accuracy. Computer-assisted enumeration of individual parcel assessed values was much more frequent for the 1982 survey. In 540 of the 1,996 jurisdictions in the sample the data were generated, at least in part, from computer records. Similar computer assistance occurred in 93 jurisdictions in 1976, and in 26 jurisdictions in 1971. So comprehensive and effective a resort to computerization became possible only through the cooperation of many State officials and hundreds of local assessing, data processing, and other officials. The private sector also was significantly involved. The Bureau of the Census contracted with private vendors for tapes containing entire local assessment rolls, or samples thereof, enumerated by computer-assisted means in accordance with survey specifications.

Similarly, agreements were entered into for all or some computer-assisted enumeration with State authorities in Arizona, Florida, New York, and Tennessee. Each of the four State revenue departments routinely acquire tapes of all or most local assessment rolls. To achieve computer-assisted enumeration on the local level in other States, a specific agreement was negotiated with each assessing official concerned.

Technical and logistical problems associated with such enumeration persist, particularly in the area of adapting local property use codes to an appropriate choice among seven classifications used in the survey. Computer-assisted enumeration has been successful, however, and can be expected to continue in the future at a significant level.

There is also the opportunity, in an increasing number of situations, for accomplishing the enumeration of assessment rolls for many jurisdictions at a central source. In each of the four States named above, a tape of each county's roll was available. In three other States (Georgia, Louisiana, and Mississippi), a copy of the manually

[2]The entry in the local roll may or may not show "land" and "improvements" components.

prepared assessment roll for each county is on file. Each of those States authorized the Census Bureau to enumerate all sample counties at the State capital.

THE PROPERTY INVENTORY

To the extent that it provides consistent nationwide data on taxable property value, uses, and numbers of parcels, survey results amount to a taxable real and personal property inventory of the United States, and to the extent made possible by available data, of Guam, Puerto Rico, and the Virgin Islands as well. Also published (in table T) from available State reports are values assigned to totally exempt property. Thus the survey provides substantial amounts of data concerning the country's "land information system," an informal "network" of local data bases developed and maintained primarily by local government assessors and recorders.

Except for the statewide and county assessed value aggregates presented in tables 2, 3, and 20, data contained herein are estimates subject to sampling variation. Even the gross total aggregates, however, constitute only a part (though a major part) of the sum total of all property.

Taxable property amounts to almost $3 trillion in assessed value, for more than 98 million realty parcels (plus those in Guam, Puerto Rico, and the Virgin Islands), and an unknown number of State-assessed properties and personal property accounts. A total property value would need to include the sizable components of totally exempt realty, such as governmental, religious, educational, and charitable property, plus the substantial amounts of tangible and intangible personalty that are not subject to taxation. Information available on tax exempt properties is less reliable (see later discussion).

Quantifying totally taxable assessed values and totally exempt amounts on a common basis such as market value is a major assignment. Assessed values exhibit much variation, of two basic types. The first is legal, the second is economic. The real estate market in recent times has been subject to inflation, recession, lofty interest rates and variable "creative" financing arrangements.

Each of these factors influence how assessed values may realistically relate to value at market levels.

There is a profusion of legal standards for assessed values prevailing throughout the country. A growing number of standards affecting specified use categories of property in States opting for classified property taxation now exist. The total of such prescribed value levels throughout the country amounts to at least 96, as indicated in the following:

Market value of $100,000

Correct assessed dollar value for above market value, for at least one property use or type, in one or more of the States:

1,000	[2]16,000	41,500
3,000	16,300	43,000
4,000	18,000	44,000
4,275	19,000	46,825
6,000	[3]20,000	48,500
[1]8,000	22,270	[3]50,000
8,550	23,140	52,000
9,000	[3]25,000	55,000
9,500	28,000	[1]60,000
[2]10,000	[3]30,000	70,000
10,500	[4]33,333	75,000
[1]12,000	34,000	81,600
13,150	[3]35,000	84,400
14,000	[1]36,000	[5]100,000
[2]15,000	[2]40,000	

[1]2 States. [2]3 States. [3]4 States. [4]5 States. [5]22 States.

The above listing does not incorporate the adoption of a dual standard that occurred in California on June 8, 1978. With their approval of Proposition 13, California voters mandated, for each property affected, retention of the assessed value determined as of the lien date (March 1) in the base year, 1975. The only exception is for annual increases of no more than 2 percent of assessed value annually, until such time as any qualifying "change of ownership" (commonly a sale) or new construction takes place. Those latter events, under the new law, immediately trigger mandatory reassessment at market value. In California, therefore, two properties identical in market value, and even in physical characteristics, can have substantially different, yet legally impeccable assessed values, if one of them has sold since 1978 and the other has not.

Other legal variations in assessed values include things like: concurrent use in Arizona of "limited property value" and "full cash value" for "primary" and "secondary" taxes,

respectively; use of market value as of December 31, 1978, in Idaho (plus up to 2 percent annual increase); and use of market value but with differential property tax rates in the District of Columbia, Massachusetts, and West Virginia.

The influence of book value, with respect to personal property valuation, provides an additional reason for wariness in drawing conclusions about the magnitude of the property inventory from assessed values alone. Without assessed values as a starting point, however, conclusions become totally elusive.

It is acknowledged, of course, that all of the assessed values in this report for realty and personalty reflect not only previously mentioned legal variations but also all other variations that affect work products of assessors.

THE PROPERTY TAX BASE

Between 1956 and 1981 the assessed value of real and personal property subject to local general property taxation has increased almost tenfold, from $280 billion to $2.96 trillion, as shown in table A. The rate of increase every 5 years has grown dramatically since 1971. Total assessed value that year had reached $718 billion, after successive 5-year increases of 30, 36, and 43 percent, respectively, in the surveys since 1956. Then values moved up much more rapidly, climbing by 71 percent to $1.2 trillion in 1976, and then more than doubling to the 1981 total of $2.96 trillion (see table 2). The latest figure is two and one-half times what it was only 5 years earlier.

All of the above amounts constitute "gross" assessed values, prior to deduction of components of assessed value (partial exemptions) in connection with age, income, or other legally specified status of affected property owners. These deducted components, or "partial exemptions," amounted to $120.7 billion in 1981. This compares with corresponding amounts of $39.7 billion in 1976, $23.2 billion in 1971, and $8 billion in 1956.

Table A. Summary, Gross, and Net Assessed Values and Changes Therein: 1956, 1961, 1966, 1976, and 1981

(Amounts in billions of dollars. For meaning of symbols, see text)

Assessed value type	1956	1961	1966	1971	1976	1981
Total gross assessed value	280.3	365.9	499.0	717.8	1,229.1	2,958.2
Total net assessed value (net locally taxable)	272.2	354.0	484.1	694.6	1,189.4	2,837.5
State-assessed property	22.5	27.8	41.6	53.5	84.7	159.0
Inside SMSA's, including State-assessed	(NA)	244.6	342.2	507.9	854.0	2,092.4
Outside SMSA's, including State-assessed	(NA)	109.3	141.9	186.7	335.5	744.9
Locally assessed property	249.7	326.1	442.5	641.1	1,104.7	2,678.4
Real property	202.8	269.7	378.9	552.7	959.1	2,406.7
Personal property	46.9	56.5	63.6	88.3	145.6	271.7

	Percent change				
	1956 to 1961	1961 to 1966	1966 to 1971	1971 to 1976	1976 to 1981
Total gross assessed value	30.5	36.4	43.8	71.2	140.7
Total net assessed value (net locally taxable)	30.1	36.8	43.5	71.2	138.6
State-assessed property	23.6	49.6	28.6	58.3	87.7
Inside SMSA's, including State-assessed	(NA)	39.9	48.4	68.1	145.0
Outside SMSA's, including State-assessed	(NA)	29.8	31.6	79.7	122.0
Locally assessed property	30.6	35.7	44.9	72.3	142.5
Real property	33.0	40.5	45.9	73.5	150.9
Personal property	20.5	12.6	38.8	64.9	86.6

Note: Because of rounding, detail may not add to totals.

Source: Taxable Property Values survey, Census of Governments as indicated: 1957, vol. 5; 1962, vol. 2; 1967, vol. 2; 1972, vol. 2, pt. 1; 1977, vol. 2; 1982, tables 2 and 3, this report.

Gross and net assessed value as of 1981 for outlying areas approximates $10,582.7 million and $7,693.3 million, respectively, as follows (see tables 23 and 24):

Gross and net assessed value, 1981

(millions of dollars)

	Gross	Net
Guam.....	711.4	678.5
Puerto Rico.....	7,705.8	4,994.3
Virgin Islands.....	2,165.5	2,020.5

Exclusive of outlying areas, the tax base (net assessed value) in 1981 is $2.8 trillion as shown in table A. The latter figure includes $159 billion of State-assessed property, up by nearly 90 percent from the total 5 years earlier. The remainder, locally assessed property, approximates $2.7 trillion, of which all but $272 billion represents real property. In 5 years, the net assessed value of locally assessed realty increased by 151 percent. Over the 25 years of the survey, the corresponding increase stands at more than 1,000 percent.

The personal property total of $272 billion reflects smaller increases, 87 percent since 1976 and about 480 percent over 25 years. Several States have abandoned the assessment of all personal property in recent years, but the considerable taxable base that remains (see table E for taxability and appendix B for legal assessment standards) is subject to modern assessment methods. State-assessed property includes railroads and other utilities, assets often requiring individual expertise for satisfactory appraisal. The owners of such property have become much more vigilant in pressing assessment appeals. For example, the Railroad Revitalization and Regulatory Reform Act of 1976 (the "4-R Act") became fully effective in 1979, and companion statutes extend its coverage to truck and bus lines. Any assessment subject to the act which, in terms of de facto assessment level, exceeds the level for commercial and industrial property by more than 5 percent, is discriminatory and subject to relief in the Federal courts.

Law, technology, and other social forces have affected assessed value magnitudes. In 1956 few States specified different legal assessment levels for particular categories of property. Now 11 States do so, and the number appears to be increasing (see appendices A, B, and C for variations now supporting the property tax legal structure).

One profound influence on assessment methods has been the introduction of the computer, mentioned earlier. With machine assistance assessors can accomplish mass appraisal every year. This was not feasible in the past. Local assessments, therefore, are now more likely to be reflective of current market trends, especially for residential property.

DISTRIBUTION AND COMPOSITION OF THE BASE

Territorial Distribution

About three-fourths of all taxable assessed value and three-fifths of taxable real property parcels in the United States are located in urban areas. The urban assessed value proportion increased to 74 percent in 1981 (see table B). This resumes a trend going back to 1961, when the corresponding figure was 69 percent. Only once, in 1976, was this trend interrupted when the nonmetropolitan share increased from what it had been 5 years earlier. State-assessed and personal property components of the urban base moved down in 1981 to 3.1 percent and 6.7 percent, respectively, of the total for all property. In each case, however, the assessed value within SMSA's constituted a greater proportion of the aggregate assessed value than in 1976.

There have been substantial increases in assessed value within individual States, primarily because of changes in the legal level of assessments. California reported a total of $658 billion in assessed value for 1981, up by 602 percent from the pre-Proposition 13 aggregate in 1976 (see table 3). A major reason is the legal change, effective January 1, 1981, that required assessments at 100 percent of full cash value instead of 25 percent (whether defined in "base year" or "change of ownership" terms). Similarly in Texas, assessed value increased over 650 percent from the 1976 total, to $313 billion in 1981. There was the new legal and organizational assessment structure in Texas that placed the appraisal function for all tax levying units within each county in a county wide appraisal district. As part of the reorganization assessment levels were raised to "100 percent of appraised value" as of January 1, 1981. Six other States reported assessed values in excess of $100 billion in 1981, as follows:

Florida.....	249	North Carolina.	113
New Jersey..	111	Virginia.....	122
New York....	108	Washington.....	124

Assessed values represent varying percentages of market value, as indicated by sales prices (see table 11). Comparative value studies should recognize these conditions.

The separate amounts for the "land" and "improvements" components of real property assessed value provided by 19 States and shown in table 3 should be used cautiously. The present report is the first for which such separate data have been published so comparative data are not available. Among the 19 States, assessed value for land (improved or unimproved) ranges from 28 percent of total realty assessed value, in New Hampshire and Wyoming, to double that proportion in North Dakota. The land component is 35 percent or less in 11 of the 19 States, and 40 percent or more only in the "farm" States of Nebraska (50) and North Dakota (62).

Within SMSA's, land assessments constitute a generally lesser share of total realty assessed value. New Mexico at 38 percent has the only proportion exceeding 35, while in 4 of the 19 States (Kansas, Nebraska, New Hampshire, and Oklahoma) assessed values for SMSA land comprise 25 percent or less of total realty.

Numbers of parcels predictably are relatively greater in States of larger population. Each of the following seven States has more than 4 million of the Nation's 98.4 million taxable realty parcels:

Texas.....	8.6	New York.....	4.7
California..	8.2	Pennsylvania..	4.7
Florida.....	5.3	Illinois.....	4.2
Ohio.....	4.9		

Together the above States account for almost 41 million parcels, 2 out of every 5 of the national total. At the other end of the spectrum, where the emphasis is on space, there are two States with less than 200,000 parcels each, Alaska

Table B. Percent Distribution of Gross Taxable Property Assessed Value: 1956, 1961, 1966, 1976, and 1981

(For meaning of symbols, see text)

Assessed value type	1956	1961	1966	1971	1976	1981
Total gross assessed value.....	100.0	100.0	100.0	100.0	100.0	100.0
State-assessed property.....	8.0	7.6	8.3	7.5	6.9	5.4
Locally assessed property.....	92.0	92.4	91.7	92.5	93.1	94.6
Real.....	74.8	76.6	78.8	80.0	80.8	85.0
Personal.....	17.2	15.7	12.9	12.6	12.4	9.6
Inside SMSA's.....	(NA)	69.1	70.6	73.3	72.0	74.1
State-assessed.....	(NA)	3.9	5.0	4.5	4.0	3.1
Locally assessed.....	(NA)	65.2	65.7	68.7	68.0	70.9
Real.....	(NA)	55.3	57.6	60.3	59.8	64.3
Personal.....	(NA)	9.9	8.0	8.4	8.2	6.7
Outside SMSA's.....	(NA)	30.9	29.4	26.7	28.0	25.9
State-assessed.....	(NA)	3.7	3.4	2.9	2.9	2.3
Locally assessed.....	(NA)	27.2	26.0	23.8	25.1	23.7
Real.....	(NA)	21.3	21.2	19.6	21.0	20.7
Personal.....	(NA)	5.9	4.8	4.2	4.1	2.9
For each class:						
Inside SMSA amount as a percent of total amount:						
State-assessed property.....	(NA)	51.4	59.7	60.9	57.5	58.1
Locally assessed property.....	(NA)	70.5	71.6	74.3	72.9	75.0
Real.....	(NA)	72.2	73.1	75.5	73.9	75.6
Personal.....	(NA)	62.6	62.4	66.7	66.6	69.4
Outside SMSA amount as a percent of total amount:						
State-assessed property.....	(NA)	48.6	40.3	39.1	42.5	41.8
Locally assessed property.....	(NA)	29.5	28.4	25.7	27.0	25.0
Real.....	(NA)	27.8	26.9	24.5	26.0	24.4
Personal.....	(NA)	37.4	37.5	33.3	33.4	30.5

Note: Because of rounding, detail may not add to totals.

(187,826) and Wyoming (194,766). In the four States where farm and acreage land use predominates (Arkansas, Iowa, North Dakota, and South Dakota), the total number of parcels slightly exceeds 4.6 million. A second group of farm States has a combined total of 5 million parcels. Those States are Kansas, Montana, Nebraska, and Wisconsin.

Realty Tax Base--Locally Assessed Values by Use Categories

Again in 1981, as in every survey year back to 1956, the smallest identifiable assessed value component of the local real property base came from vacant platted lots (see tables 4 to 6). As the summary in table C indicates, vacant land assessments contributed only 4.4 percent of realty total assessed value. The proportion has increased by 16 percent since 1976 and has in fact almost doubled over the 25 years of the survey. Nevertheless, when it is noted that vacant land parcels constitute one-fifth of the nationwide total (see table D), the assessed value component, increasing or not, stands out as relatively low.

The situation within individual States varies (see table 4). In 1981 each of four States (Alaska, Arizona, Nevada, and New Mexico) had more that one-tenth of its taxable realty value base in the form of vacant lots. Five years earlier only two, Alaska and New Mexico, were in that position.

Noticeable proportionate decline in the realty value base is evident for two other use categories, namely, acreage (including farms and nonresidential rural land) and the combination of commercial and industrial property.

As table C indicates, acreage realty now contributes less than 10 percent of the taxable base, continuing a decline (interrupted only in 1976) from 14 percent in 1956. The decline has been evident in parcels as well (see table D), where the acreage share dropped from 23

Table C. Gross Assessed Values, Locally Assessed Realty, and Use Categories 1956, 1961, 1966, 1976, and 1981

(Amounts in billions of dollars)

Years indicated	1956	1961	1966	1976	1981
United States total, all use categories	209.8	280.5	393.2	992.5	2,514.9
Acreage and farms	29.1	32.7	43.4	117.6	247.8
Vacant platted lots	4.8	7.0	10.2	38.0	109.4
Residential (nonfarm)	113.5	162.5	236.3	587.3	1,520.0
Single-family houses only	95.1	135.5	196.7	495.3	1,328.7
Commercial and industrial	58.0	74.5	97.2	239.8	549.3
Commercial	34.8	44.2	60.0	166.0	353.5
Industrial	22.6	30.3	37.1	73.7	195.8
Other and unallocable	4.4	3.8	6.0	9.8	88.3
	Percent distribution				
	1956	1961	1966	1976	1981
United States total, all use categories	100.0	100.0	100.0	100.0	100.0
Acreage and farms	13.9	11.7	11.0	11.9	9.9
Vacant platted lots	2.3	2.5	2.6	3.8	4.4
Residential (nonfarm)	54.1	57.9	60.1	59.2	60.4
Single-family houses only	45.4	48.3	50.0	49.9	52.8
Commercial and industrial	27.7	26.6	24.7	24.2	21.8
Commercial	16.6	15.8	15.3	16.7	14.1
Industrial	10.8	10.8	9.4	7.4	7.8
Other and unallocable	2.1	1.4	1.5	1.0	3.5

Source: Census of Governments: for 1957, vol. 5; for 1962, vol. 2; for 1967, vol. 2; for 1977, vol. 2; and for 1982, tables 4 through 9, this report. Each volume cited has data for the preceding year.

percent to 15 percent in 25 years. This change may be linked to the profusion of "benefited use" legislation now common in all States in one form or another (for a State-by-State summary, see appendix C).

In States where farm and other rural lands loom large in the taxable property inventory, use-influenced assessment levels are significant. In 1981, agricultural and nonurban realty amounted to 30 percent or more in Iowa, Kansas, Nebraska, North Dakota, and South Dakota (see table 6). In Idaho, where the acreage share had been 34 percent in 1976, there was a drop to 26 percent in 1981.

Commercial and industrial realty are probably the most difficult to assess. Such property sells less frequently than residential. When it is sold, the transaction is more difficult to evaluate than a sale of a house. Other features of a commercial transaction may reflect "income analysis," including complications like capitalization of rents. The proportion of commercial and industrial properties declined as shown in table C, from 28 percent in 1956 to 22 percent in 1981.

Realty Tax Base--Numbers of Parcels by Use Categories

In 1981 single-family homes (includes detached houses and condominiums) accounted for almost 55 million parcels, or 56 percent of the total. The nationwide proportion again increased slightly, as it has in every survey since 1956. Among individual States, there are 20 (see table 7) in which the number of realty parcels used for single-family residences equals or exceeds 1 million. California heads the list with 5.4 million parcels. In 37 States and the District of Columbia the single-family category constitutes at least half the total number.

The overall proportion of parcels being used for commercial and industrial purposes has remained the same, at 4.2

Table D. Numbers of Parcels, Locally Assessed Realty, and Use Categories: 1956, 1961, 1966, 1976, and 1981

(Number of parcels in thousands)

Years indicated	1956	1961	1966	1976	1981
United States total, all use categories	61,158	67,449	74,832	88,194	98,394
Acreage and farms	14,185	13,348	14,085	13,893	14,778
Vacant platted lots	12,694	12,876	14,250	17,492	19,483
Residential (nonfarm)	30,924	37,336	42,329	51,971	58,162
Single-family houses only	29,973	35,817	40,436	48,750	54,983
Commercial and industrial	2,291	2,508	2,487	3,663	4,113
Commercial	1,942	2,098	2,112	3,179	3,562
Industrial	298	410	376	485	551
Other and unallocable	1,067	1,381	1,679	1,175	1,861
	Percent of total				
	1956	1961	1966	1976	1981
United States total, all use categories	100.0	100.0	100.0	100.0	100.0
Acreage and farms	23.2	19.8	18.8	15.8	15.0
Vacant platted lots	20.8	19.1	19.0	19.8	19.8
Residential (nonfarm)	50.6	55.4	56.6	58.9	59.1
Single-family houses only	49.0	51.6	54.0	55.3	55.9
Commercial and industrial	3.7	3.7	3.3	4.2	4.2
Commercial	3.2	3.1	2.8	3.6	3.6
Industrial	0.5	0.6	0.5	0.5	0.6
Other and unallocable	1.7	2.1	2.2	1.3	1.9

Source: Census of Governments: for 1957, vol. 5; for 1962, vol. 2; for 1967, vol. 2; for 1977, vol. 2; and for 1982, tables 4 through 9, this report. Each volume cited has data for the preceding year.

percent (see table 9), between 1976 and 1981, after increasing somewhat during the previous decade. Within individual States the change is equally divided, 24 showing an increase and 23 a decrease in the commercial and industrial share of parcels in the 5-year period since 1976.

