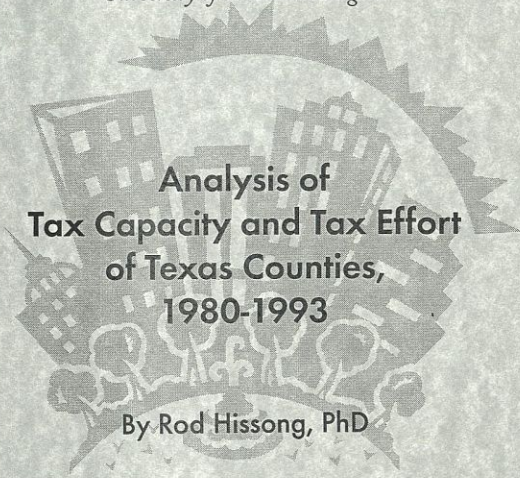


A Report

from

**The Center for
Economic Development Research and Service**

*Institute of Urban Studies
School of Urban and Public Affairs
University of Texas at Arlington*



**Analysis of
Tax Capacity and Tax Effort
of Texas Counties,
1980-1993**

By Rod Hissong, PhD

Report CED96-8

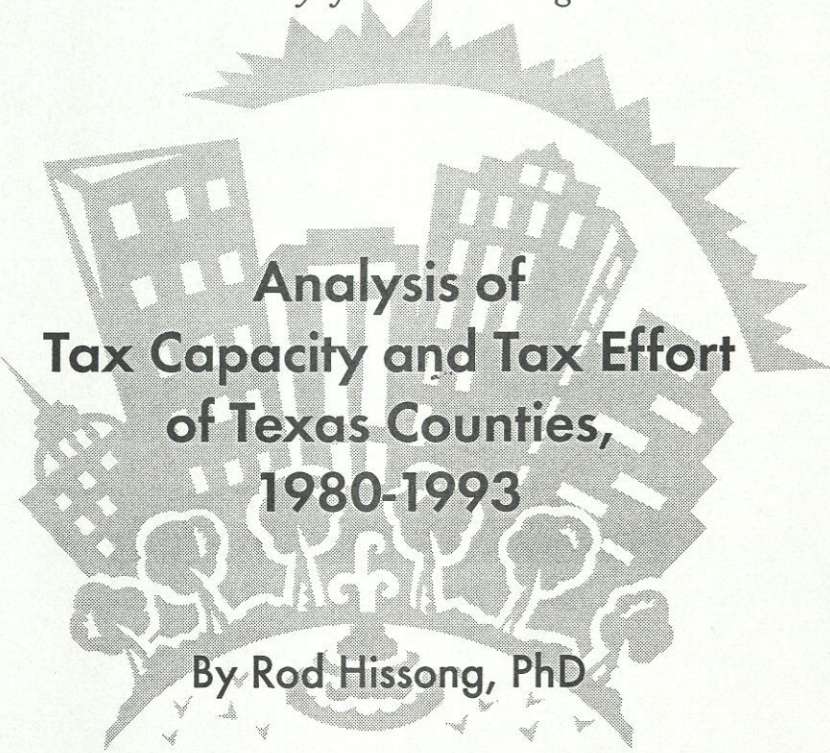


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This publication was prepared by the Center for Economic Development Research and Service at the University of Texas at Arlington. The statements, findings, conclusions and recommendations in the report are those of the authors and do not necessarily reflect the views of the Economic Development Administration, US Department of Commerce.

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Many thanks to Ekong Peters for the electronic compilation of the data for this study.

I. Introduction

Texas counties vary dramatically across socio-economic factors. They range in population from 127 in Loving county to 2.9 million in Harris County. Population densities range from less than one person per square mile to 2,175 people per square mile. Some economies are nearly exclusively agrarian, others are heavily dependent upon oil and gas and yet others closely reflect the national economy. These, and other variations, create difficulties when comparing the public fiscal health of the counties; ie a county's ability to generate revenues for public goods and services.

Per capita income was once the standard of comparison. Public policy analysts recognized the relationship between income and tax revenue and used per capita income as a proxy for revenue generating potential. This method proved convenient but had some pitfalls. Time lags of varying durations often occurred between changes in per capita income and changes in the fiscal health of the county. In heavily industrialized regions, the local per capita income did not reflect the property wealth held by non-residents.

A frequently used substitute for the per capita income measure is the Representative Tax System (RTS) procedure. The RTS procedure has been used extensively by the Advisory Commission on Intergovernmental Relations in the comparison of state tax potential and effort. Two measures are commonly used for comparison purposes. The Tax Capacity per capita is the amount of tax revenue a jurisdiction would collect, per capita, if it imposed an average tax rate on the relevant tax base. When the ratio of the individual jurisdiction Tax Capacity to the Tax Capacity of the average jurisdiction is multiplied by one hundred the result is the Tax Capacity Index. The Tax Capacity Index is a relative measure of how the

individual jurisdiction compares to the group average. Tax Effort indicates the portion of the Tax Capacity that the jurisdiction actually collects. The Tax Effort Index is the ratio of the actual tax revenue collected to the Tax Capacity. For jurisdictions that collect taxes from numerous bases and at various rates, the Tax Capacity Index is weighted by the relative importance of the array of taxes. Texas counties generate most of their tax revenue from the property tax. This study focuses on the Tax Capacity Index and Tax Effort Index of Texas counties calculated exclusively with the county property tax rates and levies.

The Tax Capacity Index, when using only the property tax base and the property tax rate, becomes the comparison of the individual county per capita property value to the average per capita property value for all Texas counties. The Tax Capacity Index will exceed one hundred when the per capita property value of individual county exceeds the county average per capita property value. Likewise, the Tax Effort Index becomes the comparison of the property tax rate of the county to the average property tax rates of all Texas counties. The Tax Effort Index exceeds one hundred when the property tax rate of the individual county exceeds the county average property tax rate. Counties with above average per capita property values will have a Tax Capacity Index above one hundred and counties with above average property tax rates will have a Tax Effort Index above one hundred.

This report contains the historical trend of the Tax Capacity Index and Tax Effort Index for all Texas Counties from 1980 through 1993. The capacity and effort of each county is compared to counties of similar type, i.e. urban or rural, size, and in close proximity.

Tax Capacity Index and Tax Effort Index are relative measures of wealth and taxing activity of governmental units. Counties with relatively limited

resources may be the counties that are compelled to tax at higher than average tax rates. County officials that aggressively and successfully pursue economic development can use the Tax Capacity Index and the Tax Effort Index as a relative measure of the efficacy of their efforts.

Data

The state of Texas created the State Property Tax Board in 1981 and over the subsequent three years formed County Appraisal Districts (CAD), of which Texas counties were required to be members, that assumed the responsibility of appraising property. The State Property Tax Board originally supervised the CADs but in 1991 the Property Tax Division of the State Comptroller of Public Accounts assumed the responsibility.

The state standardized appraisal methods across counties, the categories of taxable property, and the appraisal value to market value requirements. Standardized methods ensured that similar types of property were appraised in the same fashion. Counties may have differed in property value but it was not attributable to a difference in the appraisal methods. The fiscal capacity notion then was more useful and powerful since the types of property and the methods used to determine property value were uniform across counties.

The data used in this study was from the Annual Property Tax Report published by either the Property Tax Board or the Office of the State Comptroller from each year between 1980 through 1993 inclusive. The report provided the appraised value of property for each county across fifteen different property categories, the total appraised value of property in the county and the total levy collected. The individual county effective property tax rate for each year was calculated by dividing the total levy by the total appraised value and multiplying the result by 100. The report also contained the aggregated state property values and levy. The

statewide county average property tax rate was calculated in the same way as the individual county rates.

Some counties did not report fully every year. In some cases the total property value or the total levy or both were absent. For a given county, if total property value was not reported but the levy was reported, we estimated it by averaging the property tax rates from the previous and following year and dividing the average into the reported levy. If the county did not report the property value or the levy, the property value was estimated by averaging the property values of the preceding and following years. The tax rate was estimated in similar fashion and the levy was estimated by applying the estimated tax rate to the estimated tax base. When the county reported the tax base but not the levy we estimated the levy by applying the estimated tax rate, the average of the prior and following year rates, to the reported property value. Counties reported sufficiently well and missing data was not a serious problem.

The Tax Capacity Index and Tax Effort Index are both per capita measures. This required annual county population estimates. Texas A&M University, Center for Rural Sociology, Population Division provided the county population estimates.

Methodology

A county's per capita Tax Capacity was determined by multiplying the county property tax base (per \$100) by the state average property tax rate and then dividing by the population of the county. For example, Dallas county property value and population in 1993 was \$85,945,858,817 and 1,926,968 respectively. The 1993 state average county property tax rate was \$0.289 per \$100 value. Dallas county tax capacity was \$248,383,531.98, $[(\$85,945,858,817/\$100)*\$0.289]$. The per capita tax capacity was \$128.90, $[\$248,383,531.98/1,926,968]$. The Tax Capacity

Index is the ratio of the respective county per capita tax capacity to the state average per capita tax capacity times 100. The average per capita tax capacity for Texas counties in 1993 was \$114.94. The 1993 Dallas county Tax Capacity Index was 112.14, $[(128.90/114.94)*100]$. The value of 112.14 indicated that per capita property value in Dallas county in 1993 was 12.14 percent higher than the state average county per capita property value.

The same operations were performed on 1993 data for Hunt county. The Tax Capacity Index of 68.93 indicated that per capita property value in Hunt county was only sixty-nine percent of the state average county per capita property value.

A county's Tax Effort Index was determined by dividing the per capita total property tax levy by the per capita tax capacity and multiplying the result by one hundred. Dallas county 1993 total property tax levy and population were \$151,994,979 and 1,926,968 residents respectively. The per capita property tax levy was \$78.88. $[\$151,994,979/1,926,968]$ Using the per capita tax capacity of \$128.90 from above, the result of per capita property tax levy over per capita capacity was 0.6119 which produced the value of 61.19 for the Tax Effort Index. Property tax rates in Dallas county in 1993 were only sixty-one percent of the average Texas county property tax rates.

We performed the same operations on the 1993 data for Hunt county to determine the Tax Effort Index to be 126.25. The Hunt 1993 county property tax rate exceeded the average Texas county property tax rate by twenty-six percent.

The Tax Capacity Index and the Tax Effort Index were calculated for each of the 254 Texas counties and have been organized first by economic

region of the state and then by urban or rural counties. The economic regions of the state were established according to Texas Area Facts, a 1996 Texas Comptroller of Public Accounts publication. The state is divided into ten regions. The map in the appendix shows the regions to be Central Texas, Upper East Texas, Metroplex, Northwest Texas, High Plains, West Texas, Upper Rio Grande, South Texas, Gulf Coast, and Southeast Texas. The counties have been listed by economic region in the appendix.

Overall, 84.02 percent of the state's population lived in metropolitan counties. Some regions, however, were more urbanized than others. Table 1 displays the metropolitan county population, rural county population, total population, and percent of total population that was metropolitan.

Table 1

Texas Metropolitan and Rural Population by Economic Region

<u>Economic Region</u>	<u>Metropolitan Population</u>	<u>Rural Population</u>	<u>Total Population</u>	<u>Percent Metropolitan</u>
Central	1,524,505	333,543	1,858,048	82.05
Gulf Coast	4,27,874	171,970	4,199,844	95.91
High Plains	421,371	316,996	738,367	57.07
Metroplex	4,348,245	191,475	4,539,720	95.78
Northwest Texas	251,408	270,540	521,948	48.17
South Texas	2,744,497	651,242	3,395,739	80.82
Southeast Texas	371,972	303,385	675,357	55.08
Upper East Texas	439,926	423,470	863,396	50.95
Upper Rio Grande	646,877	24,185	671,062	96.40
<u>West Texas</u>	<u>334,685</u>	<u>188,136</u>	<u>522,821</u>	<u>64.02</u>
Total	15,1114,360	2,874,942	17,986,302	84.02

Three regions were nearly equal in percent of population living in metropolitan counties. The upper Rio Grande had the highest percent of

population living in metropolitan counties, 96.4 percent. It was followed closely by the second most populated region, the Gulf Coast, which had 95.91 percent living in metropolitan counties. The Metroplex, the most populated region of the state, had 95.78 percent of its residents living in metropolitan counties. Only one region, Northwest Texas, had fewer people living in rural counties than in metropolitan counties. High Plains, Southeast Texas, and Upper East Texas, however, had 57.07 percent, 55.08 percent, and 50.95 percent respectively living in metropolitan counties.

Section II reviews the Tax Capacity Indexes and Tax Effort Indexes of the twenty-seven Texas metropolitan areas for the years 1980, 1987, and 1993. Section III contains a similar review for the rural counties in the ten economic regions of the state. Section IV focuses on the trends of the two indexes for the counties within each metropolitan area. Section V concludes the report with an analysis of the trends of the indexes for the rural counties.

II. Standard Metropolitan Areas

Approximately fifteen million people lived in the metropolitan areas of Texas in 1993. Table 2 below shows South Texas contained over one fifth of the twenty-seven metropolitan areas of the state but over one half of the population lived in metropolitan areas of the Gulf Coast or Metroplex regions. The number of counties of each metropolitan area and the average population of metropolitan counties have also been included in the table. The average metropolitan county population was important because the Tax Capacity Index and the Tax Effort Index represented per capita measures. Differences in the either index could arguably be caused simply by wide variations in populations. The average metropolitan county population ranged from eighty-three thousand in Northwest Texas to over six hundred thousand in the Upper Rio Grande region. El Paso is the only

metropolitan county in the Upper Rio Grande area and as such was an exception to the other areas. The mean of the average metropolitan county population was 260,540.69. Two economic regions of multiple metropolitan areas and counties, the Gulf Coast and the Metroplex, had average county populations that significantly exceeded the overall average. These two regions contained Texas' two most populous counties; Harris and Dallas. When the average metropolitan county population was computed with Harris or Dallas county excluded from their respective groups, the overall mean county population was 181,761.89 and the Gulf Coast Region and Metroplex Region average county population was 146,021 and 201,773 respectively. The regional averages clustered more closely around the overall mean which reduced the chance of population variations, in general, to be the source of differences among the county Tax Capacity Index and Tax Effort Index for metropolitan counties.

Table 2
Metropolitan Population by Economic Region

<u>Economic Region</u>	<u>Number of Metropolitan Areas</u>	<u>Metropolitan Population</u>	<u>Number of Metropolitan Counties</u>	<u>Average Metropolitan County Pop.</u>
Central Texas	4	1,524,505	8	190,563.13
Gulf Coast	3	4,027,874	8	503,484.25
High Plains	2	421,371	3	140,457.00
Metroplex	3	4,348,245	13	334,480.38
Northwest Texas	2	251,408	3	83,802.67
South Texas	6	2,744,497	9	304,944.11
Southeast Texas	1	371,972	3	123,990.67
Upper East Texas	3	439,926	3	146,642.00
Upper Rio Grande	1	646,877	1	646,877.00
<u>West Texas</u>	<u>2</u>	<u>334,685</u>	<u>3</u>	<u>111,561.67</u>
Total	27	15,111,360	58	260,540.69

Tax Capacity Index

Table 3 displays the Tax Capacity Index for 1980, 1987, and 1993 by Texas metropolitan areas. The Tax Capacity Index for each metropolitan area was computed as a weighted average of the individual counties' Tax Capacity Index within each metropolitan area. The parenthetical numbers indicate the rank of the metropolitan Tax Capacity Index in the respective year. Correlation analysis of the ranks between 1980 and 1987 indicated no significant change in over all rankings. Similar analysis of ranks between 1987 and 1993 indicated even less change in rank order than in the earlier period. Some rank change, however, did occur.

The metropolitan areas among the top five in the state in 1980 were Brazoria, Galveston, Odessa-Midland, Victoria, and Longview-Marshall. These five metropolitan areas had the highest per capita county property values in Texas in 1980. The influence of the 1980 world price of oil is apparent. The top five metropolitan areas of 1987 contained only two areas, Brazoria and Longview-Marshall, that were also in the top five in 1980. The Austin, Dallas, and Houston metropolitan areas completed the top five of 1987. Brazoria and Longview-Marshall continued to have among the top five per capita property values in 1993 along with Beaumont-Port Arthur, Dallas, and Galveston. Houston fell to six in the rankings for 1993 and Austin metropolitan area was eight. The areas with the five lowest 1980 per capita property values came from five different economic regions. Waco and San Angelo had the fifth and fourth lowest Tax Capacity Index respectively. Lubbock had the third lowest index. Texarkana and the Brownsville-Harlingen metropolitan areas had the lowest Tax Capacity Index, i.e. per capita property values, in 1980. Only two of the lowest five areas in 1980 were also among the bottom five in 1987. Waco continued to be ranked twenty-third among twenty-seven areas and Brownsville-Harlingen fell in rank from twenty-six to twenty-

Table 3
Tax Capacity Index for Texas Metropolitan Areas

<u>Metropolitan Area</u>	Economic <u>Region</u>	Metropolitan Average Capacity Index		
		<u>1980 (Rank)</u>	<u>1987 (Rank)</u>	<u>1993 (Rank)</u>
Abilene	Northwest	63.22(17)	65.85(19)	61.74(23)
Amarillo	High Plains	97.13(8)	74.51(16)	82.03(14)
Austin	Central	66.80(15)	127.38(1)	97.30(8)
Beaumont-Port Arthur	Southeast	112.68(7)	90.36(9)	116.13(2)
Brazoria	Gulf Coast	180.50(1)	118.40(3)	132.26(1)
Brownsville-Harlingen	South	39.25(26)	41.56(27)	48.87(26)
Bryan-College Station	Central	54.70(18)	64.16(20)	69.03(19)
Corpus Christi	South	91.66(9)	83.15(11)	91.34(10)
Dallas	Metroplex	64.94(16)	120.98(2)	111.71(5)
El Paso	Upper Rio Grande	82.76(13)	45.35(24)	57.12(24)
Fort Worth-Arlington	Metroplex	51.43(20)	90.94(8)	91.64(9)
Houston	Gulf Coast	114.78(6)	102.36(5)	104.32(6)
Galveston	Gulf Coast	153.62(2)	98.69(6)	114.95(4)
Killeen-Temple	Central	51.73(19)	44.07(26)	48.8(27)
Laredo	South	87.22(12)	76.31(14)	76.11(16)
Longview-Marshall	Upper East	124.12(5)	106.68(4)	115.92(3)
Lubbock	High Plains	41.58(25)	57.86(21)	68.57(20)
McAllen-Edin.-Mission	South	49.75(22)	44.55(25)	49.17(25)
Odessa-Midland	West	133.33(3)	89.30(10)	90.18(12)
San Angelo	West	47.86(24)	67.81(18)	72.35(17)
San Antonio	South	49.93(21)	78.35(13)	70.83(18)
Sherman-Denison	Metroplex	88.29(11)	74.52(15)	86.81(13)
Texarkana	Upper East	37.62(27)	56.79(22)	65.98(21)
Tyler	Upper East	89.11(10)	83.11(12)	90.51(11)
Victoria	South	127.58(4)	92.82(7)	100.10(7)
Waco	Central	49.14(23)	56.30(23)	85.16(22)
Wichita Falls	Northwest	82.06(14)	68.63(17)	77.30(15)

seven. The Killeen-Temple area ranked twenty-six and the McAllen-Edinburg-Mission area moved from twenty-two in 1980 to twenty-five in 1987. Of the bottom five in 1987, El Paso exhibited the greatest change in rank with a decline from thirteen in 1980 to twenty-four in 1987. Less shuffling in rank occurred between 1987 and 1993 which left four of the bottom five in 1987 in the bottom five in 1993. The rank of the

Brownsville-Harlingen area increased from twenty-seven to twenty-six, El Paso and McAllen-Edinburg-Mission continued to be ranked twenty-four and twenty-five respectively, and the Killeen-Temple area ranking fell to twenty-seven. The Abilene area, ranked nineteen in 1980, was ranked twenty-third.

The relative positions of the metropolitan areas with respect to Tax Capacity Index were generally stable from 1980 to 1993 but some shuffling did occur.

Tax Effort Index

Comparisons of Tax Effort Index in this study were equivalent to comparisons of county property tax rates. The changes in the Tax Effort often resulted from decisions made by voters or county commissioners and were accomplished quicker than a changes in the value of the tax base.

The rankings of metropolitan areas by Tax Effort Index, displayed in Table 4, were expected to change more than the rankings by Tax Capacity Index. Correlation analysis indicated there was no correlation between the rankings at different points in time which confirmed the expectations that the rankings changed significantly over time as counties within areas responded to changes in the county per capita property values or changing financial needs of the county. Only one area in the top five Tax Effort Index counties in 1980 was among the top five in 1987. The Tax Effort Index for Texarkana was ranked third in both years, behind Waco and San Angelo in 1980 and Bryan-College Station and Galveston in 1987. Dallas and Corpus Christi metropolitan areas had the fourth and fifth highest relative county property tax rates in 1980. By 1987, Odessa-Midland and Killeen-Temple occupied the fourth and fifth places respectively. The

Table 4
Tax Effort Index for Texas Metropolitan Areas

<u>Metropolitan Area</u>	<u>Economic Region</u>	<u>Metropolitan Average Effort Index</u>		
		<u>1980 (Rank)</u>	<u>1987 (Rank)</u>	<u>1993 (Rank)</u>
Abilene	Northwest	83.29(21)	119.03(10)	131.84(3)
Amarillo	High Plains	80.52(24)	127.57(6)	113.54(8)
Austin	Central	111.12(10)	105.77(19)	158.35(1)
Beaumont-Port Arthur	Southeast	102.86(12)	118.83(11)	102.44(12)
Brazoria	Gulf Coast	81.99(23)	113.43(16)	96.08(17)
Brownsville-Harlingen	South	81.87(22)	117.71(12)	94.23(19)
Bryan-College Station	Central	123.46(6)	169.76(1)	131.77(4)
Corpus Christi	South	121.73(5)	104.25(20)	101.36(13)
Dallas	Metroplex	123.16(4)	64.25(27)	71.17(25)
El Paso	Upper Rio Grande	49.49(27)	101.91(21)	88.41(21)
Fort Worth-Arlington	Metroplex	100.30(14)	87.51(26)	87.29(22)
Houston	Gulf Coast	120.21(7)	127.31(7)	110.27(11)
Galveston	Gulf Coast	95.91(17)	162.10(2)	140.23(2)
Killeen-Temple	Central	92.19(20)	128.99(5)	89.38(20)
Laredo	South	117.81(8)	126.48(8)	94.83(18)
Longview-Marshall	Upper East	113.70(9)	113.92(15)	97.07(16)
Lubbock	High Plains	103.67(11)	88.68(25)	55.87(27)
McAllen-Edin.-Mission	South	95.31(18)	112.72(18)	118.00(5)
Odessa-Midland	West	102.71(13)	132.43(4)	101.33(14)
San Angelo	West	140.58(2)	99.85(22)	82.66(24)
San Antonio	South	98.53(16)	88.86(24)	114.44(7)
Sherman-Denison	Metroplex	99.63(15)	125.41(9)	112.32(10)
Texarkana	Upper East	140.17(3)	132.61(3)	85.67(23)
Tyler	Upper East	77.78(26)	91.31(23)	63.68(26)
Victoria	South	78.94(25)	117.17(13)	98.48(15)
Waco	Central	171.83(1)	114.08(14)	115.22(6)
Wichita Falls	Northwest	93.49(19)	113.06(17)	112.83(9)

1993 rankings contained two metropolitan areas in the top five that had been in the top five in 1987; Bryan-College Station (moving from first to fourth) and Galveston (remaining at second in both years). The Austin metropolitan area had the highest county property tax rates, the Abilene

area had the third highest property tax rates, and the McAllen-Edinburg-Mission metropolitan area had the fifth highest.

Analysis of the bottom five positions, places that reflected the lowest metropolitan average county property tax rates, revealed further evidence of the instability of the rankings. The El Paso metropolitan had the lowest property tax rates in 1980 followed by the Tyler and the Victoria metropolitan areas. The Brazoria and Amarillo areas had the fourth and fifth lowest county property tax rates respectively. Of those five areas, only the Tyler area remained as one of the five lowest tax effort areas in 1987. The other four areas, in order of descending value of Tax Effort Index were San Antonio, Lubbock, Fort Worth-Arlington, and Dallas. Dallas had the fourth highest Tax Effort Index in 1980. Greater stability was evident in 1993. Three of the five areas with the lowest Tax Effort Index in 1987 remained so in 1993. The Dallas metropolitan area had the third lowest Tax Effort Index in 1993. The Tyler and the Lubbock areas had Tax Effort Indexes lower than the Dallas area. The Texarkana area Tax Effort Index, ranked number three in 1980 and 1987, ranked number twenty-three in 1993. The San Angelo area Tax Effort Index, ranked number two in 1980, ranked number twenty-four thirteen years later.

Scattergrams provided evidence of the relationship between the Tax Capacity Index and the Tax Effort Index of metropolitan Texas counties. Figure 1 is a plot of the Tax Capacity Indexes and the Tax Effort Indexes of the fifty-seven Texas metropolitan counties.

The pattern indicates a weak relationship of low capacity and high effort. A correlation coefficient of -0.30 supported the visual evidence of a negative relationship. The relationship was interpreted as weak because correlation coefficients range for -1.00 to +1.00 with a value of 0.00 meaning no relationship.

Tax Capacity Index vs. Tax Effort Index
Metropolitan Texas Counties
1980

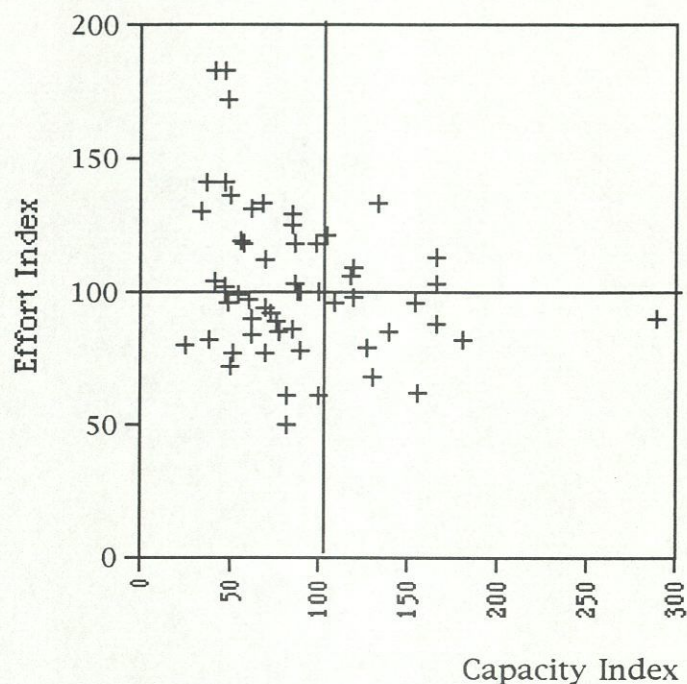


Figure 1

Figure 2 displays the metropolitan counties Tax Capacity Index and the Tax Effort Index for 1987. The pattern is more concentrated in the upper left hand quadrant of the graph. This pattern indicated that metropolitan counties had above state average property county tax rates regardless of their respective capacity. The correlation coefficient for 1987, -0.17 , reflected a weaker relationship between Tax Capacity and Tax Effort Index in 1987 than in 1980. The trend of the weakening correlation between the Tax Capacity Index and the Tax Effort Index continued to 1993.

Tax Capacity Index vs. Tax Effort Index
Metropolitan Texas Counties
1987

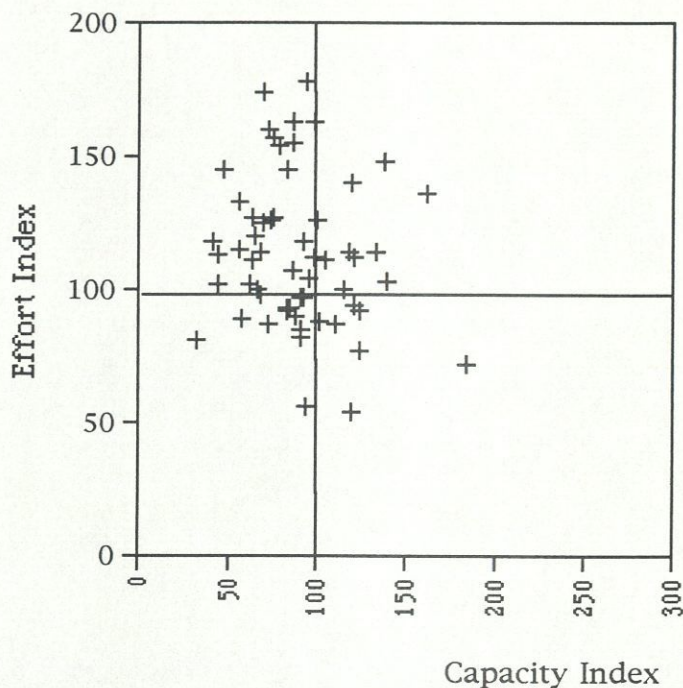


Figure 2

Figure 3 shows relatively few metropolitan counties above the state average in capacity while the effort index is distributed evenly above and below the one-hundred value for Tax Effort Index. The correlation coefficient for 1990, 0.07, indicated essentially no relationship between the Tax Capacity Index and the Tax Effort Index.

One possible explanation for the longitudinal weakening relationship between counties' Tax Capacity Index and Tax Capacity Effort was the relatively reduced dependency on the property tax by counties. Constitutional and political constraints have caused some urban counties to explore a variety of revenue sources beyond the traditional property tax. A greater reliance on user fees could have contributed to a weakened relationship between property values and property tax rates.

Tax Capacity Index vs. Tax Effort Index
Metropolitan Texas Counties
1993

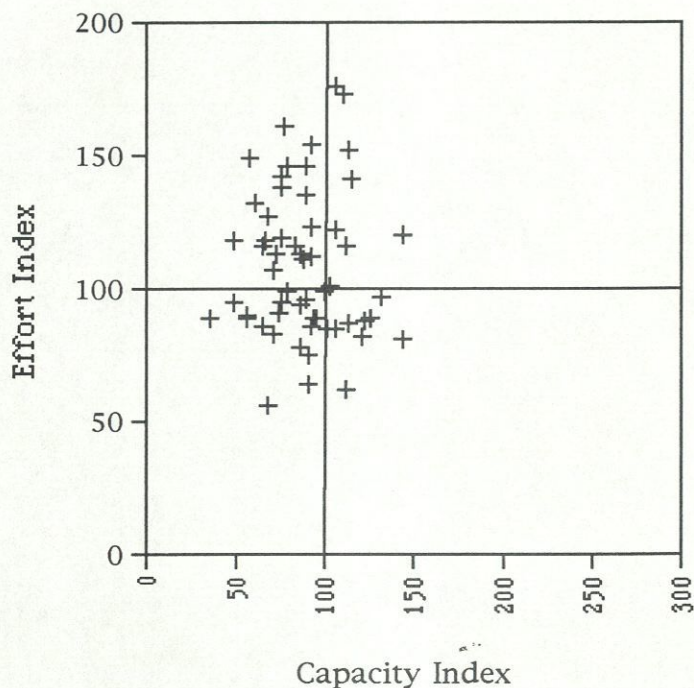


Figure 3

It should be noted that the general trend of a weak relationship between the Tax Capacity Index and the Tax Effort Index was not found to hold uniformly for individual counties and for all time periods. Numerous counties displayed a negative relationship between Tax Capacity Index and its Tax Effort Index while other counties exhibited a positive relationship between the two indexes. Explanations include greater demands placed on the county as the county's economy grew which increased property values. A county may have increased tax rates but not as much as other counties. Also, counties that are subject to numerous overlapping jurisdictions may find it politically impossible to adjust rates as property values change.

III. Rural Areas

The rural counties of the state comprised the remaining 196 of the 254 Texas counties. The total 1993 rural county population was 2.9 million and rural counties had an average of 14,668 population. Rural county population ranged from a minimum of 127 in Loving county, in West Texas, to maximum of 76,569 in Angelina county, in Southeast Texas. The number of rural counties in economic regions ranged from as few as five in the Gulf Coast and Upper Rio Grande regions to as many as thirty-eight in the High Plains. See Table XX. The Upper Rio Grande had the lowest population, 24,185, and South Texas had the highest population, 651,242. Upper Rio Grande region also had the lowest county average population, 4,837, while the Gulf Coast region had the highest county average population, 34,394.

Table 5
Total and Average Rural County Population by Region

<u>Economic Region</u>	<u>Number of Counties</u>	<u>Total Regional 1993 Population</u>	<u>Average County Population</u>
Central Texas	21	333,543	15,883
Gulf Coast	5	171,970	34,394
High Plains	38	316,996	8,342
Metroplex	7	191,475	27,354
Northwest Texas	27	270,540	10,020
South Texas	37	651,242	17,601
Southeast Texas	12	303,385	25,282
Upper East Texas	17	423,470	24,910
Upper Rio Grande	5	24,185	4,837
West Texas	<u>27</u>	<u>188,136</u>	<u>6,968</u>
Total Rural Population	196	2,874,942	14,668

Low population numbers in some counties created comparison problems of the Capacity Index and Effort Index. Some rural Texas counties had populations so small that the per capita measure of capacity was more than one hundred times greater than the state average and produced a

Capacity Index in excess of one thousand. The respective Effort Index indicated rates far below the state average. Loving county, for example had estimated population that never exceeded two hundred residents. The 1980 Tax Capacity Index and Tax Effort Index for Loving county was fourteen thousand and fifty-seven respectively. The Tax Capacity Index increased to a high mark of eighteen thousand in 1982. In that same year the Tax Effort Index reached its lowest value, just under forty-two. For comparison purposes, area wide Tax Capacity Indexes and Tax Effort Indexes were calculated weighting the individual county values with the proportion of regional population residing in the county. This ensured the sparsely populated counties had a proportionate influence on the aggregate regional values.

With respect to Tax Capacity Index, three areas, West Texas, High Plains, and Upper Rio Grande were among the top five areas for all three years. Northwest Texas and South Texas were among the top five areas in 1980 but not for 1987 and 1993. Since the state is divided into ten economic regions, any movement out of the top five means movement into the bottom five. A correlation analysis of the rankings indicated that the rankings did not change significantly between 1980 and 1987 or between 1987 and 1993. Tax Effort Indexes rankings were only slightly less stable. Two regions were among the top five areas for all three years. South Texas was ranked first or second for each year and the Gulf Coast region was ranked fifth in 1980 and third in 1987 and 1993. Correlation analysis indicated the rankings changed significantly between 1980 and 1987 but not between 1987 and 1993. Recall, above average Tax Effort Index indicates above state average county property tax rates.

Table 6
Tax Capacity Index for Texas Rural Areas

<u>Economic Region</u>	Rural Average Capacity Index <u>1980 (Rank)</u>	Rural Average Capacity Index <u>1987 (Rank)</u>	Rural Average Capacity Index <u>1993 (Rank)</u>
Central Texas	92.70(8)	137.75(4)	136.88(5)
Gulf Coast	122.28(7)	125.57(5)	147.86(3)
High Plains	265.20(2)	149.41(3)	169.29(2)
Metroplex	73.85(9)	82.70(10)	92.39(10)
Northwest Texas	162.19(3)	108.95(7)	121.28(6)
South Texas	135.09(5)	123.83(6)	116.08(7)
Southeast Texas	64.90(10)	82.80(9)	93.12(9)
Upper East Texas	123.50(6)	104.00(8)	107.00(8)
Upper Rio Grande	154.46(4)	170.27(2)	145.92(4)
West Texas	592.90(1)	273.34(1)	276.10(1)

Table 7 shows that for the ten regions, in the three years that were reviewed, the rural counties, as a group, had below state average county property tax rates seven out of the thirty times.

Table 7
Effort Index for Texas Rural Areas

<u>Economic Region</u>	Rural Average Effort Index <u>1980 (Rank)</u>	Rural Average Effort Index <u>1987 (Rank)</u>	Rural Average Effort Index <u>1993 (Rank)</u>
Central Texas	123.29(4)	116.30(4)	100.75(7)
Gulf Coast	122.28(5)	131.23(3)	112.63(3)
High Plains	90.46(9)	114.18(6)	108.55(5)
Metroplex	130.77(3)	108.41(7)	101.13(6)
Northwest Texas	103.32(7)	116.15(5)	110.92(4)
South Texas	141.46(1)	140.79(2)	145.28(1)
Southeast Texas	134.54(2)	96.43(9)	90.88(9)
Upper East Texas	113.40(6)	108.35(8)	100.12(8)
Upper Rio Grande	97.48(8)	88.97(10)	84.47(10)
West Texas	89.52(10)	142.12(1)	118.67(2)

Scattergrams were produced with a limit on the range of the values for the Tax Capacity Index and the Tax Effort Index. This prevented outlier from compacting the majority of observation into a small area of the graph. Figure 4 indicates that sufficient observations remained to reveal a pattern of slight negative association between the Capacity Index and the Effort Index in 1980. A correlation coefficient of -0.13 also indicated a moderately negative relationship. This correlation was interpreted to mean that counties with a relatively high Tax Capacity Indexes had a relatively low Tax Effort Index. Rural counties that had relatively high county property values were counties that had relatively low county property tax rates. The relationship, however, was weak.

Tax Capacity Index vs. Tax Effort Index
Rural Texas Counties
1980

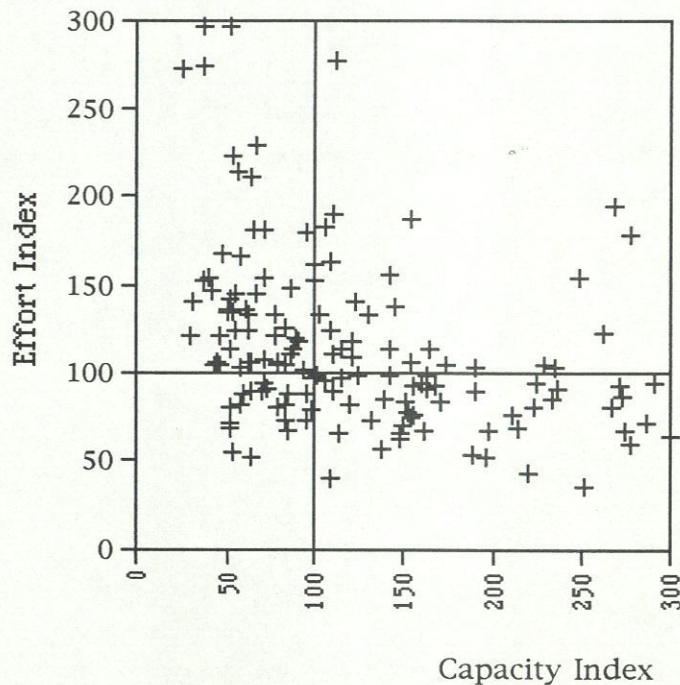


Figure 4

Figures 5 and 6 display analogous data for 1987 and 1993 respectively. Less of a pattern existed between Tax Capacity Index and Tax Effort Index. The correlation analysis also revealed a weakened relationship between the two indexes. The correlation coefficient for 1987 was -0.07, just over one-half the 1980 value. The correlation coefficient for the 1993 data, -0.06, was less than half the 1980 value.

Tax Capacity Index vs. Tax Effort Index
Rural Texas Counties
1987

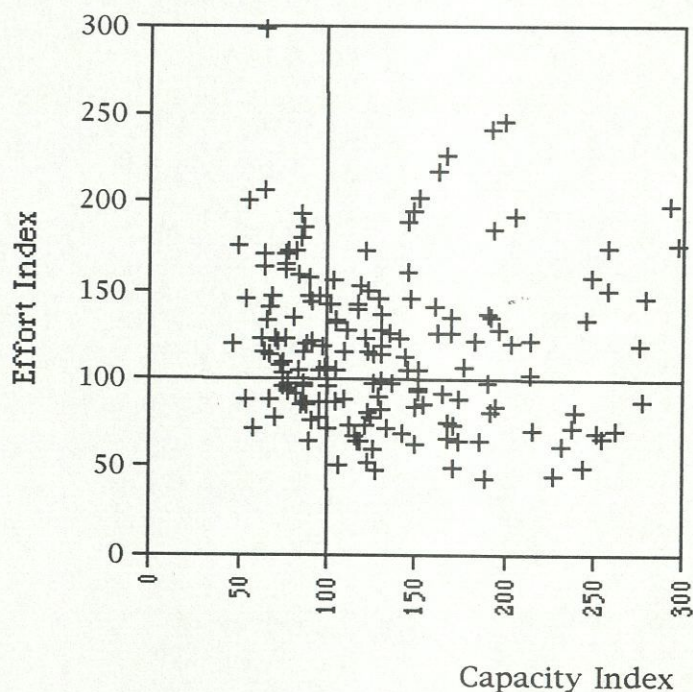


Figure 5

This weakened statistical relationship between the Tax Capacity Index and the Tax Effort Index in 1987 and 1993 indicated that one could no longer assume that a rural county with a relatively high county property tax base would also be among counties that have relatively low county property tax

rates. The reasons for this weakened correlation could be attributable to political and constitutional constraints on property tax rates as well as the hard work of county officials finding ways to do more with less in poor times and not becoming extravagant in relatively good times.

Tax Capacity Index vs. Tax Effort Index
Rural Texas Counties
1993

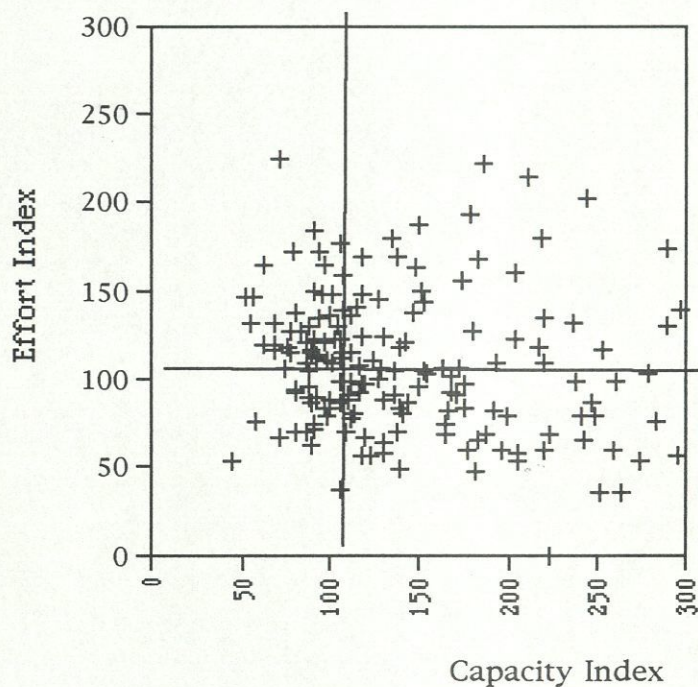


Figure 6

Rural regions and metropolitan areas exhibited considerable stability of the rankings by Tax Capacity Index and less stability of the rankings by Tax Effort Index. In both cases the slow changes in the property tax base was attributable to the stability of the rankings by Tax Capacity Index and the ability to adjust tax rates was the reason for less stability in the rankings by Tax Effort Index. The political, constitutional, and environmental constraints likely contributed to the stability of the rankings by Tax Effort Index.

The next section analyzes the trend of the Tax Capacity Index and Tax Effort Index for each county. The counties are organized first by economic region of the state and then by metropolitan versus rural.

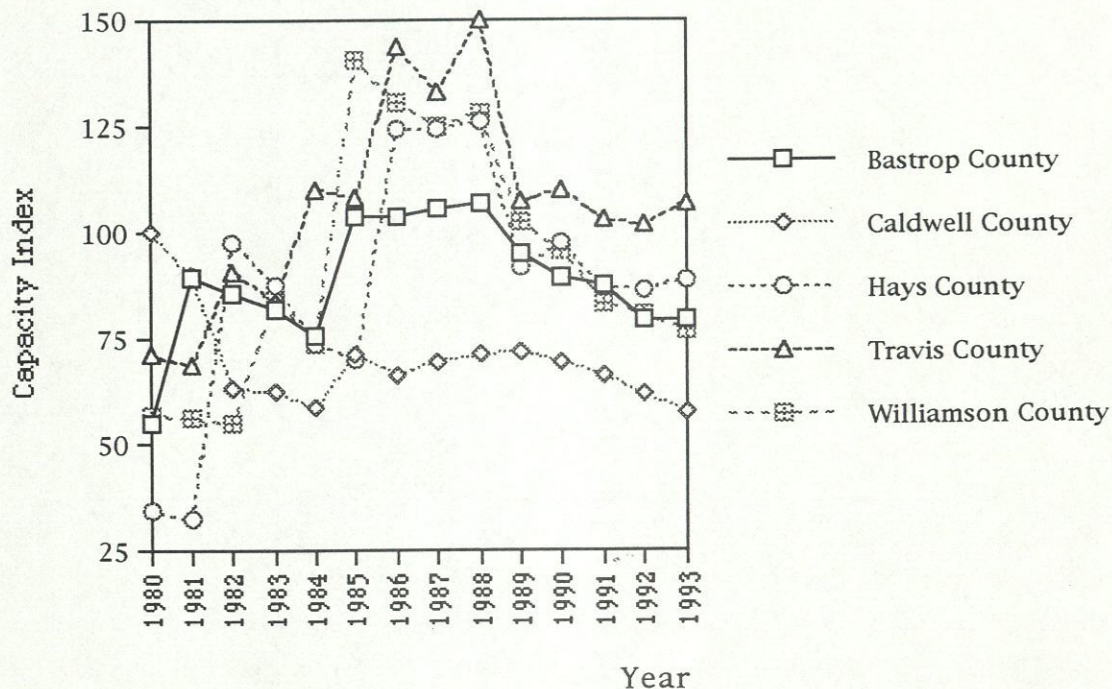
IV. Time Trend Analysis

The time trend analysis revealed not all counties fared equally well at all times. Some regions benefited from economic changes while other regions suffered. Within a region some counties thrived while others struggled. Even within metropolitan areas, individual counties outperformed relative to their neighboring counties.

The regions have been organized alphabetically and within each region the metropolitan counties precede the rural counties. The rural counties have been roughly grouped by population.

CENTRAL TEXAS REGION
METROPOLITAN COUNTIES

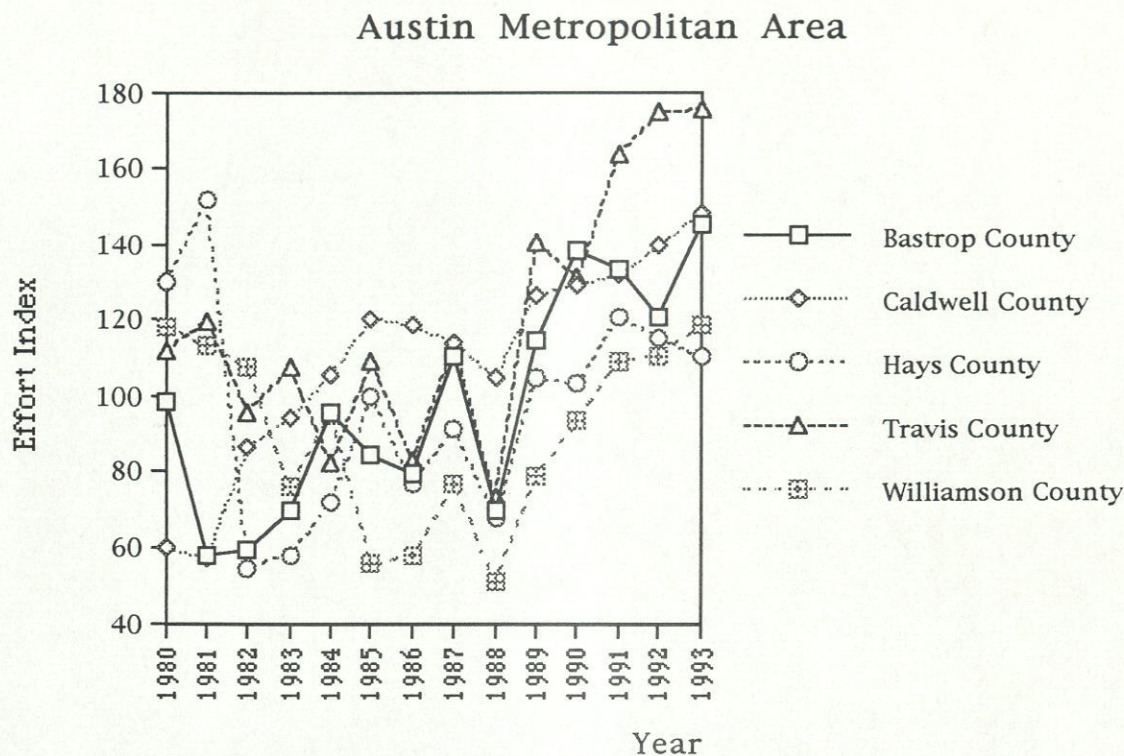
Austin Metropolitan Area



Austin Metropolitan Area
County Property Tax Per Capita Capacity Index

The five county metropolitan area Capacity Index started the thirteen year study period over thirty points below the state average, 66.80. By mid-period it had risen to 127.38, the highest in the state. The metropolitan area Capacity Index declined between 1987 and 1993 and finished at near the state average, 97.30; eighth in the state. The individual county Capacity Indexes reflected this gradual increase. They began below the state average but generally increased over time. Exceptions were Caldwell which started with a capacity index at 100 and experienced a steady downward trend. Travis county capacity per capita was below state

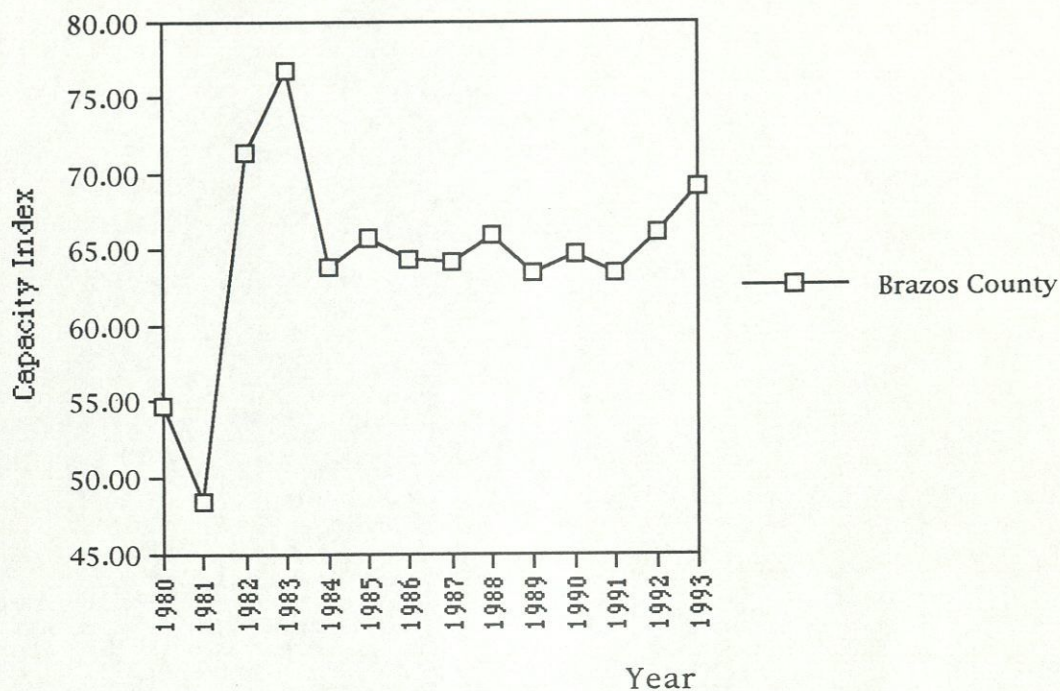
average in 1980, peaked at 150 in 1988 and finished just above 100.



Austin Metropolitan Area
County Property Tax Per Capita Effort Index

The metropolitan area Effort Index was above the 100 mark in the initial, middle, and end years of the study period. The area Effort Index decreased the first half of the period from 111.12 to 105.77 but then increased to 158.35 by 1993. The graph of individual counties exhibited steady increase over time but in early years the effort index declined and then increased for numerous counties. Travis county's decline in capacity in later years may partially explain the increased effort over same time period. The Caldwell county Effort Index increased from lowest of group to second highest of group by end of time period.

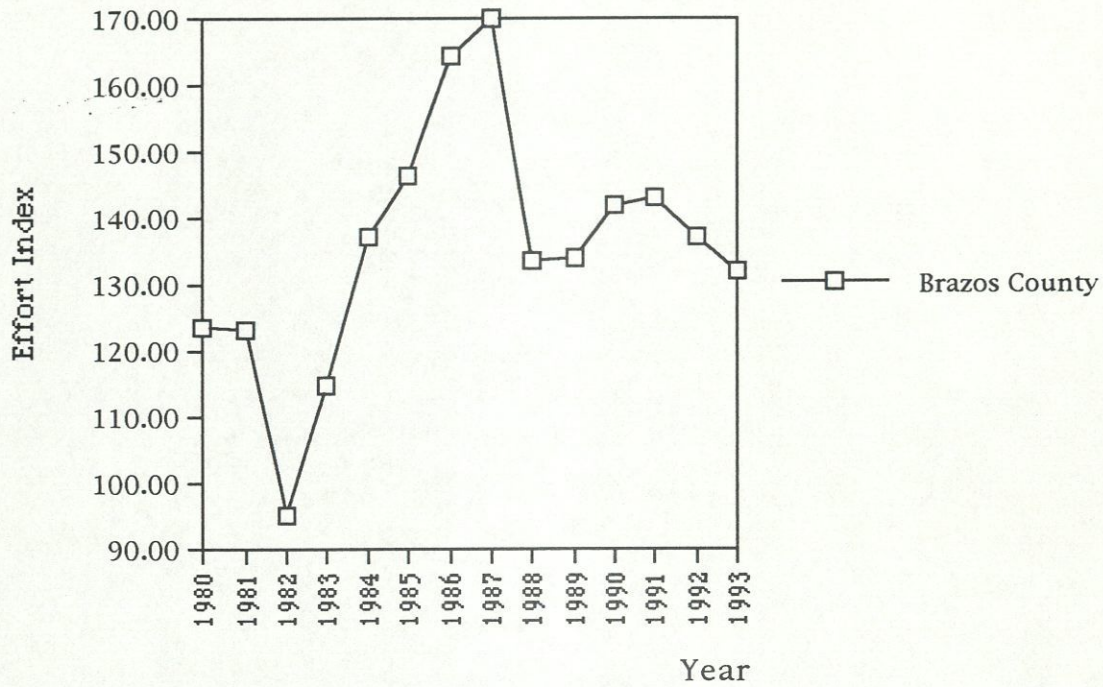
Bryan College Station Metropolitan Area



Bryan College Station Metropolitan Area
County Property Tax Per Capita Capacity Index

The 1980 Capacity Index indicated county property values to be fifty-five percent of the state average county property values. Relative property values improved dramatically by 1983 and then declined in 1984. Property values in the one county metropolitan area, Brazos, remained relatively constant to the end of the period but were always significantly below state average values.

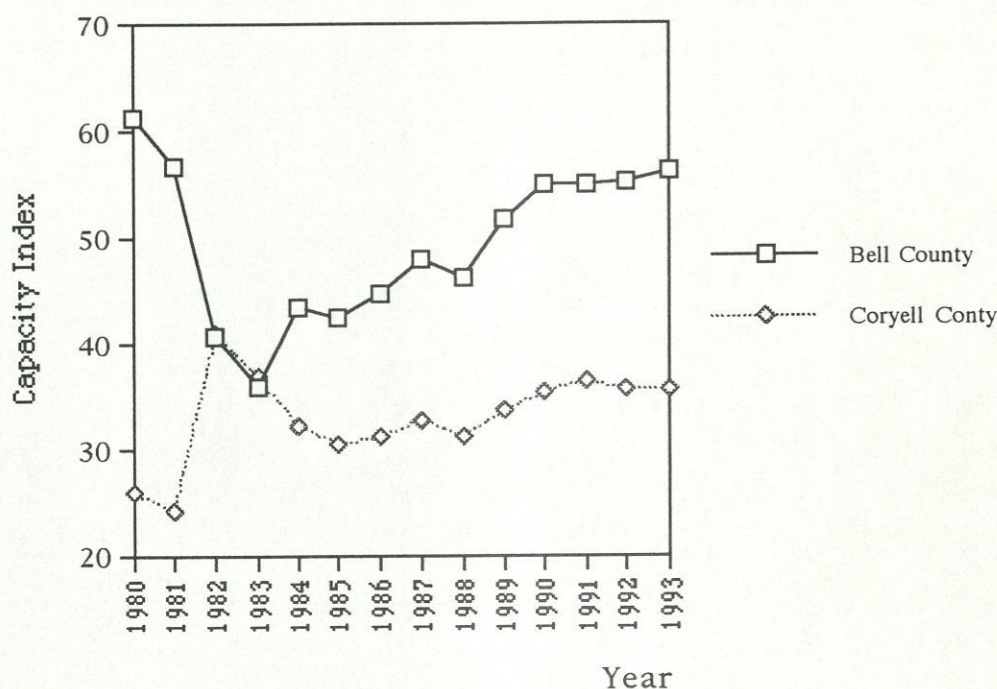
Bryan College Station Metropolitan Area



Bryan College Station Area County Property Tax Per Capita Effort Index

The Effort Index reflected above average property tax rates for every year except 1992. The decline in 1982 corresponded with the increase in the Capacity Index in that year. The Effort Index increased from 1982 until 1987, declined forty points and stabilized within a ten point range. Property tax rates in the Bryan College Station metropolitan area were consistently above the state average.

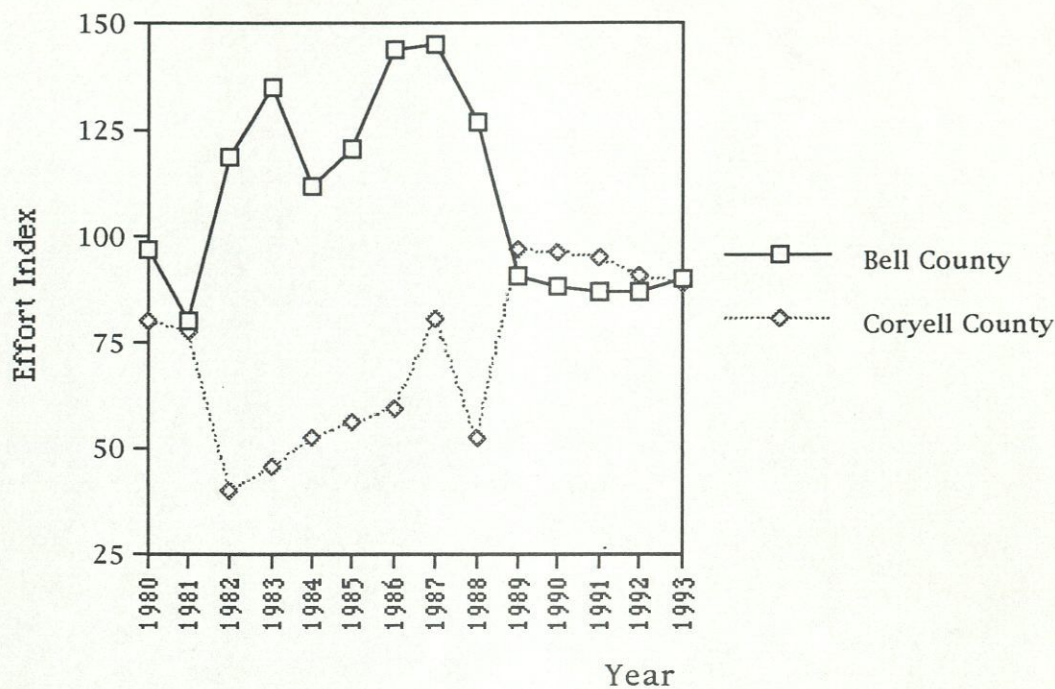
Killeen-Temple Metropolitan Area



Killeen-Temple Metropolitan Area
County Property Tax Per Capita Capacity Index

The two county area Capacity Index indicated below average per capita property values throughout the study period and the trend of the Capacity Index indicated a worsening of relative property values over time. The area was below average at the beginning and fell further behind over time. The area was ranked nineteenth in 1983 and dropped to twenty-six and twenty-seven in rank for 1987 and 1993 respectively. The Capacity Index for Bell county, the more populous county, peaked in 1980 dropped significantly over the next three years and exhibited a steady twenty point recovery from 1983.

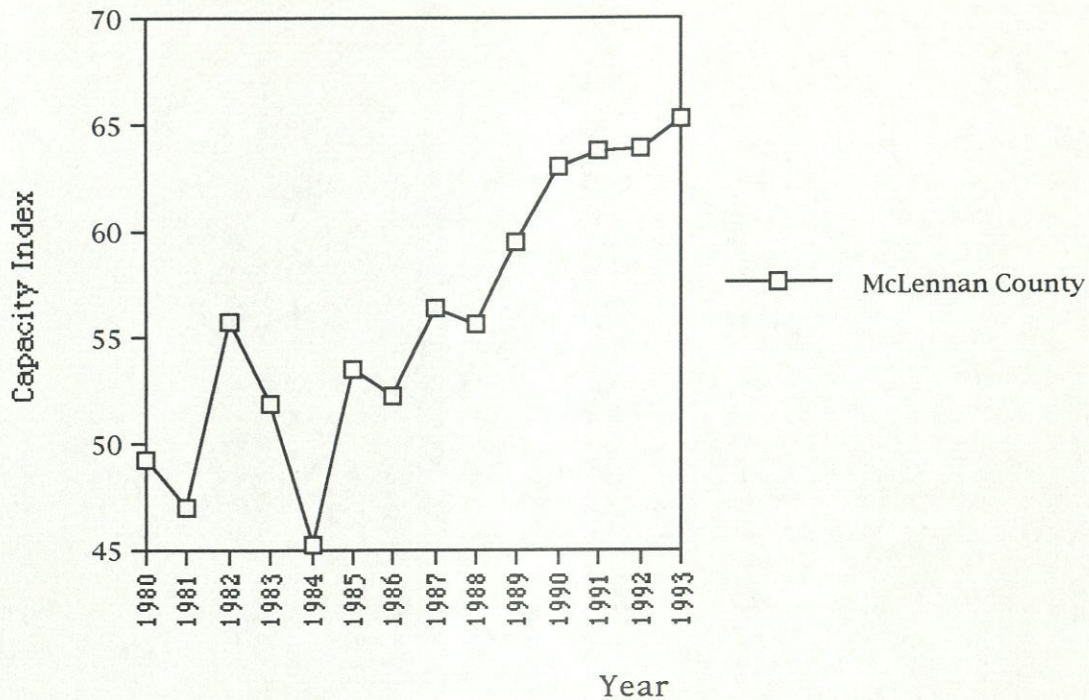
Killeen-Temple Metropolitan Area



Killeen-Temple Metropolitan Area
County Property Tax Per Capita Effort Index

The Effort Index for 1980 ranked twentieth with a 92.19 value. County property tax rates increased relative to other Texas metropolitan areas during the first half of the study period and reached 128.99 in 1987; a ranking of five. The increase was primarily caused by the approximate fifty point increase in Bell county's Effort Index. The area Effort Index decreased in the later half of the study period to 89.38 and once again ranked twentieth in Effort Index. Bell county's Effort Index declined over this same period.