As table D indicates, only the acreage use category exhibits a decrease in proportionate share that extends over the entire quarter century of these surveys, the figure falling from 23 percent for 1956 to 15 percent for 1981. Within individual States the proportions have decreased since 1976 in 30 States and increased in 19.

Other States exhibiting less substantial changes in parcel composition affecting acreages and vacant lots include Maine, Nevada, Oregon, South Dakota, and Wisconsin. On a nationwide basis vacant platted lot proportions declined in 27 States between 1976 and 1981, and increased in 22 States.

Parcel use category estimates are produced within a survey design that is based on known aggregates of assessed values. Wherever possible, such aggregates were matched with corresponding information about numbers and uses of the parcels which the aggregates quantify (see table 8 for sampling error).

Parcel counts follow definitions of the local assessors. On occasion that means they reflect statutory limits on size or other aspects that may need separate recognition on local assessment rolls.

It is also likely that counting as one assessment the aggregate value of all properties in a single ownership still occurs in some jurisdictions. This can also affects some parcel estimates.

Personal Property--Locally Assessed Value

Personal property is every kind of property that is not realty. It is either tangible, such as desks and chattels that can be seen or touched, and moved about, or intangible, having no physical existence beyond certificates or accounts that represent its value. Certain kinds of property, such as fixtures, can be personal or real, depending on the nature of attachment to the realty in a given situation (for details on types of personalty, see appendices B and E, and table E).

Gross assessed value of locally assessed personal property in 1981 amounted to $284.2 billion, 87.2 percent greater than the corresponding amount in 1976. Almost 70 percent of gross total value comes from metropolitan areas. The trend here is up, since the metropolitan proportion in 1976 was 67 percent, itself an increase from 63 percent 10 years earlier (see tables 2, 3, and 28).

In 1956, a net aggregate of $47 billion in personal property accounted for 17.3 percent of the total for all taxable property. Corresponding shares in 1976 and 1981 are 12.2 percent and 9.6 percent, respectively. The personal property part of the taxable base continues to shrink. Net assessed value of personalty still constitutes at least 20 percent of the total base in 13 States (see table 3), but in 1976 there were 15 States in a similar position.

Four States have since 1976 joined Delaware, Hawaii, New York, and Pennsylvania in exempting all personalty from property taxation. Illinois and South Dakota acted on January 1, 1979, the latter State extending exemption to all personal property, following earlier removal of specified classes. In New Hampshire total exemption became effective on April 1, 1981. North Dakota removed most personal property from taxation in 1970, and now exempts all of it.

As table E indicates, inventories in 1981 were totally exempt in 22 States and the District of Columbia, the eight named earlier that exempt all personalty, and the 15 that follow: Alabama, Arizona, California, District of Columbia, Idaho, Maine, Michigan, Minnesota, Nebraska, New Jersey, Oregon, Tennessee, Utah, Wisconsin, and Wyoming.

Commercial and industrial personalty remained taxable in 42 States and the District of Columbia, and still predominates among legally taxable categories. The agricultural group was subject to taxation in 34 States, several of which exempt dollar amounts or specified property types. Similar reduction of the base affects taxation of household personalty in the 16 States still using it. Motor vehicles remained subject to special property taxes in some of the 32 States that in 1981 exempted them from general property taxation.

Intangible Personal Property

Intangible personal property has no value except for what it represents. The form showing the nature of that representation is the only indication of the property's existence. Examples of intangibles are cash, bank deposits, shares of stock, bonds, patents, and goodwill.

Table E. Legal Status of Major Types of Tangible Personal Property With Respect to Local General Property Taxation by States: 1981 and Subsequent Periods

State	Business inventories	Other commercial and industrial	Agricultural	Household personal property	Motor vehicles
Total taxing	28	43	34	16	19
Alabama	E	[1]T	[1]T	[2]T	[1]T
Alaska	L	L	L	[1]L	L
Arizona	E	[1]T	T	[2]T	E
Arkansas	T	T	T	T	T
California	[3]E	[1]T	[1]T	[2]T	E
Colorado	[1 4]T	T	[4]T	[2]T	E
Connecticut	[5]T	[1]T	[1]T	E	T
Delaware	E	E	E	E	E
District of Columbia	E	[1]T	E	E	E
Florida	[1 6]T	T	T	E	E
Georgia	T	T	[1]T	E	T
Hawaii	E	E	E	E	E
Idaho	E	[1]T	[1]T	[2]T	E
Illinois	E	E	E	E	E
Indiana	T	T	T	[2]T	E
Iowa	[7]T	[1 7]T	[1 7]T	E	E
Kansas	T	T	[1]T	[2]T	[8]T
Kentucky	[9]T	[9]T	[1]T	E	T
Louisiana	T	T	E	E	E
Maine	E	T	[1]T	E	E
Maryland	[10]L	[10]L	[10]L	E	E
Massachusetts	[1]T	[1]T	T	E	E
Michigan	E	T	E	[2]T	E
Minnesota	E	[11]T	E	E	E
Mississippi	[1]T	T	E	E	T
Missouri	T	T	T	E	[1]T
Montana	[12]T	T	[1]T	E	[13]T
Nebraska	E	T	[14]T	E	T
Nevada	[15]T	T	[15]T	E	E
New Hampshire	E	E	E	E	E
New Jersey	E	[16]T	E	E	E
New Mexico	[17]T	[1]T	[1]T	[18]E	E
New York	E	E	E	E	E
North Carolina	T	T	[1]T	[1]T	T
North Dakota[19]	E	E	E	E	E
Ohio	T	T	E	E	E
Oklahoma	T	T	T	[1]T	E
Oregon	[20]E	[1]T	[20]E	E	E
Pennsylvania	E	E	E	E	E
Rhode Island	[21]T	[21]T	[1]T	[1]T	T

See footnotes at end of table.

Table E. Legal Status of Major Types of Tangible Personal Property With Respect to Local General Property Taxation by States: 1981 and Subsequent Periods--Continued

State	Business inventories	Other commercial and industrial	Agricultural	Household personal property	Motor vehicles
South Carolina	[22]T	[1]T	[23]T	E	T
South Dakota[24]	E	E	E	E	E
Tennessee	E	[1]T	[1]T	[1]T	T
Texas	T	T	[25]T	E	[26]T
Utah	E	[1]T	[1]T	E	T
Vermont	[27]L	[1]T	E	E	E
Virginia	T	T	L	L	T
Washington	[28]T	T	[28]T	E	E
West Virginia	T	T	T	[29]T	T
Wisconsin	[30]E	[30]T	[30]T	E	E
Wyoming	E	T	T	E	E

Note: T locally taxable. E exemption. L local option; option to exempt affected items is exercised in most jurisdictions.

[1]Subject to legal provision for partial exemptions either as to specified types or specified value levels. [2]Taxable only if used in production of income. [3]In California, business inventories became exempt effective Mar. 1, 1980. [4]In Colorado, inventories, livestock, agricultural products, and agricultural equipment became exempt effective with the 1983 tax year. [5]In Connecticut, manufacturers' inventories are exempt; other inventories 1/12 exempt in 1971, additional 1/22 exempt annually until totally exempt, 1982. [6]In Florida, inventories became exempt effective Jan. 1, 1982. [7]In Iowa, personal property assessed value is subject to reduction required by chap. 427A of the Code of Iowa which limits personalty value in each jurisdiction to the total value for such property in the jurisdiction as of Jan. 1, 1973 (excluding livestock. [8]Subsequent to 1981, Kansas motor vehicles were subject to special rather than general ad valorem taxation. [9]In Kentucky, machinery and products in course of manufacture, and raw materials are exempt. [10]In Maryland, exemption of personal property either in part or in full is permitted at the option of the localities; currently 4 counties have exempted all personalty. [11]Although the taxability of specific types of personalty in Minnesota is not always clear, in practice very little personal property is assessed or taxed. [12]Montana allowed a credit against corporate income taxes for property taxes paid on business inventories in 1981 and 1982. Such inventories became exempt Jan. 1, 1983. [13]In Montana, automobiles and trucks having a rated capacity of 3/4 ton or less became exempt, effective Jan. 1, 1980. [14]Agricultural personalty in Nebraska is mostly exempt effective July 19, 1980. [15]In Nevada, business' and manufacturers' inventories, and livestock were assessed at 14 percent of taxable value for 1981-82; 7 percent for 1982-83; exempt subsequent to 1982-83. [16]In New Jersey, business personal property subject to local taxation is limited to tangible personalty of telephone, telegraph, and messenger companies. [17]Inventories in New Mexico are exempt except for livestock and inventories of certain centrally assessed taxpayers. [18]In New Mexico, household personalty is presumed exempt by virtue of its exclusion from categories defined by statute as taxable. [19]North Dakota personal property is no longer assessed effective with 1981 assessments. [20]Effective Jan. 1, 1980, inventories (including farm machinery and equipment) and livestock in Oregon became exempt. [21]In Rhode Island, manufacturers' inventories and certain manufacturing machinery and equipment are exempt. [22]Manufacturers' inventories in South Carolina are exempt. [23]Most agricultural personalty is exempt. [24]In South Dakota, personal property not centrally assessed became exempt Jan. 1, 1979. [25]In Texas subsequent to 1981, exemption of agricultural personalty was expanded so that the following are currently excluded from taxation: Family supplies for farm and home use, farm products (including livestock and poultry), and farm implements. [26]Passenger automobiles and light trucks in Texas are exempt if not used for the production of income. Local taxing units may override this exemption with respect to automobiles. [27]Municipalities in Vermont may exempt inventories and in lieu thereof, tax business machinery and equipment. [29]In Washington, inventories, agricultural crops, and animals became exempt Jan. 1, 1983. Household goods in West Virginia are exempt unless used for profit, in which case a $200 exemption applies. [30]In Wisconsin merchants' stock-in-trade, manufacturers' materials and finished products, and livestock became exempt effective Jan. 1, 1981. Most agricultural personalty is also exempt.

Only 3 of the 13 States now subjecting intangibles to local general property taxation have available the aggregate assessed value of such personalty. The three are Kansas, Louisiana, and Tennessee. Together they report a total assessed value for 1981 of $430.5 million (see table 28). The other 10 States are Alabama, Florida, Georgia, Indiana, Iowa, Mississippi, Montana, North Carolina, Texas, and West Virginia.

Several States and some local governments tax intangibles via separate levies. In its report, State Tax Collections in 1982 (Series GF82, No. 1), for example, the Bureau of the Census lists identifiable State revenue from intangibles taxes as follows (described as "general" property taxes in Florida, with 55 percent of net collections distributed to counties, "special" property taxes elsewhere):

Millions of dollars, 1982

Florida.....	109.5	Kentucky.....	40.7
North Carolina.	56.9	Virginia.....	17.3
Michigan.....	48.6	Rhode Island.	7.3

The same report includes revenue from special property taxes in 32 States. Such amounts may include revenue from intangibles.

The total intangibles value base is substantial. Identifying its magnitude may become easier through computer-assisted enhancement. Opinion is divided on the extent to which taxing representational value as well as the underlying assets constitutes double taxation.

Public Utilities

Most of the $159.2 billion in gross assessed value of State-assessed property (see table 2) is that of public utilities. Any estimate of the exact amount necessarily lacks precision. It would in any case be substantially less than the total worth of all such property.

A public utility, though privately owned, has property of a highly specialized type, difficult to value at best. Much, if not most, is nevertheless subject to local general property taxation. Exemption occurs in those States which resort instead to special property, excise, or other taxation, often based on gross receipts, franchise value, or property value.

In States where utilities are subject to local general property taxation the appraisal responsibility is generally at the State level, in the department of revenue, tax commission, or similar body. This allocational preference reflects not only the inherent complexity and special character of utility property, but also the "at large" aspect of its situs. What a utility owns generally spreads beyond the boundaries of a single county or municipality.

Manageable appraisal of a public utility stems from a realization of its multilocational, system-wide, unitary nature. This has evolved into the "unit rule" as the commonly accepted valuation technique. The unit rule means appraisal on the basis of what the entire unit, or system, is worth, on the applicable valuation date. That kind of value requires allocating portions to all the counties in which the utility is located. It also implies adherence to definitions about which utility property is inside the unit and which, if any, is not.

Basically everything is in, including intangibles, since the unit applies to one property aggregation under control of one management, operating for system wide profit but also for public necessity.[3] In reality States have reshaped and reconstituted the unit, always careful to retain within it an integrated valuation target. Intangibles, for example, may be exempted, but what remains must itself be a cohesive whole.

A somewhat natural development is restriction of unit appraisal to "operating" property (that directly associated with the operation of the utility), leaving for separate treatment anything "nonoperating" in character. Unit appraisal of operating property proceeds on the basis of approaches to value common for utilities: capitalization of earnings, value of stock and debt, and original cost less reasonable depreciation.

Some States do the entire appraisal job--valuing nonoperating as well as operating utility property, and then apportioning resulting values among the local jurisdictions affected. These include the following: Alabama, Georgia, Kentucky, Maryland, Mississippi, New Jersey, New Mexico, Oklahoma, Tennessee, Utah, West Virginia, and Wyoming.

The following States assign the utility valuing function to local assessing officials: Alaska, Connecticut, Delaware (except railroads), Maine, and Texas (except intangibles of transportation companies).

In a third group are 22 States which assess operating property (which may be

[3]Established from sources such as Adams Express Co. v. Ohio State Auditor, 165 U.S. 194, 222, 1897.

called "special property") of public utilities and, at the same time, direct that local assessors value nonoperating utility property along with all other taxable property. These States are: Arizona, Arkansas, Colorado, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Massachusetts, Missouri, Montana, Nebraska, Nevada, New Hampshire, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Virginia, and Washington.

California does most utility appraising at the State level, but apparently some continues locally. In Florida and Michigan, only railroad operating property is assessed by the State. Hawaii, Minnesota, and Pennsylvania exempt from general property taxation property necessary for utility operation, subjecting it to in-lieu taxes instead. Other utility-owned property is locally assessed and taxed. Ohio assesses railroad property at the State level but assigns responsibility for the assessment of other utilities to each county auditor. In Rhode Island a gross earnings tax is in lieu of property taxes on the intangibles of public utilities, but realty and tangible personalty remain subject to property taxation and are assessed locally.

Other levies, sometimes special property taxes but alternatively in-lieu taxes on gross receipts, franchises or specified excises, apply to specified types of utility property in Delaware (railroad operating property only), Indiana, Maine, Michigan, Massachusetts, Missouri, New Jersey, New Mexico, Ohio, Oklahoma, Oregon, Tennessee, Vermont, Virginia, and Wisconsin. The common occurence in such instances is local assessment and taxation of all utility-owned nonutility property. In the District of Columbia gross receipts taxes are in lieu of personal property taxes on utilities specified, but realty is assessed and taxed in the same manner as other realty.

New York carries out the assessment of public utilities in a manner different from that in other States. With respect to railroads, the responsibility is nominally with each local assessor. State law requires, however, that the State establish for each railroad property a value ceiling that the local assessor may not exceed. Value ceilings set by the State result from a "unit rule" appraisal of each railroad. The practical effect is that railroad assessments, though nominally local, are in fact work products of State appraisal specialists.

Regarding utilities other than railroads, New York separates the property of each utility into special franchises (classified as realty), relating to everything located in or encroaching on the public domain (such as pipes and wiring under streets), and property relating to or encroaching on private domain (such as telephone poles that cross someone's private property). The State assesses all special franchises for each utility. All private domain realty for each utility is the assessment responsibility of the local assessor. Both of these kinds of utility property are assessed not via the unit rule, but separately, on the basis of reproduction cost minus depreciation.

As pointed out earlier, the owners of railroads and other affected transportation property throughout the country may now apply for injunctive and other relief under the "4-R Act" (now incorporated into section 11503 of the Interstate Commerce Law, Title 49 of the United States Code). Relief hinges on establishing that the contested railroad assessment occurs at a value level more than 5 percent above that prevailing for commercial and industrial property in the jurisdiction. Assessment of railroads, as of other utilities, is usually a State responsibility, at least to the extent of any operating property involved. Because litigation under the 4-R Act has become common, comparisons between "unit rule" appraisals and market value estimates of commercial, industrial, and other realty have increased in recent years.

PROPERTY TAX YIELD

Decline, Growth, and Durability

State and primarily local revenue from property taxes slightly exceeded $90 billion, for the year ending June 30, 1983.[4] This is almost 7 times the $13.1 billion collected 26 years ago in 1957, when the Bureau first conducted the taxable property values survey. This represents an increase of 8 percent over the corresponding amount a year earlier. That increase is slightly less than those in the 2 preceding fiscal years, when property tax levies increased sharply despite the restraints of Proposition 13 (see tables F and 1).

[4] Quarterly Summary of Federal, State, and Local Tax Revenue, GT83, No. 2 U.S. Bureau of the Census, November 1983, p. 1. Note that the sample used in the quarterly survey differs from that used for the Governmental Finances annual reports providing data for tables F and 1.

Table F. Revenue From Property Taxes: 1956-57 to 1981-82

(Dollar amounts in millions)

Fiscal year	State and local governments			State governments			Local governments		
	Property tax revenue	Percent of-- Revenue from all sources	Percent of-- Total tax revenue	Property tax revenue	Percent of-- Revenue from all sources	Percent of-- Total tax revenue	Property tax revenue	Percent of-- Revenue from all sources	Percent of-- Total tax revenue
1981-82	81,918	15.0	30.8	3,113	1.0	1.9	78,805	25.2	76.0
1980-81	74,969	14.8	30.7	2,949	1.0	2.0	72,020	25.0	76.0
1979-80	68,499	15.2	30.7	2,892	1.0	2.1	65,607	25.4	75.9
1978-79	64,944	16.0	31.6	2,490	1.0	2.0	62,453	26.6	77.5
1977-78	66,422	17.9	34.3	2,364	1.1	2.1	64,058	29.9	79.7
1976-77	62,527	18.5	35.5	2,260	1.1	2.2	60,267	30.7	80.5
1975-76	57,001	18.7	36.3	2,118	1.1	2.4	54,884	30.8	81.2
1974-75	51,491	19.7	36.4	1,451	0.9	1.8	50,040	31.3	81.6
1973-74	47,754	20.1	36.5	1,301	0.9	1.8	46,452	32.4	82.2
1972-73	45,283	20.8	37.4	1,312	1.0	1.9	43,970	34.1	82.9
1971-72	42,133	22.2	38.7	1,257	1.1	2.1	40,876	36.1	83.5
1970-71	37,852	24.5	39.9	1,126	1.2	2.2	36,726	36.4	84.6
1969-70	34,054	22.7	39.2	1,092	1.2	2.3	32,963	37.0	84.9
1968-69	30,673	23.2	40.0	981	1.3	2.3	29,692	37.5	85.4
1967-68	27,747	23.6	41.1	912	1.3	2.5	26,835	38.2	86.1
1966-67	26,047	24.4	42.7	862	1.4	2.7	25,186	39.0	86.6
1965-66	24,670	25.3	43.5	834	1.5	2.8	23,836	40.2	87.1
1964-65	22,583	25.8	44.1	766	1.6	2.9	21,817	40.9	86.9
1963-64	21,241	26.1	44.5	722	1.6	3.0	20,519	41.4	87.2
1962-63	20,089	26.7	45.4	688	1.7	3.1	19,401	41.7	87.5
1961-62	19,056	27.4	45.9	640	1.7	3.1	18,416	42.6	87.9
1960-61	18,002	27.9	46.3	631	1.8	3.3	17,370	42.9	87.7
1959-60	16,405	27.2	45.4	607	1.9	3.4	15,798	42.5	87.4
1958-59	14,983	27.8	46.3	566	1.9	3.6	14,417	43.1	87.2
1957-58	14,047	28.5	46.2	533	2.0	3.6	13,514	43.3	87.4
1956-57	13,097	28.5	45.1	479	1.9	3.3	12,618	43.4	87.0

Sources: Governmental Finances, series GF, No. 5, covering periods shown.

The history of property taxes since 1957 has been one of reduced growth sustained by a certain durability and adaptability, as table F indicates. They remain the source of 3 of every 4 local tax dollars. Moreover, collections in recent years may have arrested a proportionate decline that had reduced what property taxes contribute to total local revenue, from 2 of every 5 dollars in 1957 to 1 out of 4 in 1982.

Despite caps, limits, exemptions, and assorted relief measures endorsed or spawned by the 1978 vote for Proposition 13, property taxes remain the most prolific single source within maximum local control. In absolute terms they yield more every year, the lone exception in contemporary times being the reduction between 1978 and 1979 following adoption of California's Proposition 13.

State and Local Structural Changes

Between fiscal years 1967 and 1982 property tax yield has decreased from 39 to 25 percent of total revenue, as shown in table G. Local governments still depend on the property tax, but within limits imposed not by tax capacity, but by public pressure for alternate revenue sources. Service fees and charges have become more popular, along with a local government disposition to maximize interest earnings if possible. Interest earnings accounted for almost $13.7 billion of the $25 billion in miscellaneous revenue for fiscal 1982.

The major nonproperty tax revenue source, however, continues to be intergovernmental revenue, as table G makes evident. Reductions can and do occur here also. The 37 percent share for

Table G. Percent Distribution, State and Local Government Revenue Structures: 1966-67 and 1981-82

(Dollar amounts in millions. For meaning of symbols, see text)

Item	State governments		Local governments		
	1966-67	1981-82	1966-67	1981-82	Exhibit: Revenue 1981-82
Revenue from all sources	100.0	100.0	100.0	100.0	313,131
Intergovernmental revenue	23.4	20.9	31.2	37.0	115,963
From Federal Government	22.3	20.0	2.9	6.7	20,919
From State governments	-	-	28.3	30.4	95,044
From local governments	1.1	1.0	-	-	-
Taxes, all types	52.3	49.1	44.8	33.1	103,641
Property taxes	1.4	.9	39.0	25.2	78,805
Income, individual	8.0	13.8	1.4	1.9	6,105
Income, corporate	3.7	4.2			
Sales and gross receipts	30.4	23.8	3.0	4.7	14,836
Other	8.8	6.4	1.5	1.2	3,896
Current charges	6.9	6.4	9.7	11.2	34,998
Miscellaneous general revenue	2.7	6.7	4.1	7.9	24,601
Other	14.7	16.9	10.1	20.7	33,929

Sources: Governmental Finances, GF, No. 5, editions for years indicated.

local governments in 1982 had been 39 percent 5 years earlier. Also in 1982, for their part, States received proportionately less aid and dispensed proportionately more than was the situation in 1967. Large cities especially have come to rely on State and Federal assistance, even as they maximize what present use of the property tax can yield.

THE ASSESSING FUNCTION IN A LAND INFORMATION SETTING

Basic Elements

Assessing is the responsibility of an appointed or elected county or other designated official for determining the value of property subject to local general property taxation, as of the specified valuation date. Because its essentials are discovery, listing, and valuation of each taxable property in the jurisdiction, assessing also carries with it the responsibility for maintaining property records accurate and comprehensive enough to accomplish essential valuation work uniformly and on time. Two ultimate assessed value characteristics condition and reflect assessment performance: conformance with the value levels, at market or other specified value level prescribed in the particular State's constitution and statutes, and uniformity with the assessed value of each of the other taxable properties subject to the prescribed legal level.

Assessing thus needs the best property records possible because assessed values need to be uniform at the applicable legal level. For personal property, this means a comprehensive inventory of accounts.

For real property, it means parcel-oriented tax maps and associated appraisal files, in effect a cadastre containing a unique identification number for each parcel plus data on its uses, attributes, and structures. Tax maps and parcel identification numbers often reflect any geocoding made possible by subdivision block and lot numbers, cartographic survey coordinates, and the hierarchies of the Public Land Survey System that exists in 30 States comprising 80 percent of nationwide land.

The importance of such individual property records systems to professional assessing has come to mean widespread reliance, by the public and by officials and others from many disciplines, on the assessor's office for the most complete, most accurate data available on property in the particular jurisdiction. This reliance has increased in recent times as assessors have turned wherever possible to computerization for more effective administration. The computer expedites

access to individual property records, without use of cumbersome metes and bounds legal descriptions. Moreover it now influences valuation directly, making possible swift mass appraising, at least for residential property, by means of statistical techniques such as multiple regression analysis and adaptive feedback. Use of computer methodology has in turn brought about what had been virtually impossible, annual assessment cycles. The computer has had similar transforming effect on assessment administration generally.

Legal Standards and Value Levels

Each State, in its constitution or statutes or both, prescribes one legal standard for all assessed values, or a group of standards each specified for a particular type of property. The legal standard may be the same for realty and personalty, or there may be specified differences. All of the standards have a basis in or a relationship to market value, as the details in appendices A and B make evident for 1981 and subsequently. However, compliance with the standard, market value or something else, does not necessarily indicate anything definite about the amount of property tax billed against a given property. What taxpayers actually will owe has in recent times become a function not only of the interaction between assessed value and tax rate, but also of special social elements such as income level, age, or other benefited status of the taxpayer, or benefited use of the property.

Legal assessment standards nevertheless remained important in 1981 as a point of departure, and variations among States were numerous and remain so today. With respect to real property in 1981, 18 States and the District of Columbia called for assessments at market value, or at some equivalent ("full and true value" in Alaska, "true value in money" in Delaware, "actual value" in Nebraska effective January 1, 1981, or "fair market value" in Virginia). Another group of 19 States specified a single percentage of market value, or a way of calculating a single percentage annually.

For 11 States the single realty assessment level has disappeared, and "classified property taxation" was the prevailing consensus in 1981. A summary of that situation follows:

State and number of classes

Alabama.....	3	Montana.....	6
Arizona.....	9	North Dakota...	4
Iowa.....	4	Oregon.....	2
Louisiana....	4	South Carolina.	5
Michigan.....	*6	Tennessee.....	3
Minnesota....	19		

*Classification via equalization categories.

The above listing does not include Illinois and New York, both grouped earlier among the "market value" 19. Cook County has seven categories in Illinois (legal under an option valid only for any county of 200,000 population or more). New York now uses "preservation of share" alternatives authorized by legislation in December 1981. It should be noted also that Arizona's nine classes have two alternative bases each (see appendix A): "limited property value," used in the calculation of primary taxes, and "full cash value" used for secondary taxes.

California, after Proposition 13 in 1978, has had two standards of assessment. For any property that has not sold since 1978, the assessed value is that for the base year, 1975, subject to increases of no more than 2 percent annually. Whenever a qualifying "change of ownership" or new construction occurs, however, reappraisal is mandatory and the new assessment must be at the market value level. Effective in 1983, that new assessment is placed on a supplemental roll immediately, and a supplemental tax becomes due. Its amount is the product of current rate times the difference between old and new assessed values, prorated according to the months affected by the change in value. Idaho emulated California to a degree with statutory change that bases all assessed values on the market level as of December 31, 1978.

Three areas in the "market value" group provide for differential tax rates. They are the District of Columbia with three rate classes, and Massachusetts and West Virginia with four each. The latter State opted for a 60 percent level (within a reappraisal sequence) in 1982.

A similar pattern of legal variation prevails for personal property assessments, as indicated in appendix B. Percentages of market value range from the 100 percent, or full level, down to 1 percent.

One additional variety of legal standards affecting realty is the assemblage of benefited use (sometimes called "current use") laws, summarized in appendix C. In 1981 this kind of legislation was present in all States except Georgia, which now has it, and Wisconsin, which

uses an income tax credit. The essential characteristic of such laws is the instruction to assessors to estimate value for the realty affected on the basis of specified use or uses. Conventional appraisal theory rests on estimating value of a property on the basis of "highest and best use," namely, the use naturally suited to the site and likely to maximize the pecuniary return possible from the property. Appraising for assessing purposes has an identical goal, except that actual use often is accepted as the highest and best use, especially when it conforms to what zoning allows.

The purpose of benefited use laws is to benefit the particular use or uses specified, frequently agricultural, open space or historical. There are three types of such legislation: preferential use, deferred taxation, and contracts and agreements. In some instances, a single State can exhibit two or even all three of the possible varieties.

"Preferential use" laws (termed "use value assessment only" in appendix C) direct assessment on the basis of the use or uses specified, without providing any tax consequence in the event such uses change. Twenty-two States had such laws in 1981. Often eligibility for such assessment depends on preexisting benefited use for a specified number of years. There also may be minimum requirements for property size and for income attributable to what the property produces (crops, for example).

In contrast, "deferred taxation" provisions existed in 31 States in 1981. This alternative prescribes "benefited use assessing" as long as the qualifying use continues. With any change, however, (for example, from sale of the property) a "deferred tax" is activated, its rate applicable to the difference in value between what the property is worth at the benefited use, and what it would command at highest and best use. In the States affected, the assessment rolls may show both values for each affected parcel (the benefited use assessment and the conventionally estimated assessment).

Fourteen States had, by 1981, enacted legislation of the third type. "Contracts and agreements" are simply that, contractual arrangements available under the law, by means of which taxpayers agree to use the subject property for purposes and under conditions specified, for a stated period of time, in exchange for assessment of the property on a benefited use basis as long as the contract is in effect.

Among outlying areas the legal standard for real and personal property in the Commonwealth of Puerto Rico is the actual and effective value as of January 1 each year. In the Virgin Islands real property is assessed at 60 percent of actual value. A specific valuation date is not mentioned in applicable statutes. Realty in Guam is assessed at 35 percent of appraised value. Personal property is not assessed in Guam or in the Virgin Islands.

Both of the latter outlying areas used statutory tax rates in 1981. In Guam the rate on assessed value was 1 percent for buildings and one-half of 1 percent for land. In the Virgin Islands the statutory rate was 1.25 percent of the assessed value of all real property, including land and improvements.

Assessment Organization and Administration

For survey purposes, the Bureau classifies assessing jurisdictions within three groups, namely, county, township-municipal-county, and township-municipal, identified in this report as types CO, TMC, and TM,[5] respectively, (see table H for valuation dates and table I for organization types).

County assessor system (type CO)--Here the county assessing official (usually designated "assessor" but may have other titles such as "property valuation administrator" in Kentucky, and "county auditor" in Ohio) has initial responsibility for determining the assessed value of taxable property. Type CO includes certain areas not specifically counties but nevertheless having county type functions. It prevails totally in 31 States and in the District of Columbia. The assessing official involved is elected in some places, appointed in others.

Among some of the other 19 States the county assessor system applies partially, as follows: three places in New York (New York City and Nassau and Tompkins Counties); a majority of places in Iowa, Missouri, and South Carolina; a minority of places in Illinois and Pennsylvania; and one county (Kenosha) in Wisconsin.

Hawaii belongs with the county group since July 1, 1981, when the assessing function there ceased being a State responsibility and instead was assigned to each of the four counties. The Hawaii

[5]Corresponding designations in earlier editions of this survey (for 1956, 1961, 1966, and 1971) follow: type A (now type CO); type B (now type TMC); type C (now type TM).

assessing units were previously classified as "county-type," similar to those in Maryland and Montana, even though each of the three States centralized the function at the State level. The latter two States still operate this way. In Maryland all assessing personnel, including the director of assessments in each county, are State employees. In Montana each county assessor is an agent of the State's department of revenue.

In a few States, such as Louisiana, county assessors coexist with assessors for overlapping municipal and other units. The latter officials determine separate assessed values for the particular local governments they serve. Such values exist independently of those determined for county purposes by the county assessor for the geographic area that includes the overlapping territory.

Texas formerly exhibited the most comprehensive example of such overlapping responsibilities. There were separate assessors for counties, cities, independent school districts, and water improvement districts. At present in Texas, however, following voter authorization on November 4, 1980, a single appraisal was made possible within each county for all taxable property. Legislation has assigned the assessing function for all units in each county to the chief appraiser of the county "appraisal district" (coterminous with the county).

The chief appraiser's assessed value for each taxable property in the county is reported to the collector for each property tax levying unit within, or partially within, the county, including the county government itself. These several municipal, school district, and

Table H. Valuation Dates Applicable to Assessed Value in This Report

State	Valuation date
Alabama	October 1, 1980
Alaska	January 1, 1981
Arizona	January 1, 1981
Arkansas	January 1, 1981
California	March 1, 1981
Colorado	January 1, 1981
Connecticut	October 1, 1980
Delaware	Kent County, May 31, 1981; New Castle, March 22, 1981; Sussex, May 1, 1981
District of Columbia	January 1, 1981 (personal property July 1, 1981)
Florida	January 1, 1981
Georgia	January 1, 1981
Hawaii	January 1, 1981
Idaho	January 1, 1981
Illinois	January 1, 1981
Indiana	March 1, 1981
Iowa	January 1, 1981
Kansas	January 1, 1981
Kentucky	January 1, 1981
Louisiana	January 1, 1981
Maine	April 1, 1981
Maryland	January 1, 1981
Massachusetts	January 1, 1981
Michigan	December 31, 1980
Minnesota	January 2, 1981
Mississippi	January 1, 1981
Missouri	January 1, 1981
Montana	January 1, 1981
Nebraska	January 1, 1981
Nevada	Roll containing property assessed between July 1 and December 15, 1980
New Hampshire	April 1, 1981
New Jersey	October 1, 1980
New Mexico	January 1, 1981
New York	May 1, 1981, generally, but varies among cities and towns
North Carolina	January 1, 1981
North Dakota	February 1, 1981
Ohio	January 1, 1981 (personal property December 31, 1980)
Oklahoma	January 1, 1981
Oregon	January 1, 1981
Pennsylvania	No fixed dates; roll containing 1981 values used as basis for 1982 tax bills
Rhode Island	December 31, 1980
South Carolina	December 31, 1980
South Dakota	January 1, 1981
Tennessee	January 1, 1981
Texas	January 1, 1981
Utah	January 1, 1981
Vermont	April 1, 1981
Virginia[1]	January 1, 1981
Washington	January 1, 1981
West Virginia	July 1, 1980
Wisconsin	January 1, 1981
Wyoming	February 1, 1981

[1]Except for seven independent cities using a July 1, 1981, valuation date.

Table I. Number of Areas for Local Property Tax Assessment, by Type of Area: 1981

Item	Total	Kind of assessment organization[1]		
		Type CO	Type TMC	Type TM
United States				
Primary assessing jurisdictions	[2]13,527	[3]2,270	4,814	[2]6,443
Assessing jurisdictions providing assessed values for county (or county-equivalent) taxes:				
Total	[2]9,236	[3]2,270	523	[2]6,443
Number in sample	1,996	829	175	992

[1]Organizations classified according to best fit among the 3 possibilities. For Missouri, above classification still includes 325 township-assessing organizations eliminated effective Sept. 28, 1981, with replacement by county assessing no later than election of November 1982. [2]Excludes approximately 1,400 assessing areas remaining within towns in Minnesota, regarded by some as primary assessing jurisdictions but not classified as such here because counties exercise definitive assessing authority. [3]Includes the 66 county-assessing areas in South Dakota, plus the city-assessing areas in Aberdeen and Huron, the latter to transfer the assessing function to Beadle County in July 1984.

other collectors are in most instances the former "assessor-collectors" who have relinquished the assessor part of their duties to the chief appraiser under the statewide reorganization. Thus, full implementation of the new Texas system means that one assessing official with county-wide jurisdiction will provide one assessed value for each taxable property, to be used by all units levying a property tax on that property.

Township-municipal-county organization (type TMC)--This system makes it possible, sometimes mandatory, for township or municipal assessors to accomplish initially the official assessing function, within guidelines, supervisory direction, and/or equalization action from officials at county or State levels. TMC organization occurs throughout Indiana, Kansas (nominally), Minnesota, and North Dakota. It is evident as well in those parts of Illinois, Iowa, Missouri, Pennsylvania, and South Carolina not within the county (CO) type described earlier.

Township-municipal assessing (type TM)--For Census Bureau taxable property value surveys from 1956 through 1976, this kind of assessing organization included the units in the six New England States (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), together with those in Michigan and Wisconsin. This time the survey includes in this category the assessing units in New Jersey and New York (except New York City and Nassau and Tompkins Counties) as well, because it was concluded that the former TMC classification for those States did not accurately reflect their assessing organizations.

In township-municipal States, the individual township or municipal assessors, elected or appointed, perform the initial assessing function. There may be consultative or other assistance from the State, but not in the manner or to the extent demonstrated among States in the TMC group.

The fundamental assessing entity in all three of the alternative systems is the primary assessing jurisdiction. This is simply one of the contiguous territories (counties, municipalities, or townships) which together occupy the entire geographic area of the State. The assessing official in each of the primary assessing juridictions has initial responsibility for determining the base for local general property taxes levied by local governments and, where applicable, by the State government.

In 1981 there were 13,527 primary assessing jurisdictions, assuming one each for Maryland and Montana.[6] Except for the change from one State to four county jurisdictions in Hawaii, noted earlier, there has been little alteration in the organizational pattern within the past 3 decades. State involvement in

[6]See also State and Local Ratio Studies, Property Tax Assessment, and Transfer Taxes, GSS No. 99, U.S. Bureau of the Census, Washington, D.C., October 1980, table 1. See also the seminal work, still highly regarded, Assessment Organization and Personnel, National (now International) Association of Assessing Officers, Chicago, Ill., 1941, pp. 4-13.

local assessing, however, has increased, as exemplified by developments such as those in South Carolina and Wisconsin, where all assessing of manufacturing property takes place at the State level.

The exact number of the overlapping jurisdictions alluded to earlier with respect to Louisiana is not known. As many as 6,300 existed in 1940, but the total today is believed to be a small fraction of that number.

Assessment Cycles

An assessment cycle is the period of time during which the assessing official, by statutory or administrative mandate, has the obligation to review in detail each taxable property in the jurisdiction. Nominally, there is an assessed valuation made of each taxable property as of each annual valuation date. That value is likely to be the same as what it was on the previous valuation date unless there was a reassessment or a change in the property, occasioned by remodeling or new construction or structure removal.

With the advent of computerized administration there can be and in some places there is appraisal-type attention to each taxable property annually. In order to assure that there is such attention within a specified time period, some States in the statutes prescribe assessment cycle length or direct that a specified fraction of the jurisdiction be reassessed each year (see appendix D). Examples follow:

State	Years in cycle, or fraction per year
Connecticut	10
Illinois	1/4 per year (quadrennial)
Indiana (effective 1987)	8
Iowa	2
Kentucky	2
Maryland	1/3 per year
Minnesota	4

Assessed values for the present survey were obtained by access to the official assessment roll of each jurisdiction involved and selection of assessed values from that roll in accordance with survey sampling procedures. Cyclical status of any individual assessed value cannot be determined during such enumeration, since the assessment roll does not identify the most recent or the next prospective reassessment of any value shown.

Among outlying areas, revaluation of all assessable property in Guam takes place every 3 years. In the Commonwealth of Puerto Rico statutes call for classification and assessment of property as of January 1 each year. In the Virgin Islands each parcel of taxable realty is to be reassessed at least biennially. Efforts to implement that statute moved forward in 1981 with the reappraisal of 25,000 improvements throughout the islands.

Assessed Values and Taxable Values

For the taxable property values survey and this report, in order to assure nationwide comparability, the Bureau of the Census regards an assessed value as the one officially determined for tax purposes. Specifically, it is the value determined for county or county-equivalent government tax purposes, as of the specified valuation date. It is that assessed value, before deduction of any partial exemptions, which is used as the numerator in each of the assessment-sales price ratios calculated.

Despite its conceptual simplicity, that assessed value comes in a variety of circumstances and is not always known as "assessed value." There are, in fact, three groups: (1) the conventional variety, (2) the assessed value in counties, or equivalent areas, with more than one assessor to produce either one value or more than one value per property, and (3) the assessed value, or values, resulting from application of prescribed procedures that inflate, deflate, or otherwise adjust the assessor's original work product.

In 30 States and the District of Columbia the assessed value is what conventionally might be expected. That is an official determination of value by the assessor of the primary assessing jurisdiction, nominally if not actually at the level prescribed in the law for the particular property. The second group has six States. It includes Iowa and Minnesota, both of which accurately might be placed in the third group, but in both of which more than one assessor may sometimes be involved. In 19 among Iowa's 99 counties a city assessor provides assessed values, for city and county purposes, for properties within the respective cities. Moreover, all assessed values in Iowa incorporate the effects of two types of factors. One implements whichever county equalization orders apply to affected use categories in the particular county, the other effects "rollback adjustments" prescribed by the State.