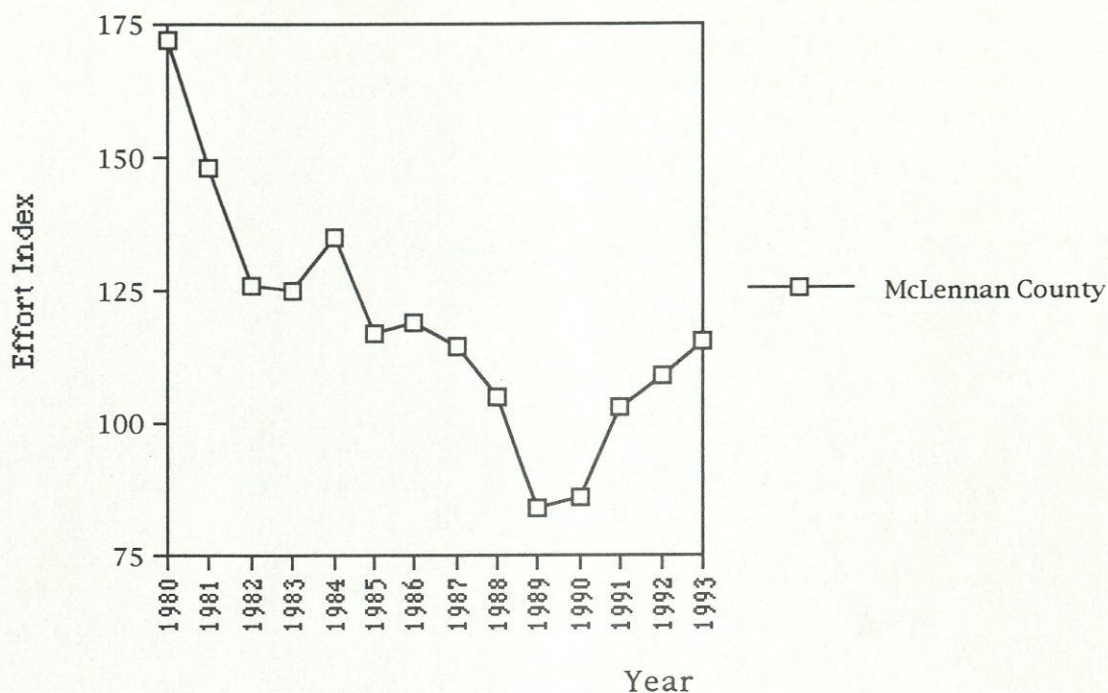
Waco Metropolitan Area



Waco Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index for the single county area increased steadily from 1984 forward. The area had the fourth smallest Capacity Index in 1980, 49.14, as well as in 1987, 56.30. The highest value for Capacity Index, 85.16 occurred in 1993 and improved the ranking by one place. The steady increase reflected a strengthening of the per capita property value but the area per capita property values remained substantially below the state average.

Waco Metropolitan Area

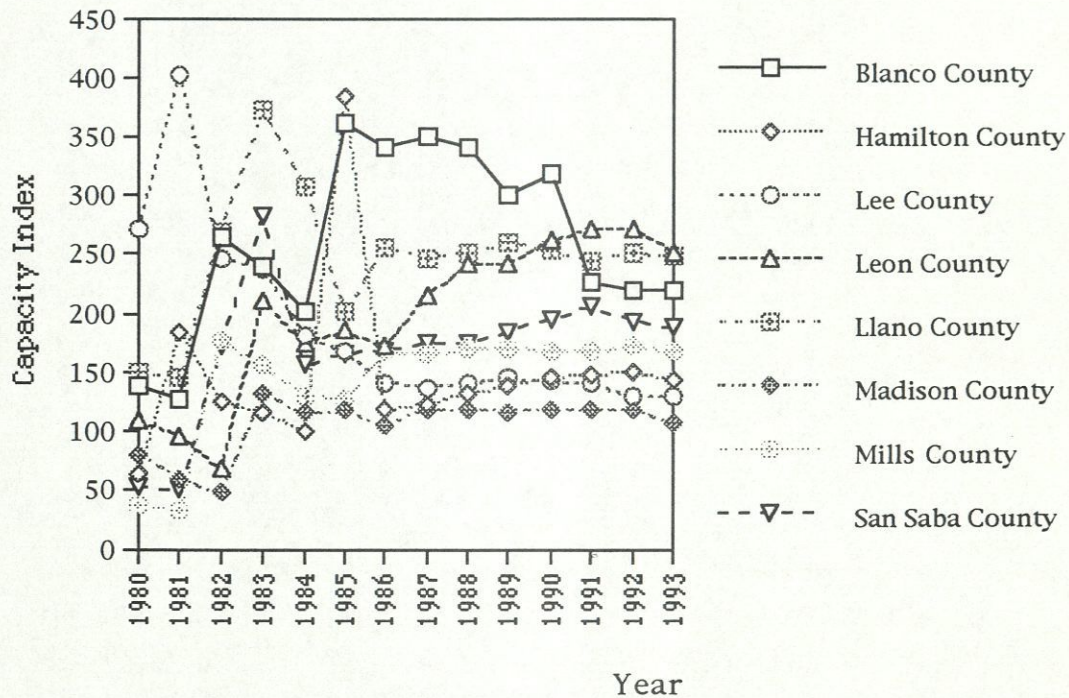


Waco Metropolitan Area
County Property Tax per Capita Effort Index

Overall, the Effort Index declined until the final four years of the study period at which time the trend reversed itself. This indicated a decline in property tax rates relative to other Texas metropolitan area and then a moderate increase. The highest Effort Index, 171.83, occurred in 1980 and was also the largest among Texas metropolitan areas. The 1987 Effort Index, 114.08, reflected the ongoing decrease. The area's rank fell to fourteen. By 1993, the Effort Index had increased slightly to 115.22 but had increased its rank to six.

CENTRAL TEXAS REGION
RURAL COUNTIES

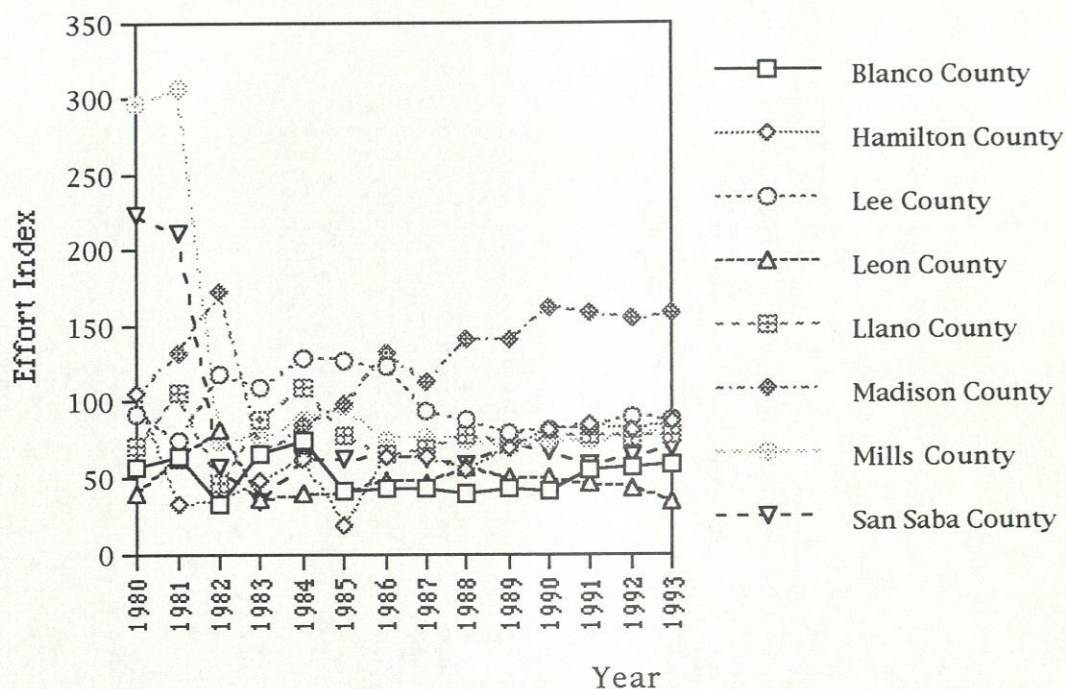
Rural Central Texas Counties
Population Under 14,000



County Property Tax per Capita Capacity Index

Eight of the twenty-one rural counties in the area had populations under fourteen thousand. Analysis showed evidence of greater dispersion of Tax Capacity Index at the end of the period relative to the beginning. Only three counties were below the state average per capita property value at the end of the study period.

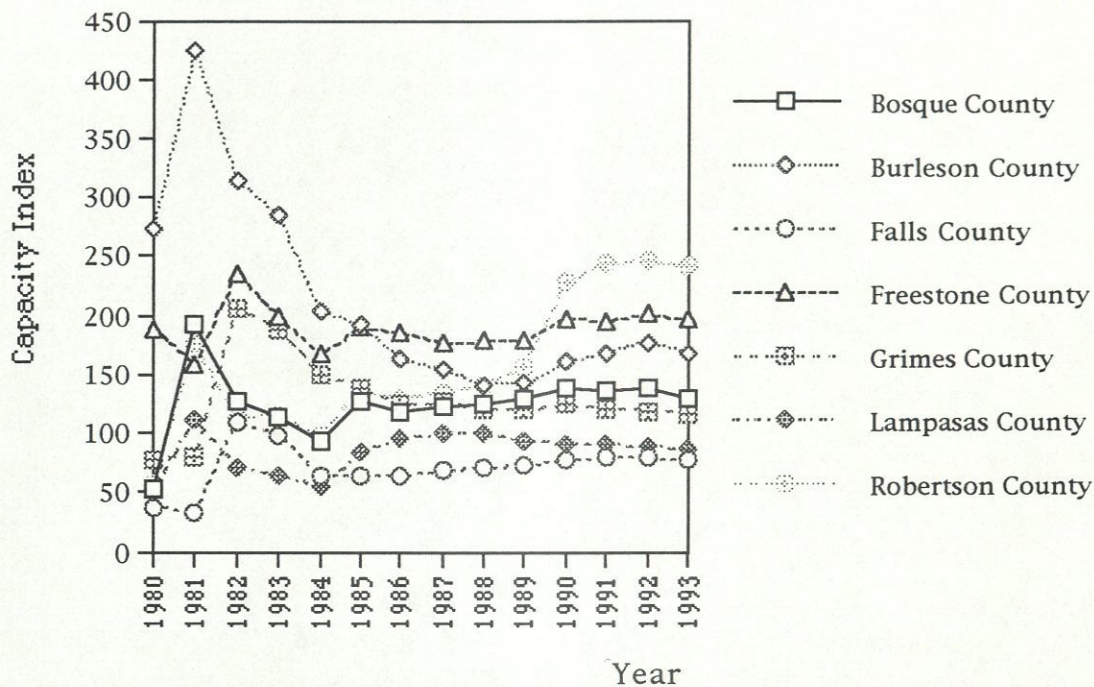
Rural Central Texas Counties Population Under 14,000



County Property Tax per Capita Effort Index

Increased clustering in the fifty to one-hundred value range over time. Madison county was exception from mid study forward with Tax Effort Index in excess of one-hundred most years and in excess of one hundred and fifty in final since 1990. The decline of the Mills county Tax Effort Index corresponds the increase in the Mills county Tax Capacity Index on the previous figure.

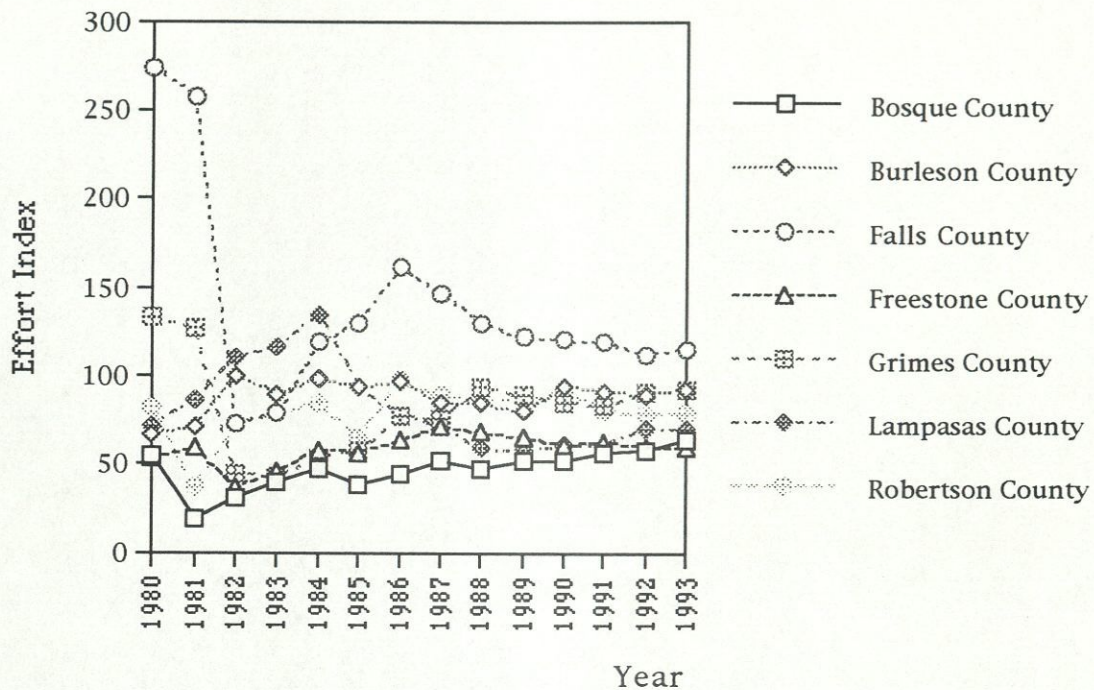
Rural Central Texas Counties
Population 14,000-20,000



County Property Tax per Capita Capacity Index

Tax Capacity Index for this seven county group ranged between fifty and two hundred except for Burleson county. Tax Capacity Index was over four hundred in 1981 and only temporarily fell below the 150 value in the late 1980s. Falls county had the lowest per capita property values of the group and the most stable.

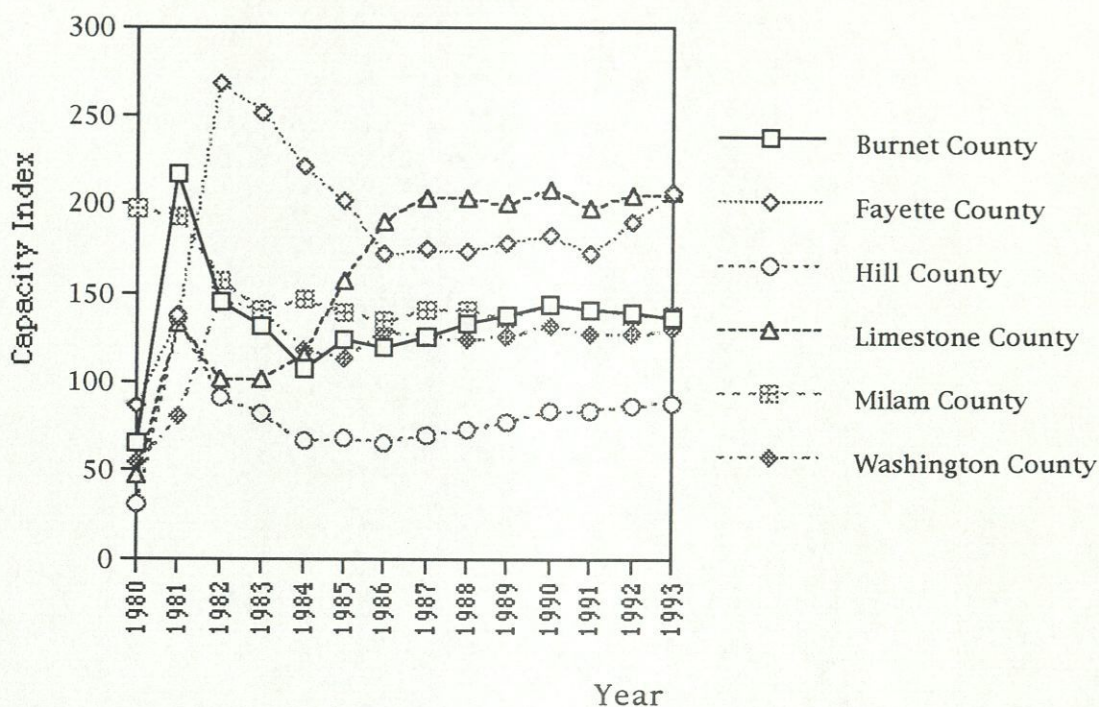
Rural Central Texas Counties
Population 14,000-20,000



County Property Tax per Capita Effort Index

Wide variation in the Tax Effort Index at the outset. By the end of the study period, the indexes had converged into a seventy five point range. Only one county finished the time period with county property tax rates above the state average.

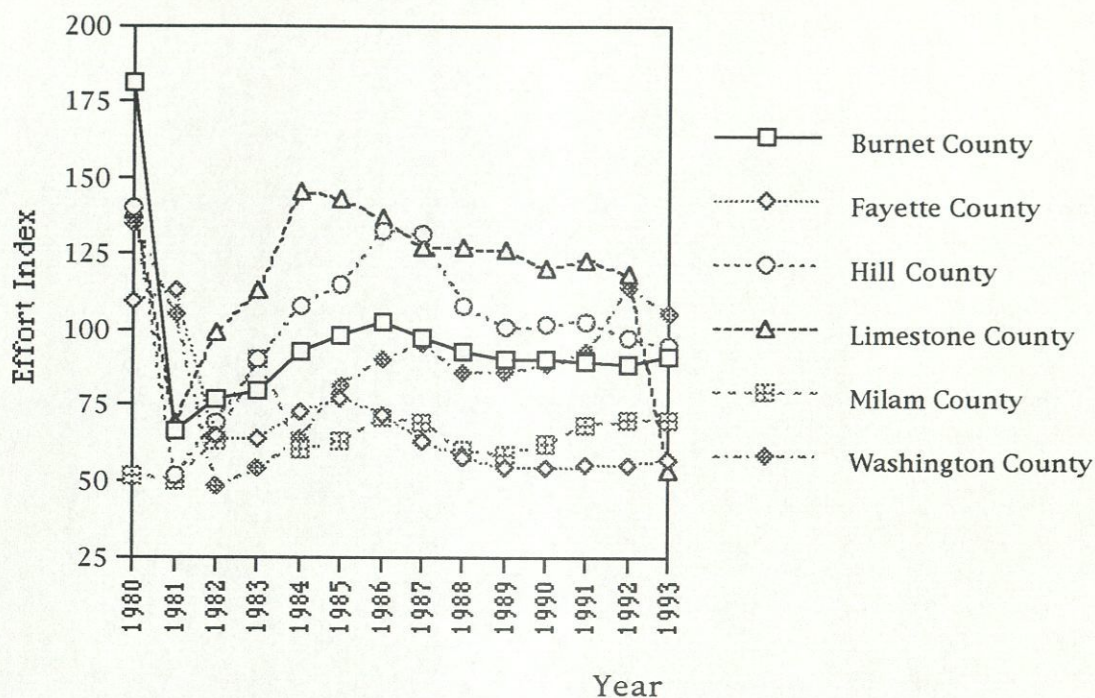
Rural Central Texas Counties Population Over 20,000



County Property Tax per Capita Capacity Index

Six counties exceeded twenty thousand in population. All but one began the study period with Tax Capacity Index below one hundred. Only Milam county had per capita property values above the state average. Over the time period, per capita property values diverged relative to the initial clustering and per capita property values were below the state average in only one county by the end of the study period. The property values in this group of rural counties improved relative to the rest of the state.

Rural Central Texas Counties Population Over 20,000

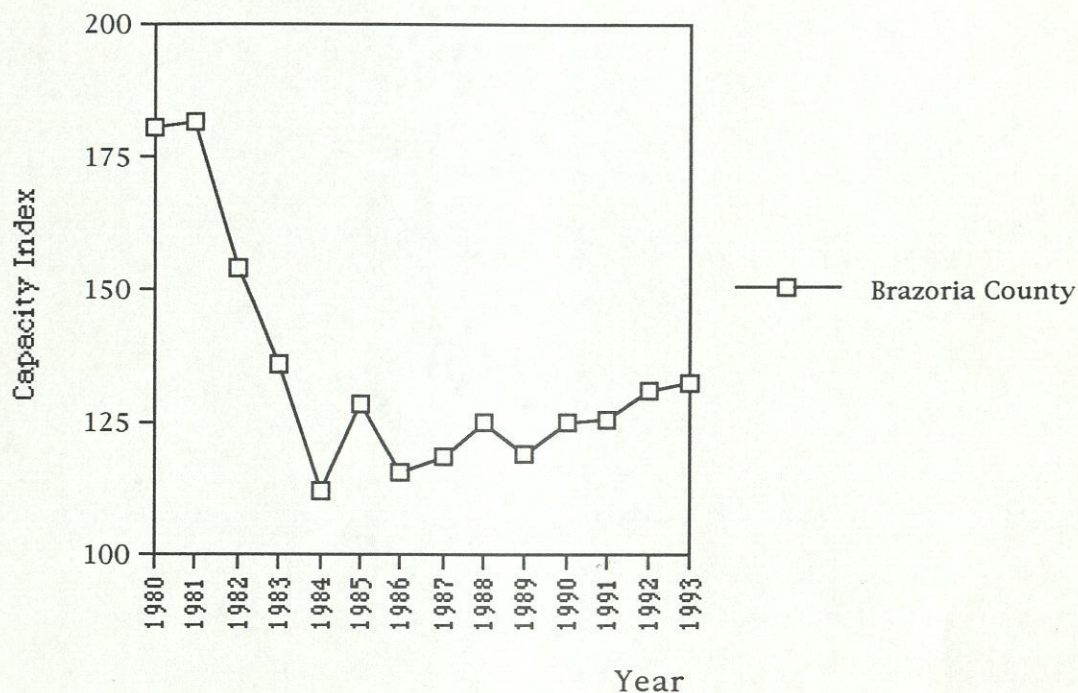


County Property Tax per Capita Effort Index

At the outset of the study period the Tax Effort Indexes for the counties were above one hundred, reflecting above state average county property tax rates. Only one county, Milam county, had below state average rates. The Tax Effort Index for Milam county increased slightly but remained below the state average by twenty-five index points. The individual Tax Effort Indexes for the other counties declined over time such that only one county, Washington county, had per capita property tax rates above the state average rate by 1993.

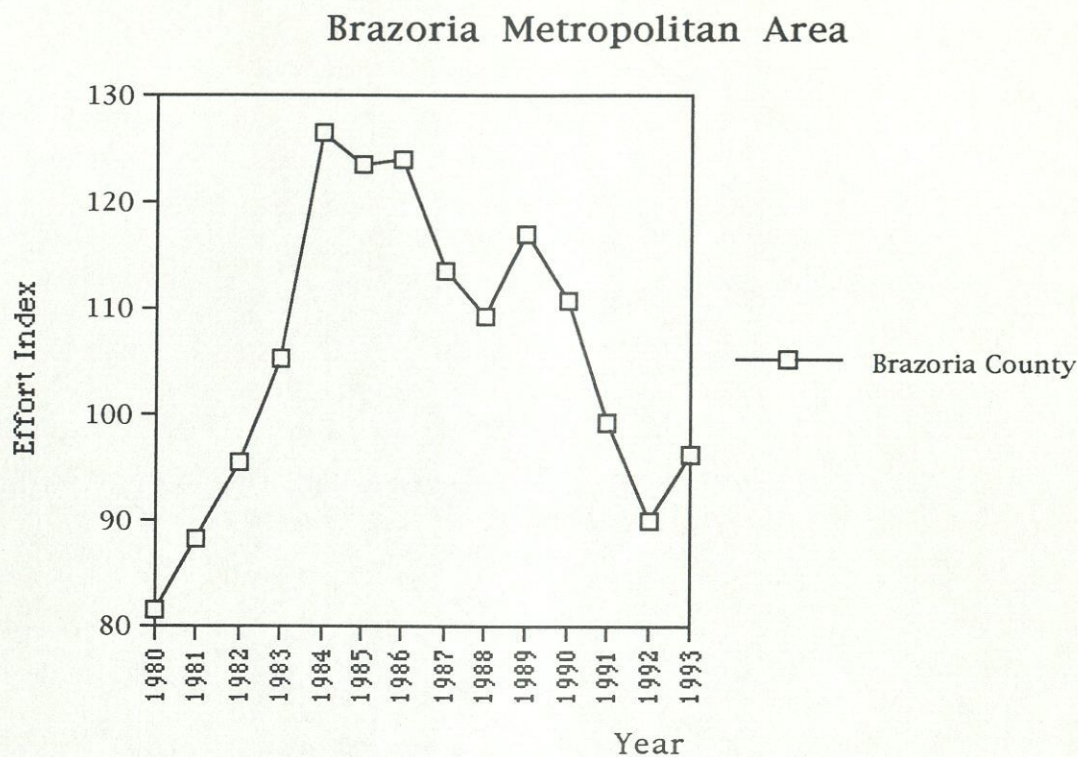
GULF COAST REGION
METROPOLITAN COUNTIES

Brazoria Metropolitan Area



Brazoria Metropolitan Area
County Property Tax Per Capita Capacity Index

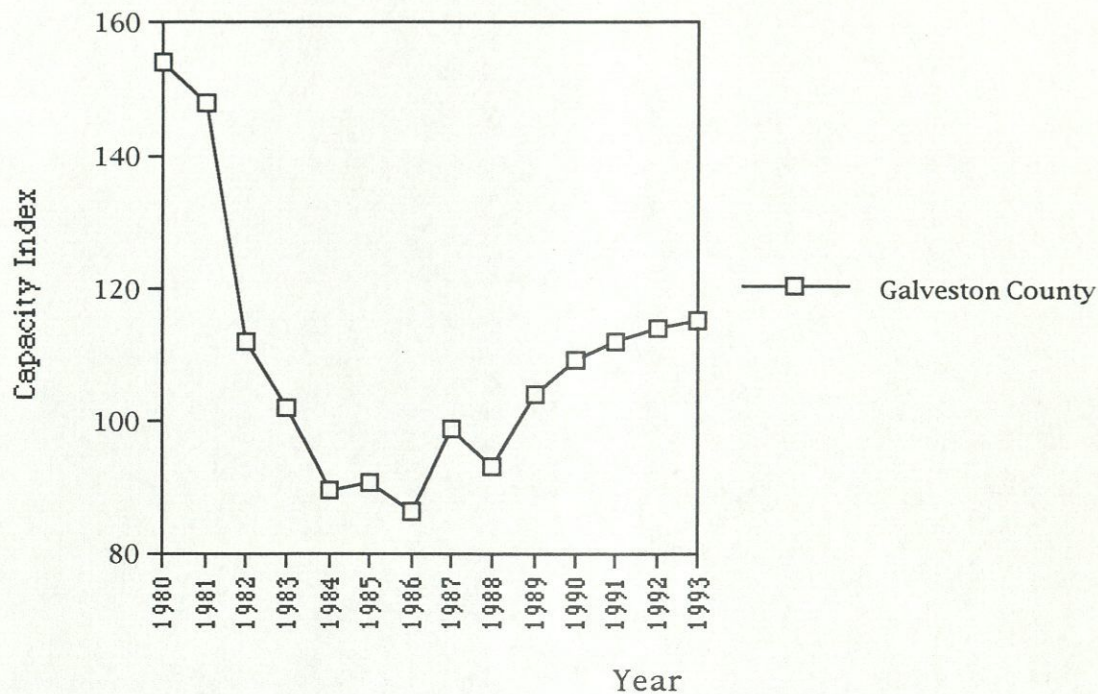
Capacity Index for this one county area exceeded 100 for entire time period. It dropped precipitously during the early 1980s but stabilized from mid-1980s with a slight upward trend.



**Brazoria Metropolitan Area
County Property Tax Per Capita Effort Index**

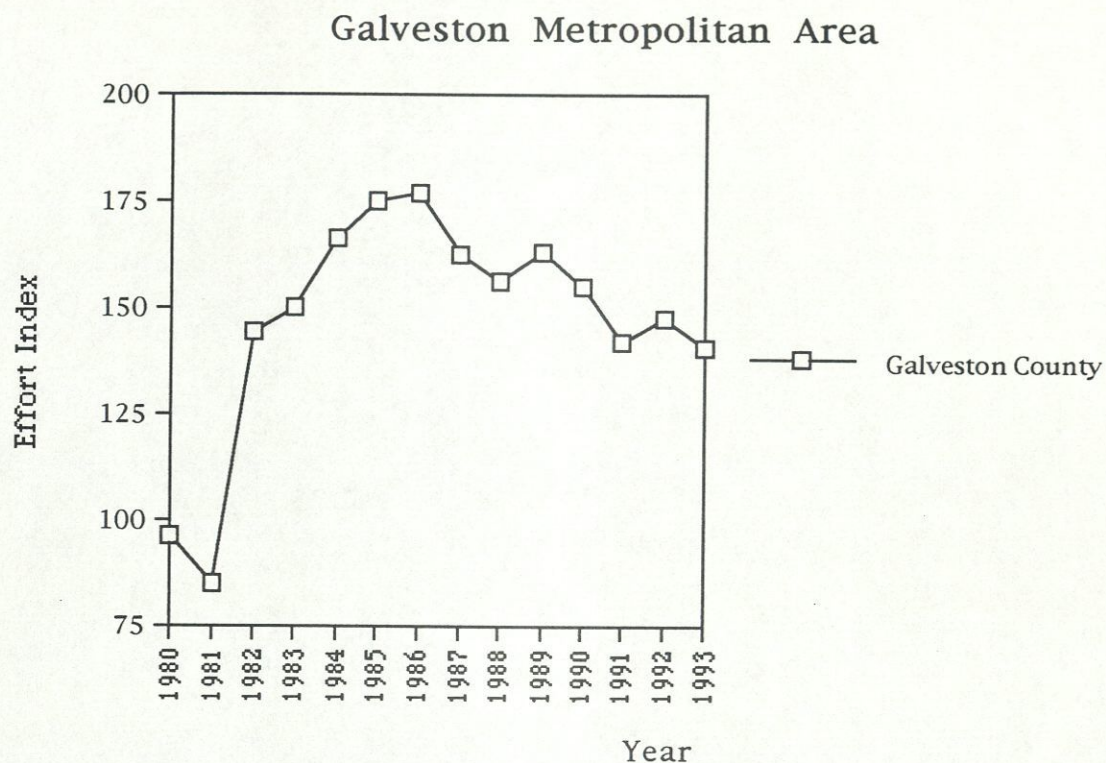
The Effort Index was nearly twenty points below state average at outset but increased by nearly fifty points in four years. The increase in the Effort Index corresponds to the years the Capacity Index declined. The Effort Index declined during the rest of decade but remained above 100 until 1991. It was slightly below state average rate at the end of the study period. As property values in the area declined relative to the rest of the state, the county property tax rate increased relative to other Texas counties.