Minnesota has municipal and county assessors. The latter possess ultimate assessing authority, except that in some cities with a population of 30,000 (each) or more, the city assessor performs the duties of the county assessor. Thus city assessed values apply (for city located property) in the county as well as in the city. A Minnesota assessed value is defined as the one emerging from the particular set of calculations necessary for the applicable classifications in the Minnesota law. As shown in the following example, for a nonfarm residential homestead property, class 3c, a Minnesota assessed value only begins with the assessor's work product--estimated market value (see appendices A and B):

Estimated market value..		$100,000
First $27,000 at 16 percent, equals.....	$ 4,320	
Second $27,000 at 22 percent, equals.....	5,940	
Remainder $46,000 at 28 percent, equals.....	12,880	
Assessed value.....		$ 23,140

If the above property had been involved in one of the sales sampled for this report, it is the assessed value of $23,140 which would be divided by the sales price to arrive at the assessment-sales price ratio.

Four States in the second group exhibit situations where there may be not only more than one assessor per property, but also more than one value per property. These States are Missouri, Pennsylvania, Tennessee, and Texas. In Kansas City the city assessor provides separate assessed values for city-located properties, but they apply only for city purposes. The Jackson County assessor assesses city-located properties for county purposes, and these latter are the values used in this report. Other municipally estimated assessed values in Missouri are developed within the county assessor's supervision, for municipal as well as county purposes.

Pennsylvania, Tennessee, and Texas also have at least a few cities in which the city assessor determines an assessed value for city located property, for city purposes only. In Texas, as mentioned elsewhere in this report, additional assessors--officials of independent school districts, water improvement districts, and possibly others--still provided separate assessed values in 1981 for properties located in their respective jurisdictions. In all three States the county assessor's value prevailed for county purposes, and this county value is the one used in this report.

Fifteen States prescribe adjustment or augmentation of the assessor's work product in order that the resulting assessed value reflects a desired level, accommodates deliberately paced change, or accomplishes some other policy purpose.

Arizona assessors establish two assessed values for each property. One is at "full cash value," used for the levy of "secondary taxes"; the other is at "limited property value," used for the levy of "primary taxes" (see appendices A and B). Limited value is essentially the lesser of a prior year value (or equivalent) increased by 10 percent, or full cash value. Full cash value assessed values are used for Arizona in this report.

California in the third group now has the dual system its voters created with Proposition 13. The assessed value is the one in effect during the base year 1975, plus no more than 2 percent annual increase, except where a qualifying change of ownership or new construction has mandated reappraisal at full cash value. Connecticut's values are set by statute at 70 percent of the market level after revaluation, but may do so over a 5-year phase-in period. Florida property appraisers (assessors) base assessments on full cash value, except where qualifying benefited uses apply. In such instances the roll shows both assessed values, and the one selected is the one actually used by the property appraiser for tax purposes. Also, the county assessed value in Florida differed from the value for school district levies between 1981 and 1983. The exemption now is the same with respect to all levies.

In Illinois assessed values reflect use of the applicable State determined county multiplier to inflate or deflate the assessor's work product value. The multiplier in 1981, however, did not apply to agricultural property assessed on a benefited use basis, except for the homestead and homesite portion of such property.

Maryland uses triennial reassessment. The assessed value each year is the applicable "phase-in" value multiplied by a State-determined growth factor. "Phase-in" value is the prior year's assessed value plus one-third of the difference between the values before and after reassessment. The growth factor, different each year, is a statewide adjusted assessed value aggregate divided by the statewide full cash value.

In Michigan the assessed value is the "State equalized value" adjusted by the applicable equalization factor, whichever one among six applies to the category of property involved.

Montana and North Dakota each have two values, "assessed value" as estimated by the assessor, and "taxable value," incorporating the application of the prescribed statutory percentage for the assessment involved. In Montana there are numerous such percentages. This survey uses "taxable value" as the assessed value for both States.

To arrive at assessed value in 1981, Nevada assessors multiplied an "adjusted cash value estimate" by 35 percent and by the particular State-provided factor which related to the year of reappraisal applicable to the property.

Oregon adjusted estimated market values by choosing among two equalization percentages in 1981, one applicable to homestead property, the other to every other kind. South Dakota provided for one or more adjustment factors to be applied to each value estimate supplied by the county assessor.

In Vermont assessors (called "listers") estimate "listed values," each of which is the same as the appraised value (fair market value). The "grand list" value, however, on which levies are based, is 1 percent of the listed value. It is the "grand list" value which is used in this report for the first time. In previous surveys, the listed values were used for Vermont.

De Facto Assessment Levels, Uniformity, and Tax Burdens

This report includes assessment-sales price ratios, coefficients of dispersion, and effective tax rates.

For each sold parcel, an assessment-sales price ratio (or simply assessment ratio) is the relationship, expressed as a percentage, resulting from dividing the assessed value by the sales price of a given property. The median among such ratios for a single jurisdiction indicates its de facto assessment level--the level that sales suggest actually exists in prevailing assessments. De facto levels confirm or contrast with those called for by State prescribed legal levels of value. Ratio studies, such as the one reported here, indicate de facto assessment levels.

This study is unique in that it is carried out on a nationally consistent basis. From its findings, aggregate ratios for the entire nation are produced. Included are ratios for each State and its metropolitan portions, for each of five use categories: all real property as a single group, residential (including single-family separately), acreage (including farms), vacant platted lots, and the combined commercial and industrial group. The single-family category includes: detached houses; separately owned one-family units of semidetached, row or town houses; condominium units; and mobile homes when assessed as realty. Table 11 contains these statewide findings.

The aggregate assessment ratio ("simple sales-based average" until 1972) is the quotient resulting from dividing the estimated total assessed value of all sold properties by the corresponding estimated total of all sales prices. Thus, if all assessed values reflected the same level of value as that represented by all sales prices, an aggregate assessment-sales price ratio of 100 percent would result.

To reduce the effect of possible differences in turnover rates among various value size categories of properties, "size-weighted" aggregate ratios were also calculated. These also appear in table 11, in the column adjacent to the aggregate ratio. Following is the procedure for deriving the size-weighted ratio, for each property use category:

1. Statewide amounts of assessed value are divided by the aggregate ratio for sold properties of same use category and assessed value size, to yield estimates of market value for each size group. Statewide amounts of assessed value for size groups come from the tax base composition phase of the survey.

2. Results of 1 above are summed to a statewide total for each use category.

3. Statewide aggregate assessed value for the use category concerned is divided by the corresponding statewide estimated market value total (as indicated by sales prices) calculated in 2 above.

Neither the aggregate ratio nor the size-weighted ratio is possible if the market has not made possible the enumeration of a representative sample of sales for the survey period.

Aggregate, mean, and median assessment ratios were calculated and are published (in table 21) whenever a sufficiency of

measurable sales made such action possible, for the following jurisdictions:

1. Each within a sample SMSA in the county-type States.

2. Each within a sample SMSA or NECMA, in the 10 township-municipal type States, if it had a 1978 population of 50,000 or more.

3. Each in the non-SMSA jurisdictional sample with a 1978 population of 50,000 or more.

As mentioned earlier, assessment ratios tend to indicate de facto assessment levels. Hence they suggest the extent to which actual assessed values do in fact reflect the prevailing legal standard, if the State involved has only one. In that circumstance, full implementation of the legal standard in prevailing assessments will mean a de facto ratio equal to the level prescribed in that standard. For States which use classified property taxation, however, the above result is true for each classification only to the extent that use category ratios ultimately relate to classified legal standards. The realty sales sample was enumerated from a basically unclassified universe. Individual sales were associated with property use categories subsequently on the basis of transacting party responses to a sales questionnaire.

The central essential of assessing is uniformity, or lack of dispersion, among individual assessed values at the value level achieved. To measure dispersion (or scatter) among individual sold parcel ratios around a central tendency indicator (such as mean or median ratios), four indicators are calculated: the coefficient of intra-area dispersion and a related composite coefficient, plus the coefficient of interarea dispersion and a price-related differential. Each of the first three measures variation from a median ratio. The fourth relates a mean ratio to an aggregate ratio. All receive more detailed discussion later. Findings appear in tables 15 through 19 for single-family (nonfarm) houses, and in table 21 for three use categories.

Effective tax rates are found in table 22, where available measurable sales have made this possible. These statistics were sought, in general, only for those cities with 1978 populations of 200,000 or more and their surrounding counties, including for those counties only, each city with a 1978 population between 50,000 and 200,000. An effective tax rate (discussed in more detail later) is a widely accepted indicator of the property tax burden on property, because it expresses the amount of property taxes billed as a percentage of sales price. That amount of property taxes can also be expressed as a burden on income, of the property owner or tenant (via rental payments). That aspect is discussed later in this text.

Factors Conditioning Sales and Assessed Values

The value of a nationwide assessment-sales price ratio study is limited by data reliability. Some of the more important constraints are listed below:

1. This study seeks "arm's length" transactions. These ideally consist of "ordinary" transfers between willing buyers and willing sellers not under duress. This survey rejected most sales for reasons shown in items 4b to 4f of the sales questionnaire sent to transacting parties (see specimen of form GP-31, pages 285 and 286). This report based its sample on publicly available records in recording and assessing offices, and excluded sales of State-assessed property and locally assessed personal property. Moreover, only sales evidenced by warranty deeds or instruments of equivalent standing were included.

   Except for applicable data in tables 10 and 13, the study reports data only on ordinary sales. These exclude the sale of any locally assessed real property valued at more than an amount which, in the light of the applicable aggregate ratio for less valuable properties, had an indicated market value in 1981 of more than $3 million. Ordinary realty also excludes separately assessed mineral rights and all real property for which a use category cannot be assigned.

2. For the 1982 survey the sample consists of realty sales occurring generally between July 1 and December 31, 1981. In nine States, however, the time period was altered in order to adhere to certain survey design require-

ments. The survey period had to begin after completion of any official review process which might substantially alter individual assessed values. This requirement was necessary to avoid any possibility that the assessed value of a sold property might reflect effects of the sale itself.

It is also necessary that the sales period precede appearance of 1982 assessed values on local rolls, in order to prevent enumeration complications.

To comply with the above design requirements, the following survey periods were specified for the following States: Alabama, Connecticut, Nevada, New Jersey, and West Virginia (January 1 to June 30, 1981); Missouri, New Hampshire, New Mexico, and Pennsylvania, (September 1, 1981, to February 28, 1982).

It should be noted that requiring the use of assessed values in effect at time of sale automatically suggests that assessment-sales price ratios for California jurisdictions are likely to change immediately. As noted elsewhere, California law now mandates reappraisal at full cash value of any property immediately after any qualifying "change of ownership." The most common such change is the typical real property sale. Conventional survey requirements were nevertheless applied to California in order to retain nationwide design consistency.

3. The low level of activity in the 1981 real estate market was a factor in the 1982 survey. Another was a development new to residential sales. This is creative financing, a term for whatever method grantor and grantee used to complete a sale not otherwise possible in the absence of mutually acceptable fixed rate long term mortgage financing. Methods included adjustable rate, balloon, shared equity, wrap-around, and other mortgages, together with mortgage assumptions not affected by due-on-sale clauses (see appendix E).

   To obtain some empirical data concerning creative financing and its effect on the realty market during 1981, a few questions were included in the questionnaire sent to transacting parties involved in sample sales (see specimen form GP-31, page 286). A tabulation of data obtained appears in table 25.

4. Measurable sales include only those concerning which a buyer or other transacting party has responded. Thus, the survey depends on "inscope responses" to the realty sales questionnaire for data on sales price and on use category of the sold property, and for confirmation of other property information.

   There are sources of realty sales prices, publicly available in some States and available to assessors in many States, on which the Bureau has relied to resolve ambiguities about sales prices provided on the sales questionnaires. These sources are State transfer tax declarations, which in at least 10 States are affidavits. Similar documentation is required for some of the local transfer taxes now existing in 12 States and the District of Columbia.

   A somewhat typical State transfer tax is the one in Ohio, where the State imposes a tax on the transfer of realty in the amount of $1.00 or 10 cents per $100 of the sales price, whichever is larger. Among the local taxes, the levy possible for Virginia cities and counties is one-third of the State recording tax, or 5 cents per $100 (for existing rates among State and local transfer taxes, see tables J and K, respectively).

   At time of payment, the grantee (or authorized representative) in Ohio is required to sign a statement containing amount of sales price, use of property, conditions of sale, and financing (principal amount of mortgage, if new, and amount of any mortgage assumed). The statement does not require notarization, but is subject to penalties for perjury. The requirement to provide financing details is not yet common among States. It is, however, required in Arizona, which imposes a $2 fee on realty transfers, and requires an affidavit disclosing sales price, from either transacting party. Kentucky also requires an affidavit but not disclosure of

mortgage terms. In Kentucky, however, filing the affidavit is a prerequisite for recording the deed.

Virginia imposed the first State transfer tax in 1922, South Carolina the following year, and Florida in 1931. There have been recent rate increases in Florida, New York, and Wisconsin. The big impetus for such taxes, now in effect in at least 37 States, came after 1968, when the Federal Government repealed its tax on transfer of realty (at that time 55 cents per $500, or fraction thereof, of selling price). Documentary stamps affixed to the deed as evidence of payment of that tax provided assessors and others with indications of sales prices.

Transfer tax affidavits are specifically confidential in Maine, Nebraska, New York, and Wisconsin. Kansas has no transfer tax but does require a sales price disclosure statement at time of realty transfer, and this statement is confidential.

Table J. Rates, in Percent, State Realty Transfer Taxes: 1983

0.01	0.05	0.10	0.11	0.15
Colorado	Hawaii Illinois	Alabama Georgia Kentucky North Carolina Ohio South Dakota Virginia[4] Washington[5]	Arkansas Connecticut[2] Iowa Maine Michigan[3] Nebraska Nevada	Oklahoma
0.20	**0.22**	**0.228**	**0.25**	**0.26**
South Carolina	Minnesota Rhode Island West Virginia	Massachusetts	New Hampshire[6]	Tennessee
0.30	**0.325**	**0.35**	**0.40**	**0.45**
Wisconsin	Indiana[7]	New Jersey[8]	New York[9]	Florida

0.50	1.0	2.0	Other
Maryland[10] Vermont	Pennsylvania	Delaware	Arizona[11]

[1]Recordation tax in Alabama only applicable to that portion of fair market value that exceeds the amount of mortgages, deeds of trust, etc. Alabama also levies a conveyance tax on mineral interests. [3]An additional tax of 1/2 of 1 percent is levied on property conveyed within an enterprise zone. In addition to realty transfer tax, Connecticut levies a conveyance fee on farm, forest, or open space land. [4]Tax is 55 cents per $500 of consideration in counties having less than 2 million population. Counties having over 2 million population may increase this tax to 75 cents per $500 as authorized by the county board of commissioners. [5]Data indicated applies to the realty transfer tax. Virginia also levies a document recording tax of 15 cents per $100 on which reduced rates apply for transactions in excess of $10 million. [6]Washington also imposes a 7 percent surtax on the basic tax on conveyances, effective Aug. 1, 1982, through June 30, 1983. [7]Minimum tax is $10 where sales price is less than $4,000. [8]Gross income tax on proceeds from sale of real estate. Tax is levied in decreasing percentages until Dec. 31, 2009, at which time tax will no longer be imposed. [9]Transfers of newly constructed property or owner-occupied residences of senior citizens, blind persons, or disabled individuals subject to a reduced tax of 50 cents per $500 of consideration. [10]New York also levies a 10 percent gains tax on transfers of real estate where the consideration exceeds $1 million. [11]Maryland also levies an additional transfer tax on property transferred that is assessed as agricultural land. Rate is $2 per document.

Table K. Rates, in Percent, Local Realty Transfer Taxes: 1983

0.05	0.055	0.10	0.11
Illinois counties Virginia cities and counties[1]	California cities[2]	Washington County, Oreg.	California counties South Carolina counties West Virginia counties
0.20	**0.30**	**0.45**	**1.0**
Chicago, Ill.	Ohio counties	Florida counties[3]	Wilmington, Del. District of Columbia[4] Washington counties[5]

1.5	2.5	Other
Pittsburgh, Pa.	Philadelphia, Pa.	Baltimore and Maryland counties[6] New York City, N.Y.[7]

[1]Tax is not to exceed 1/3 of State document recording tax (hence, 5 cents per $100). [2]Any city within a county levying the tax may impose a city transfer tax at a rate of 1/2 that of the county. City tax then becomes a credit against the county tax. [3]Certain charter counties may levy a discretionary surtax on documents not to exceed 45 cents per $100 of consideration. This surtax may not be levied on transfers of single-family residences. [4]Data indicated applies to the real estate transfer tax. District of Columbia also levies a document recording tax of 1 percent of consideration. [5]Rate of tax must be established annually. [6]Local recordation taxes are as follows: $1.10 per $500--Allegany ($2.20 in 1983-84), Garrett; $1.65 per $500--Calvert, Caroline, Dorchester, Kent, Somerset, Talbot, Wicomico ($2.00 in 1983-84), Worcester; $2.20 per $500--Baltimore city ($2.50 in 1983-84), Cecil, Howard, Montgomery, Prince George's, Queen Anne's, Washington; $2.50 per $500--Baltimore County; $3.30 per $500--Carroll, Charles, Frederick, Harford, St. Mary's; $3.50 per $500--Anne Arundel. Local jurisdictions in Maryland imposing a realty transfer tax are as follows: Baltimore city (1 1/2 percent of taxable basis); Baltimore County (1.6 percent of value transferred); Prince George's County (1 percent of consideration); Anne Arundel County conveyance tax (1 percent of consideration); Cecil County ($3.00 per transaction); Howard County (1 percent of consideration); Kent County (1/2 of 1 percent of consideration); Montgomery County levies a realty transfer tax based on the following categories of property: 1 percent of value of consideration for unimproved property, and where value of consideration for improved property exceeds $35,000; 1/2 of 1 percent on other nonresidential improved real property where the value of consideration is at least $20,000, but less than $35,000; 1/4 of 1 percent on residential improved real property where the value of consideration is at least $25,000, but less than $35,000. In Montgomery County no realty transfer tax is imposed on improved property where the value of consideration is less than $20,000, nor on transfers of residential improved property where the value of the consideration is less than $25,000. Montgomery County imposes a condominium transfer tax of 4 percent of the value of the consideration at time of transfer from a residential rental unit to a condominium unit. Montgomery County also levies an agricultural transfer tax. Rate of this tax is based on length of time property held for agricultural use. If property is subject to the realty transfer tax and the agricultural transfer tax, only the aggricultural transfer tax shall be imposed. In Montgomery County a 6 percent transfer tax is imposed on land and certain improvements rezoned after July 2, 1971, to a more intensive use. [7]Consideration must exceed $25,000. Rate is as follows: 1 percent where consideration is less than $500,000 or the transfer conveys an individual condominium unit or a 1-, 2-, or 3-family home; 2 percent where consideration is $500,000 or more.

Local transfer taxes vary in several respects. In California, the cities can levy a transfer tax only if they are located within counties that levy them. In New York City, where documentation is necessary, the tax applies only to conveyances where the consideration exceeds $25,000. There are 2 rates, 1 percent where the consideration is less than $500,000, and 2 percent when it is $500,000 or more. Some rates have increased in recent years. Examples (in percent of sales price) are the transfer taxes in Chicago (0.1 percent to 0.2 percent), Philadelphia (1 percent to 2.5 percent), and Pittsburgh (1 percent to 1.5 percent).

Among outlying areas, the Commonwealth of Puerto Rico requires

that internal revenue stamps be affixed to deeds at time of sale. Unless this is done, the deed cannot be recorded. For a sale amounting to less than $250, the law requires a stamp of 25 cents for the original of the deed and 10 cents for each copy. Stamp fees increase in stages, to $1.00 for the first $1,000 and 50 cents for each additional $1,000 on original copies of deeds in excess of $5,000. There are corresponding increases for additional copies.

RATIOS AND DISPERSION

Market Value Indications

As noted earlier, when the estimated aggregate assessed value of all sold realty is divided by the estimated aggregate of corresponding sales prices, the quotient is 40 percent. Using that relationship for estimating market value of all taxable property must be done cautiously, in view of the legal, economic, and administrative variations contributing to aggregates shown in tables 2 and 3.

Those latter amounts for 1981 are $2,958.2 billion, the gross assessed value of all property subject to local general property taxation, and $2,514.9 billion, the gross total of locally assessed realty. The first total includes not only realty but State-assessed property and personal property as well.

The second amount of $2,514.9 billion does constitute an aggregate of values identical in basic nature (real property) to values in the real property sales sample. It too incorporates variations, such as the following:

1. Differences in legally specified assessment levels (see appendix A), including those from the classified property taxation discussed earlier and effective in 1981 in Alabama, Arizona, Iowa, Louisiana, Michigan, Minnesota, Montana, North Dakota, Oregon, South Carolina, and Tennessee. De facto classification also occurs in several States. The composite aggregate of $2,514.9 billion reflects both kinds and all other legal level differences. These include the assessment levels at less than full market value, legally specified in 15 States at percentages ranging from 1 to 70.