Galveston Metropolitan Area



Galveston Metropolitan Area
County Property Tax Per Capita Capacity Index

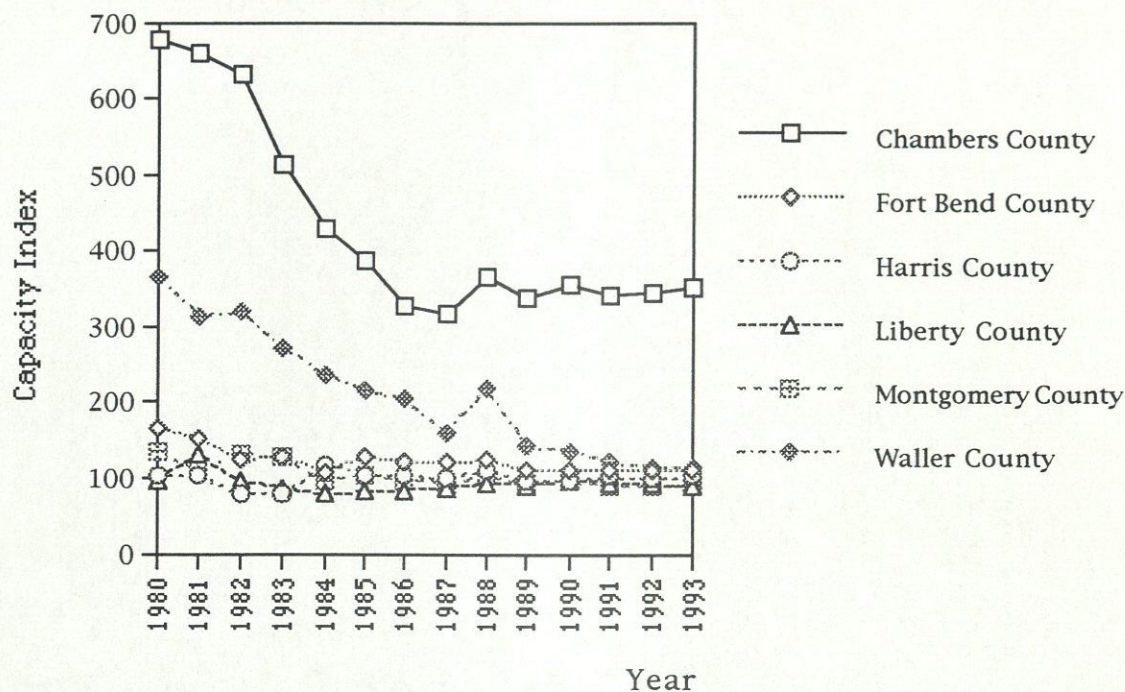
The 1980 Capacity Index for the one county area exceeded the state average by more than fifty percent(153.62); the second highest Capacity Index for that year. It declined over the next six years and then recovered moderately through 1993. It's ranked six and four in 1987 and 1993 respectively compared to other Texas metropolitan areas. The 1993 Capacity Index indicated per capita property values in Galveston county were nearly fifteen percent greater than the state average.



Galveston Metropolitan Area
County Property Tax Per Capita Effort Index

The 1980 Effort Index for the area was slightly below the state average,(95.91), which indicated slightly less than state average county property tax rates. The index increased substantially in 1982 and remained above the state average for the rest of the time period. The Effort Index was the second largest among Texas metropolitan areas in both 1987 and 1993.(162.10 and 140.23)

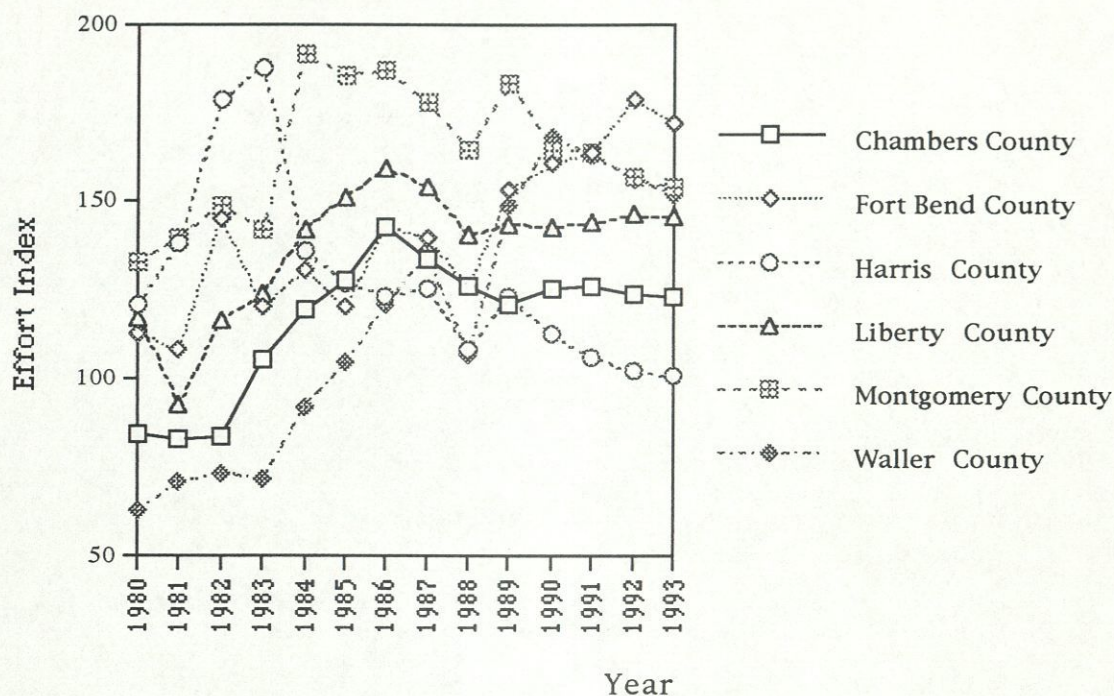
Houston Metropolitan Area



Houston Metropolitan Area
County Property Tax Per Capita Capacity Index

The six county metropolitan area ranked sixth in Capacity Index, 114.78 in 1980. Per capita property values declined slightly relative to the rest of the state but remained above the state average throughout the study period. The metropolitan Capacity Index for 1987 and 1993 was 102.36 and 104.32 respectively. Individual indexes for area counties exhibited a trend of generally converging just above the state average per capita property value. Chambers county exhibited the greatest amount of change among the area counties. Chambers county's 1993 Capacity Index of more than 350 began the study period at nearly 700. Harris county, the most populous county, remained in the 100 to 125 range and no doubt influenced the metropolitan average.

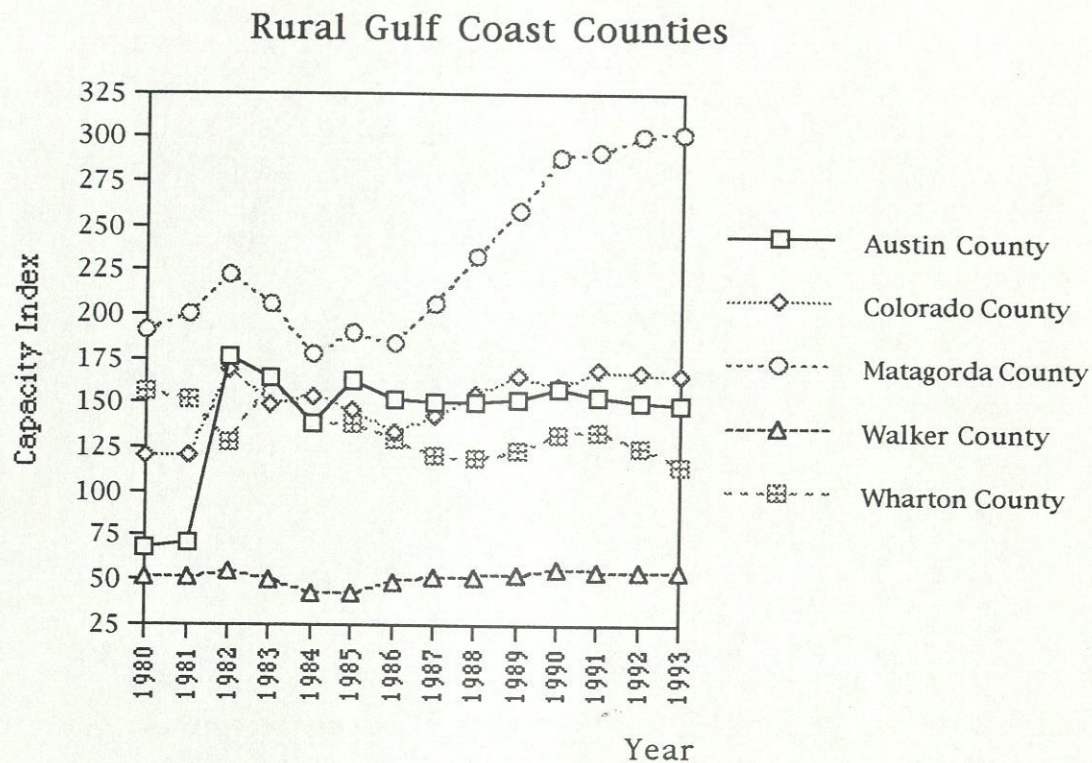
Houston Metropolitan Area



Houston Metropolitan Area
County Property Tax Per Capita Effort Index

The metropolitan area Effort Index, 120.21, began the study period ranked seventh in the state. It increased by seven points in 1987 and maintained its rank order. Between 1987 and 1993 property tax rates in the area declined relative to the rest of the state but not enough to be below the state average at the end of the period. The area ranked eleventh with an Effort Index of 110.27. No counties had rates below the state average after 1985. Harris county, where Houston is located, had the second highest rates in the beginning but had the lowest rates at the finish of the time period.

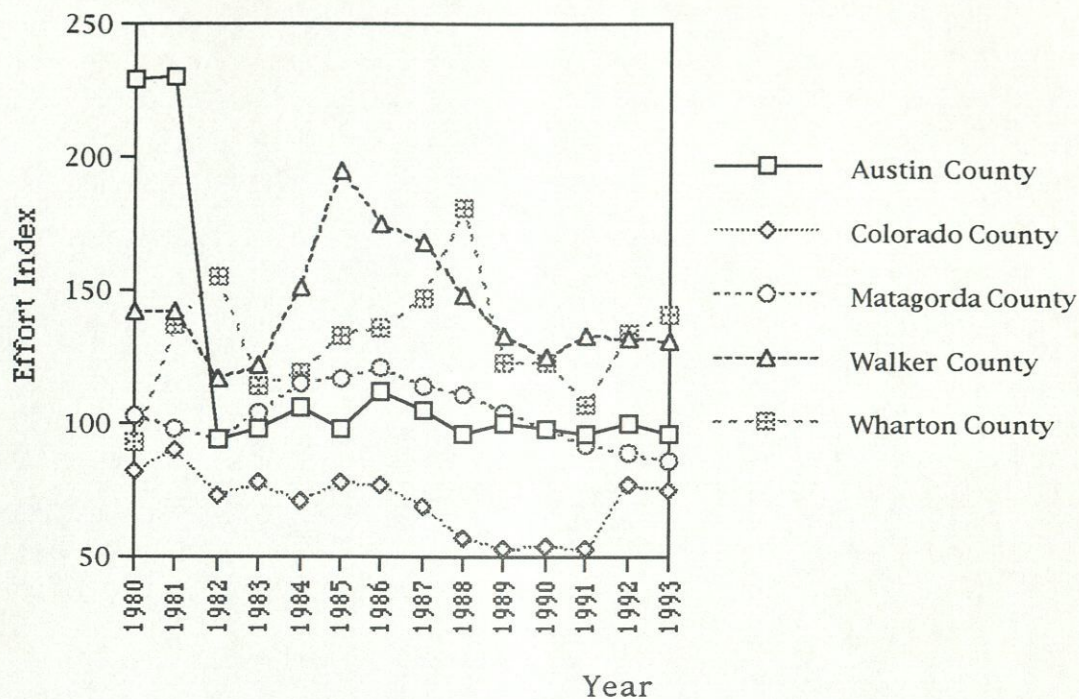
GULF COAST REGION RURAL COUNTIES



County Property Tax Per Capita Capacity Index

From 1982 four of the five rural counties consistently had above state average per capita property values. The exception was Walker county that had per capita property values only fifty percent of the state average. The Tax Capacity Index for Matagorda county increased over one hundred points from 1986 through 1993.

Rural Gulf Coast Counties

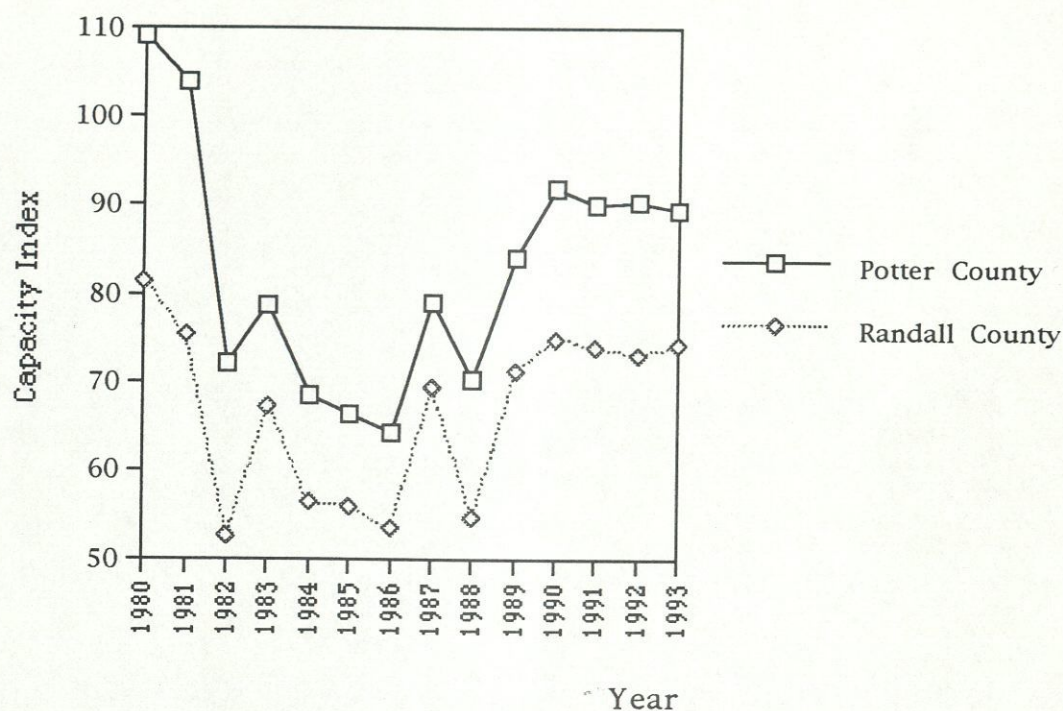


County Property Tax Per Capita Effort Index

Effort Indexes indicated property tax rates generally above state average until the concluding year. Three of the five counties exhibited rates at or below state averages. The Tax Effort Index for Austin county dropped precipitously in 1982 from over twice the state average to the state average. Colorado county had below state average over the entire study period.

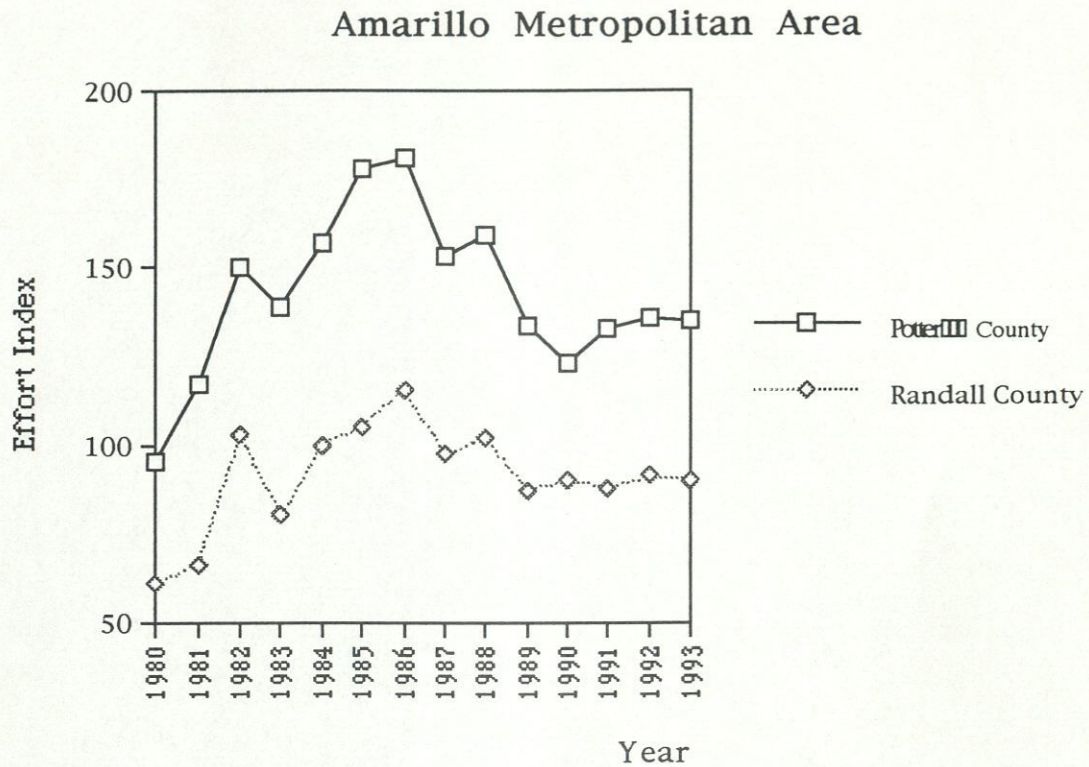
High Plains Region Metropolitan Counties

Amarillo Metropolitan Area



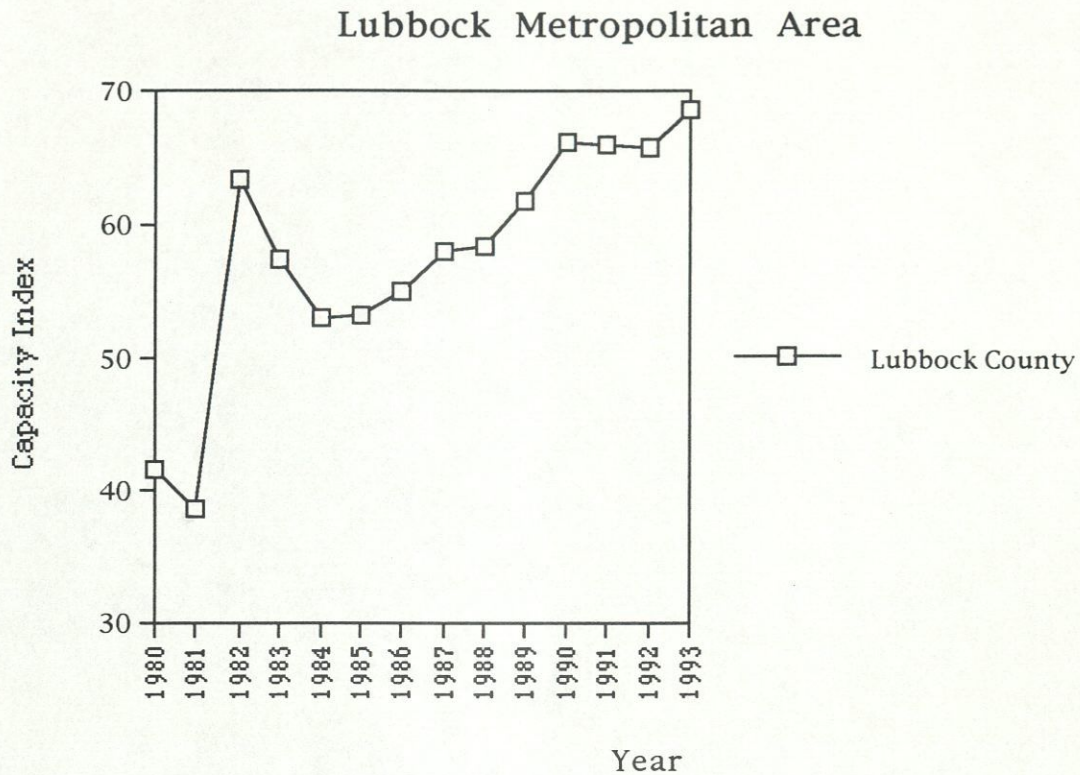
Amarillo Metropolitan Area County Property Tax Per Capita Capacity Index

Potter and Taylor Counties comprise the Amarillo area. The 1980 Index was below 100 but was ranked eighth among Texas metropolitan areas. The area Capacity Index declined to 74.51 by mid-period and but had recovered to 82.03 by 1993. The area ranked sixteenth and fourteenth in 1987 and 1993 respectively. The Capacity Index for individual counties followed patterns similar to each other. They declined until 1986 and moderately increased after. The capacity index below 100 since 1982 indicated property values per capita were below the state average.



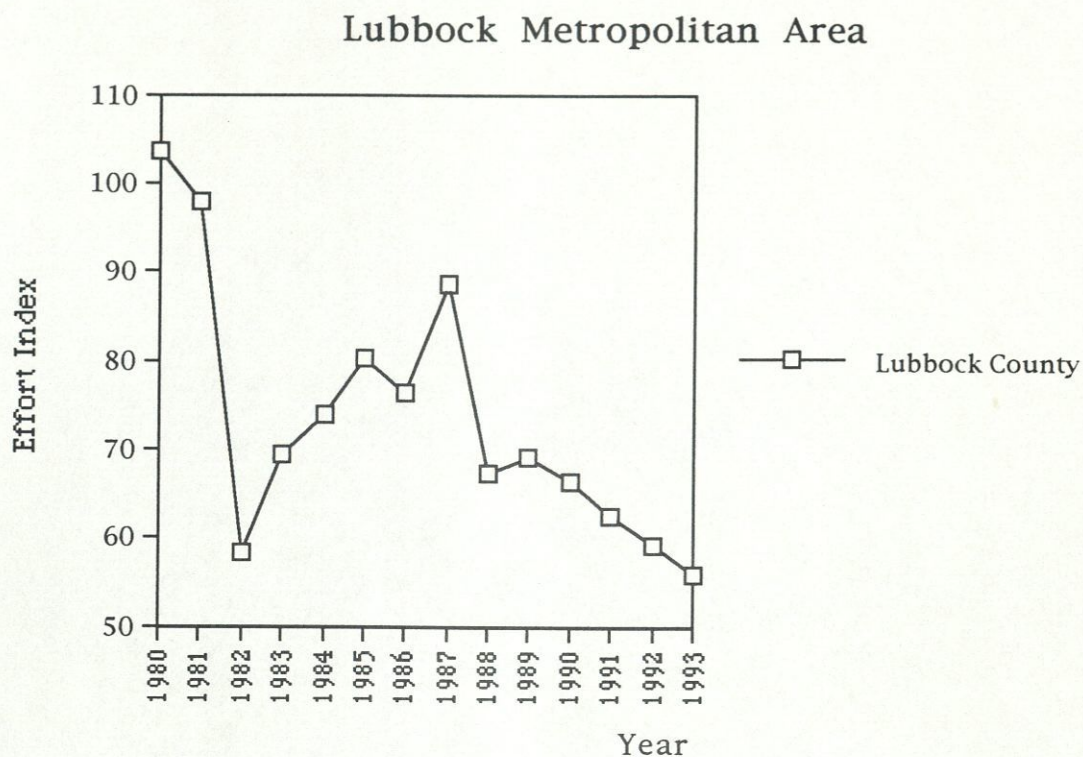
Amarillo Metropolitan Area
County Property Tax Per Capita Effort Index

The 1980 metropolitan Effort Index, 80.52, indicated below average property rates at the beginning of the study period. By mid-period the Effort Index had increased to 127.57 and the area's rank had increased from eighteen to five. At the end of the study period the area Effort Index had declined to 113.54, falling in rank by two positions. As in Capacity Index, the Effort Index for the counties in the metropolitan area followed similar trends but at different levels. Potter county consistently had tax rates above state average while Randall county rates remained predominantly at or below state average.



Lubbock Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index indicated increasing per capita property value from 1984 forward but also that the per capita property value was consistently below state average values. The index ranged in values between fifty seveny. The 1980 Capacity Index, 41.58, ranked twenty-five out of twenty-seven Texas metropolitan areas. The 1987 and 1993 values indicated relative improvement, 57.86 and 68.57 respectively but the Lubbock area remained in the bottom ten of metropolitan areas with respect to per capita property values.

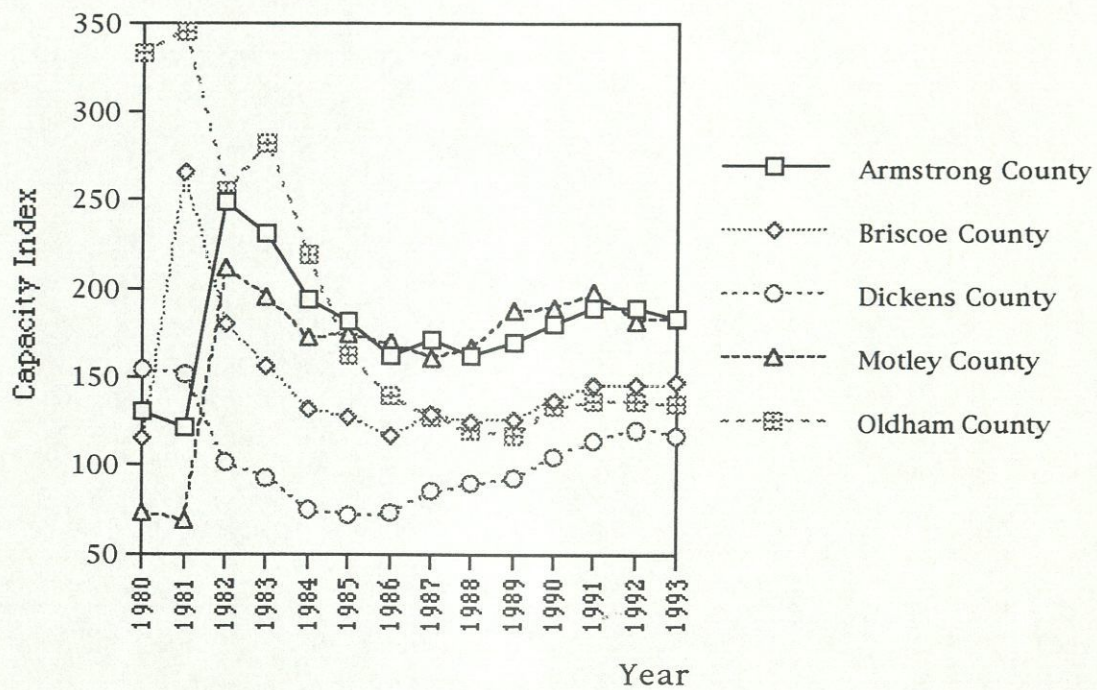


**Lubbock Metropolitan Area
County Property Tax Per Capita Effort Index**

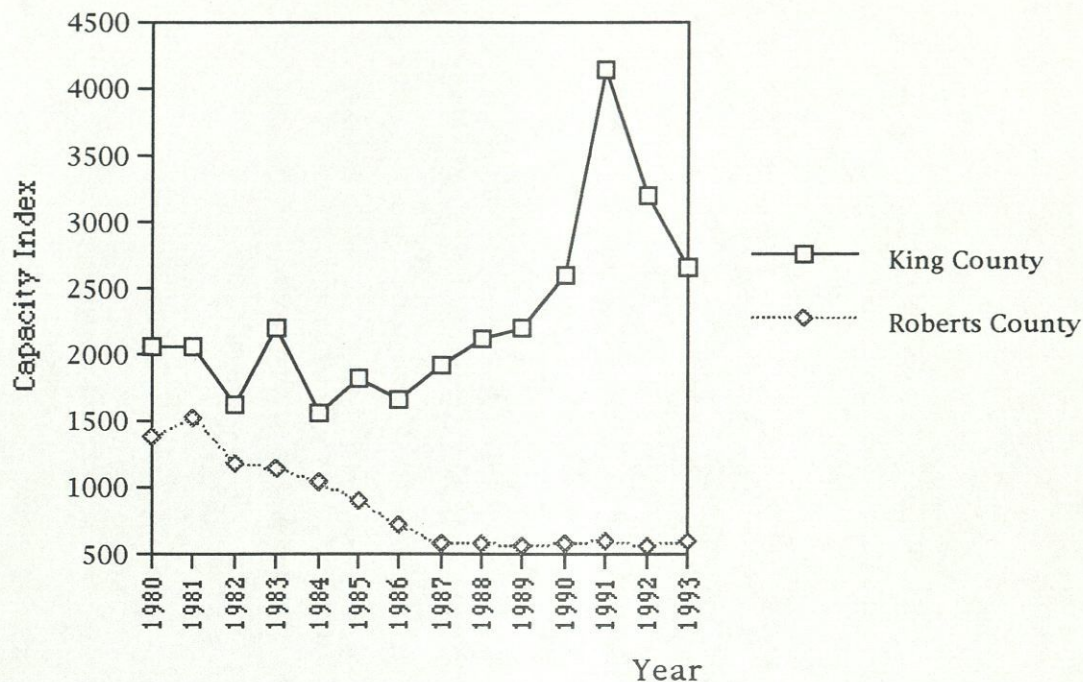
The Effort Index for the area indicated below average county property tax rates for all but the initial year of the study. In 1980, the area was ranked eleventh, with an Effort Index value of 103.67, but by 1987 was ranked twenty-five, with an index of 88.68. The trend continued through the end of the study period when the Effort Index dropped to 55.87, the lowest Effort Index of Texas metropolitan areas. This decline occurred as the Capacity Index was increasing.

High Plains Region Rural Counties

Rural High Plains Counties Population Under 2,500 Excluding King and Roberts Counties



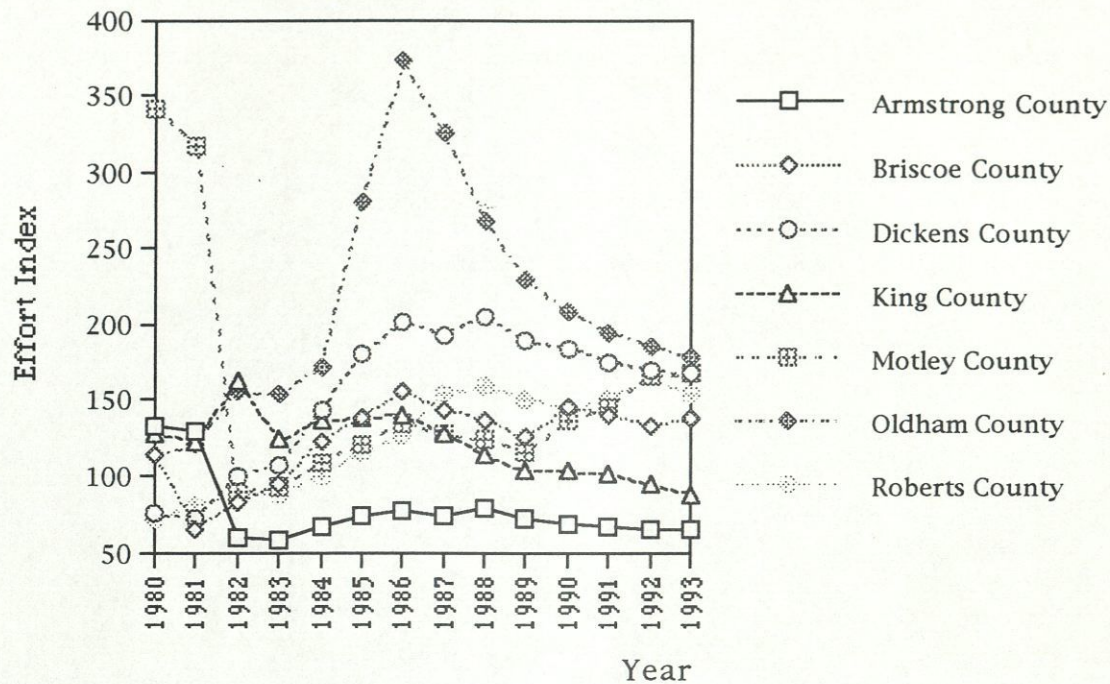
King and Roberts Counties Population Under 2,500



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes indicated per capita county property values above the state average for all but Dickens county. Wide variations of index values in early years dampened in later years. King and Roberts counties were exceptions, likely caused by sparse populations.

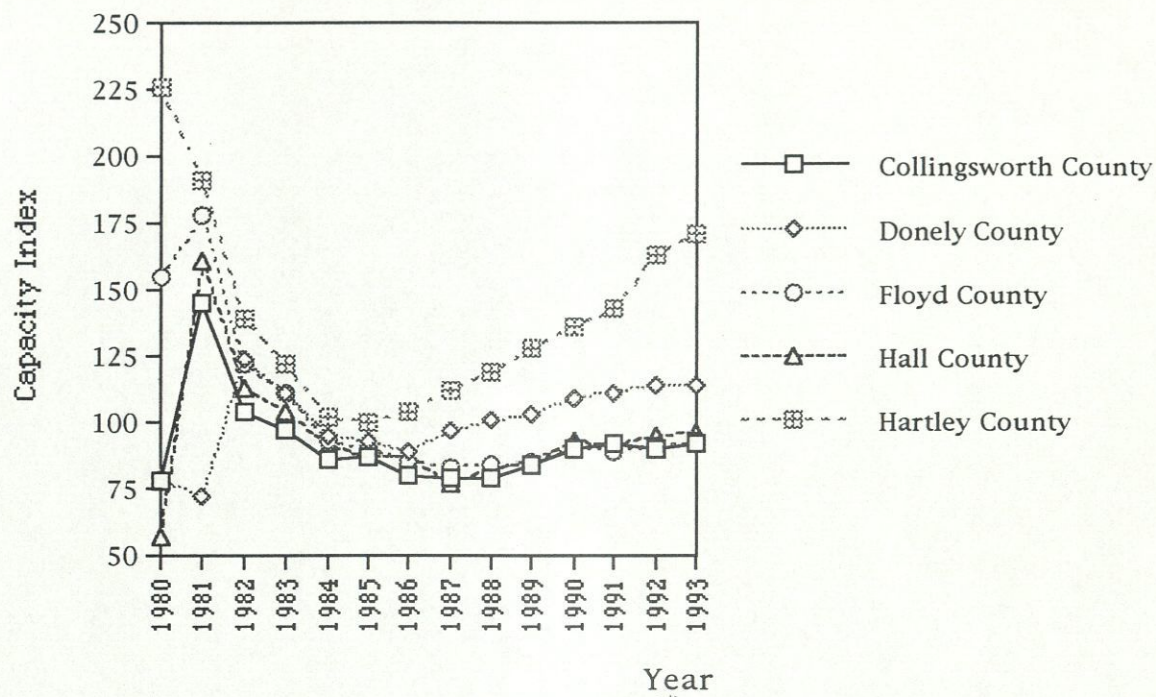
Rural High Plains Counties Population Under 2,500



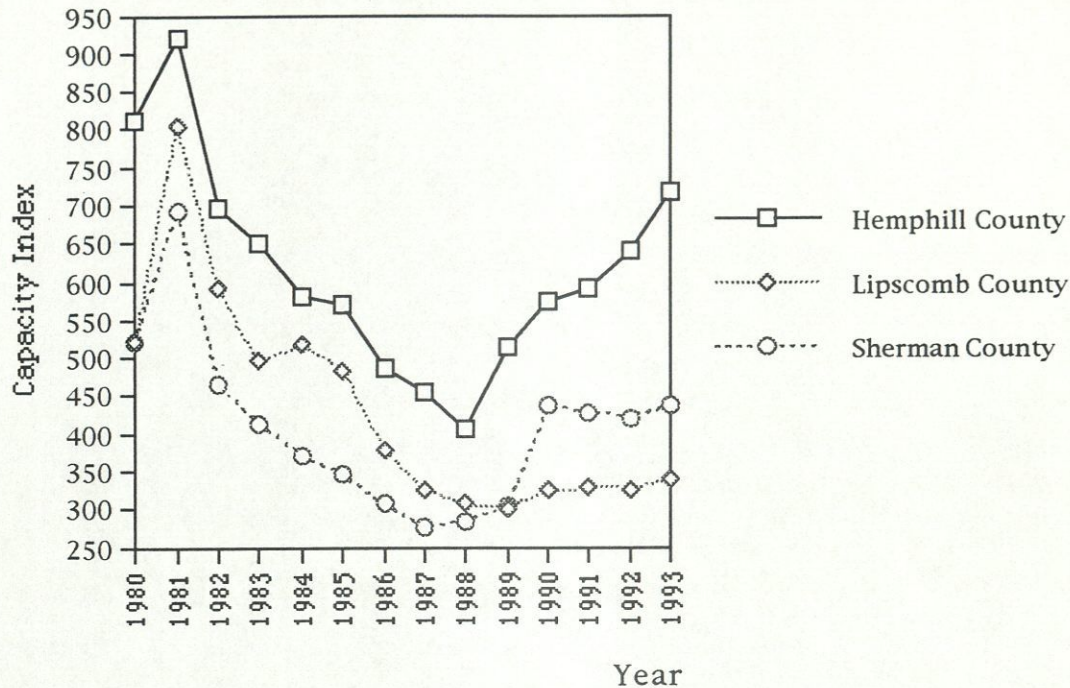
County Property Tax Per -Capita Effort Index

The Tax Effort Index of six of the seven counties exceeded one hundred. Oldham county index increased to over 350 in 1986 and then declined steadily. Oldham county had the highest index at the end of the study. Armstrong county index was second highest at outset, declined to lowest in 1982 and maintain position for duration. Only county in the group to have below state average rates for over ten years.

Rural High Plains Texas Counties
Population 2,500 to 4,000
Excluding Hemphill, Lipscomb, and Sherman



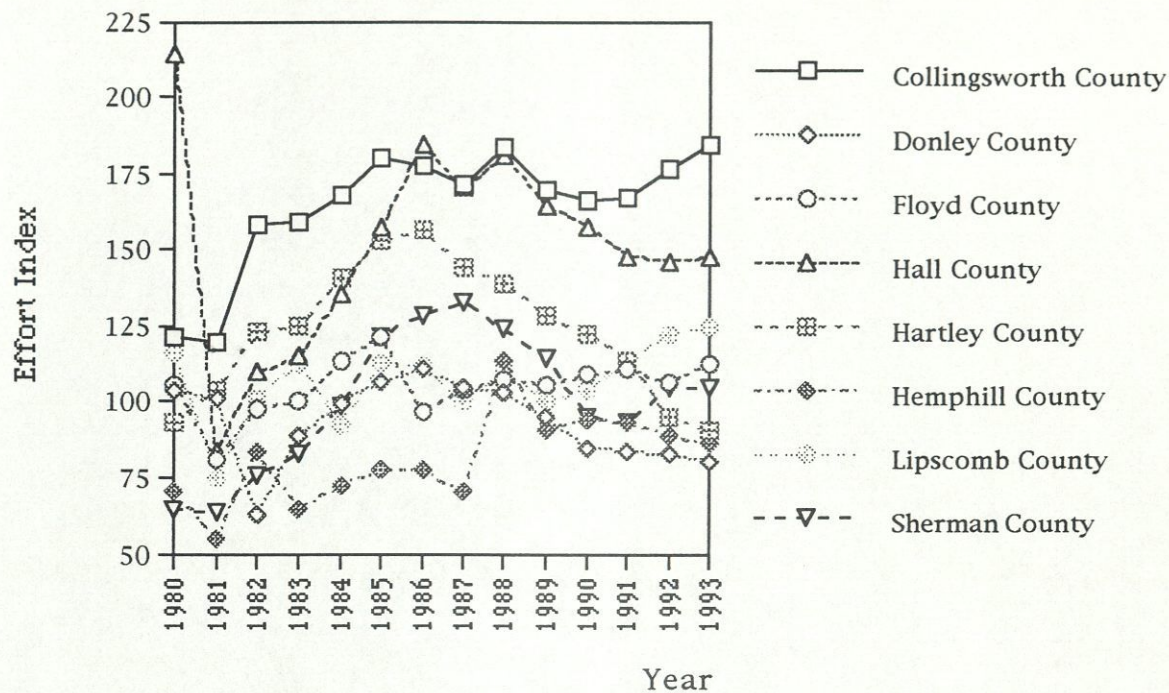
Rural High Plains Counties Kemphill, Lipscomb, and Sherman Counties



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes for the eight counties exceeded one hundred from 1981. Three counties, Hemphill, Lipscomb, and Sherman, had indexes that exceeded 250 for the entire study period. All counties in the group exhibited declining property values, relative to the rest of the state, during the first half of 1980s. Upward trend of indexes from 1988 to 1993. Nonetheless, three counties had below state average property values in 1993.

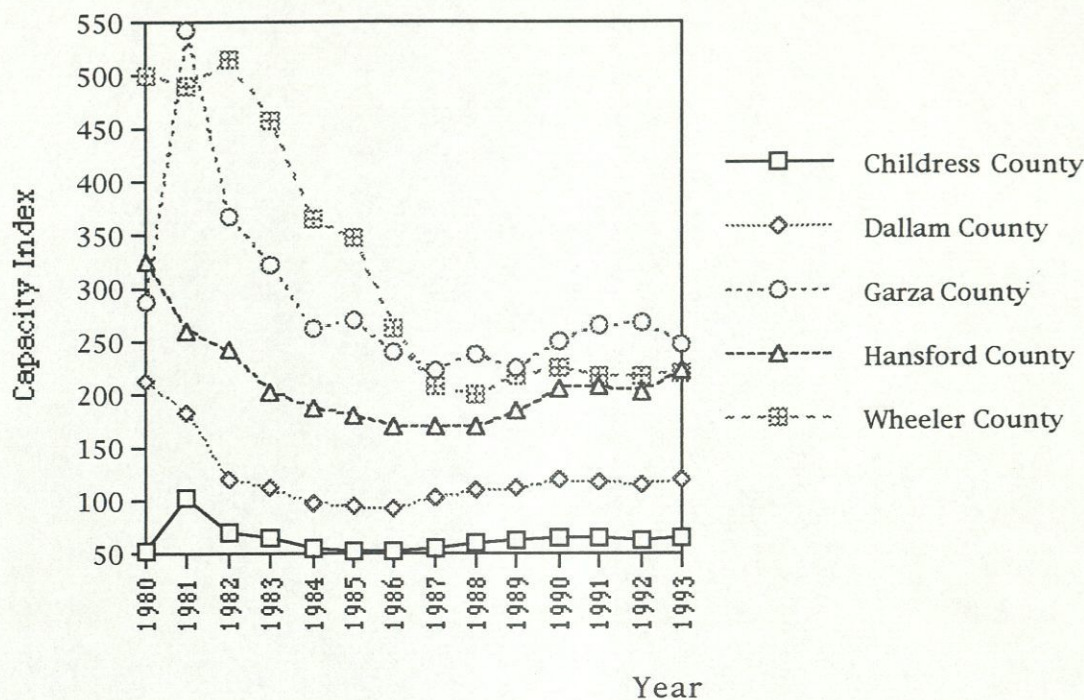
Rural High Plains Texas Counties
Population 2,500 to 4,000



County Property Tax Per Capita Effort Index

Values of Tax Effort Index ranged primarily from low seventies to 125, with exception of Hall county's index of over 200. General upward trend of Tax Effort Index in the early 1980s coincided roughly with decline of Tax Capacity. Downward trend from the middle 1980s was not sufficient to prevent overall increase in Tax Effort Indexes.

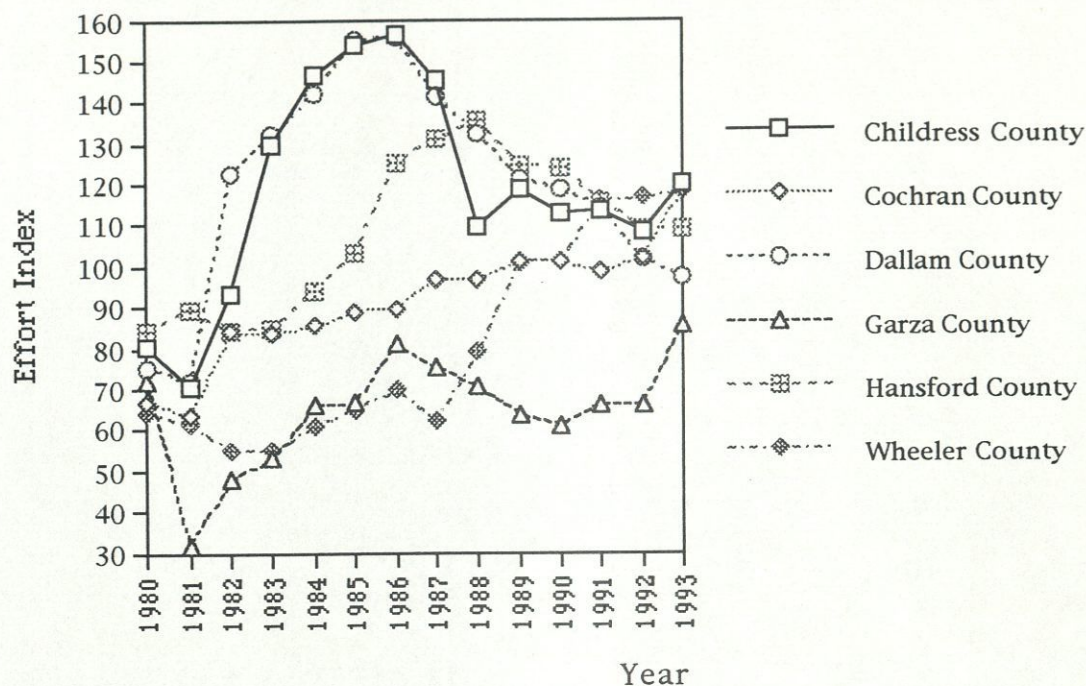
Rural High Plains Texas Counties
Population 4,000 to 6,500



County Property Tax Per Capita Capacity Index

The Tax Capacity Index for four of the five counties in the group exceeded 200 in 1980. Downward trend of index for group indicated overall decline in relative per capita property values during the first half of the study period. Flat trend from late 1980s to 1993. Tax Capacity Indexes remained largely above one hundred. Childress county was exception in the group. The Tax Capacity Index for Childress equalled at or above one hundred in only one year and remained near fifty for the duration.

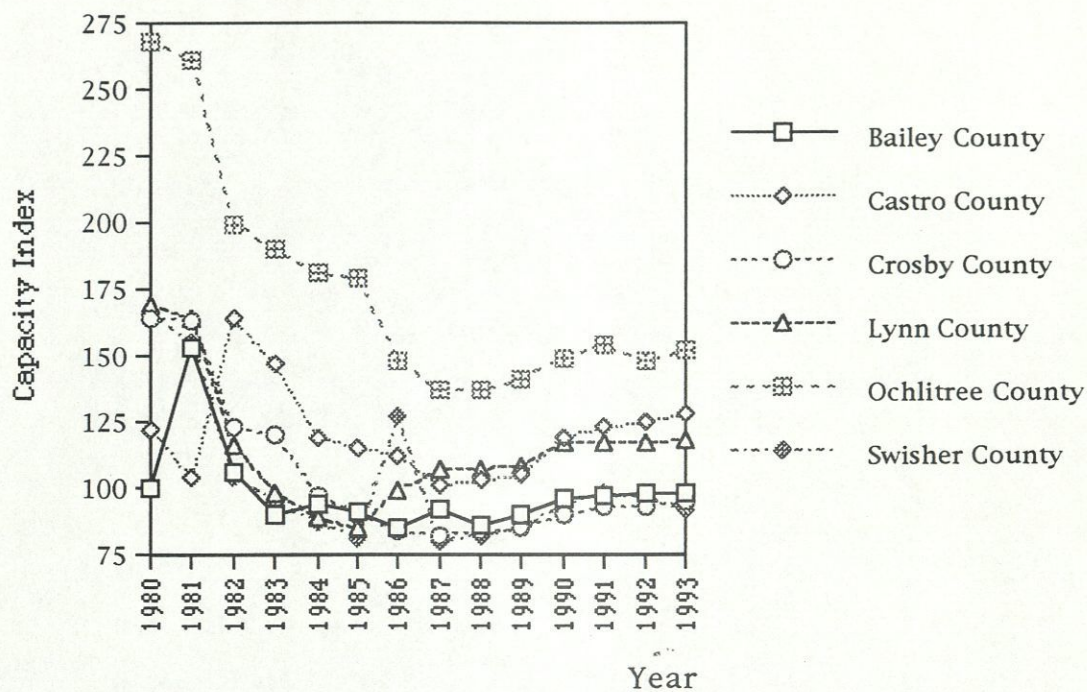
Rural High Plains Texas Counties Population 4,000 to 6,500



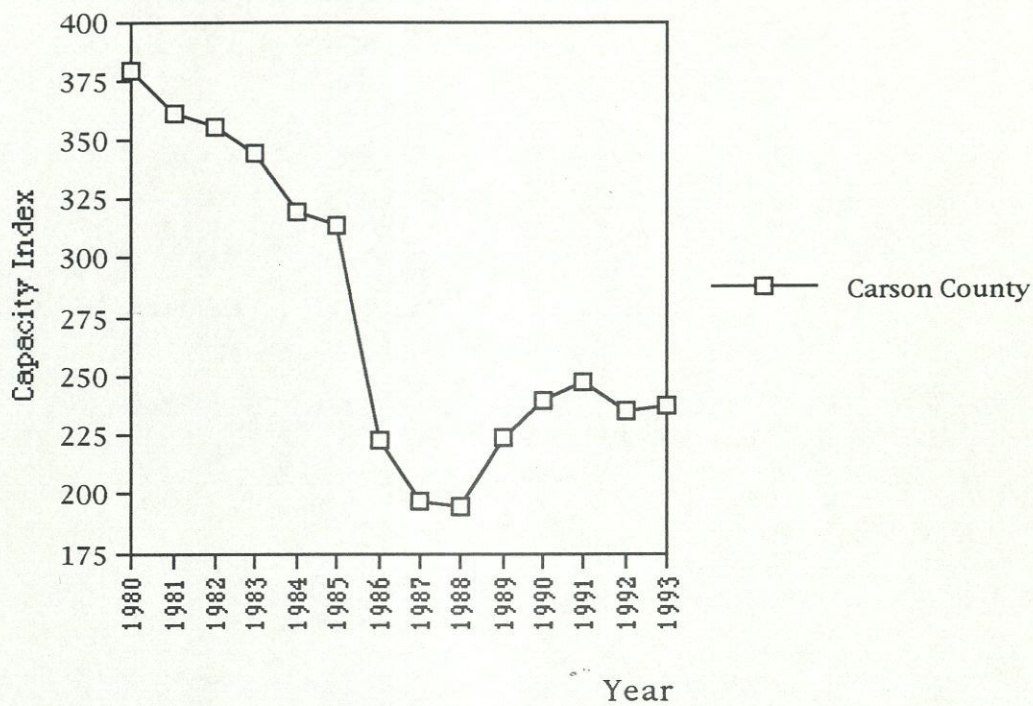
County Property Tax Per Capita Effort Index

The Effort Indexes clustered compactly between sixty and ninety at the outset of the study period. Tax Effort Indexes exhibited upward trend over same years that the Tax Capacity Indexes were declining. Trend in Tax Effort Indexes indicated response of tax rates to relative decline in per capita property values. Values at the end of the study period ranged from approximately ninety to one hundred twenty.

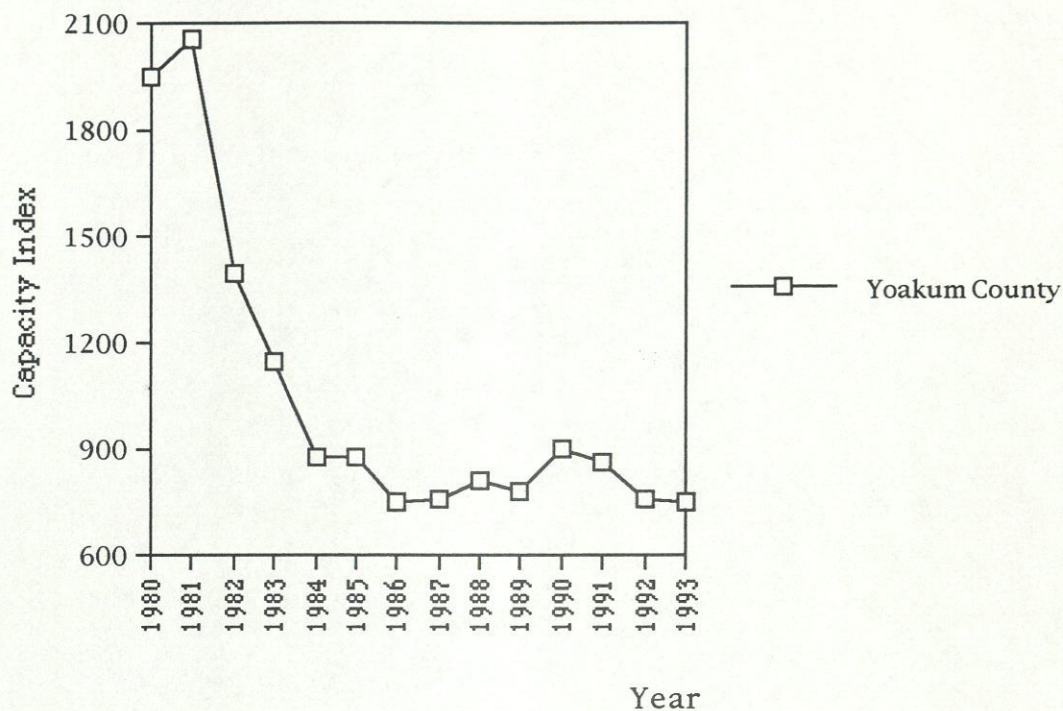
Rural High Plains Texas Counties
Population 6,500 to 10,000
Excluding Carson and Yoakum Counties



Rural High Plains Texas Counties
Carson County



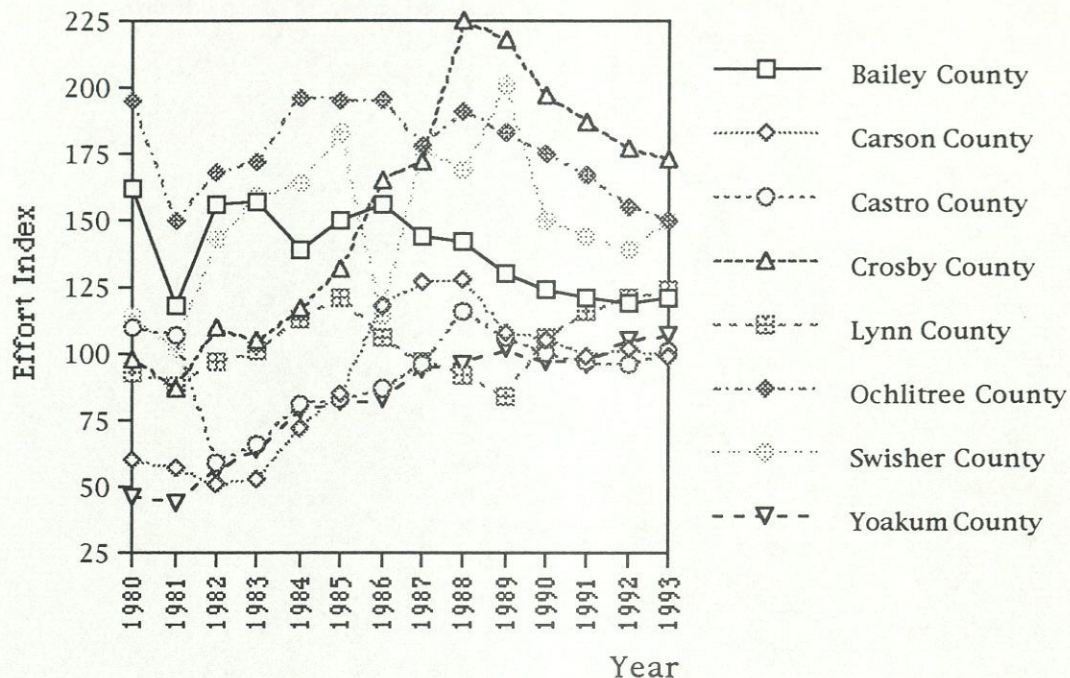
Rural High Plains Texas Counties Yoakum County



County Property Tax Per Capita Capacity Index

As with other counties in the High Plains, this group of six counties experienced a decrease in Tax Capacity Indexes in the early and middle 1980s and then a general increase, although in this case relatively mild.. All six counties exhibited per capita property values above the state average in 1980 but by 1993 three counties had Tax Capacity Indexes below one hundred and two counties had Tax Capacity Indexes within twenty-five points of the state average.

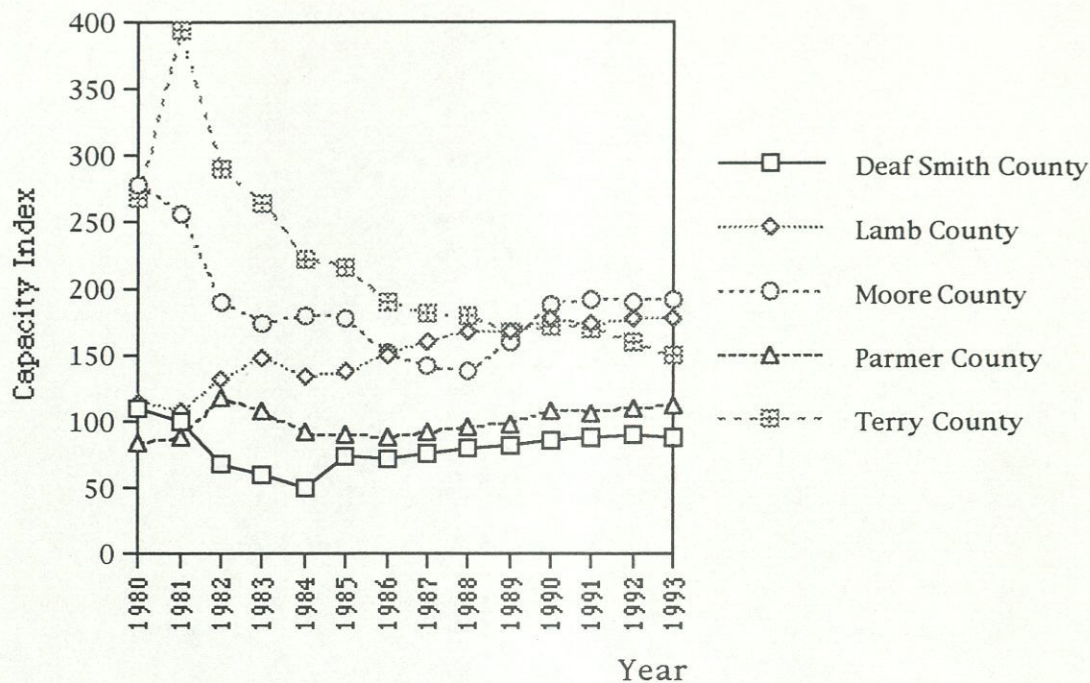
Rural High Plains Texas Counties
Population 6,500 to 10,000



County Property Tax Per-Capita Effort Index

Tax Effort Indexes ranged from fifty to two hundred at the outset. Index for most counties declined for one year and then increased. A general increase occurred through 1988 that was followed by an overall decline in Effort Index. The range of index values in 1993 was narrower with the minimum higher than in 1980 and the maximum lower than in 1980.

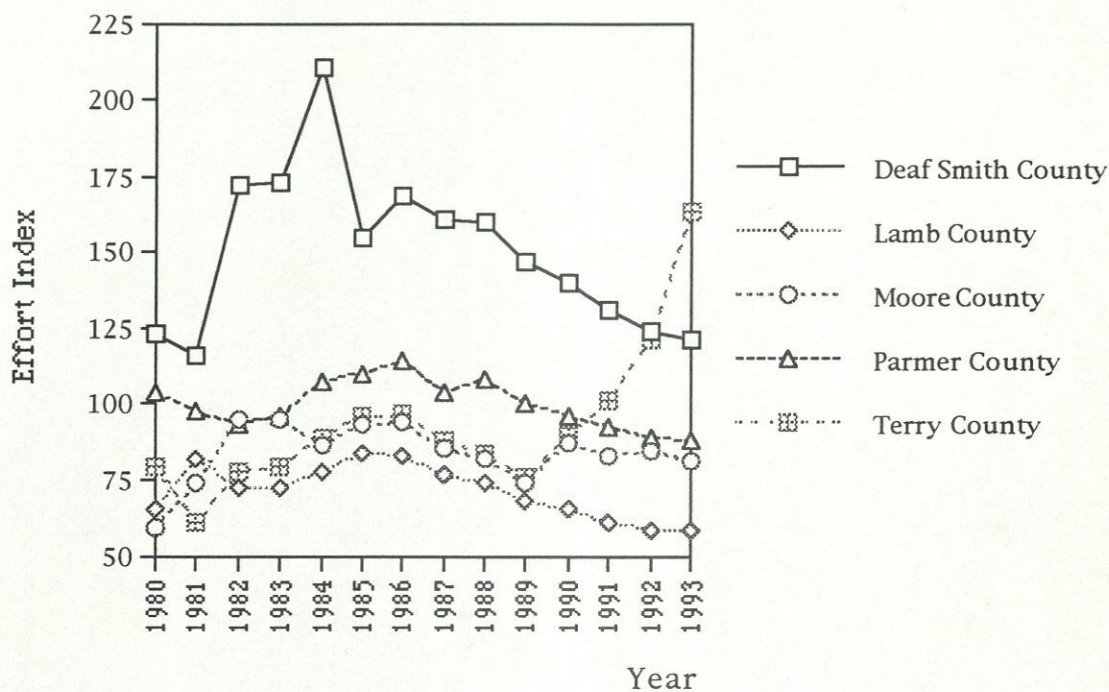
Rural High Plains Texas Counties Population 10,000 to 20,000



County Property Tax Per Capita Capacity Index

The Tax Capacity for four of the five counties exceeded one hundred at the beginning of the study, two of which exceeded 250. Parmer county's index exceeded one hundred only in 1982 and 1983. Deaf Smith and Parmer counties had index values that reflected below average per capita county property values from the mid-1980s. The respective indexes for the other three counties reflected property values more than fifty percent above the state average for most years. No clear pattern was present with respect to overall increase or decrease. The decline of index values for Moore and Terry counties produced a tighter clustering of the indexes in the later years of the study.

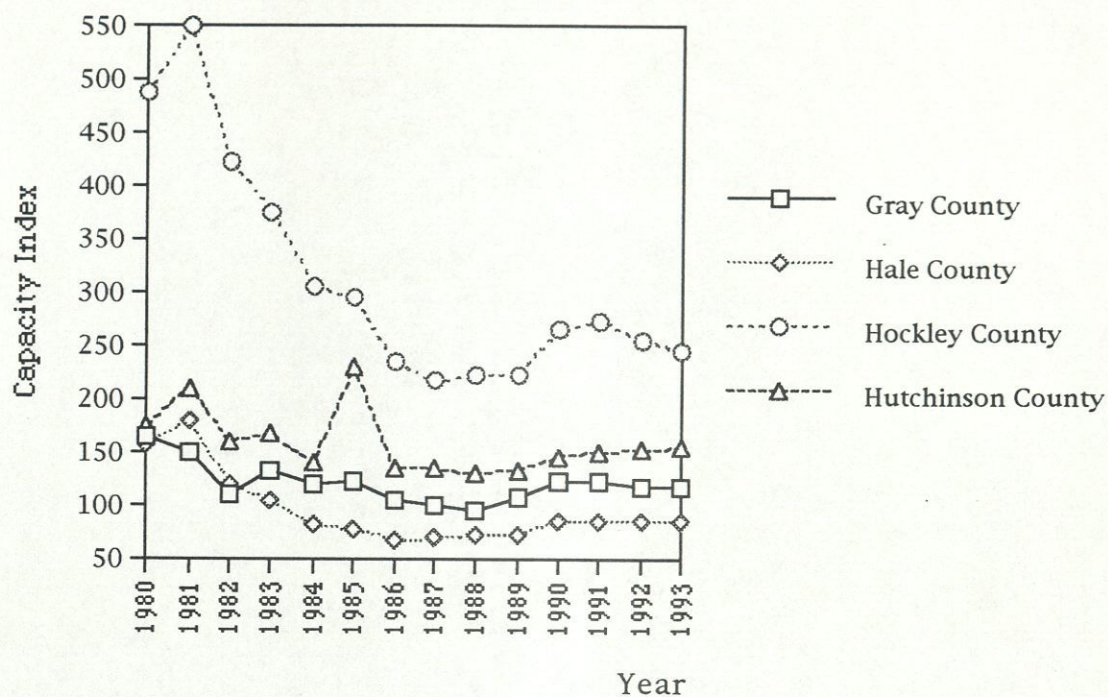
Rural High Plains Texas Counties Population 10,000 to 20,000



County Property Tax Per Capita Effort Index

The three counties that had above average property values had Tax Effort Indexes that reflected below state average rates. The Tax Effort Index for Deaf Smith consistently exceeded 125. A moderate trend of first increasing Tax Effort Indexes through mid-1980s and then a slow decline to the end of the study period.