2. Variations resulting from benefited use legislation (see appendix C), operative in 1981 everywhere except in Georgia (which now has such a law) and Wisconsin (which opts for an income tax credit instead of specifically benefited use assessment). Theoretically such variations occur only if the benefited use of the property results in a value estimate lower than what appraisal at "highest and best use" would produce.

3. Changes prior to 1981 in what applicable State law prescribes. As detailed in appendix A, changes between 1976 and 1981 have occurred in at least the following States: Arizona, California, Idaho, Maryland, Michigan, Minnesota, Nebraska, Nevada, North Dakota, Oregon, Texas, and Utah. The change (discussed earlier) to reporting Vermont values at their "grand list" level (1 percent of listed value), as provided by Vermont law, should also be noted.

In view of all the above, any imputations purporting to yield nationwide market values for all taxable property, or for its major component, locally assessed realty, require careful, guarded interpretation sensitive to data characteristics.

Within qualifications such as those set forth above, certain inductive statements are possible, all rooted in data from tables 2, 3, and 11.

If the sales-oriented aggregate ratio, namely the aggregate ratio applicable to measurable sales of ordinary real property, 40 percent, can be held to apply to all locally assessed taxable realty, the estimated market value of such real property, indicated only by sales prices and assessed values, would approximate $6,287.2 billion. If the size-weighted ratio of 37.2 percent is used instead, the estimate becomes $6,760.4 billion. In 1976 a similarly qualified indication of market value, based on the size-weighted ratio, amounted to $3,202 billion. Earlier year estimates, "size-weighted" except for 1971, are shown in the following summary of market value

indications for locally assessed realty (in billions of dollars):[7]

Year	
1956.....	$700
1961.....	970
1966.....	1,277
1971.....	1,755
1976.....	3,202
1981.....	6,760

Findings About Financing

Data about financing, creative and otherwise, are reported in table 25, within several qualifications.

First, the data in table 25 constitute a tally of those responding to questions about financing on the sales questionnaire (see specimen form GP-31, pages 285 and 286, especially question 2c on page 286). There are no inferences or projections made about those not responding.

Second, the sales price used in ratio calculations is the one provided by a transacting party in question 2a of form GP-31 (see page 286). Available data do not make possible any conclusion that a sales price provided in question 2a is higher than, lower than, or the same as what it would be if financing differed from arrangements reported in answer to question 2c.

Third, available data do not make possible any conclusion that any individual assessed value used in this survey does or does not incorporate an adjustment for financing arrangements associated with sale of the property involved.

Within the above qualifications, findings including the following: 37,000 among the 47,000 sales survey respondents provided data on financing. This includes an indeterminate number whose financing consisted of cash payment for the property sold. Three out of ten respondents said they assumed an existing mortgage. Almost 20,000, or more than half, obtained first mortgages, 80 percent of which called for a fixed interest rate.

About 4,800 of those responding resorted to a second mortgage as well, at a fixed rate in 9 out of 10 instances.

Adjustable rate mortgages accounted for only 17 percent of all such instruments carrying an interest rate below 14 percent. For interest rates of 14 percent and up, however, 3 out of 10 mortgages called for adjustable rates.

The 10 States providing the largest numbers of responses about financing are (in order) California, New York, Florida, Pennsylvania, Texas, Ohio, Virginia, Massachusetts, New Jersey, and Arizona.

Statewide, SMSA, and Jurisdiction Aggregate Ratios

As table L makes evident, the aggregate ratio has increased by at least 20 percent in more States this time than in the previous survey, for every use category except commercial and industrial. The latter category, comprising kinds of property seldom sold, also exhibits a pronounced ratio decrease more often than others for 1981. As the table shows, there was a drop greater than 20 percent between 1976 and 1981 in the aggregate commercial and industrial ratio in 15 States. In five of those States the decrease was 40 percent or more. Such results are consistent with differential effects of price influences such as inflation on properties often assessed on basis of capitalized income approaches to value.

Precipitous ratio descents (decrease of 40 percent or more) occurred for acreage property in only 6 States, in contrast with similar findings for 13 States in 1976.

"All types" ratio changes and levels summarized in tables L and M occurred within the framework of classified property taxation for 11 States. Results should therefore be interpreted cautiously, since for each such State assessments reflecting several legal levels are being compared with a single market level indication, sales price. It can be noted, nevertheless, that the number of States with de facto levels of 50 percent or more rose to 17 in 1981, more than twice the number 10 years earlier.

Results within use categories are similar, as table M indicates. There are more States with ratio levels at 40 percent or higher in 1981, for every use category except acreage. The frequency of higher levels for vacant platted lots is particularly noticeable.

[7]For market value indications other than those for 1981, see the following: for 1956, vol. 5, 1957 Census of Governments, p. 11; for 1961, vol. 2, 1962 Census of Governments, p. 11; for 1966, vol. 2, 1967 Census of Governments, p. 11, as revised in Errata Notice, Feb. 13, 1969; for 1971, vol. 2, pt. 2, 1972 Census of Governments, p. 8; for 1976, vol. 2, 1977 Census of Governments, table 2, p. 44, and table 9, p. 60.

Table L. Distribution of States According to Changes in Statewide Aggregate Assessment-Sales Price Ratios, by Use Categories: 1971 to 1976, 1976 to 1981

(For meaning of symbols see text)

Indicated degree of change in statewide ratio	All types		Residential (nonfarm)		Acreage[1]		Vacant platted lots		Commercial and industrial	
	1971 to 1976	1976 to 1981	1971 to 1976	1976 to 1981	1971 to 1976	1976 to 1981	1971 to 1976	1976 to 1981	1971 to 1976	1976 to 1981
Total States	51	51	51	51	[2]48	[2]47	[2]49	[2]48	[2]42	[2]38
Increase of:										
20 percent or more	5	7	5	7	9	10	9	11	9	6
15 to 19.99 percent	1	1	1	3	2	1	3	2	2	2
10 to 14.99 percent	4	1	1	1	–	1	–	1	1	-
5 to 9.99 percent	–	3	2	5	2	3	2	3	1	-
Increase or decrease less than 5 percent	7	7	5	5	2	6	5	10	6	8
Decrease of:										
5 to 9.99 percent	5	4	10	4	2	1	6	5	3	3
10 to 14.99 percent	8	7	5	7	3	2	2	2	2	3
15 to 19.99 percent	3	6	4	4	3	3	1	3	5	1
20 percent or more	18	15	18	15	25	20	21	11	13	15
Exhibit--										
Decrease of:										
20 to 24.99 percent	3	3	5	4	7	5	4	1	2	2
25 to 29.99 percent	3	2	4	-	1	3	7	-	5	5
30 to 34.99 percent	5	2	4	2	2	3	3	5	2	1
35 to 39.99 percent	2	5	2	5	1	3	–	1	2	2
40 percent or more	5	3	3	4	13	6	7	4	2	5

[1]Excludes District of Columbia.

[2]Because of insufficient sales, it was not possible to calculate ratios for use categories and States as follows: For comparisons involving 1981: Acreage--Alaska; vacant platted lots--District of Columbia and Vermont; commercial and industrial--Alaska, Delaware, District of Columbia, Hawaii, Idaho, Maryland, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming. For comparisons involving 1976: Acreage--Arizona and Hawaii; vacant platted lots--District of Columbia and Hawaii; commercial and industrial--Alaska, Arizona, Delaware, District of Columbia, Hawaii, Maryland, Montana, Nevada, and Utah. For comparisons involving 1971: Commercial and industrial--Hawaii and Nevada.

Source: For 1971 data, 1972 Census of Governments, vol. 2, Pt. 2; for 1976 data, 1977 Census of Governments, vol. 2, table 9; for 1981 data, table 11, this report.

There are still 26 among the 40 single standard States, however, where the statewide aggregate ratio for vacant platted lots is more than 5 percent below the corresponding ratio for all types of realty, as table N indicates. Acreage ratios are even more likely to fall substantially below the "all types" ratio. When comparisons are limited to States without classified property taxation, residential realty continues to be the category most likely to be at or above the de facto level for all realty in general.

As reported in table 26, statewide aggregate ratios for condominiums only, available for 28 States and the District of Columbia, ranged from 3 percent in South Carolina to 84 percent for Virginia.

Available local jurisdiction aggregate ratios for condominiums only are reported in table 27.

Distributions of Real Property Sales

Contrary to trends during the 70's, there was a proportionate decrease for 1981 in sales of single-family houses, both in number and in aggregate sales price dollars. As tables O and 11 indicate, only three out of five sales involved single-family residences in 1981, compared with a corresponding

Table M. Distribution of States According to Aggregate Assessment-Sales Price Ratios for Major Use Categories: 1971, 1976, and 1981

(For meaning of symbols, see text)

Statewide aggregate assessment-sales price ratios (in percentages)	All types of property			Single-family residential			Multifamily residential		
	1971	1976	1981	1971	1976	1981	1971	1976[1]	1981[2]
Ratios of:									
Less than 15	10	14	18	9	14	18	9	11	8
15 to 19.9	6	8	3	5	8	2	5	6	2
20 to 24.9	4	2	2	6	3	3	4	5	3
25 to 29.9	5	5	5	5	4	5	4	3	3
30 to 34.9	6	4	1	3	3	1	6	5	3
35 to 39.9	4	1	4	7	2	–	2	1	–
40 to 49.9	8	5	1	7	4	5	11	3	3
50 or more	8	12	17	9	13	17	10	13	14

	Acreage[1]			Vacant platted lots			Commercial and industrial		
	1971	1976[2]	1981[2]	1971	1976[2]	1981[2]	1971[2]	1976[2]	1981[2]
Ratios of									
Less than 15	18	23	23	14	16	16	9	7	11
15 to 19.9	7	8	4	6	9	5	5	10	3
20 to 24.9	4	2	2	5	4	3	8	–	4
25 to 29.9	4	1	4	8	3	6	4	6	4
30 to 34.9	6	3	5	3	2	2	1	4	–
35 to 39.9	6	1	3	5	4	1	3	3	3
40 to 49.9	2	4	4	6	5	4	11	–	3
50 or more	3	6	4	4	6	12	8	12	11

[1]Excludes District of Columbia.

[2]Because of insufficient sales, it was not possible to calculate ratios for use categories and States as follows: For 1981: Multifamily--Alabama, Arkansas, Delaware, Hawaii, Idaho, Mississippi, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, West Virginia, and Wyoming; acreage--Alaska; vacant platted lots--District of Columbia, Hawaii, Idaho, Maryland, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming. For 1976: Multifamily--Delaware, Hawaii, New Mexico, and Wyoming; acreage--Arizona and Hawaii; vacant platted lots--District of Columbia, Hawaii, Maryland, Montana, Nevada, and Utah. For 1971: Commercial and industrial--Hawaii and Nevada.

Source: For 1971 data, 1972 Census of Government, vol. 2, Pt. 2; for 1976 data, 1977 Census of Governments, vol. 2, table 9; for 1981 data, table 11, this report.

proportion of 65 percent in 1976. The dollar volume represented by such sales dropped by almost 8 percentage points from the 1976 proportion. Acreage and vacant lot sales increased slightly in number and a bit more in aggregate sales price. There was also a somewhat surprising increase, in both respects, among commercial and industrial sales.

Estimated measurable sales of all types of realty in the depressed 1981 realty market slightly exceeded 726,000 during a 6-month period, down from a corresponding figure of 1,856,000 in 1976. The estimate for single-family house sales in 6 months of 1981 approximated only 440,000, down by more than 60 percent from the corresponding total in 1976. The residential decline hit all States. Indeed, all categories showed similar movement, except for most categories in Delaware, and for acreage and commercial sales in Colorado.

During the survey period in 1981, new single-family houses sold for an average price, nationwide, of $84,377 as shown in table 13. Averages ranged from $51,079 in Alabama, to $171,798 in Hawaii. The nationwide average price is 88 percent higher than the corresponding average of $44,770 for 1976. The two previous 5-year increases were 67 percent and 22 percent. New home sales are otherwise excluded from survey findings because applicable assessed values are not available as of applicable valuation date.

Table N. Selected Relationships Among Aggregate Assessment-Sales Price Ratios and Single Standard States: 1971, 1976, and 1981

(For meaning of symbols, see text)

Item	Number of States having use category ratio for "all use categories" of realty					
	1971		1976		1981	
	Statewide	SMSA portion	Statewide[1]	SMSA portion[2]	Statewide[1]	SMSA portion[2]
INTERVALS FOR USE CATEGORIES SHOWN						
Residential:						
Within ± 5 percent of "all types" ratio.....	28	35	28	39	18	26
More than 5 percent above.....	21	13	17	4	22	11
More than 5 percent below.....	2	1	-	-	-	1
Acreage:[3]						
With ± 5 percent of "all types" ratio.....	2	1	2	2	-	1
More than 5 percent above.....	2	2	-	-	1	2
More than 5 percent below.....	46	45	41	30	37	23
Vacant platted lots:						
Within ± 5 percent of "all types" ratio.....	5	9	9	5	6	1
More than 5 percent above.....	3	4	1	1	6	5
More than 5 percent below.....	43	36	33	31	26	24
Commercial and industrial:						
Within ± 5 percent of "all types" ratio.....	12	7	6	7	6	4
More than 5 percent above.....	19	20	24	14	14	8
More than 5 percent below.....	18	20	8	3	10	5

Note: Relationships involving SMSA's subject to SMSA definitions of the time specified. For 1976, excluding the following classified assessment States: Alabama, Arizona, Minnesota, Montana, South Carolina, and Tennessee. For 1981, in addition to those so classified in 1976, the following were considered classified assessment States: Iowa, Louisiana, Michigan, North Dakota, and Oregon.

[1]Excluded from 1976 statewide comparisons because of insufficient sales: Acreage--Hawaii; vacant platted lots--District of Columbia, and Hawaii; commercial and industrial--Alaska, Delaware, District of Columbia, Hawaii, Maryland, Nevada, and Utah. Excluded from 1981 statewide comparisons because of insufficient sales: Acreage--Alaska, vacant platted lots--District of Columbia, and Vermont; commercial and industrial--Alaska, Delaware, District of Columbia, Hawaii, Idaho, Maryland, Nevada, New Mexico, Urah, and Wyoming.

[2]No SMSA portions in Vermont and Wyoming. In addition to those excluded from statewide comparisons, the following were excluded from 1976 SMSA comparisons because of insufficient sales: Acreage--Alaska, Delaware, Idaho, Iowa, Nebraska, New Mexico, North Dakota, Rhode Island, and South Dakota; vacant platted lots--Alaska, Delaware, North Dakota, and South Dakota; commercial and industrial--Arkansas, Idaho, Iowa, Mississippi, Nebraska, New Hampshire, New Mexico, North Dakota, Oregon, South Dakota, Washington, and West Virginia. In addition to thos excluded from statewide comparisons, the following were excluded from 1981 SMSA comparisons because of insufficient sales: Acreage--Delaware, Hawaii, Idaho, Illinois, Mississippi, Nebraska, Nevada, New Mexico, South Dakota, and Utah; vacant platted lots--Delaware, Hawaii, Idaho, Nevada, New Mexico, and South Dakota; commercial and industrial--Georgia, Illinois, Kentucky, Maine, Mississippi, Nebraska, New Hampshire, North Carolina, South Dakota, Washington, West Virginia, and Wisconsin.

[3]"Acreage" not applicable to District of Columbia.

Among previously occupied single-family houses, average sales prices in 1981 ranged from $37,501 in Arkansas to $143,209 in Hawaii, while the nationwide average stood at $66,606. This latter figure is 92 percent higher than the corresponding average for 1976. Increases over the two previous 5-year periods were 56 percent (1971 to 1976) and 40 percent (1966 to 1971).

Table O. Percent Distribution of Real Property Sales and Aggregate Sales Prices, by Use Category, 6-Month Period: 1971, 1976, and 1981

Item	Total number of sales			Aggregate of sales prices		
	1971	1976	1981	1971	1976	1981
All types	100.0	100.0	100.0	100.0	100.0	100.0
Residential (nonfarm):						
Single-family	63.9	64.5	60.7	71.9	70.5	62.8
Multifamily	5.4	4.9	5.2	8.5	8.2	8.5
Acreage	9.7	9.2	11.1	8.3	9.0	11.0
Vacant platted lots	18.6	18.2	18.5	5.3	4.9	6.9
Commercial and industrial	2.4	3.1	4.5	6.0	7.4	10.9

Note: Because of rounding, detail may not add to totals.

Median Ratios (Nonfarm Single-Family Houses)

Median assessment ratios, discussed here, and the dispersion coefficients and price-related differentials discussed later, all reflect the inclusion of condominiums within the nonfarm single-family residential use category.

The reader is reminded of the difference in survey design for 1982 that may influence individual findings. The change relates to drawing the jurisdiction sample for New Jersey and New York. Until now, these two States were sampled by county, and an assessment-sales ratio, coefficient of dispersion, and price-related differential were developed for each county on the basis of county assessment levels that incorporate any intercounty equalization activity. This time, the sample for New Jersey and New York was drawn by municipal primary assessing jurisdiction, and thus each of the above three measures was developed for each of such jurisdictions. Survey ingredients now are initial assessed values as they come from the municipal assessor.

That background affects the 1981 data for text tables P, Q, and R, also data for tables 14 to 19.

Table P contains distributions of median ratios for single-family (nonfarm) houses[8] for each of the Bureau's surveys beginning in 1957. Subject to qualifications inherent in the self-contained nature of each survey, results indicate both progress and difficulties in the evolution of de facto assessment levels closer to the market level. In some respects, the 1981 median ratios show ascents toward higher levels as substantial as those of the midsixties. No matter which way the distributions are arranged, there are noticeable increases in the proportions of jurisdictions having median ratios at 50 percent or higher. That almost half the township-municipal (type TM) units are at such lofty levels may reflect the new treatment of New York and New Jersey, but the proportion is nevertheless impressive.

At the same time the increase in the proportion of assessing jurisdictions exhibiting median ratios below 10 percent is substantial. Among county-type assessing units, one out of every four evidently assessed single-family houses in 1981 at less than 10 percent of market value.

Uniformity Indicators

An area ratio, as noted earlier, describes a de facto level of assessment in terms of a particular measure of central tendency. To get the extent to which the individual ratios so measured deviate from the area ratio, some kind of dispersion or scatter indicator is necessary. Four such indicators are produced for the taxable property values survey. Two indicate deviation evidenced by sampled ratios with respect to the median assessment-sales price ratio for the jurisdiction. They are the coefficients of intra-area dispersion and a related composite coefficient.

The third scatter measure, the price-related differential, relates the mean ratio to the associated aggregate ratio to suggest that particular price ranges may be subject to inordinately high or

[8] Coverage is confined to single-family houses beginning with 1971, but may have included multifamily residences as well in the first three surveys.

low assessment. The fourth, called the coefficient of interarea dispersion, measures the extent of deviation among area median ratios from the median among them.

The four uniformity indicators are discussed below, in the context of survey results.

Coefficient of Intra-area Dispersion

Among statistical dispersion indicators, the standard deviation, or square root of the variance, has widespread acceptance for arrays that are normally distributed. The consensus is that arrays of assessment ratios are not normally distributed and thus respond best to nonparametric measures. For this survey, therefore, the coefficient of intra-area dispersion is calculated. It is the assessment uniformity indicator easiest to comprehend intuitively, though as a median-based coefficient it theoretically has no maximum value. The Bureau always has based calculation of this coefficient on the median ratio, though some States conducting ratio studies use the mean instead.