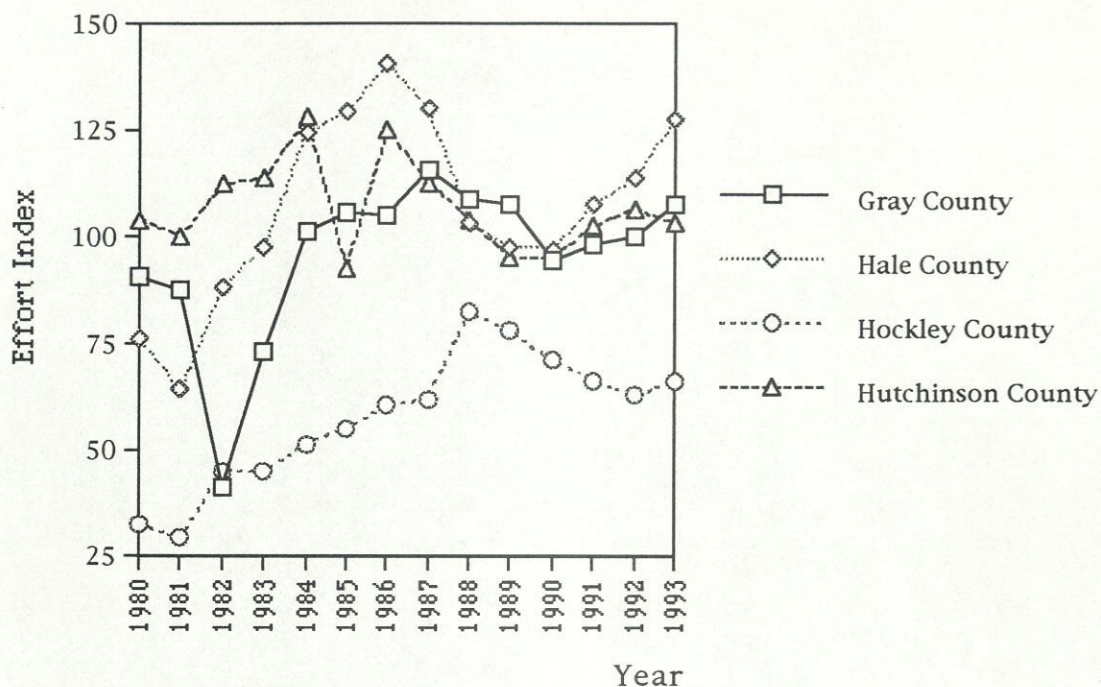
Rural High Plains Texas Counties Population Over 20,000



County Property Tax Per Capita Capacity Index

High Plains Over 20000 pop (p. 61) Tax Capacity Group began study period with per capita property values above the state average and Finished the study period with one county's Tax Capacity Index reflecting below state average per capita property values. The respective indexes for three counties clustered in the 150 to 160 range in 1980. Overall trend was downward but the trend was not severe and all but one county finished the study period with Tax Capacity Index that exceeded one hundred. Hockey county was outlier with Tax Capacity Index no smaller than 200 and no smaller than 300 in the first half of 1980s. Nonetheless, the Hockley county Tax Capacity Index reflected a decline in relative property values.

Rural High Plains Rural Texas Counties
Population Over 20,000

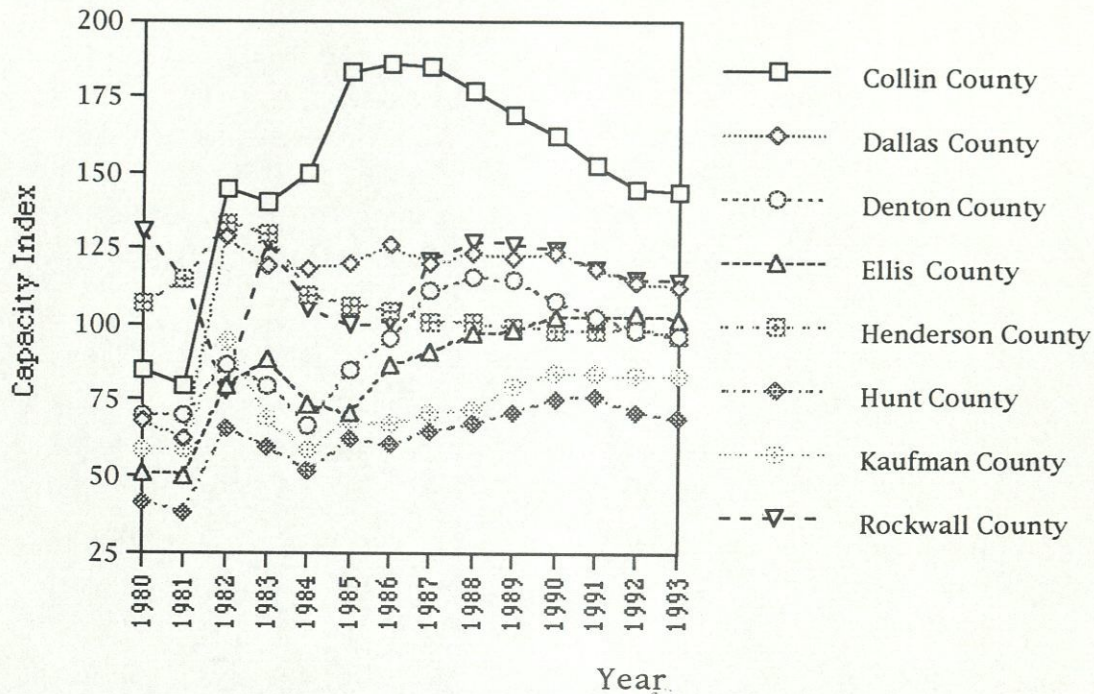


County Property Tax Per Capita Effort Index

Tax Effort Overall increase in Tax Effort Index for the group. At outset, the largest value was approximately one hundred. By 1993 the lowest value, excluding Hockley (the outlier), was approximately one hundred. The largest value was approximately 125. The modest increase of the index for Gray, Hale, and Hutchinson counties reflected modest increases in county property tax rates relative to the state average. The increases also occurred in roughly the same years the counties experienced declining Tax Capacity Indexes; i.e. declining relative property values.

Metroplex Region
Metropolitan Counties

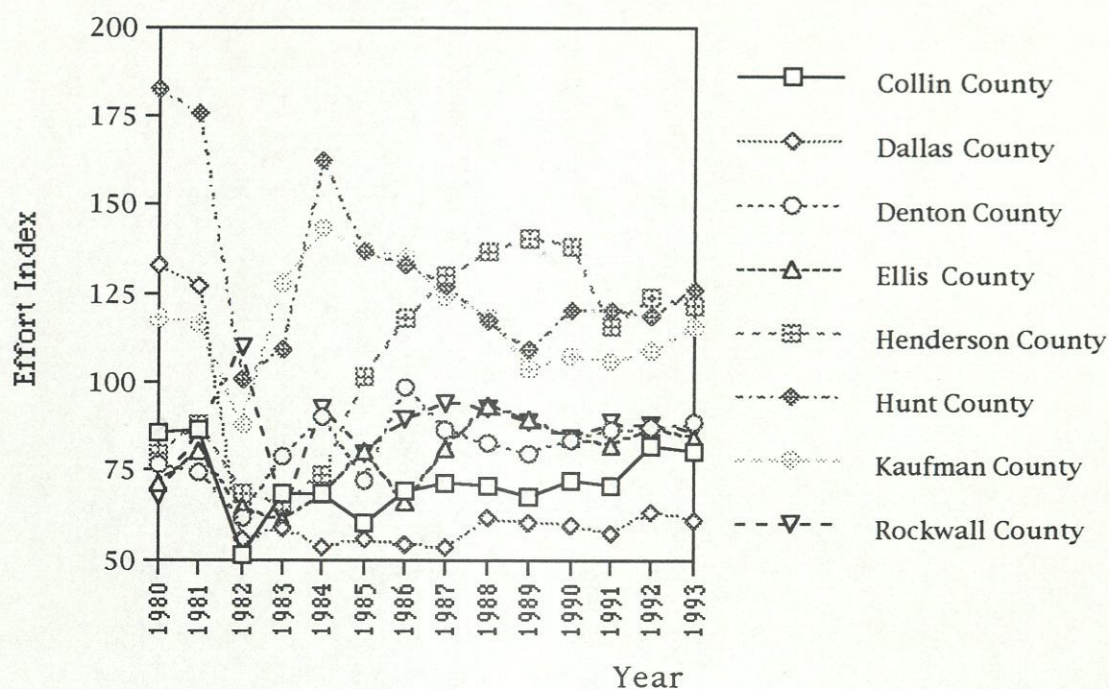
Dallas Metropolitan Area



Dallas Metropolitan Area
County Property Tax Per Capita Capacity Index

Eight counties comprise the metropolitan area. The metropolitan Capacity Index (64.94) was over thirty-five points below state average at the outset. Steady increases in per capita property values increased capacity to 120.98 in 1987 but it then declined to eleven points above state average by the end of the time period. Collin county property values were consistently the highest in the area with values fifty points or more above the state average. Dallas county generally had the second highest values per capita in the area. Hunt county values hovered around forty to fifty points below the state average for the duration.

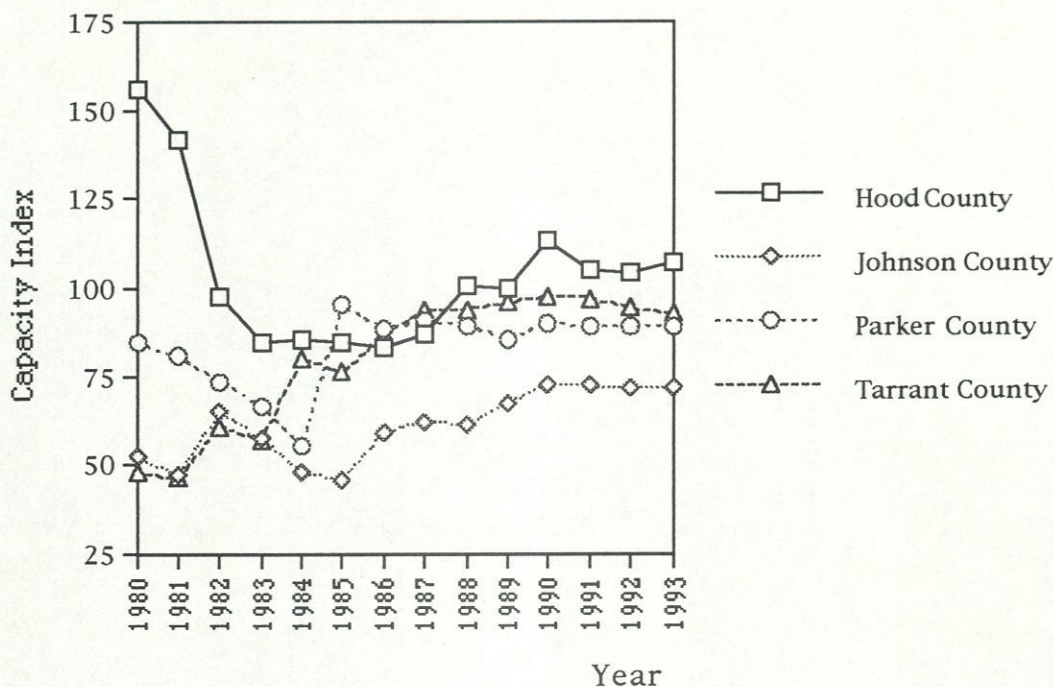
Dallas Metropolitan Area



Dallas Metropolitan Area
County Property Tax Per Capita Effort Index

The metropolitan Effort Index for 1980 (123.16) was the fourth highest in the state for metropolitan indexes. In 1987 and 1993 the metropolitan Effort Index was twenty-six (64.25) and twenty-four (71.17) largest respectively. County Effort Indexes exhibited pattern of overall slight decline during the time period with exception of Henderson county. The Effort Index for Henderson was below state average in early eighties but finished with above state average rates. Dallas county had the lowest Effort Index from 1983 forward and Collin county had the second lowest tax rates.

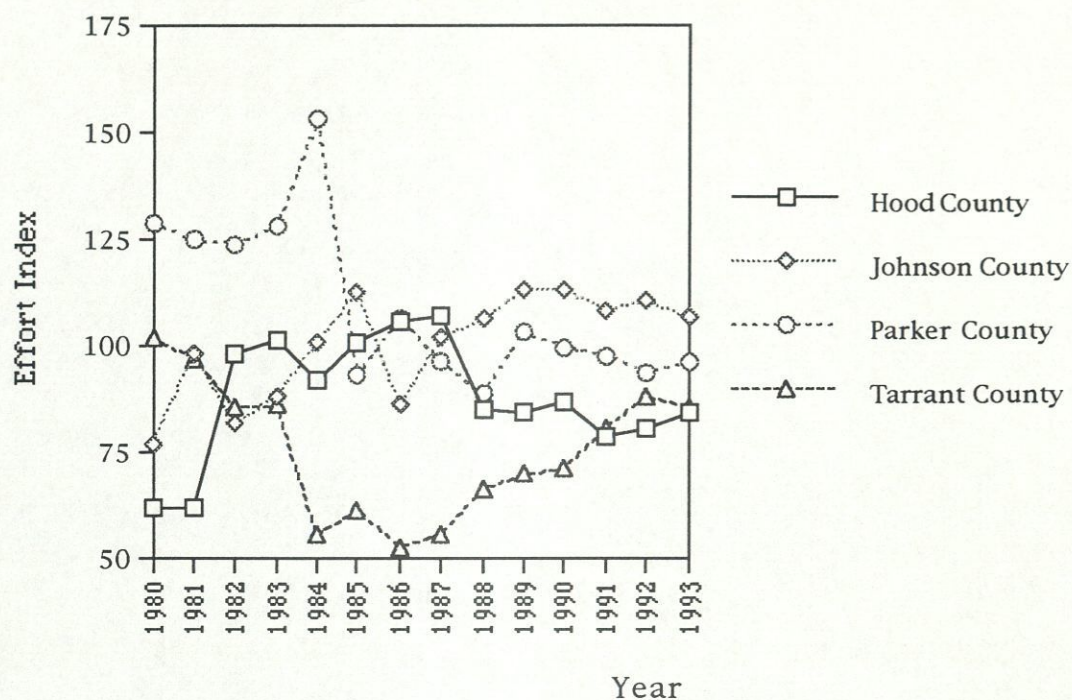
Fort Worth/Arlington Metropolitan Area



Fort Worth-Arlington Metropolitan Area
County Property Tax Per Capita Capacity Index

The four county area ranked twentieth in Capacity Index in 1980. The Capacity Index of just over fifty indicated below state average property values. A moderate upward trend reflected an increase to ten points within the state average. Overall the Capacity Index never reflected the area attaining state parity in per capita property value. The area's rank increased to eight in 1987 and nine in 1993. The Capacity Index for Tarrant county, the most populous county of the area, increased by ninety-five percent to influence area trend. Johnson county consistently had the lowest Capacity Index, never higher than seventy-five.

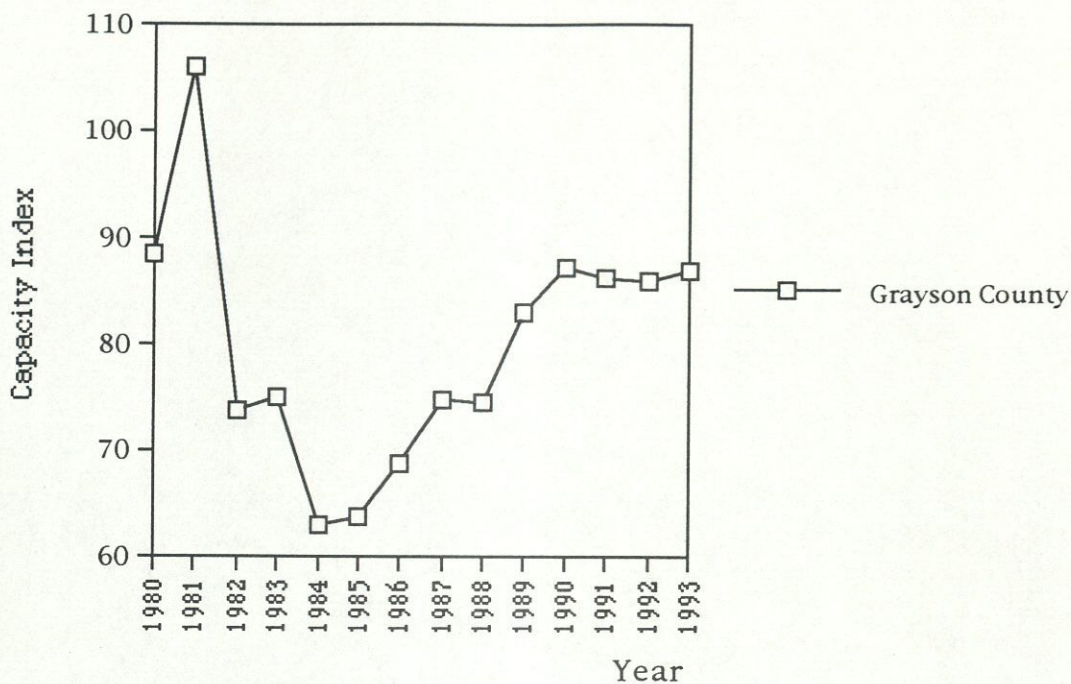
Fort Worth-Arlington Metropolitan Area



Fort Worth-Arlington Metropolitan Area
County Property Tax Per Capita Effort Index

The 1980 Effort Index of 100.30 and rank of fourteen indicated property tax rates were approximately at the state average. Over time the effort declined to 87.51 in 1987 and 87.29 in 1993 and the rank declined to twenty-one for both years. The Tarrant County Effort Index consistently remained below one-hundred and was thirteen points below state average in 1993. The Tarrant county Capacity Index was lowest value from 1983 through 1990 and finishes time period with second lowest of four counties in the area.

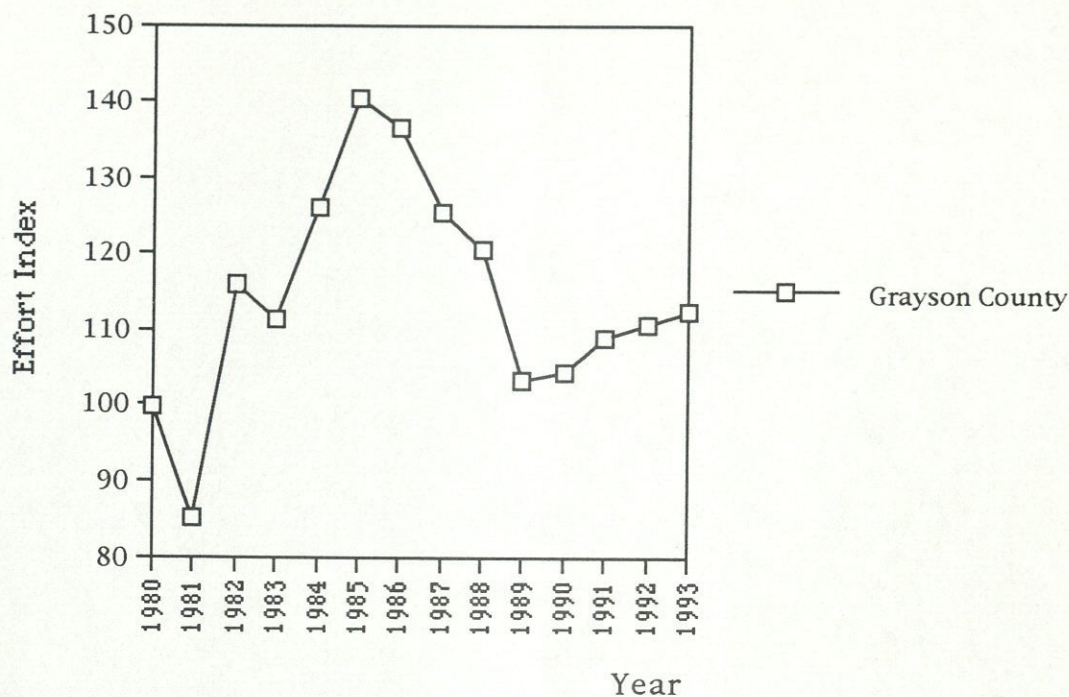
Sherman-Denison Metropolitan Area



Sherman-Denison Metropolitan Area County Property Tax Per Capita Capacity Index

The Capacity Index reflected the relative decline of per capita property values in the first half of the 1980s followed by a gradual recovery. The Capacity Index indicated that by 1993 the per capita property values, relative to the rest of the state, had nearly regained the 1980 position. Property values remained below state average for all years except 1981. The area's rank changed from eleventh, to fifteenth, to thirteenth for 1980, 1987, and 1993 respectively.

Sherman-Denison Metropolitan Area

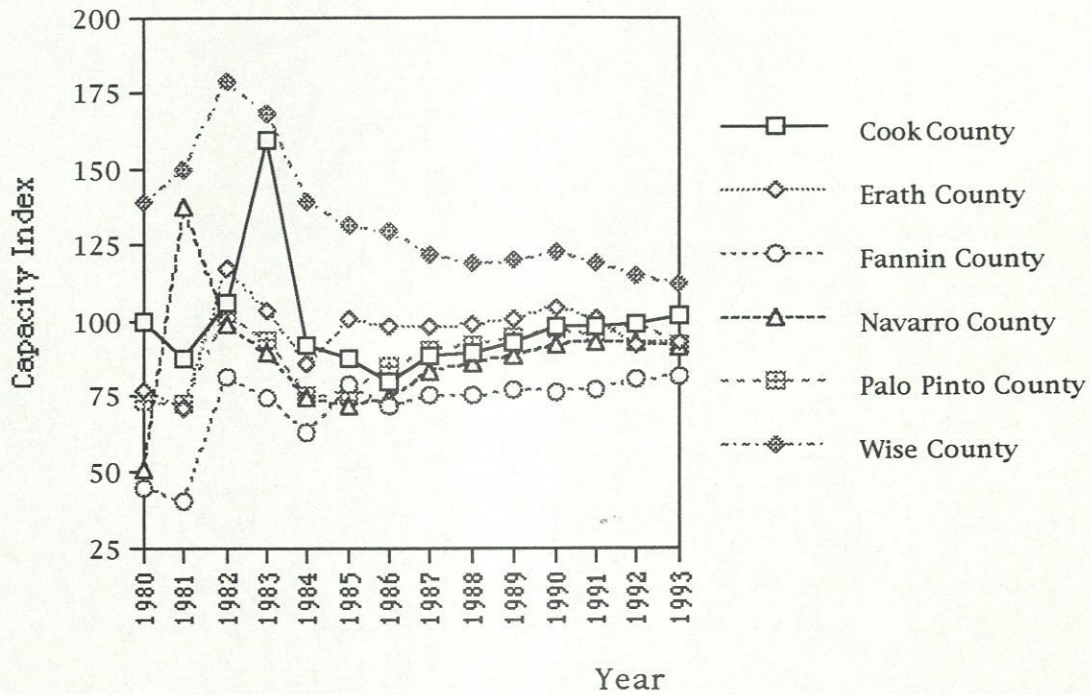


Sherman-Denison Metropolitan Area
County Property Tax Per Capita Effort Index

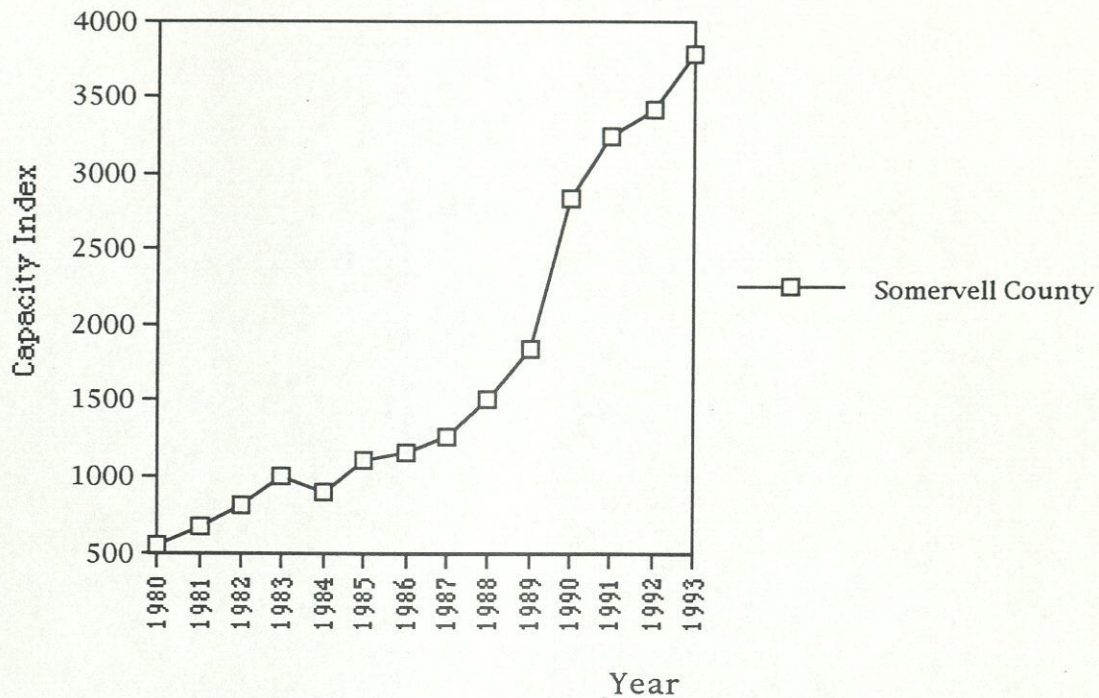
The Effort Index reflected the relative increase in property tax rates as per capita property values declined. It increased during the early 1980s, peaked and then declined over time. Only in 1981 were tax rates in this area below the average county property tax rates. The 1980 Effort Index, 99.63, was the fifteenth largest in the state. By 1987 the Effort Index increased to 125.41; ninth largest among state metropolitan areas. It fell only one place in 1993 with a value of 112.32.

Metroplex Region Rural Counties

Rural Metroplex Texas Counties Excluding Somervell County



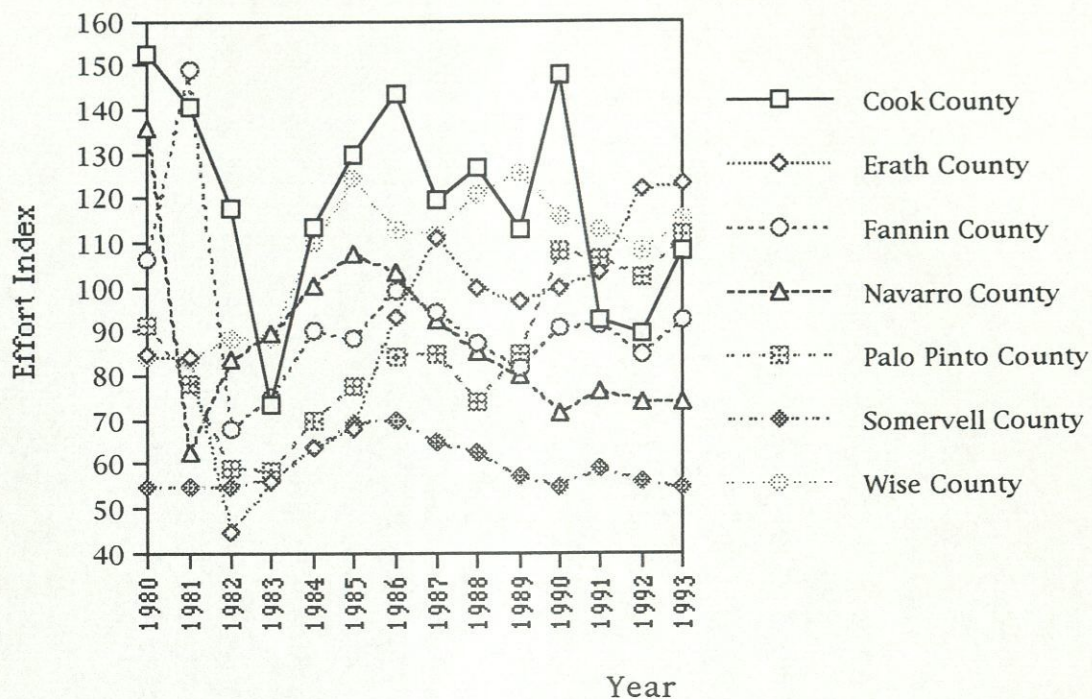
Rural Metroplex Texas Counties Somervell County



County Property Tax Per Capita Capacity Index

Relatively wide variation of Tax Capacity Indexes in the early 1980s followed by a convergence of values toward one hundred. This reflected per capita property values that were close to the state average at the end of the study period. The one exception was Somervell county. The 1980 Tax Capacity Index for Somervell was 500. It increased to nearly 4000 by 1993

Rural Metroplex Texas Counties

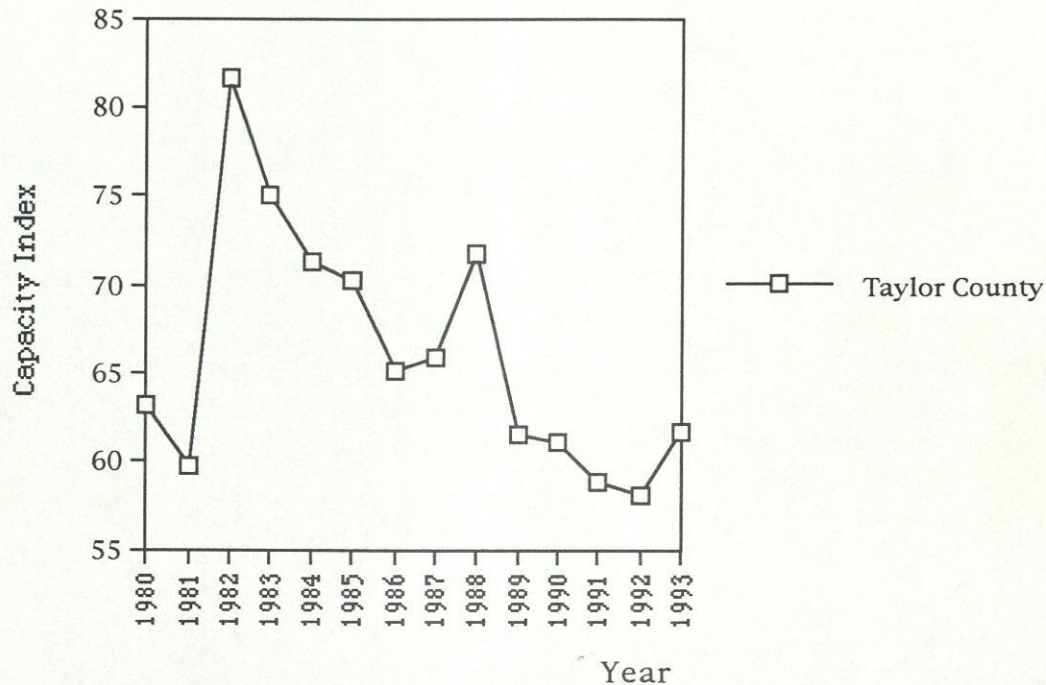


County Property Tax Per Capita Effort Index

Extensive variability in Tax Effort Indexes for the seven rural counties. No clear pattern of convergence or upward or downward trend. Somervell county Tax Effort Index was consistently the lowest of the individual indexes.