As used in this report, the coefficient of intra-area dispersion is based on an ascending array of ratios for indi-

Table P. Distribution of Median Assessment-Sales Price Ratios for Single-Family (Nonfarm) Houses for Selected Local Areas: 1956, 1961, 1966, 1971, 1976, and 1981

(Cumulative percentages. For meaning of symbols, see text)

Median assessment-sales price ratios (percent)	All selected areas						Areas with population 50,000 or more					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	7.1	7.7	4.4	5.2	7.5	18.1	4.6	4.5	4.6	5.6	8.7	17.9
Less than 15.0.....	17.6	16.9	10.9	11.1	21.5	27.4	12.2	11.4	8.8	11.7	24.2	30.4
Less than 20.0.....	29.9	30.4	23.7	20.8	34.2	32.1	25.0	26.8	22.1	25.3	43.0	36.5
Less than 25.0.....	48.9	47.5	38.8	33.4	40.0	35.7	46.6	45.4	39.4	43.1	49.7	41.1
Less than 30.0.....	64.0	61.3	51.2	44.0	47.9	42.4	61.3	59.8	51.4	56.7	60.7	48.5
Less than 40.0.....	82.4	78.0	67.5	60.3	60.9	52.6	83.5	77.5	70.8	73.3	71.2	61.3
Less than 50.0.....	93.6	88.7	78.4	77.9	74.9	61.0	94.7	89.9	83.5	84.9	78.3	68.8
50.0 or more.....	6.4	11.3	21.6	22.1	25.1	39.0	5.3	10.1	16.4	15.1	21.7	31.2
	Areas with population 50,000 or less						Assessing organization type CO					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	8.3	9.6	4.3	4.9	6.7	18.3	6.7	6.8	2.8	5.3	12.1	23.6
Less than 15.0.....	20.0	19.6	12.3	10.7	19.9	25.2	21.6	19.3	12.7	16.8	30.8	34.2
Less than 20.0.....	32.1	32.4	24.8	17.6	28.8	28.8	38.3	38.7	29.2	32.6	45.8	36.8
Less than 25.0.....	50.0	48.7	38.3	26.6	34.0	31.6	58.7	58.2	45.8	46.8	51.5	40.3
Less than 30.0.....	65.2	62.1	51.0	35.2	39.9	37.8	74.9	71.4	54.0	60.7	61.1	47.7
Less than 40.0.....	81.9	78.3	65.3	51.2	54.5	46.1	91.0	86.4	69.8	77.0	72.6	57.7
Less than 50.0.....	93.1	88.1	75.0	73.1	72.8	55.2	97.1	94.2	79.9	84.5	78.9	61.3
50.0 or more.....	6.9	11.9	25.0	26.9	27.2	44.8	2.9	5.8	20.0	15.5	21.1	38.7
	Assessing organization type TMC						Assessing organization type TM					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	16.2	20.3	13.8	15.1	7.0	19.3	-	0.3	0.8	0.5	0.2	6.1
Less than 15.0.....	24.5	26.7	18.2	18.5	29.6	33.9	2.0	2.2	2.1	1.2	2.8	7.8
Less than 20.0.....	36.6	35.9	26.9	29.2	53.6	46.0	4.4	5.9	10.5	3.2	6.1	9.8
Less than 25.0.....	59.2	57.8	44.7	55.4	64.2	49.4	16.8	13.6	20.5	7.7	9.8	13.8
Less than 30.0.....	74.7	74.1	64.7	70.8	76.5	54.7	28.9	26.9	35.7	12.2	12.8	20.2
Less than 40.0.....	87.2	82.5	76.3	83.9	82.3	64.6	58.1	54.2	56.4	30.0	31.7	31.1
Less than 50.0.....	96.6	92.0	91.6	92.6	84.0	69.9	82.6	72.8	65.8	63.5	64.2	52.2
50.0 or more.....	3.4	8.0	8.4	7.4	16.0	30.1	17.4	27.2	34.1	36.5	35.8	47.8

Note: Because of rounding, detail may not add to totals. Population for years indicated are as of 1950, 1960, 1960, 1970, 1973, and 1980 respectively.

vidual parcels within the jurisdiction. The coefficient expresses as a percentage the result of dividing the mean of the deviations (disregarding signs) from the median ratio, by the median ratio. In example 1 there are 17 sales sampled in county X, where the legal standard for all assessed values is full market value.

Example 1. Derivation of Coefficient of Intra-area Dispersion for County X, a Primary Assessing Jurisdiction

Parcel number	Step 1--Calculation of assessment-sales price ratio for each sold property			
	Use category: Description	Use category: Census use code	Assessed value (AV) (dollars)	Sales price (SP) (dollars)	Assessment-sales price ratio, as percentage (AV ÷ SP)
1	Vacant platted lot outside city..	450	900	9,000	10
2	Farm.....	300	1,800	60,000	3
3	Single-family house.....	120	24,400	40,000	61
4	Vacant platted lot in city.....	400	6,480	8,000	81
5	Single-family house (mobile home)	150	6,000	30,000	20
6	Vacant platted lot in city.....	400	720	4,000	18
7	Gasoline service station.....	500	45,000	100,000	45
8	Single-family house (condominium)	700	33,000	60,000	55
9	Single-family house.....	120	32,400	120,000	27
10	Vacant platted lot outside city..	450	3,680	8,000	46
11	Single-family house.....	120	18,800	40,000	47
12	Vacant platted lot outside city..	450	4,800	12,000	40
13	Acreage (ranch).....	351	8,000	80,000	10
14	Single-family house.....	120	54,400	80,000	68
15	Single-family house.....	120	43,200	60,000	72
16	Hotel.....	500	420,000	840,000	50
17	Single-family house.....	120	44,000	80,000	55

	Step 2--Array of ratios (ascending order), and subsequent calculations						
	All types			Single-family houses		Vacant platted lots	
	Census use code	Assessment-sales price ratio (percent)	Deviation from median ratio	Assessment-sales price ratio (percent)	Deviation from median ratio	Assessment-sales price ratio (percent)	Deviation from median ratio
2	300	3	-43				
1	450	10	-36			10	-30
13	351	10	-36				
6	400	18	-28			18	-22
5	150	20	-26	20	-35		
9	120	27	-19	27	-28		
12	450	40	-06			40	0
7	500	45	-01				
10	450	46	0			46	+06
11	120	47	+01	47	-08		
16	500	50	+04				
8	700	55	+09	55	0		
17	120	55	+09	55	0		
3	120	61	+15	61	+06		
14	120	68	+22	68	+13		
15	120	72	+26	72	+17		
4	400	81	+35			81	+41
Median ratio		46		55 (55 + 55) ÷ 2		40	
Sum of deviations (disregarding signs)			316		107		99

Example 1. Derivation of Coefficient of Intra-area Dispersion for County X, a Primary Assessing Jurisdiction--Con.

Mean of deviations	18.6 (Derivation: 316 ÷ 17)	13.4 (Derivation: 107 ÷ 8)	19.8 (Derivation: 99 ÷ 5)
Coefficient of intra-area dispersion	40.4 percent (Derivation: 18.6 ÷ 46)	24.4 percent (Derivation: 13.4 ÷ 55)	49.5 percent (Derivation: 19.8 ÷ 40)

As example 1 demonstrates, sales reveal the coefficient of intra-area dispersion for all properties within county X (regardless of use category) to be 40.4 percent around a median of 46 percent. Corresponding coefficients for single-family residences and vacant platted lots are 24.4 percent and 49.5 percent, respectively, around medians of 55 percent and 40 percent, respectively. Note that the sales sample for acreage and commercial properties was insufficient in county X to support calculation of use category coefficients, though the four sales involved did enter into the calculation of the "all types" coefficient.

Table Q. Distribution of Selected Local Areas by Coefficients of Intra-Area Dispersion Based on Median Assessment-Sales Price Ratios, for Previously Occupied Single-Family (Nonfarm) Houses: 1956, 1961, 1966, 1971, 1976, and 1981

(Cumulative percentages. For meaning of symbols, see text)

Coefficient of intra-area dispersion (percent)	All selected areas						Area population 50,000 or more					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	(NA)	2.9	7.6	6.7	6.9	12.3	(NA)	1.8	4.4	3.7	3.5	8.7
Less than 15.0.....	7.9	13.7	28.2	24.6	22.1	29.4	5.1	11.9	80.2	22.7	15.7	23.2
Less than 20.0.....	20.4	29.9	53.4	48.9	42.3	47.3	21.0	32.8	60.8	52.1	36.5	42.3
Less than 25.0.....	35.6	47.6	69.1	67.0	59.4	59.5	38.0	57.5	76.7	72.3	59.0	56.1
Less than 30.0.....	50.1	61.9	80.4	79.1	71.2	71.1	57.0	75.1	88.0	84.4	70.8	70.5
Less than 40.0.....	71.3	80.6	90.2	90.9	86.3	83.0	79.5	92.9	94.7	94.4	88.3	84.0
Less than 50.0.....	82.9	89.4	95.7	96.1	93.4	89.2	89.4	98.2	98.2	98.3	94.3	90.4
50.0 or more.....	17.1	10.6	4.3	3.9	6.6	10.8	10.6	1.8	1.3	1.7	6.7	9.6
	Area population less than 50,000						Assessing organization type CO					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	(NA)	3.6	9.8	8.8	9.1	15.0	(NA)	2.0	7.2	3.0	5.0	5.3
Less than 15.0.....	9.2	14.7	26.8	26.0	26.1	34.1	4.7	8.6	27.6	16.2	16.0	17.3
Less than 20.0.....	20.2	28.3	48.4	46.6	45.8	51.1	16.4	24.8	54.0	40.3	33.5	35.0
Less than 25.0.....	34.4	41.9	64.0	63.2	59.6	62.2	32.1	44.6	70.2	60.0	51.3	48.9
Less than 30.0.....	47.0	54.3	75.4	75.3	71.4	71.6	45.4	59.9	83.0	73.8	65.0	64.0
Less than 40.0.....	67.5	73.5	87.3	88.4	84.7	82.2	65.9	77.8	92.4	88.5	83.1	78.7
Less than 50.0.....	79.9	84.2	94.1	94.6	92.8	88.2	79.2	87.1	96.8	94.9	92.1	87.0
50.0 or more.....	20.1	15.8	5.9	5.4	7.2	11.8	20.8	12.9	3.1	5.1	7.9	13.0
	Assessing organization type TMC						Assessing organization type TM					
	1956	1961	1966	1971	1976	1981	1956	1961	1966	1971	1976	1981
Less than 10.0.....	(NA)	0.4	-	0.7	-	12.4	(NA)	7.1	13.9	13.7	13.4	26.2
Less than 15.0.....	0.4	4.8	12.7	10.0	6.2	28.3	22.1	32.8	40.4	41.2	39.6	54.8
Less than 20.0.....	5.7	12.7	35.2	36.2	20.6	46.3	43.0	55.4	65.1	64.8	66.7	73.2
Less than 25.0.....	14.3	27.9	54.1	59.4	42.4	56.5	62.4	70.0	77.4	78.6	80.5	83.6
Less than 30.0.....	33.6	42.2	69.4	71.6	54.7	65.8	75.8	81.7	83.2	88.6	89.0	90.2
Less than 40.0.....	65.3	74.1	83.9	86.0	77.8	78.3	89.3	92.0	90.3	96.0	95.5	96.0
Less than 50.0.....	80.0	87.6	93.7	93.7	88.1	84.5	94.3	95.7	94.8	98.7	98.0	98.0
50.0 or more.....	20.0	12.4	6.2	6.3	11.9	15.5	5.7	4.3	5.2	1.3	2.0	2.0

Single-family houses generally sell more often than other types of realty. They also exhibit considerable basic homogeneity, within individual neighborhoods and even entire jurisdictions, despite much variety in design, layout, workmanship, and materials. Hence the assessment task involved may be less complex than for properties more specialized and seldom sold. For this survey, sales frequency is the primary limiting factor restricting calculation of coefficients of intra-area dispersion to ratios for all types, single-family houses, and vacant platted lots.

With regard to assessments of single-family houses, the six-survey coverage in table Q, including data for 1981 from table 15, shows dual direction movement. Except for township-municipal assessing organizations, there are proportionately more areas with coefficients higher than 50 percent than was the case 5 years earlier, regardless of the distribution method. On the other hand, every distribution shows an increase in the proportion of local assessing areas with coefficients of less than 10 percent. Here as with ratio levels, the county-type assessing organization exhibits little movement.

Individual area coefficients of less than 10 percent came from 26 States for 1981 (see table 18). Thirteen of those States were among the 16 in the corresponding group for 1976.

The median area coefficient on a nationwide basis is 21.3 percent (see table 18), down slightly from the 22 percent registered for 1976. The range among States extends from 10.3 percent for Wisconsin to 52 percent for Alabama.

When compared with corresponding results for 1976, median area coefficients of intra-area dispersion for 1981 are lower in 32 States, higher in 17 States, and the same in one. The same comparison for composite coefficients, however, is noticeably different (see next section).

Following is a listing of the number of States in each specified group of median area dispersion coefficients (expressed as percentages) for 1981 and earlier years (no computation for Arizona, Delaware, and Nevada in 1956, first coverage for Hawaii in 1961, for Alaska in 1966):

Year	10 to 14.99	15 to 19.99	20 to 24.99	25 and over
1956...	1	2	5	37
1961...	1	6	13	29
1966...	5	19	14	12
1971...	5	13	14	18
1976...	1	13	13	21
1981...	8	8	13	21

The above summary is consistent with data in table Q, and with results generally for the six census surveys, in suggesting substantial movement toward uniformity up to 1966, and away from it thereafter until a resumption this time.

Composite Coefficient of Intra-area Dispersion

The unadjusted coefficient of intra-area dispersion indicates uniformity attainment within a jurisdiction but tells nothing about relative size, compared with other jurisdictions in the State. In order to adjust for such differences in a feasible manner, a composite coefficient is calculated for single-family houses only, as follows:

1. The coefficient of intra-area dispersion, for each sampled area in the State, is multiplied by a weighting factor. The numerator of the factor is the number of assessed single-family (nonfarm) houses in the area. The denominator of the factor is the number of assessed single-family (nonfarm) houses in all sampled areas of the State involved.
2. The results of the weighting process are summed for all sample jurisdictions within the State.

As table 18 indicates, the State with the lowest composite coefficient for 1981 is Wisconsin, with 12.4 percent. At the opposite end is North Dakota with 78.9 percent. Four States have composite coefficients of less than 15 percent. In addition to Wisconsin, they are Alaska, Connecticut, and Oregon. Only Connecticut, at 13.8 percent, was lower than 15 for 1976. Only two States, Montana and Pennsylvania, were higher than 50 percent for 1976, while six joined that group for 1981. In addition to North Dakota, they are Alabama, Indiana, Missouri, Texas, and Utah.

Comparison with 1976 results reveals increases in composite coefficients for 28 States, decreases in 22. This contrasts with the summary discussed above for the unadjusted coefficients. It is apparently better, however, than the situation for 1976. Based on the sample jurisdictions for that particular survey, 42 States showed increases over composite coefficients for 1971.

It should be noted, however, that with respect to 1971, numerator and denominator of the weighting factor for composite coefficients consisted of 1970 populations of the respective sample areas, because estimates of the number of single-family houses were not available in sufficient detail from the 1972 Census of Governments.

Intra-area Price-Related Differential

To obtain some notion of any association, within a jurisdiction, between levels of assessed values and particular property sales price ranges, a price-related differential is calculated. This was done only for single-family residential property in each of the 1,367 areas for which available sales made the calculation of the mean ratio possible. This measure results from dividing the mean of the assessment ratios involved by the aggregate assessment-sales price ratio for the same sales.

If the price-related differential exceeds 100 percent, the inference is that assessed values for properties relatively high in value (in terms of sales price) reflect lower assessment-sales price ratios than assessed values for properties relatively low in such value. Similarly, a differential of 100 or less implies relatively higher assessment levels for properties relatively high in value. Authorities describe assessment as "progressive" or "regressive" to the extent that price-related differentials lie at or below 100, on the one hand, or exceed 100, on the other. This is because a differential of 90, for example, indicates (all other things being equal) that the owner of a lower value house pays relatively more in property taxes than the owner of a higher value house. The labels may not apply if the first owner gets enough property tax relief (from an income-related rebate, for example) to nullify the regressive effect of differential assessment.

Data contained in tables 16 and 19, together with comparisons in table R, support an interpretation that, on the basis of 1981 sales in the 1,367 assessing jurisdictions, almost 200 (14 percent), spread among 42 States, assess at substantially higher levels the single-family houses in relatively low sales price ranges. This proportion of total sample units is greater in 1981 than it has been since 1961, as table R indicates.

At the other end, the small proportion of units with price-related differentials of less than 95 percent has increased somewhat, from 3 to 5 percent between 1976 and 1981. There are about 61 assessing units in this group for 1981, distributed among 29 States (see table 19). Five years earlier 40 corresponding units were distributed among 24 States. The entire group lying below 105 percent has remained at about the same proportionate size in surveys for 1966 and subsequently. This is another reflection, among successive survey findings, of greater change between 1956 and 1966, and lesser change since.

Most median area price-related differentials decreased from 1976 to 1981, continuing a trend from 1956 that was interrupted by increases only in 1971.

Coefficient of Interarea Dispersion

This measure shows, for single-family houses only, how uniform assessed values are among and between assessing jurisdictions sampled in a given State (apart from uniformity attained within individual jurisdictions). Calculation of the coefficient of interarea dispersion involves the following steps:

1. Obtain the deviation of each sampled area median ratio from the median among such ratios for all sampled areas within the States.

2. Sum the deviations (disregarding sign) from the median among the median ratios and calculate the mean deviation.

3. Divide the mean deviation by the median among median ratios for all sampled areas.

Thus, the higher the coefficient, the wider will be the range of median ratios for sampled areas within the State.

Assessing jurisdictions enumerated basically comprise a sample designed to produce statewide estimated distributions of real property assessed values, by major property use categories. There is greater representation in the sample of populous, heavily urban assessing jurisdictions. Each individual area median ratio nevertheless received equal weight in calculation of interarea coefficients. Such foregoing factors condition inferences and interpretations concerning statewide and/or interstate assessment comparisons.

The lowest interarea coefficient for 1981 is 3.6 percent, for Oregon (see table 17). Fourteen States exhibit coefficients less than 10 percent for 1981, five more than those in the corresponding

group for 1976. Distributions of inter-area coefficients (in percentages) among groups follow, for 1981 and earlier years (first coverage for Hawaii in 1961, for Alaska in 1966):

Year	Less than 10	10 to 14.99	15 to 19.99	Other
1956...	0	13	8	27
1961...	2	13	12	22
1966...	10	9	9	22
1971...	13	13	8	16
1976...	9	12	9	20
1981...	14	8	6	22

TAX RATES

Two types of tax rates receive attention in this report, the nominal rate and the effective rate. The first, the nominal rate (whether one levy from one governmental unit, or a composite of levies from all units taxing the assessed value), is defined as the quotient of the total net annual property tax bill divided by the assessed value of the property. Nominal rates can vary within a single assessing jurisdiction depending on the extent to which taxing units overlap. A nominal rate can be relatively high or low depending on the de facto assessment level, the levying unit's functional responsibilities and need for funds, legal tax rate limits, and other factors.

The second rate presented in this report is the effective tax rate. This is not a levy at all, except in equivalent terms when assessed values, market values, and sales prices in fact equal each other. The effective tax rate is the quotient of total net annual property tax bill divided by the sales price of the property. Neither the effective rate nor the nominal rate incorporates circuit breakers.

Demonstration of Nominal and Effective Rates

Example 2 illustrates nominal rates and effective rates in operation.

Table R. Relationships Among Price-Related Differentials and Selected Local Areas: 1956, 1961, 1966, 1971, 1976, and 1981

Item	1956	1961	1966	1971	1976	1981
	Percent of areas					
Price-related differential of:						
Less than 95.0	4	2	2	2	3	5
95.0 to 104.9	36	43	59	58	58	56
105.0 to 119.9	38	39	32	31	31	25
120.0 or more	22	18	7	9	9	14
	Median price-related differential (percent)					
All areas	107.6	106.5	103.3	103.2	103.2	102.8
Areas by type of assessing organization:						
Type CO:						
All	108.6	107.1	103.2	104.5	103.5	103.7
With a population of--						
50,000 or more	105.3	104.5	102.5	103.1	103.0	103.3
Less than 50,000	111.7	110.9	104.2	106.2	104.3	104.7
Type TMC:						
All	109.5	109.1	105.1	105.5	106.6	103.4
With a population of--						
50,000 or more	107.4	107.3	104.0	103.6	105.6	104.8
Less than 50,000	111.9	111.6	107.1	111.5	110.2	103.0
Type TM:						
All	103.9	102.9	102.0	101.6	101.7	101.3
With a population of--						
50,000 or more	103.9	101.7	100.5	100.8	102.2	101.4
Less than 50,000	104.0	102.9	102.2	101.7	101.7	101.3

Note: Population for years indicated are as of 1950, 1960, 1970, 1973, and 1980 respectively.

Example 2. Demonstration of Rates

(For meaning of symbols, see text)

Item	Classic city		Way out city	
	Property 1	Property 2	Property 3	Property 4
Sales price (SP)	$100,000	$100,000	$100,000	$100,000
Gross assessed value (GAV)	30,000	30,000	60,000	80,000
Assessment-sales price ratio, percent (R)	30	30	60	80
Applicable partial exemption for homestead (H)	12,000	–	–	–
Net assessed value (NAV, GAV minus H)	18,000	30,000	60,000	80,000
Total tax bill (B)	1,440	2,400	2,400	3,200
Nominal tax rate, percent (NTR) (B divided by NAV)	8.0	8.0	4.0	4.0
Effective tax rate, percent (B divided by SP)	1.4	2.4	2.4	3.2

Note properties 1 and 2 in Classic City, and properties 3 and 4 in Way Out City. Despite the fact that each property sold for $100,000, nominal and effective rates differ substantially. Properties 1 and 2 in Classic City have identical assessments to begin with. Property 1 gets the benefit of a $12,000 homestead exemption, however, and the result is an effective rate of 1.4 percent instead of 2.4 percent. In Way Out City, properties 3 and 4 changed hands at identical sales prices, but have assessed values differing by $20,000. The consequence is an effective rate for property 3 that is 25 percent less than the one for property 4. Example 2 exhibits a common occurrence in an increasingly complicated assessment environment: properties identical in value subject to significant differences in effective rates, and therefore tax bills. In example 2, the range extends from 1.4 percent to 3.2 percent.