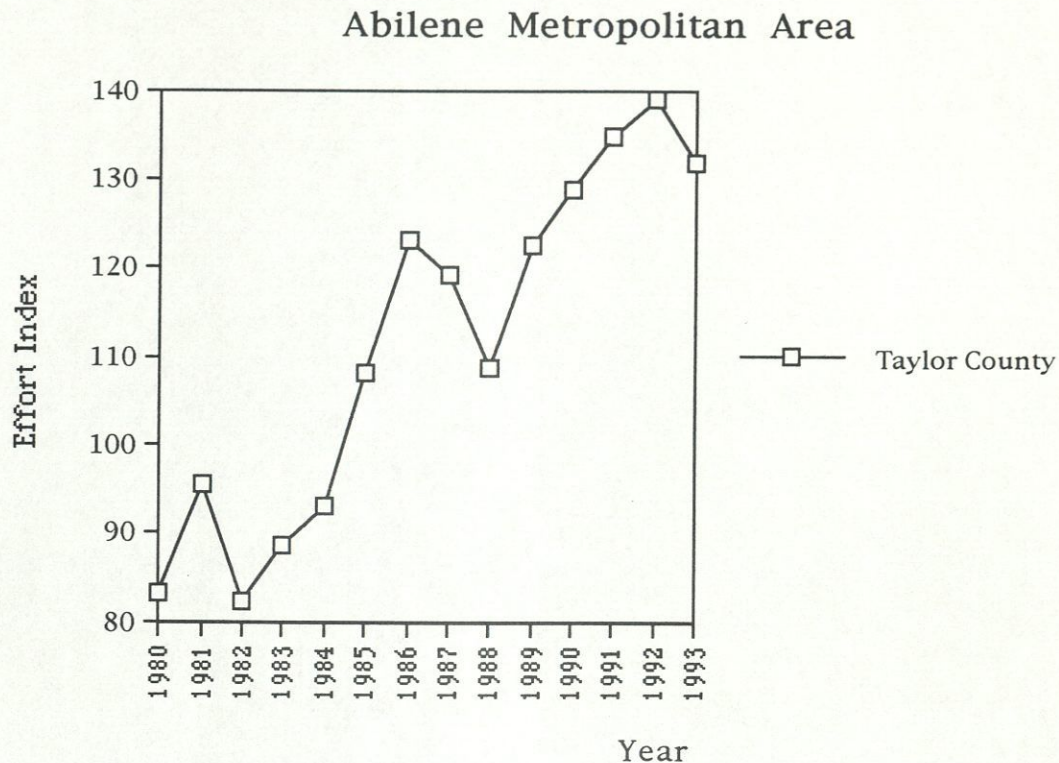
Northwest Region Metropolitan Counties

Abilene Metropolitan Area



Abilene Metropolitan Area
County Property Tax Per Capita Capacity Index

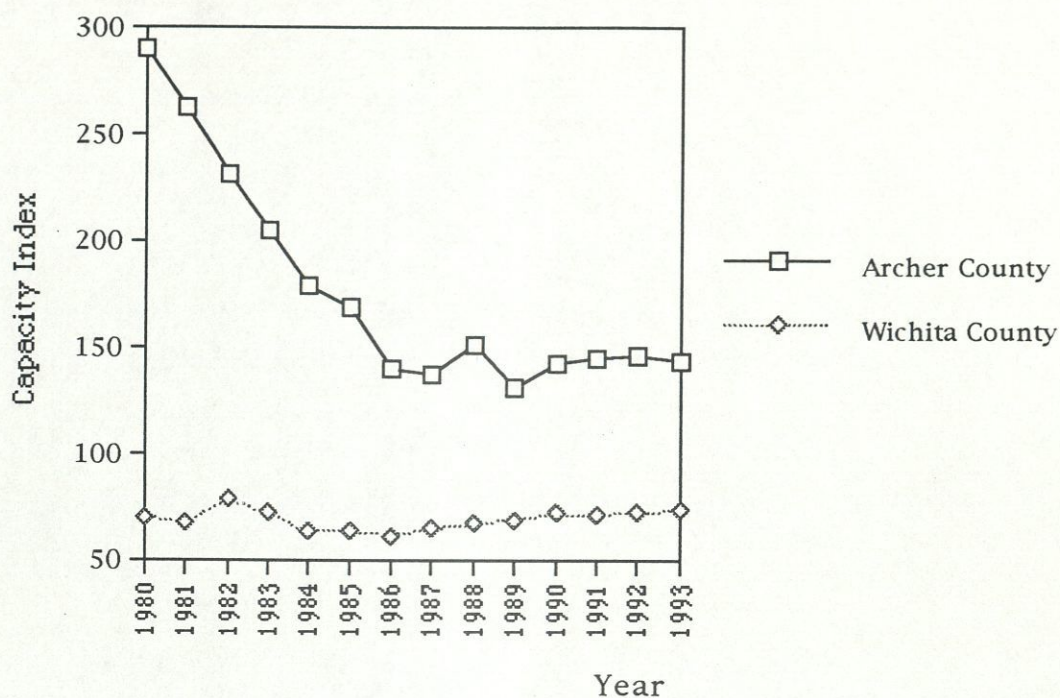
Taylor County is the only county in the Abilene Metropolitan Area. The Capacity Index, 63.22, ranked seventeen among the twenty-seven metropolitan areas. It increased by over twenty points between 1980 and 1982 but exhibited a downward trend since. The value below 100 throughout indicated the metropolitan area property value per capita has been below the state average since 1980.



Abilene Metropolitan Area
County Property Tax Per Capita Effort Index

The 1980 metropolitan Effort Index (83.29) ranked twenty among Texas metropolitan areas. The Effort Index generally increased over the study period; possibly in response to the declining capacity. The Effort Index has been greater than 100 since 1985. The 1993 value (131.84) was the third largest among Texas metropolitan areas. This indicated the county property tax rate in metropolitan area was above the state average.

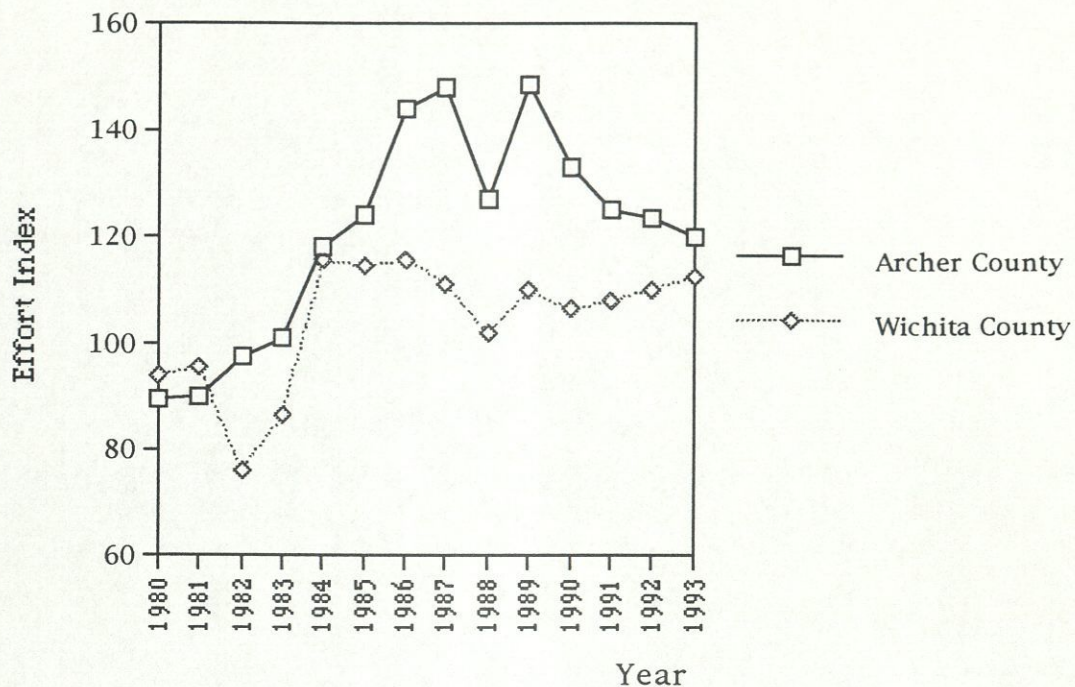
Wichita Falls Metropolitan Area



Wichita Falls Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index of the two counties in this area is weighted by the size of Wichita County. It remained stable, as Wichita County, and hovered in the sixty to eighty point range, as did Wichita county. The area's 1980 Capacity Index, 82.06, ranked fourteenth. The Capacity Index decreased to 68.63 in 1987 and then increased to 77.30 in 1993.

Wichita Falls Metropolitan Area

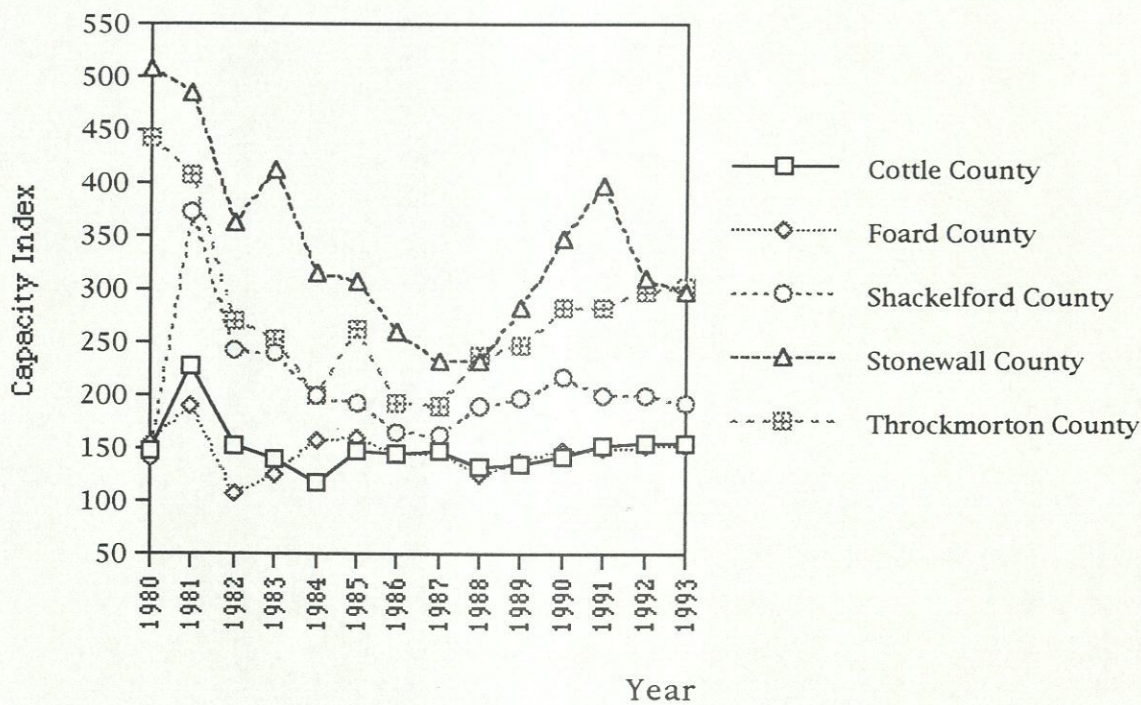


Wichita Falls Metropolitan Area
County Property Tax Per Capita Effort Index

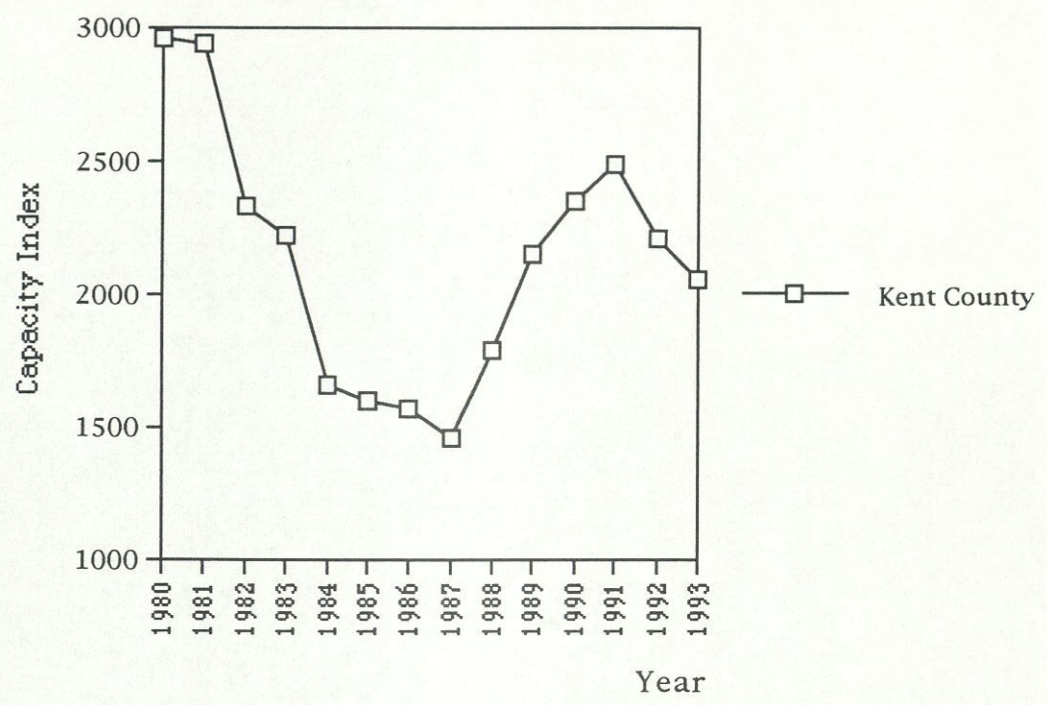
The general trend of the Effort Index was slightly increase. It began the period below one-hundred and finished the period twelve points above one-hundred. The 1980 and 1987 Capacity Index, 93.49 and 113.06 respectively, were ranked nineteenth and seventeen. The area Effort Index decreased only slightly to 112.83 but moved up in rank to nine.

Northwest Region Rural Counties

Rural Northwest Texas Counties Population Under 4,000 Excluding Kent County



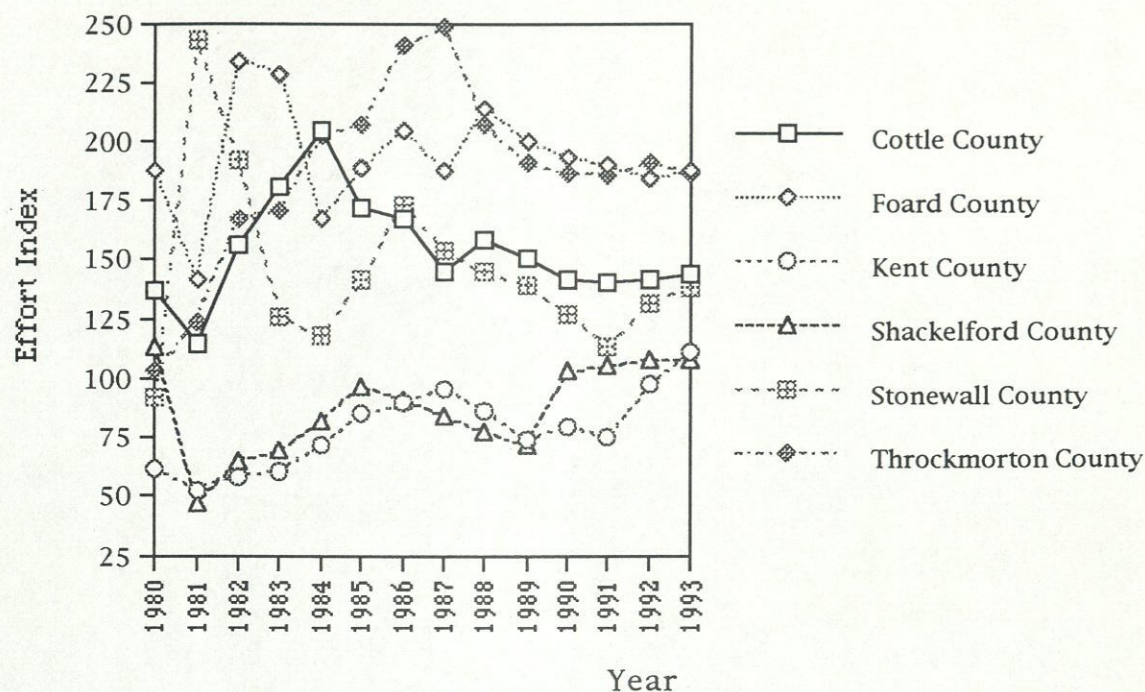
Kent County Northwest Texas



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes exceeded one hundred for the duration of the study. Indexes ranged from 150 to 500, excluding the Kent county index that never fell below 1500. The range narrowed by 1993 to approximately 150 points. Relatively high index values at the outset declined but the relatively low values remained fairly constant over time; producing a moderate overall decline in the Tax Capacity Indexes for the group.

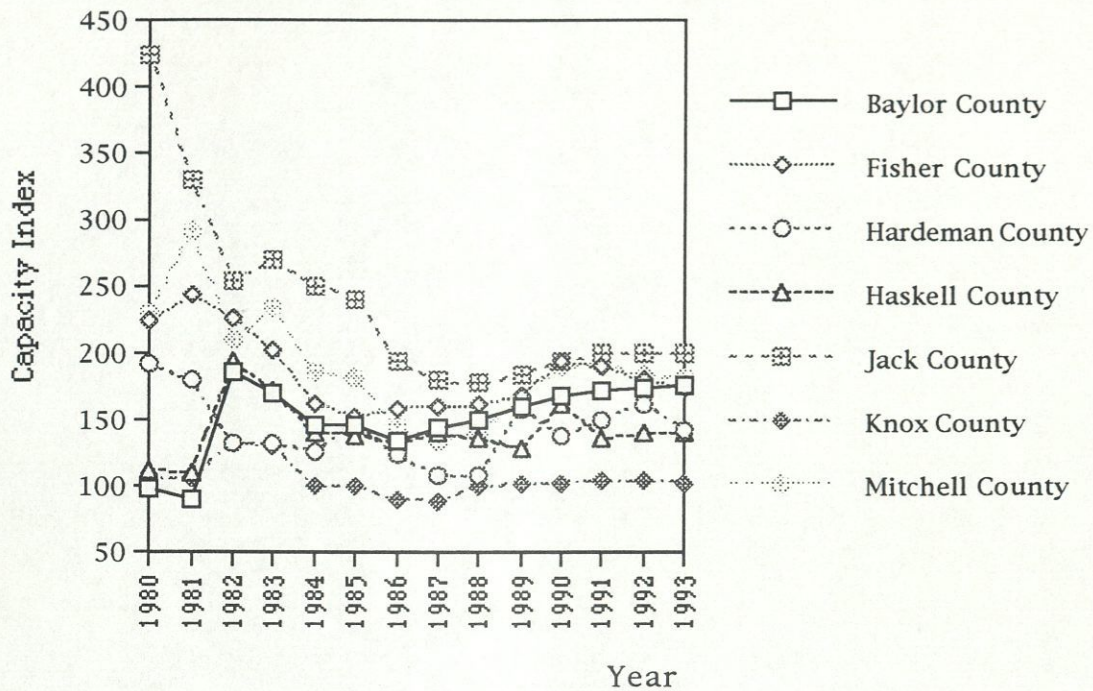
Rural Northwest Texas Counties Population Under 4,000



County Property Tax Per Capita Effort Index

Tax Effort Indexes exhibited little pattern over time. Values ranged from approximately sixty to approximately 190 in 1980. At the outset, two counties had indexes that reflected below state average county property tax rates. At the conclusion all counties had values that reflected above average rates. No county had an index value that was consistently the same rank order in comparison to the other values of other counties.

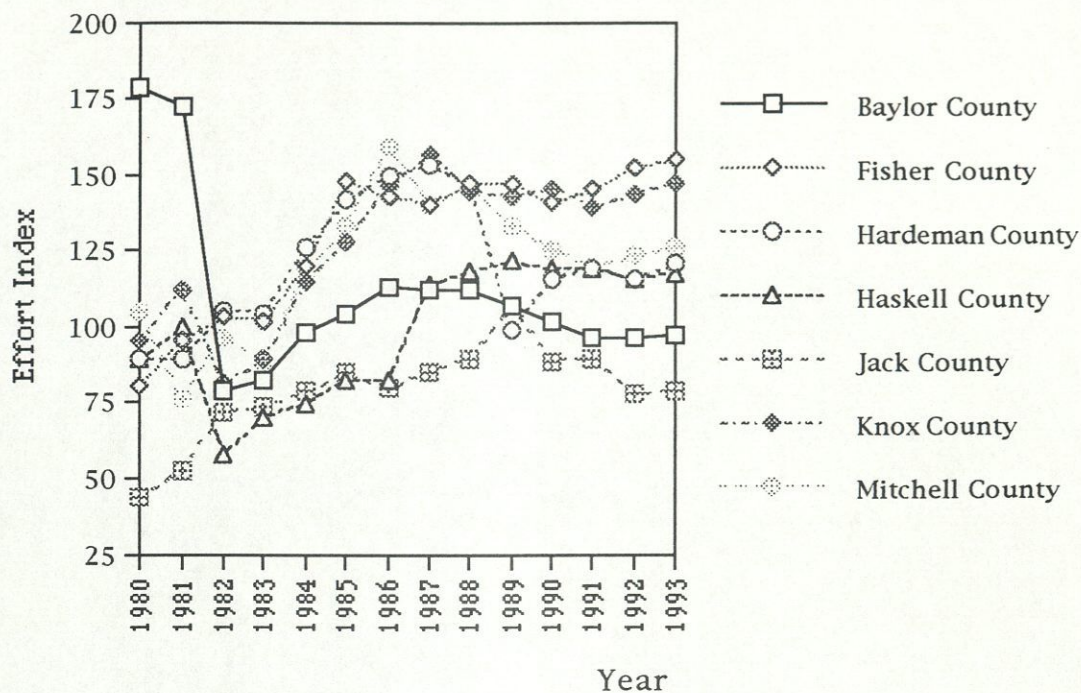
Rural Northwest Counties Population 4,000 to 8,000



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes exceeded one hundred for all seven counties in 1980 and all but one exceeded one hundred over duration of the study period. Initially, the values ranged from one hundred to over 400. Values converged to a narrower range of one hundred to 200 by 1993. As a group, per capita property tax values were above the state average for the entire study period.

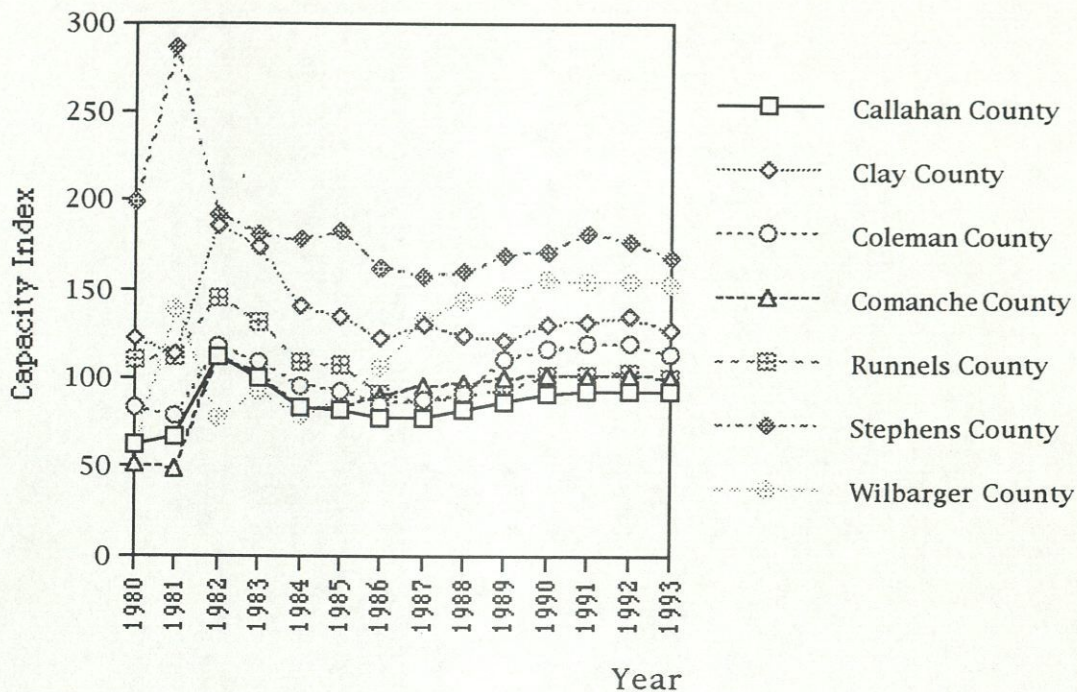
Rural Northwest Texas Counties
Population 4,000 to 8,000



County Property Tax Per Capita Effort Index

Tax Effort Indexes exhibited increasing trend. Values for all but one county, Baylor county, were less than or just above one hundred in 1980. By 1993, values for all but two counties were greater than one hundred and the range of values had increased. County property tax rates increased relative to the rest of the state for this group of counties from 1980 to 1993.

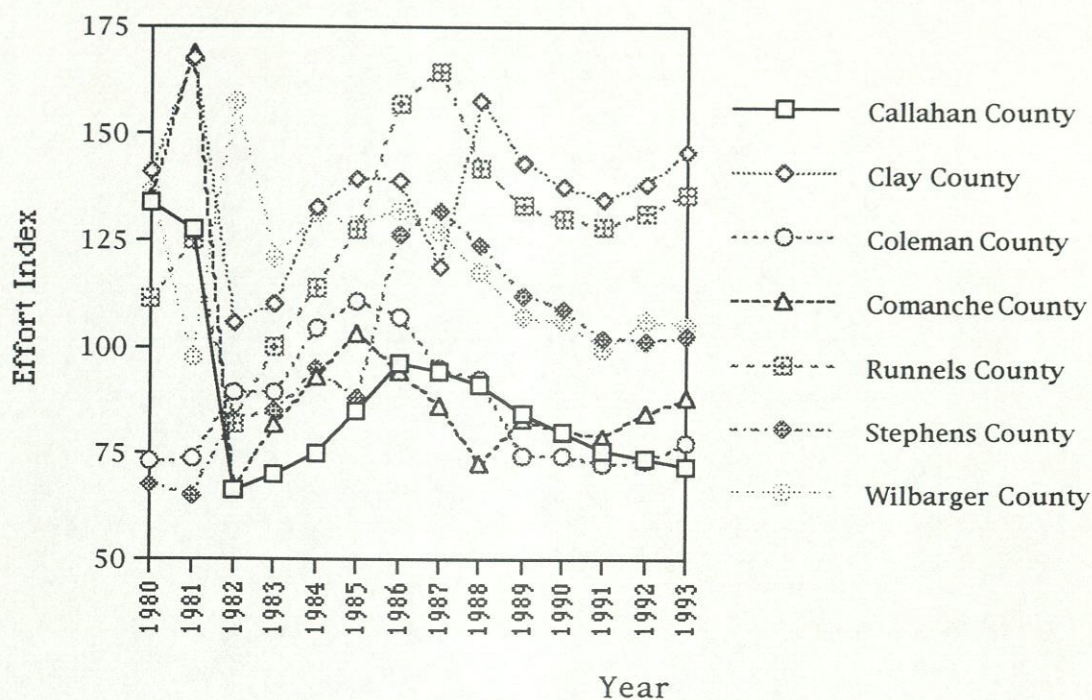
Rural Northwest Counties Population 8,000 to 15,000



County Property Tax Per Capita Capacity Index

An overall shift upward in the values of the Tax Capacity Index in 1982 was followed by relatively little change for the duration of the study period. Three counties had 1980 indexes that exceeded one hundred and by 1993 three counties had indexes under one hundred. The upward shift in 1982 produced an overall increase in per capita property values relative to the rest of the state.

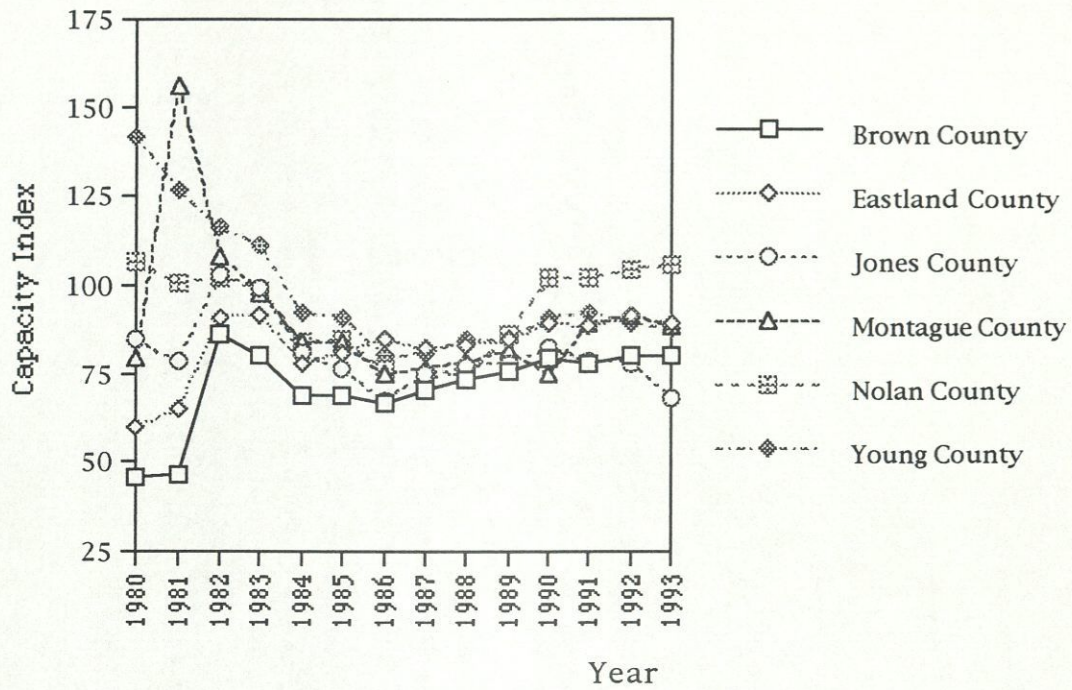
Rural Northwest Texas Counties
Population 8,000 to 15,000

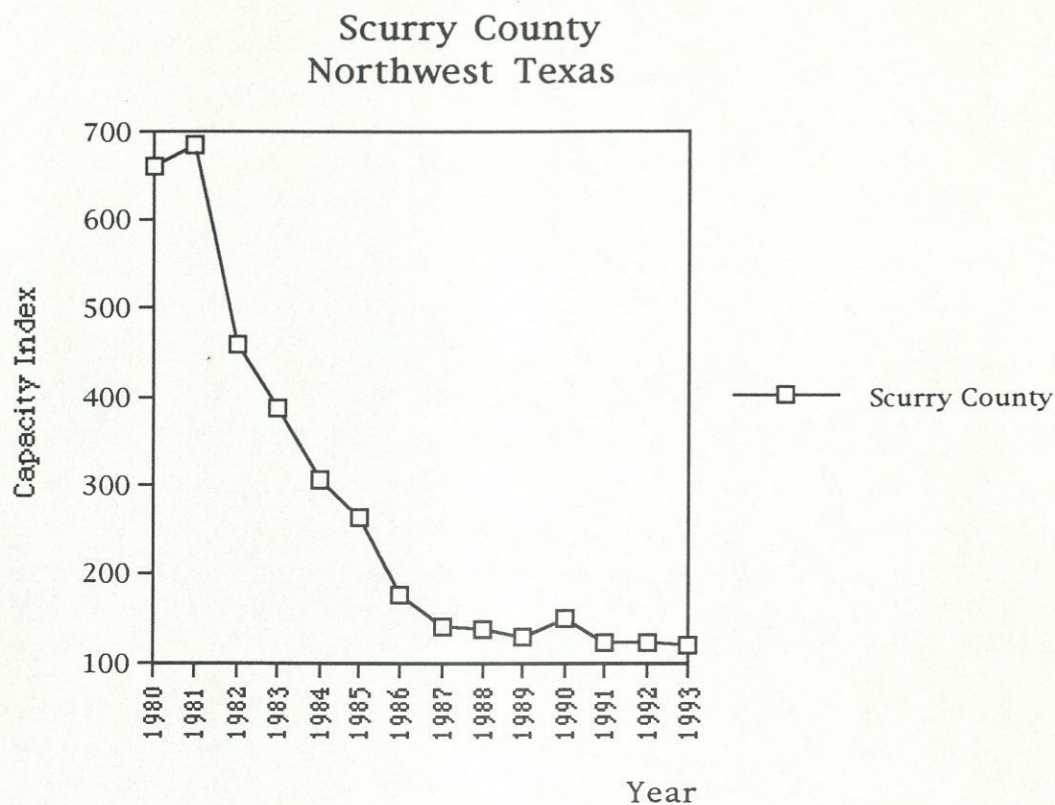


County Property Tax Per Capita Effort Index

Tax Effort Index Substantial amount of variation among Tax Effort Indexes for the seven counties from 1980 through 1993. Cyclical pattern evident but little correlation to pattern of Tax Capacity Index on previous figure. Little change in the range from lowest to highest value.