Moreover, there are differences in tax bills for properties identical in value that example 2, and also the effective rate coverage in table 22, do not incorporate. These stem from credits against income tax liability or outright cash rebates common in "circuit breaker" laws among the several States. One such law provides for a credit against income tax liability of 60 percent of the amount by which property taxes on the owner's homestead exceed 3.5 percent of household income. The credit decreases by 10 percent if household income exceeds $65,000, and by an additional 10 percent for each $1,000 of household income in excess of $65,000.

Thus, a homeowner with $50,000 of annual household income who lives in a property worth $100,000 carrying a property tax bill of $2,400 (cf. property 2 in Classic City), will get a credit against income tax liability of $390.00, as the following summarizes:

Property tax liability	$2,400
3.5 percent of household income ($50,000 times 3.5 percent)	1,750
Excess	$650
Credit against income tax ($650 times 60 percent)	$390

Thus, this homeowner has a net property tax liability of $2,400 minus $390, or $2,010, which translates to an effective rate of 2.01 percent, for reasons completely unrelated to assessment levels.

The great merit of the effective tax rate is analytical effectiveness. Because its basis is sales price and not assessed value, the effective rate avoids the built-in variety of assessment levels and makes possible certain intrajurisdictional and cross-jurisdictional comparisons of property tax burdens. The effective rate concept gets down to net tax bill, what the taxpayer actually pays as property tax, after any exemption. As the foregoing demonstrates, however, effective rates are independent of property tax reducing influences external to property tax administration.

Effective Tax Rates

Effective rates for 1981, presented in table 22, are generally lower than those for 1976 and 1971, though direct comparisons necessarily reflect differences in extent of coverage among the three surveys. In 1981, among effective rates calculated for "all types" of realty as

a group, in 81 primary assessing jurisdictions, the median is 1.09 percent, within a range extending from 0.19 percent (in Mobile County, Ala.) to 4.63 percent (in Islip town, N.Y.). For single-family (nonfarm) houses the median is also 1.09 percent within a range of 0.14 percent to 4.29 percent for the same two jurisdictions. In 1976 the median effective rate for "all types" of realty was 1.85 percent, among 358 cities with a population of 50,000 or more. The median rate for single-family houses in 1976 was also 1.85 percent, among 353 cities.

Median effective rates for areas covered are summarized in table S. They range from 0.65 percent, the median among rates for vacant platted lots in 26 "balance of county" areas, to 1.06 percent, the median among rates for "all types" of realty in 68 cities, each with a population of 200,000 or more. Not considered in the above range are the medians of 0.96 percent and 1.50 percent, shown in table S for vacant platted lots, since they are based on only four and two areas, respectively.

Sedgwick County, Kans., has the two lowest among effective rates calculated, both for vacant platted lots. They are 0.10 percent, the countywide rate, and 0.06 percent, the rate for the "balance of county" outside Wichita.

Among the larger cities and towns (population 200,000 or more), survey results show the following effective rates (percentages) for "all types" of realty (each 3 percent or more) and single-family (nonfarm) residences, respectively, in 1981, in the following places:

Place	Rates: All types	Rates: Single-family
Islip town, N.Y.....	4.63	4.29
Jersey City, N.J.....	4.40	3.43
Detroit, Mich.....	4.10	3.57
Brookhaven town, N.Y....	3.60	3.64
Babylon town, N.Y.....	3.10	2.81

VALUE EXCLUDED OR REMOVED FROM THE PROPERTY TAX BASE

Considerable property value does not appear in summations of assessed value ultimately subject to local general property taxation. There are two types. The first pertains to property outside the purview of general property taxation and therefore excluded from the tax base. The second group consists of values deducted from gross assessed values and then removed from the base prior to application of tax rates, in accordance with specific provisions in the law. The effect of the deduction in an individual case may be a net assessed value of zero, especially where the de facto assessment level is relatively low.

Property Value Excluded From the Base

Excluded or totally exempt property is familiar enough, even though many of the values involved are difficult to

Table S. Effective Tax Rates, Selected Local Areas: 1981

(Rates in percents)

Item	Counties	Cities and towns with population of-- 200,000 or more	100,000 to 199,999	50,000 to 99,000	Balance of county areas
All types of realty:					
Number of areas.....	56	68	21	43	47
Range of rates.....	0.19 to 2.15	0.14 to 4.63	0.28 to 2.89	0.37 to 2.36	0.14 to 2.25
Median rate.....	0.90	1.06	0.68	0.80	0.79
Single-family (nonfarm) houses:					
Number of areas.....	54	68	20	39	44
Range of rates.....	0.14 to 2.24	0.14 to 4.29	0.27 to 2.64	0.30 to 2.13	0.21 to 2.25
Median rate.....	0.85	1.02	0.73	0.77	0.90
Vacant platted lots:					
Number of areas.....	45	23	4	2	26
Range of rates.....	0.10 to 3.47	0.20 to 4.98	0.42 to 4.35	1.19 to 1.80	0.06 to 3.47
Median rate.....	0.71	0.90	0.96	1.50	0.65

identify since the properties commonly do not sell and are not rented. Major classifications follow:

1. Property used for purposes acknowledged to be publicly beneficial. Examples are governmental structures, churches, synagogues, mosques, and other religious properties, hospitals, and educational institutions. It should be noted that use and ownership together usually constitute prerequisites for total exemption.

2. Some States specifically exempt particular classes of property (e.g., public utilities, intangibles) from general taxation, subjecting them instead to a form of special tax (property or other).

3. Individual States exempt qualifying property of new industrial plants, over a specified period (usually not more than 10 years). The purpose is to attract industry to locate within the State.

4. Specific legislative action exempts particular property in individual jurisdictions. The

Table T. Value Analogous to Assessed Value for Excluded (Totally Exempt) Property, by Type of Exemption, for Selected States: 1981

(Millions of dollars. For meaning of symbols, see text)

State	Total	Governmental	Educational	Religious	Charitable	Other or unallocable
Total	259,576	127,925	22,477	15,027	14,878	79,269
Arizona[1]	1,255	599	78	54	(NA)	524
California[2]	14,204	(NA)	3,336	2,844	8,022	2
Colorado	3,717	2,855	128	297	363	74
District of Columbia	15,163	12,492	640	581	146	1,304
Florida	30,696	23,542	(NA)	(NA)	(NA)	7,154
Georgia[3]	4,365	(NA)	(NA)	(NA)	(NA)	4,365
Hawaii	5,085	4,128	109	275	260	313
Idaho[4]	17,049	9,863	707	502	30	5,947
Indiana	1,527	(NA)	(NA)	(NA)	(NA)	1,527
Iowa[1]	2,331	(NA)	339	1,107	651	234
Kansas[5]	2,585	(NA)	(NA)	(NA)	(NA)	2,585
Maine	4,047	2,509	506	274	195	563
Maryland	7,915	4,179	2,207	1,040	415	74
Massachusetts	16,156	11,146	2,207	827	1,729	247
Michigan[6]	17,411	6,967	(NA)	(NA)	(NA)	10,444
Minnesota[7]	16,108	5,802	6,291	1,920	540	1,555
Nevada	1,136	825	180	53	(NA)	78
New Jersey[8]	21,043	15,399	-	2,741	1,569	1,334
New Mexico	308	(NA)	(NA)	(NA)	(NA)	308
New York[9]	38,643	(NA)	(NA)	(NA)	(NA)	38,643
Ohio	10,057	4,608	2,893	1,353	934	269
Oregon[10]	25,807	21,946	2,438	1,018	(NA)	405
Rhode Island	1,974	1,065	418	141	24	326
West Virginia	994	(NA)	(NA)	(NA)	(NA)	994

Note: Because of rounding, detail may not add to totals.

[1]Values are as of January 1, 1979. [2]California values are limited to those amounts required to be enrolled. [3]Georgia values are as of January 1, 1978. [4]Idaho values are estimates as of 1977. "Other or unallocable" category includes $2,068 million in inventory and crops; $2,354 million in household goods; and $1,159 million in motor vehicles. [5]Kansas values are market rather than assessed values. [6]Michigan values are for 61 out of 83 counties and include partial reports for 5 of those 61 counties. If the reported data were projected statewide, there would be an estimated $31,200 million (at 50 percent of true cash value) in fully exempt property. [7]Minnesota values are market values as of January 1, 1980. [8]New Jersey governmental and educational values are combined under the governmental heading. [9]New York values do not reflect totally exempt property located in local assessing jurisdictions that did not report to the State. [10]Oregon values are true cash values rather than assessed values.

group is similar to the institution class above, except that exemption action is specific to the property rather than for an entire category.

5. Many States now provide incentives for activities such as pollution control and abatement, energy conservation, and property rehabilitation, by using property tax exemptions. This group is a hybrid of two of the types discussed above, sometimes relating to exclusion from the roll and sometimes to value components removed from gross assessed values.

Table T reflects 1981 values assigned to excluded property by 23 States and the District of Columbia as $259.6 billion. The values are termed "analogous" because no "assessed" value is technically possible for property excluded from the tax base.

Authorities differ on the extent to which reported values for totally exempt property resemble conventional appraisal estimates. While it is unlikely that assessors devote more than minimal appraisal resources to valuing excluded property (since no tax revenue stems from the activity), the values reported are of interest to the public. Often excluded property is highly specialized, in some instances built for a single use. Rarely does it sell and seldom is it easily rented. Moreover, its owners are usually objective about cost submissions, since they will not influence any current property tax liability.

In a previous survey 17 States reported a 1976 aggregate value for totally exempt property of $122.3 billion. Of the 1981 total reported in table T, the same 18 States accounted for $199.6 billion. Six States not reporting for 1976 listed a total of $60 billion for 1981. They are Georgia, Idaho, Maine, Massachusetts, Michigan, and West Virginia.

Of the 1981 total for amounts reported by exempt category, governmental property, at $127.9 billion, constituted the largest single component in all States except Minnesota.

Property Value Removed From the Base

The value removed constitutes the "partially exempt" or tax-exempt portion of a gross assessed value (see table 2). For 1981 such assessed value components, removed from the taxable base, slightly exceeded $120.7 billion, as summarized in table U for 31 reporting States and the District of Columbia. Corresponding aggregates for the recent past are $39.7 billion from 28 States in 1976 and $23.3 billion from 28 States for 1971.

The major type of "partial exemption" is the one for homesteads. This provides that specified amounts of gross assessed value are removed from the total in accordance with applicable State law. The result is the net amount of assessed value against which the nominal tax rate is applied.

The homestead exemption is a form of property tax relief. It lowers the tax by law for those who own and occupy (and in some circumstances rent) their own homesteads, that will be less than what otherwise would be due.

Assume an owner-occupied homestead with a market value of $50,000, located in a jurisdiction where the de facto assessment level is 20 percent. Gross assessed value is $10,000. Assume further that the law exempts the first $10,000 of assessed value for owner-occupied homesteads. Net assessed value becomes zero ($10,000 minus $10,000). Thus, a "partial exemption" in this instance removes the entire assessed value from the roll and means no tax liability.

The homestead exemption exists in the 28 States shown in table U (a few may involve homestead tax credit aspects, as in Indiana and Oregon), plus the following: Alaska, Arizona, Colorado, Massachusetts, Ohio, South Carolina, and Virginia.

Sixteen of the States and the District of Columbia listed in table U (each designated by an asterisk) also use circuit breakers for property tax relief.

A circuit breaker law activates a State financed rebate of specified amounts of property taxes due (or rent equivalents), whenever such payments exceed specified amounts of household income.[9] In Pennsylvania, for example, people 65 or over are eligible for rebates ($10 minimum, $500 maximum) of property taxes due, ranging from 100 percent (for household income less than $5,000) down to 10 percent (for household

[9]Classifications here are compatible with those in Significant Features of Fiscal Federalism, 1982-83, Advisory Commission on Intergovernmental Relations, Washington, D.C., February 1984. ACIR cooperation is gratefully acknowledged.

incomes between $9,000 and $12,000). An inflation dividend of $30 to $125 augmented rebates in 1982.

States not in table U which do have circuit breakers are: Arizona, Arkansas, Colorado, Iowa, Kansas, Maryland, Michigan, Minnesota, Missouri, Montana, Ohio, Pennsylvania, Tennessee, Vermont, and Wisconsin.

Montana adopted a circuit breaker in 1981 and further refined it in 1983, providing a maximum credit of $400 to qualifying owners or tenants age 62 or more. Indiana converted its circuit breaker to a unified tax credit in 1981, basing relief on adjusted gross income.

Among those with homestead exemptions, 17 States and the District of Columbia apply the exemption to all homeowners. Amounts of assessed value exempt range from $200 in New Mexico to $12,000 in Hawaii (now $20,000 since the legal

Table U. Assessed Value Removed from Tax Base for Selected States: 1981

(Dollar amounts in millions. For meaning of symbols, see text)

State	Exemptions				Total as percent of gross assessed value
	Total	Homestead	Veterans	Other and unallocable	
Total	120,726	(NA)	(NA)	(NA)	4.1
Alabama	1,801	1,595	-	206	19.7
California*	29,440	29,138	302	-	4.5
Connecticut*	476	(NA)	(NA)	476	1.0
Delaware	86	86	-	-	2.1
District of Columbia*	626	626	-	-	3.3
Florida	48,136	36,595	-	[1]11,542	19.3
Georgia	2,947	2,947	-	-	6.3
Hawaii*	2,279	2,235	-	44	11.2
Idaho*	1,274	1,133	-	[2]141	5.2
Illinois*	6,956	(NA)	-	6,956	8.4
Indiana	951	86	109	756	3.7
Kentucky	2,432	2,432	-	-	4.2
Louisiana	2,395	2,395	-	-	24.2
Maine*	118	-	116	2	0.6
Mississippi	1,160	1,160	-	-	21.9
Nebraska	1,251	1,251	-	-	3.4
Nevada*	26	(NA)	18	8	0.3
New Hampshire	153	135	-	18	1.0
New Jersey	60	-	-	60	0.1
New Mexico*	122	(NA)	82	40	2.2
New York*	7,373	(NA)	(NA)	7,373	6.8
North Carolina[3]	1,351	1,017	-	334	1.2
North Dakota*	7	7	-	-	0.8
Oklahoma*	788	681	(NA)	107	9.8
Oregon*	176	161	-	15	0.3
Rhode Island*	227	-	108	119	2.4
South Dakota*	109	-	-	109	1.9
Texas	6,088	(NA)	(NA)	6,088	1.9
Utah*	31	(NA)	(NA)	[4]31	0.5
Washington	1,306	966	-	340	1.0
West Virginia*	474	474	-	-	3.3
Wyoming	107	103	4	-	1.7

Note: Because of rounding, detail may not add to totals.

*Has circuit breaker; see text.

[1]Includes $11,187 million of exempted inventory differential. [2]Includes $110 million of exempted State-assessed value. [3]Data shown are for 66 out of 100 counties in North Carolina. [4]Includes $4 million of exempted State-assessed value.

standard for assessments increased to 100 percent January 1, 1983).

Other applicable exempt amounts include $1,000 (Oklahoma), $2,000 (Alabama and Georgia), $3,000 (Illinois), $7,000 (California), $9,000 (District of Columbia), and $10,000 (or 20 percent of market value, whichever less, in Idaho). Alaska municipalities may exempt up to $10,000.

Florida had increased its basic $5,000 homestead exemption (for taxes other than those of school districts) in stages (to $15,000 in 1980, $20,000 in 1981, and $25,000 in 1982 and thereafter), but subject to minimum residence in the State of 5 years. The State Supreme Court ruled the residency requirement unconstitutional in 1982 but prospectively only, effective January 1, 1983.[10] The State had separately enacted an exemption of $25,000 applicable to school district taxes, on March 11, 1980. Thus the present situation is an exemption of $25,000 applicable to all taxes.

Louisiana's exemption is $7,500, applicable to parish taxes only (except in New Orleans). In Mississippi the exemption of $5,000 applies to all State and some local taxes.

Some of the States named provide enhanced homestead exemptions for senior citizens, or for those totally disabled or for those within specified household income ceilings. Attaining age 65 either qualifies for or enhances the amount of a homestead exemption in at least 15 States. In Hawaii, enhancement begins at age 60, when the exemption doubles. Qualified persons in New Hampshire are 68 or older, with net incomes of no more than $5,000 ($6,000 if married), and with net assets of no more than $35,000.

Eligibility in Washington had begun at age 61, with full exemption from all levies for up to $15,000 of assessed value if combined disposable income was $14,000 or less. Beginning in 1984 a corresponding income of $12,000 or less entitles a qualified person to exemption, from all regular property taxes, of up to $20,000 of assessed value.

More than 20 States similarly relate eligibility for or amount of homestead exemption to specified maximum income. Massachusetts augmented qualifiers in 1982, authorizing municipalities to exempt $4,000 of assessed value or $500 of tax, whichever is greater. Eligibility extends to an owner-occupier age 70 or more, with "gross receipts" of less than $10,000 ($12,000 if married) and an estate, other than house, of no more than $20,000 ($23,000 if married). Nebraska, on the other hand, repealed the homestead exemption for many in 1983, retaining it only for senior citizens (65 or over) and disabled veterans.

Seven States accomplish property tax relief by related methods, such as homestead tax credits (Maryland, Minnesota, New Jersey, Tennessee, and Wisconsin) and locally imposed freezes on tax rate and assessed value (Rhode Island). In addition to its new circuit breaker (above), Montana relates income of property owner to specified assessment levels for the Class 4 realty affected (see appendix A). Tax deferral statutes have also become common (as in California, Colorado, District of Columbia, Florida, Georgia, Oregon, South Dakota, Vermont, Virginia, and Wisconsin).

Partial exemptions for veterans also exhibit much variety. Often they apply to veterans' homesteads only, but they can extend to other realty and personal property as well. Hawaii, Maryland, Montana, New Hampshire, and New Jersey are among States which exempt the entire amount of assessed value for residences owned by totally disabled veterans. The home of an unremarried widow is often eligible for whatever exemption the deceased veteran had.

A small amount of partially exempt assessed value is also reported in table U for qualifying industrial property.

Special Property Taxes

Available data indicate that at least 31 States subject specific types of property, usually personalty, to State and/or local special property taxes. These are levies which relate to selected classifications, at specified individual rates or average rates.

Categories of property likely to be affected include the following:

Tangible

Aircraft and other flight property
Distilled spirits
Motor vehicles
Mobile homes
Public utility property (including that of railroads and private car lines)

Intangible

Bank deposits

[10] Osterndorf v. Turner, 426 So. 2nd 539 (1982, rehearing 1983).

Bank shares
Credits
Marketable securities (stocks and bonds)

States which in 1981 imposed special property taxes on one or more of the above include: Alabama, Arizona, Arkansas, California, Connecticut, Georgia, Idaho, Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Vermont, Washington, Wisconsin, and Wyoming.

An aggregate assessed value for all of the property involved is not available, nor can revenues attributed specifically to special property taxes readily be identified. Both summations are deemed relatively minor on a nationwide basis, though substantial totals are reported by individual States.[11]

SURVEY PROCEDURE

Procedures throughout the survey incorporate the use of public records, except for sales price information discussed below. It should be noted, however, that often data in effectively usable format become available for survey use only with the authorization of the local officials concerned.

Sales prices come from contracting parties on a voluntary and confidential basis, and that confidentiality is protected, as the law requires.

Revenue data appearing in table 1 and elsewhere in this introductory material are contained in Governmental Finances in 1981-82, and in earlier editions of that publication.

Assessed value data shown in tables 2, 3, and 20 came primarily from State officials having responsibilities for State assistance to and/or supervision of local property tax and assessment administration. A canvass of such officials by means of a mail questionnaire produced most of the information for those tables and for tables T and U of this text, relating to excluded and partially exempt property.

Information concerning legal assessment levels, valuation standards, classified property taxation, exemptions, taxability, and similar matters resulted from review and analysis of State constitutional and statutory provisions, court cases, and administrative regulations, augmented where necessary by telephone consultation or correspondence with officials concerned.

For overall sampling design and its implications for each major survey component, see earlier material on survey scope and survey methodology.

The Ratio Study--Enumeration

Enumerators usually began in the offices of the local recorder, selecting the sample of real property sales according to interval counts described earlier, from pertinent public records (e.g., grantor-grantee index, register of documents, and deed books). All sales occurring and recorded within the applicable 6-month survey period were eligible for selection. After selecting the sales sample, enumerators proceeded to the office of the local assessor to obtain additional data. Minimum information (entered on form GP-30) necessary for each sale included:

1. Parcel identification, in the form most efficient for cross referencing recording and assessing records, and for subsequent processing. Identification includes street address wherever possible.

2. Names of buyer (grantee) and seller (grantor), together with mailing address of at least one of them, preferably both.

3. Assessed value of sold property, as of applicable valuation date (for such dates, see table H).

4. Amounts paid in compliance with State and/or local real property transfer, documentary, or conveyance tax laws, wherever such data were readily available. Often these amounts made possible the calculation of probable sales price, a quantity then available for confirming or clarifying sales data derived from sales questionnaires (form GP-31).

5. Sales price involved in the transaction, if readily available. In some States, the law requires price disclosure as an incident of or prerequisite to recording.

Wherever possible, enumerators augmented the above minimum facts, for

[11]See State Government Tax Collections in 1982, Series GF82, No. 1, U.S. Bureau of the Census, January 1983.

sales in cities of 200,000 population or more, and surrounding counties. This was done by obtaining amounts of property taxes billed against sold parcels (by all levying agencies) on the basis of the enumerated assessed values. These tax billing data made possible calculation of effective and nominal tax rates shown in table 22. Where the city of 200,000 population or more is the central city of a county containing other cities of 50,000 population or more, enumeration of above tax billing data included such smaller cities as well.

Acting on detailed, locally oriented instructions, enumerators selected sample real property transfers evidenced by warranty deeds (described as "grant deeds" or something else in some States), except any transfer obviously not an ordinary sale of real property. Examples of the exception are transfers evidenced by quitclaim deeds (except in a few States), tax deeds, deeds to cemetery lots, mortgages, and satisfactions (releases) of mortgages. All other screening and editing occurred centrally at the Bureau of the Census.

The Ratio Study--Screening

During the screening process, an examiner reviewed the property transfer record prepared by an enumerator for each selected sale, in order to check basic accuracy and suitability. Except where a specific circumstance regarding an individual sale made disposition dependent on a supervisor's decision, the examiner at this stage excluded sales which involved:

1. Date of sale (or recording) outside predetermined 6-month survey period.

2. Transacting parties with identical surnames, supporting a presumption that the sale was not "arm's length."

3. Sold property that was tax exempt.

4. A change in the ownership of only a partial interest in a real property, with the result that a distinctive assessed value for the particular property conveyed was not readily available.

5. A government agency as buyer or seller (the presumption being that the transfer resulted from other than arm's length situations).

Screening procedures alone eliminated 43,000 out of the 181,000 sales constituting the sample selected by the enumerators.

The Ratio Study--Mail Questionnaire

Each of the 138,000 sales which survived the above screening became the subject of a questionnaire (see form GP-31) mailed initially to the buyer (grantee). If the buyer did not respond, a second request was sent about 4 weeks later. If the second attempt also failed to stimulate a response, the same original and followup mail sequence was repeated for the seller (grantor).

In the 1982 survey, four major items of information were sought on form GP-31 for each sold property: size of sold parcel (items a and b), property use (item 1), sales price (items 2a and 2b), and financing details (item 2c). Primary data on sales price and property use constitute information essential for calculation of de facto assessment levels, for each major use category and for all types of realty combined as a single group. Information about financing, not obtained in previous surveys, has, in nationwide empirical terms, remained a mystery influence on realty sales in 1981. One national real estate group reported that as many as 6 out of every 10 sales of existing homes were affected by some form of creative financing.[12] Responses about financing were obtained for about 80 percent of measurable sales selected. A tally of such responses appears in table 25. Interest in respective sizes of sold parcels (in square feet or acreage) has also increased substantially in recent years, especially among those seeking to develop land unit price indices. Data about parcel size were obtained from over half of the usable responses.

Questionnaire respondents also provided answers important for edit decisions about a sale's "arm's length" characteristics (see item 4, page 286).

Out of 138,000 sales for which questionnaires were mailed, responses were obtained concerning 79,500 transfers. Enough data were obtained from respondents to determine that 55,300 of the sales were "measurable."

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[12] Existing Home Sales 1981, National Association of Realtors, Washington, D.C., June 1982, p. 7.

The Ratio Study--Editing

Within survey design and resource limits, all responses were examined for accuracy and adequacy of information. In many situations correspondence or telephone contact with respondents became necessary in order to confirm or obtain correct address, or sales price, or other property related data. Whenever the editing procedures resulted in a determination that the sale involved was other than "arm's length," the sale was discarded.

As it unfolded, the central edit process resulted in rejection of 24,200 sales, leaving a net total of 55,300 measurable sales available for calculations and analysis. That latter number incorporates treatment, as individual sales prices, of proportional amounts of individual reported sales prices found to apply to more than one assessed value. In each such circumstance, the apportionment of the single sales price was accomplished on the basis of the respective assessed value proportions referenced to the assessed value total.

It should be noted that the number of sales enumerated and the number of measurable sales resulting are both substantially lower in 1982 than was the case either in 1972 or in 1977, as the following summary indicates:

	1972	1977	1982
Sales enumerated.	230,800	210,000	181,000
Rejected in Initial screening..	49,500	25,000	43,000
Sales concerning which:			
Questionnaires were sent.....	181,300	185,000	138,000
Responses were received.	150,000	138,000	79,500
Sales (net):			
Rejected during edit....	38,000	28,000	24,200
Measurable sales...	112,000	110,000	55,300

Reasons for the 1982 result include things like: the substantially reduced volume of realty sales in 1981; the relatively greater difficulty of persuading the involved populace to answer questionnaires; the increased cost of each questionnaire attempt; and enhancement in edit proficiency.

The Ratio Study--Processing

After completing the edit, data were entered on magnetic tape for the surviving (measurable) sales. Included for each was the property use category, sales price, financing details (if available), sampling rate, expansion factor, jurisdiction identification code, total assessed value, and parcel size (if available). Also entered on tape was the amount of property taxes billed against the sold parcel, by all levying bodies having a taxing power over it. Covered was each property located within a city having a 1978 population of 200,000 or more, or within its surrounding county, or within certain additional areas selected in an attempt to obtain effective tax rate coverage for each State.

Following data entry, the necessary computer programs were implemented for calculation of value aggregates, ratios, coefficients of intra-area and interarea dispersion, and other findings published in this report.

Realty Tax Base Composition--Enumeration

To enumerate the sample of assessed values, including the use category, visits were made to each of 1,456 counties or other primary assessing jurisdictions included in the jurisdictional sample described earlier.

At the office of the local assessor, enumerators proceeded twice through the assessment roll, or other official assessment record, selecting the sample of certainty and noncertainty assessed values in the manner previously detailed (see forms GP-22, and GP-23 series, appendix F).

In 540 counties or other primary assessing jurisdictions all or most of the assessed value sampling was accomplished by computer processing. This represents an increase of almost 500 percent over the 93 jurisdictions enumerated by computer for the 1976 survey data. The Bureau of the Census has been able to effect this kind of sampling only through the cooperative effort of many local assessing and data processing officials.

Realty Tax Base Composition--Editing

Editing of the enumerated sample of realty parcel assessed values included careful examination of individual values within guidelines set to assure comprehensive, accurate coverage of the jurisdiction.

The editing of use categories assigned by field enumerators required close attention to definitions provided in local coding systems. The aim was compatibility between census use categories and the typically more numerous classifications in local systems.

Realty Tax Base Composition--Processing

After enumeration and editing, the sample data were tallied and inflated to produce the estimated distributions of assessed value and parcel inventory which appear in tables 4 through 9, and in tables 12 and 21.

RELIABILITY AND LIMITATIONS OF DATA

Any use of statistics contained in this report is subject to limitations and qualifications specified elsewhere in this text, in footnotes and similar references pertaining to any of the tables and to any material in appendices, and in the material which follows.

Diversity in Law and Administration

The 1982 survey occurred within a framework of even greater variation than that usually associated with property taxation and assessment. By its approval in 1978 of Proposition 13, the California electorate added the dual base concept to the mosaic of modifications affecting assessment practice. Market value, or one or more specified percentages thereof, no longer stands alone in conditioning what assessors officially identify as the ultimate basis for apportioning property tax burdens. The valid value choice now may instead be a "base year value," plus strictly limited annual accretions, until the time when an applicable "change of ownership" has occurred. When that happens in California, reassessment at the market value level is mandatory.

In fundamental form the dual base concept of Proposition 13 has not emerged anywhere else, though the notion of limits on assessments or tax rates, or both, has gained wide acceptance. This has expanded the catalog of differences within and among the individual States and local assessing jurisdictions that affect how much in property taxes people actually pay. Things like the following have complicated the environment:

Owner and occupant status influences--These include age, household income, total or partial disability, and veteran status. All translate, in property tax terms, to individual tax bills less than what would result from applying the jurisdiction mill rate to the assessed value of the property involved. The differences in taxes can come about by way of "circuit breakers" tied to household income levels, or by removal of all or portions of the assessed value of the property involved.

Benefited use influences--These alter the nature of the appraisal process. Instead of arriving at a value estimate based on highest and best use, in accordance with fundamental appraisal theory, assessors in any benefited use situation determine value on the basis of the current or other specified use. The most familiar example is the group of agricultural assessment laws now common in most States (see appendix C).

Assessment cycle influences (see appendix D)--These refer to the time periods required for intensive review (often called "reassessment") of each assessed value within a jurisdiction, whether or not changes have occurred in the property involved. Computerization technology is likely to bring about a mandate for review on as close to an annual basis as possible.

Where assessment cycles exist, the individual assessed values encountered by enumerators for this survey will unevenly reflect the current market, except where some noticeable modification in property value (possibly from remodeling) stimulated a separate reappraisal.

Financing influences--Appraisal purism would ignore these completely, since an appraisal typically is an estimate of property value in the market, on a fee simple, cash equivalent basis, devoid of "adjustments" for particular financing arrangements. In the markets of 1981, however, many transactions occurred only because the parties grasped at creative financing alternatives sensitive to an extended time of stratospheric interest rates.

Rejected whenever possible was the very high fixed-rate mortgage, in favor of things like assumptions, and the graduated payment, shared equity, flexible rate, wraparound, and balloon mortgages mentioned earlier. Though empirical data supports no conclusion that assessors systemically adjusted assessments to reflect financing options, there is evidence that the market did incorporate such things in prevailing real estate prices.

Appeals and equalization--Except as otherwise stated, included in this report are only those assessed values deemed "final" for the 1981 assessment period, following any administrative appeal. Moreover, the assessed values incorporate any equalization activity resulting in revised individual assessed values (as, for example, in Illinois).

In addition to the value-influencing factors summarized above, technical and procedural variations among assessing jurisdictions also affect survey findings reported here. Important among these are:

Differences among methods for identifying individual parcels and classifying them by use category--The Bureau of the Census provides for seven use categories (see tables 4 to 9), and defines as a parcel whatever the local assessor deems a parcel. Given the copious variety among local use coding systems, the Bureau's choices about use for particular individual parcels have been difficult.[13] Similar variety characterizes parcel identification systems. A growing number of these feature some form of geocoding, and may incorporate relationships to survey coordinates when techniques like global positioning become cost effective.[14]

Differences in placement of initial and other assessment responsibility--As indicated earlier, States vary in where they place respective assessing responsibilities and in exactly what they want as the assessed value against which tax rates are to be applied. Since the latter assessed value is what is sought for this report, in an attempt to be consistent on a nationwide basis, any variations among States which differentially affect that "bottom line" assessed value will condition inferences and judgments. This circumstance can, for example, substantially affect comparisons between assessment levels reported herein for States like Illinois, Michigan, Minnesota, and South Carolina.

Limitations on Data Based on Measurable Sales

The following factors condition use or interpretation of survey results, specifically including survey produced statistics based on samples of taxable real property sales in each State.

1. Measurable sales used comprise a relatively small portion of all taxable real property, market-selected during the survey period (generally the last 6 months of 1981). Resulting ratios express in each case the relationship between assessed value and what the market itself provides, namely sales price. Classification of measurable sales by property use category is designed to make possible data comparability consistent with local variation and nationwide scope.

2. None of the survey results standing by themselves, stated separately or as grouped data, constitute estimates of gross turnover of all realty. The reason is that, even among responses, certain transfers not usable for ratio calculation were excluded in the edit process.

3. All of the assessment-sales price ratios contributing to this report are based on a sample of in-scope transfers of real property and are subject to sampling variability.
   The particular sample used in the survey is one of a large number of all possible samples of

[13]A system frequently used, with adaptations, by local assessing jurisdictions, is that contained in Standard Land Use Coding System, developed in 1965 by Harold A. Merrill and Jacob Silver, and reprinted in March 1977 by the U.S. Department of Transportation, Federal Highway Administration, available from Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

[14]See Procedures and Standards for a Multipurpose Cadastre, National Research Council, Committee on Geodesy, National Academy Press, Washington, D.C. 1983, pp. 33-36; also Need for a Multipurpose Cadastre, same source, 1980.

the same size that could have been selected by use of the same sample design. Each of the possible samples would yield somewhat different results. The standard error is a measure of the variation among the estimates from all possible samples. Thus it is a measure of the precision with which an estimate from a particular sample approximates the average result from all possible samples.

Estimates of sampling errors of the aggregate and the unweighted mean ratios for selected major assessing jurisdictions are shown in table 21 at the two standard error level. A 95 percent confidence interval may be constructed, in the following manner. To obtain the lower bound, subtract two standard errors from the estimate. To obtain the upper bound, add two standard errors to the estimate. Regarding intervals so constructed, we can say with 95 percent confidence that the interval for a particular sample will include the figure that would have been obtained from coverage of all transfers.

For estimates of the sampling errors of assessment-sales price ratios for States, see table 11.

"Assessing jurisdictions" in this context conform to descriptions explained earlier in this text.

4. The yield of the sales sample was insufficient to support ratio calculations and other survey processing in those situations specifically cited in text and/or footnotes to affected tables.

5. Reliability of findings based on measurable sales also depends in part on the quality of basic data assembled. This in turn is affected by the quality of the field enumeration effort, and in subsequent interpretation of data provided by respondents. Undoubtedly, some errors and inaccuracies have occurred that remain undetected. The survey, however, proceeded at all stages, including those of its mail canvass, with the benefit of detailed instructions and careful editing procedures.

6. To stimulate accurate reporting, survey questionnaires emphasized that the law requires confidential handling of sales price information supplied, with use thereof limited to statistical purposes. In the 1982 survey it also was noted that response was voluntary.

Identical confidentiality characteristics applied to any correspondence deemed necessary to remove ambiguities and resolve doubts. If it became evident at any time that the sale was something other than the kind of ordinary transfer called for in survey specifications, the sale was excluded from the survey. This was true even where a respondent indicated the price paid was a reasonable market price. Similarly, if it became evident, from data obtained within procedures called for by survey specifications, that a sale previously regarded as doubtful or unacceptable was in fact measurable, the sale was included.

7. In some instances, the respondent, apparently party to more than one sale during the survey period, supplied price data for a property other than the one for which the assessed value had been obtained. Effective checking procedures made possible the discovery of most situations and the consequent elimination of the sales affected, but it is unlikely that checking procedures were totally effective.

8. With regard to most sales used, the questionnaire request for sales price data imposed no judgment requirements on respondents except any involved in the respondent's choice of use category applicable to the property in question. Some judgment was necessary, however, for transactions in which the trade of another property was part of the consideration, and for those in which personal property as well as realty was involved.

For the first type (trades and exchanges), the editor usually accepted the buyer's estimate of traded property value unless the reported value of the traded property constituted a large portion of the total reported price. In such situations the editor usually discarded the sale as unusable.

Amounts of personal property

were deducted if the respondent included them with amounts for realty. In the latter instance, the editor deducted values reported as personal property from total selling price, concluding that the remainder represented sales price of the real property only. Where necessary, supplemental correspondence was used to obtain additional information about personal property components.

Data for Selected Local Areas

Statistics contained in tables 14 through 19 stem from measurable sales of nonfarm single-family houses (including condominiums) in 1,367 sample jurisdictions. Each of these yielded at least five sample sales of single-family houses that survived all survey screening. These statistics, like certain others noted in this report, are subject to limitations of sampling variability and processsing error.

Sample local areas do not constitute a direct cross section of all local assessing jurisdictions, primary or other. Because they comprise a group disproportionally weighted in favor of jurisdictions ranking high in aggregate assessed value, the figures shown in tables 17 to 19 cannot by themselves be interpreted as direct measures of statewide characteristics. This caution has special relevance with respect to the coefficients of interarea dispersion, shown in table 17.

It should be noted also that a weighting factor, based on numbers of single-family (nonfarm) houses, is used as part of the calculation of composite coefficients of intra-area dispersion in table 18.

The grouping of local assessing areas by type of organization (e.g., in tables I, and 14 to 16) is admittedly arbitrary to some extent. Statutes for particular States may provide administrative options and alternatives in some situations.

Data contained in tables 21 and 22 are also subject to sampling variability and processing error.

In all tables, footnotes explain significant departures from usual coverage.

Realty Tax Base Composition According to Use Category

Distributions by use category of assessed values and numbers of real property parcels of locally assessed realty are shown in tables 4 to 9, 12 and 21. They are estimates subject to sampling variation and to possible errors of classification originating in or associated with field enumeration of the data.

Absolute sampling errors were calculated for data contained in tables 4 and 7 and have been reported in tables 5 and 8 at the 95 percent confidence level. Data contained in table 12 relating to use categories of property by assessed value classes are likely to involve greater sampling variation, especially for use categories that comprise only a small part of the total. For selected local areas in table 21, sampling errors of percent distributions of gross assessed value were calculated. For a summary of median sampling errors at the 95 percent confidence level, with areas grouped according to 1980 populations, see table V.

Sampling errors for nonfarm residen-

Table V. Median Sampling Error for Selected Local Area Estimates of Percent Distribution of Gross Assessed Value of Locally Assessed Taxable Real Property, by Use Category

(Sampling errors computed at the 2σ level)

Population, 1980	Number of areas	Median sampling error in percentage points			
		Single-family (nonfarm) houses	Acreage	Vacant platted lots	Commercial and industrial
500,000 and over	61	1.5	0.4	0.6	1.2
300,000 to 499,999	47	2.5	1.2	1.0	2.1
200,000 to 299,999	68	3.2	1.3	1.1	2.7
100,000 to 199,999	177	4.2	2.3	1.3	3.5
50,000 to 99,999	262	4.9	2.5	1.3	3.8
Under 50,000	105	6.0	4.9	1.5	4.1

tial property are slightly lower than those shown for single-family nonfarm houses.

With regard to estimates of number of real property parcels assessed as shown in table 21, relative sampling errors were found to be somewhat larger for single-family nonfarm houses, somewhat smaller for vacant platted lots, when compared with relative errors of corresponding gross assessed value estimates. For numbers of parcels, all types of real property, the relative sampling error was found to be generally slightly less than the relative error for gross assessed value of single-family nonfarm houses.

Official local assessment records vary widely, with respect to nature and extent of property description. Data collection was performed, however, within a framework of detailed instructions and careful checking of enumerated data. These efforts held any description error within reasonable bounds.

Historical Comparisons

Any comparison of amounts for assessed values and for numbers of realty parcels shown in this report, with corresponding amounts shown in previous Census of Governments reports (including revisions) for 1956 and subsequent years, is subject to all the changes in law, administration, economics, and other influences affecting assessed value and property taxation. In this connection, changes since 1956 in the nature of local assessment records undoubtedly mean a somewhat different treatment of some sample properties in certain jurisdictions than that which would have applied with the kind of records previously maintained.

Survey design and methodology have remained substantially similar throughout the 25-year period, except that in the Census of Governments for 1972, estimated distributions of realty within property use categories were possible for only 28 large jurisdictions, as specified in the report covering that survey. In each of the censuses since 1957, details shown for particular use categories represent sample-based estimates. Any measure of change or trend based on these estimates will be subject to a sampling variability greater than the variability of either of the figures individually.

It should be noted also that in the 1972 survey a sale of real property during the survey period was excluded if the price exceeded $500,000. This conditions to some extent any comparison with results from the 1967 and 1977 surveys. The 1967 survey excluded the sale of any parcel of realty assessed at more than an amount which (in light of the respective area's average level of assessment for less valuable properties) led to a presumption that its current market value at time of sale exceeded $250,000. The exclusion method used for 1967 was used again for 1977, except that a presumed current market value cut off of $750,000 was applied.

For this 1982 survey, the exclusions applied to the sale of any parcel of realty assessed at more than an amount which (given the respective area's average level of assessment for less valuable properties) leads to a presumption that current market value at time of sale exceeds $3,000,000.

Regarding comparisons affecting Alaska, it is noted that property taxation in that State now extends to 11 organized boroughs (including the North Slope Borough, incorporated July 1, 1972) and 13 first-class cities (7 first-class cities did not levy or collect property taxes in 1981). The assessed values of such areas comprised the data for Alaska in this report. Accordingly, territory approximating 415,000 square miles of unorganized area is not represented.

MEANING OF SYMBOLS

The symbols in the tables have the following meanings:

- \- Represents zero or rounds to zero.
- (NA) Not available.
- (X) Not applicable.
- (Z) Less than 0.05 percent.