Rural Northwest Counties Population Over 15,000 (Except Scurry County)

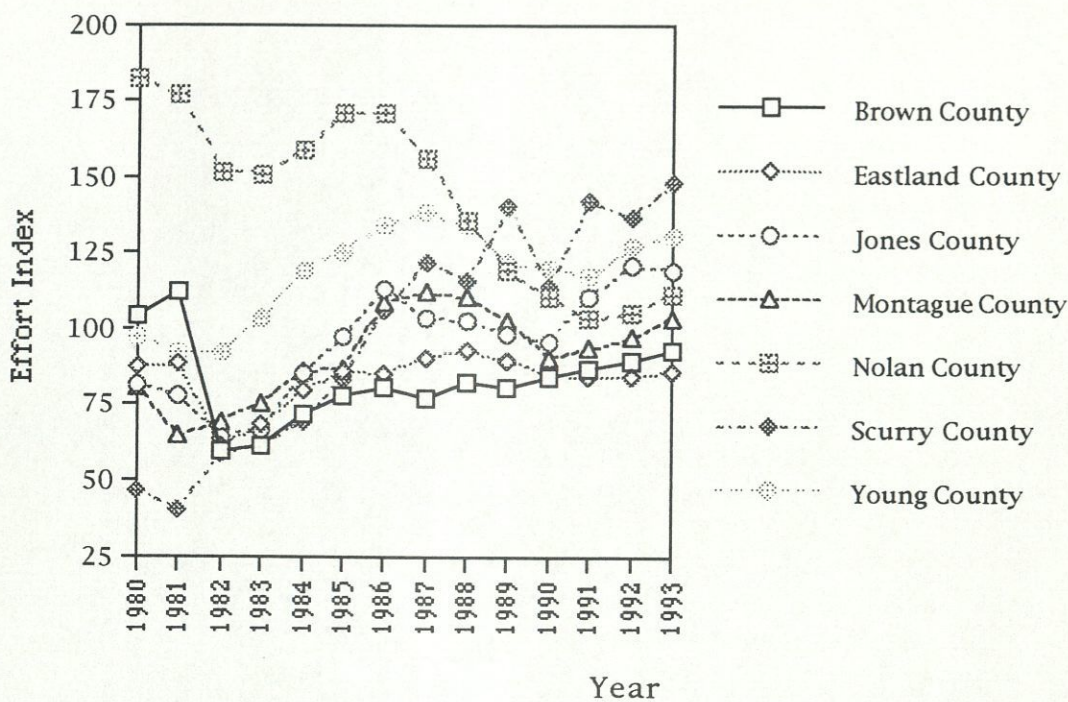




County Property Tax Per Capita Capacity Index

Tax Capacity Indexes for the seven counties in the group converged over time to the seventy-five to one hundred range. Overall, values of the Tax Capacity Index reflected per capita county property values slightly below the state average. Two counties, Nolan and Scurry, had indexes that exceeded one hundred in 1993.

Rural Northwest Texas Counties Population Over 15,000

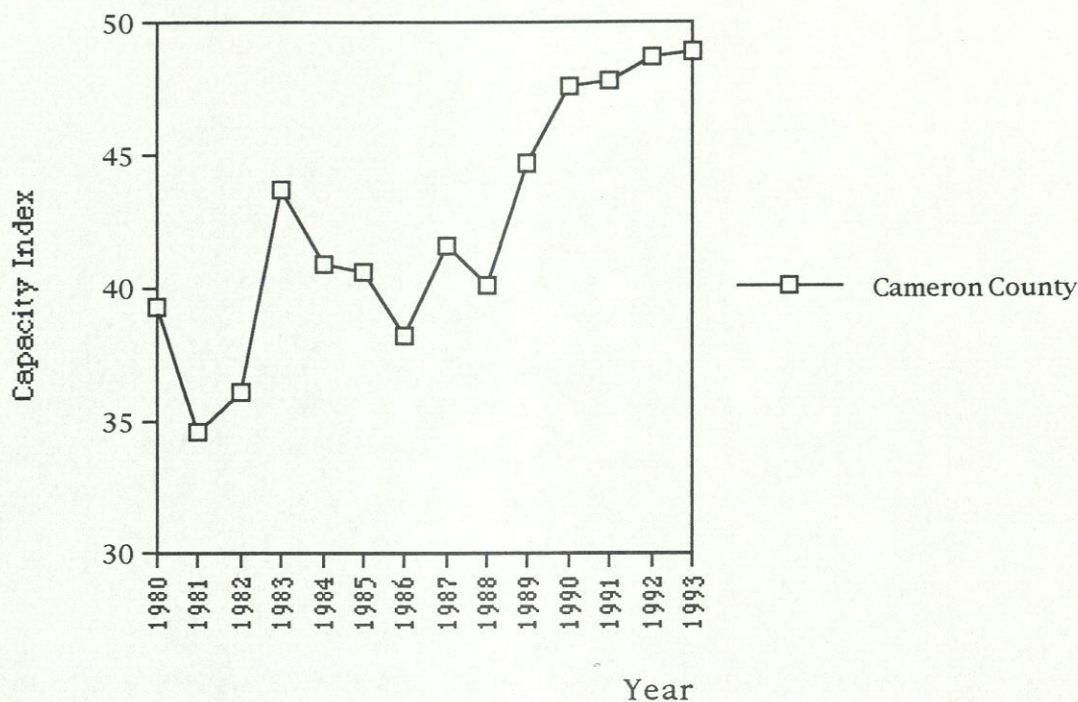


County Property Tax Per Capita Effort Index

With exception of Nolan county, the Tax Effort Indexes for the group increased over time. Tax Effort Index values were generally at or below one hundred in 1980. The Tax Effort Index for Scurry county was less than fifty. By 1993, five of the seven index values were at or above one hundred. The two values below one hundred were within twenty points of one hundred. County property tax rates for this group increased relative to the rest of the state over the fourteen year period.

South Texas Region Metropolitan Counties

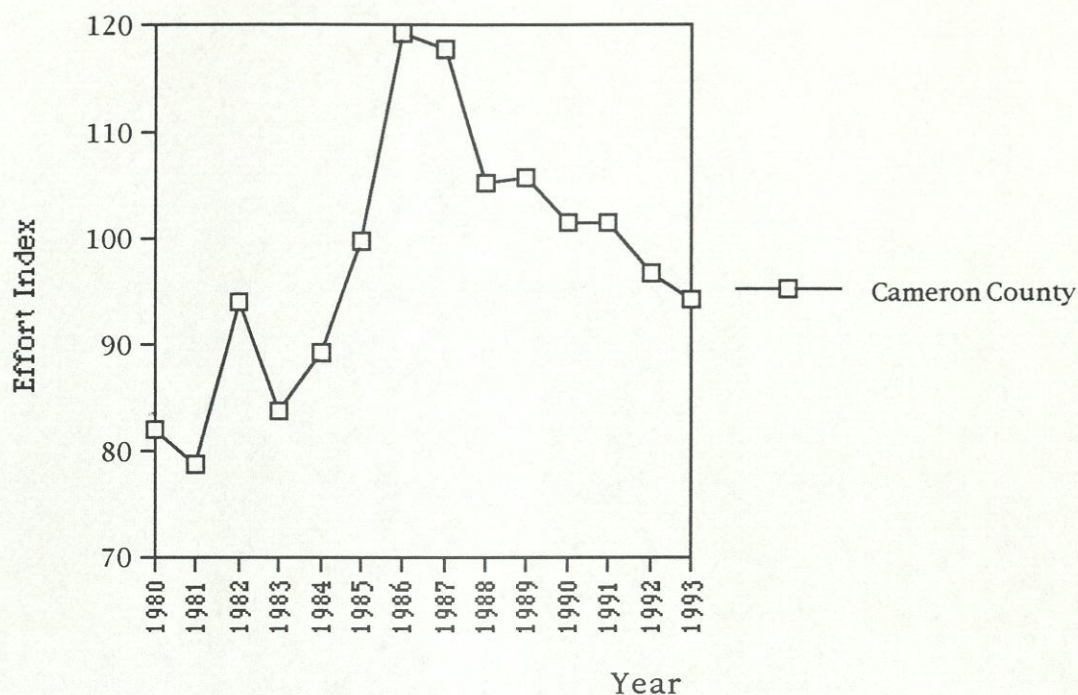
Brownsville-Harlingen Metropolitan Area



Brownsville-Harlingen Metropolitan Area County Property Tax Per Capita Capacity Index

The 1980 Capacity Index for this one county area was more than sixty points below the state average, exhibited a steady increase over time period, but always remained below the state average. The Capacity Index never reached a value as great as 50. Property values per capita have ranged 35% and 50% of the state average over the entire period.

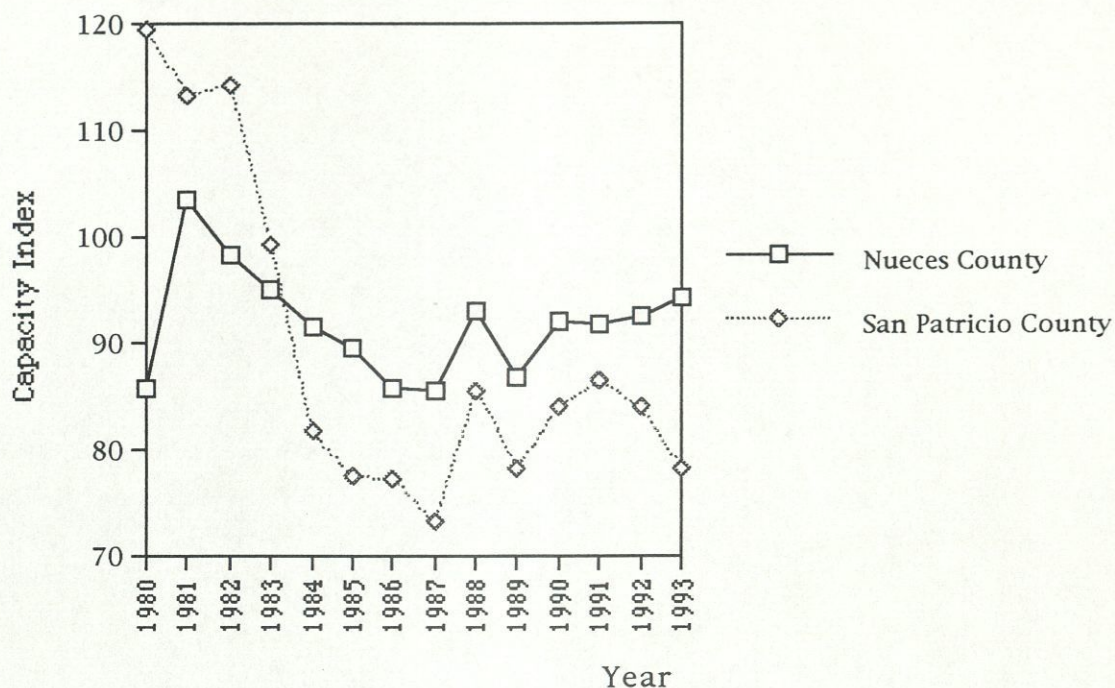
Brownsville-Harlingen Metropolitan Area



Brownsville-Harlingen Metropolitan Area
County Property Tax Per Capita Effort Index

Initially, the Effort Index was below state average. Over time it increased to twenty points above state average by 1986, and then exhibited slow and steady decline to finish the study period slightly below the state average. The Capacity Index and the Effort Index moved consistently in opposite directions only in the second half of the time period.

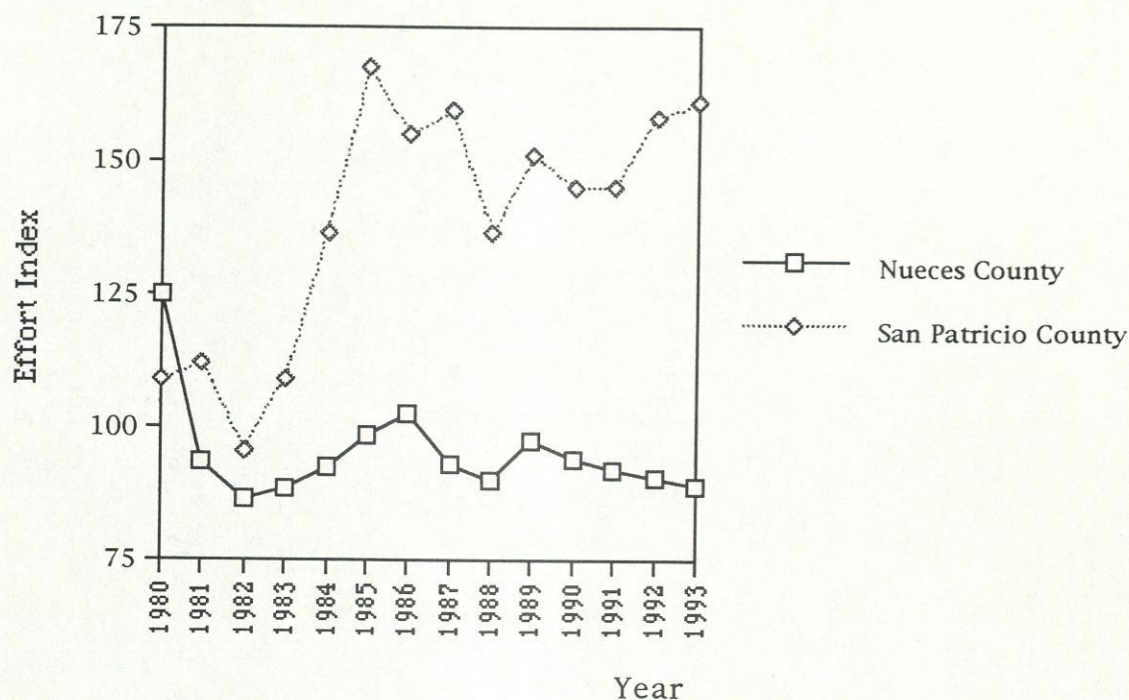
Corpus Christi Metropolitan Area



Corpus Christi Metropolitan Area
County Property Tax Per Capita Capacity Index

The metropolitan area is comprised of two counties. The Metropolitan Capacity begins below state average (91.66), declines by eight points at mid-period and then increases to finish time period nearly where it started (91.34). Nueces county, the more populous county of the area, had a Capacity Index that was consistently below the state average but first declined and then slowly increased.

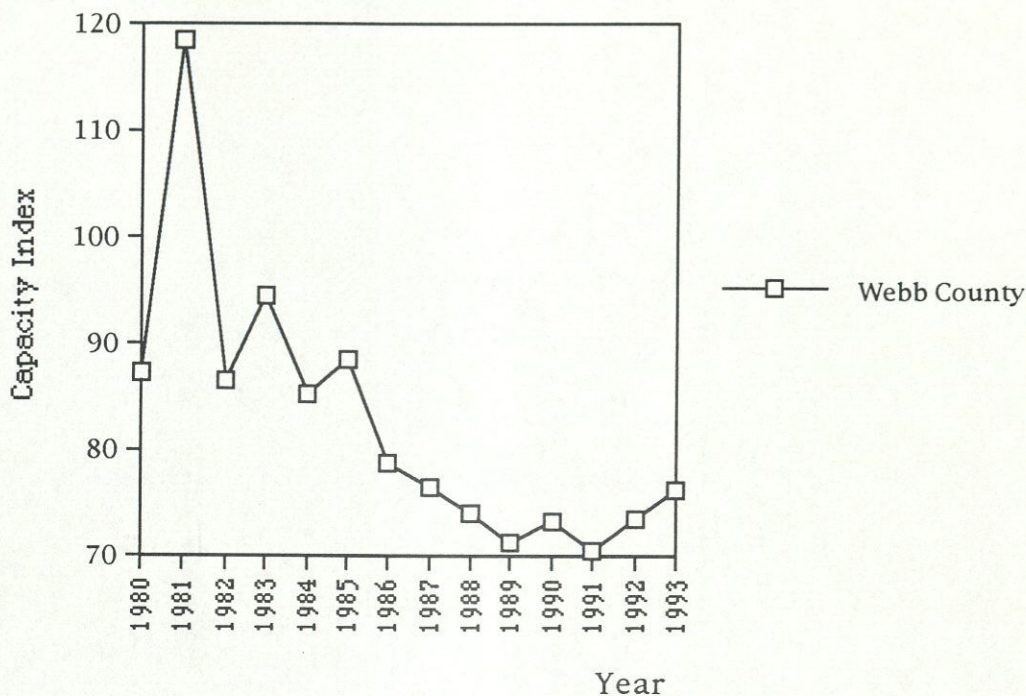
Corpus Christi Metropolitan Area



Corpus Christi Metropolitan Area
County Property Tax Per Capita Effort Index

The metropolitan Effort Index (121.73) began over twenty points above state average but finished the time period nearly equal to the state average (101.36). The decline in the Effort Index reflected the influence of Nueces County. The Effort Index for Nueces County declined to below state average in first year of decade and remained at or below state average for duration of period while the Effort Index for San Patricio County steadily increased over time.

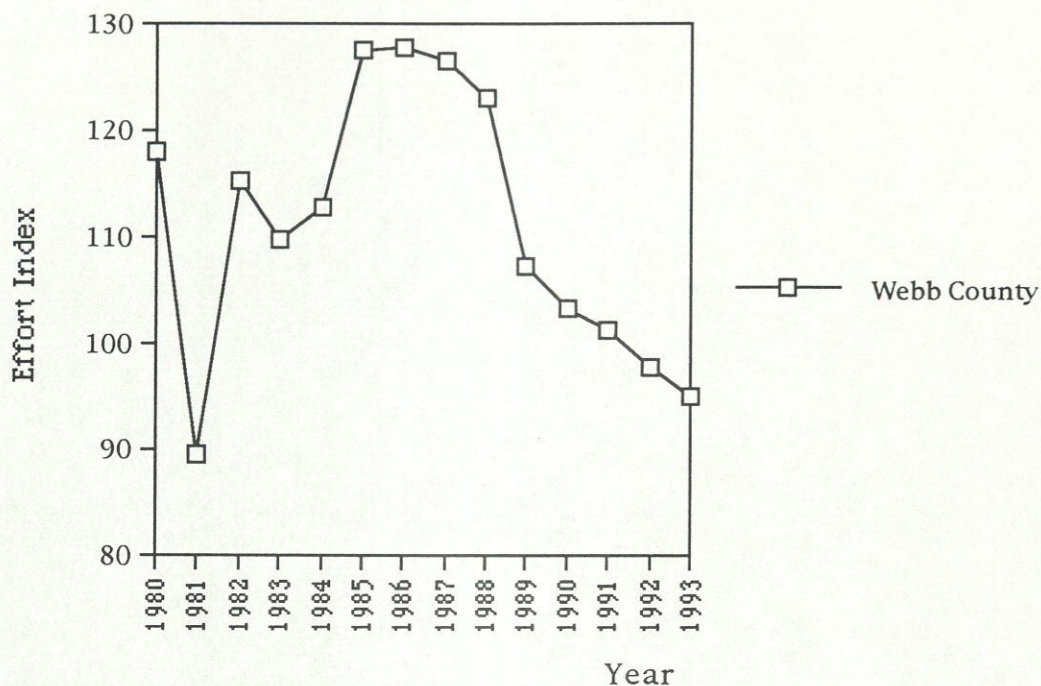
Laredo Metropolitan Area



Laredo Metropolitan Area
Count Property Tax Per Capita Capacity Index

The trend of the Capacity Index for this single county metropolitan area exhibited a sharp spike in 1981 to a value of approximately 120 and then to the upper eighties in 1982. The trend for the duration was a general overall decline interspersed with peaks and valleys. The rank of the Capacity Index dropped a total of four places between 1980 and 1993; from twelve to fourteen to sixteen. Per capita property values began below the state average, remained below the state average, and declined in relative terms as well.

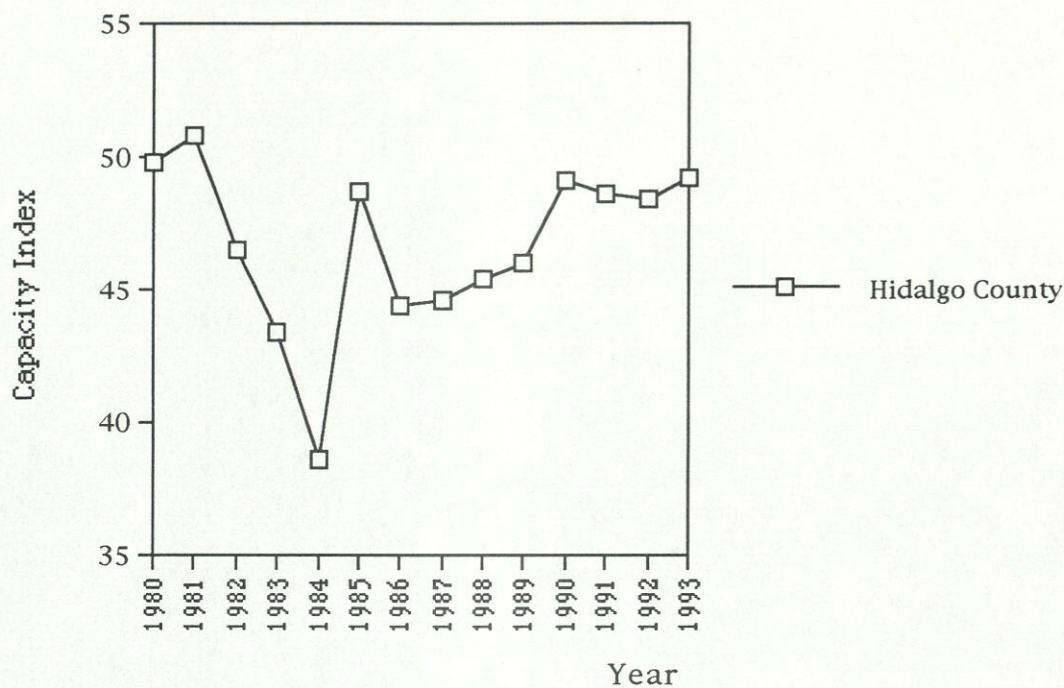
Laredo Metropolitan Area



Laredo Metropolitan Area
County Property Tax Per Capita Effort Index

The 1980 metropolitan area Effort Index ranked eighth among Texas metropolitan areas. It dropped significantly the following year and then nearly sustained the initial value of 117.81. The sharp decline and recovery in the Effort Index occurred in the same year as the sharp increase in the Capacity Index. The Effort Index peaked in the middle years of the study with a value of 126.48. County property tax rates declined relative to the state average during the last half of the study. By 1993 the Effort Index was below the state average, 94.83 and ranked eighteenth among metropolitan areas.

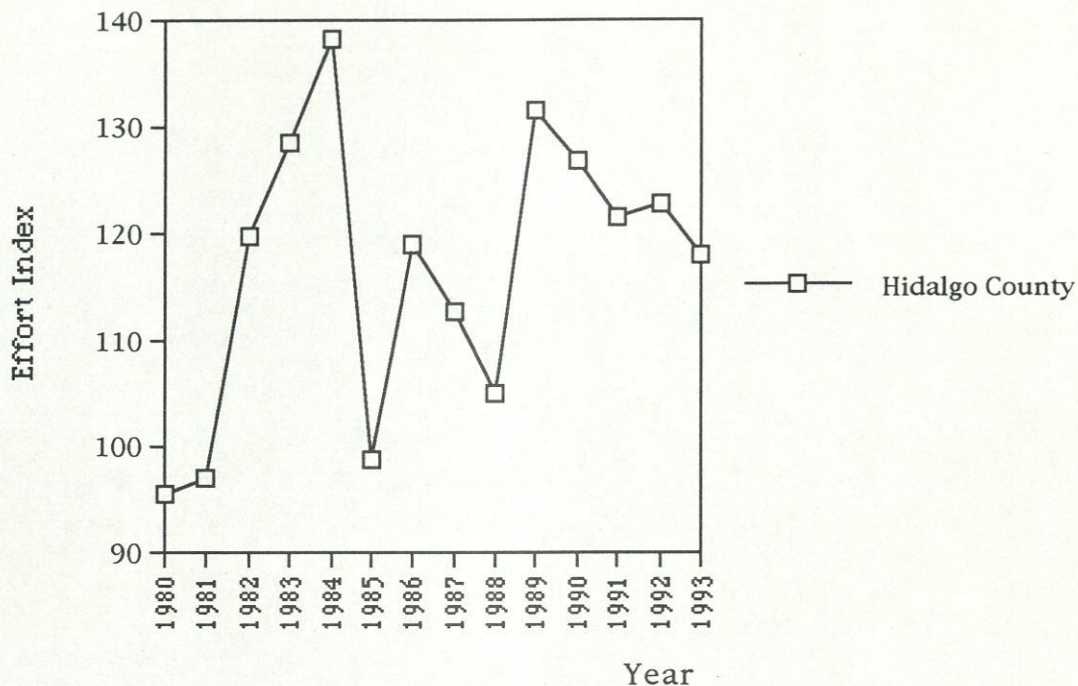
McAllen-Edinburg-Mission Metropolitan Area



McAllen-Edinburg-Mission Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index for this South Texas metropolitan area indicated that per capita property values were less than fifty percent of the state average for nearly the entire study period. The 1980 Effort Index was approximately fifty, 49.93. Relative per capita property values declined to just under forty-five percent of the state average in 1987 and recovered to fifty percent by 1993. The area had the lowest Capacity Index in 1987 and 1993.

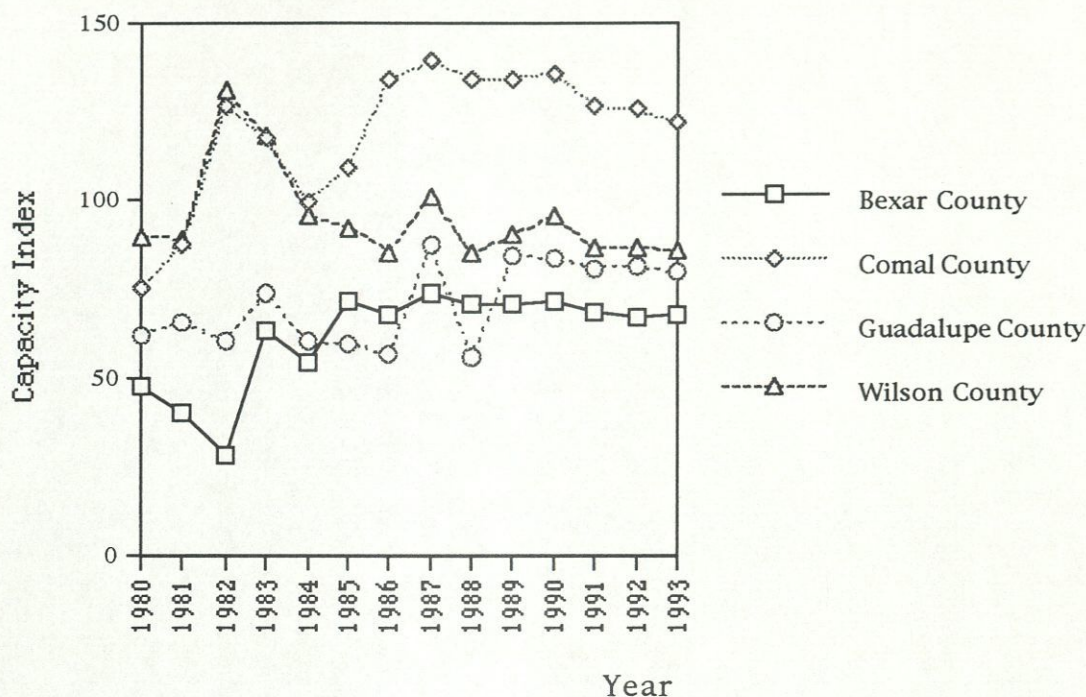
McAllen-Edinburg-Mission Metropolitan Area



McAllen-Edinburg-Mission Metropolitan Area County Property Tax Per Capita Effort Index

The relatively low per capita property value in the area seemingly caused the Effort Index to exceed the state average for all except the initial year. The 1980 Effort Index, 93.31 indicated below state average county property tax rates in Hidalgo county. The irregular trend produced Effort Index values as high as nearly 140 in one year, down to almost 110 the next, and then up to 120 the next. The 1987 Effort Index indicated above average property tax rates, 112.72, and a rank of eighteen. The Effort Index increased by approximately six points to 118.00, fifth highest among Texas metropolitan areas..

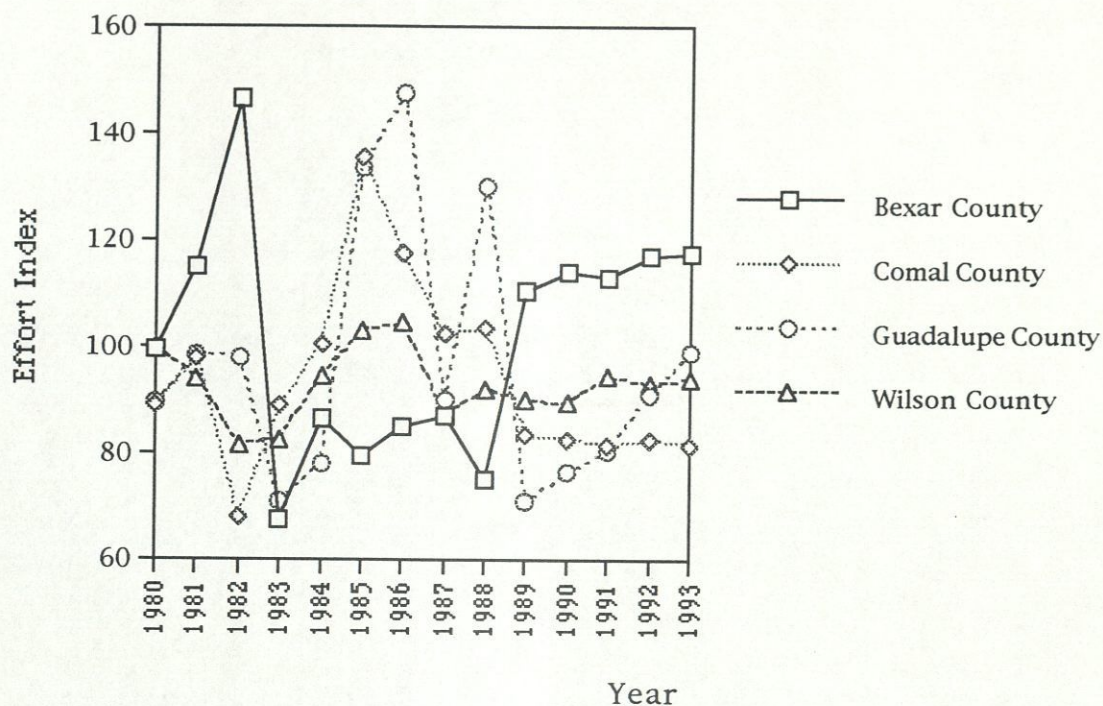
San Antonio Metropolitan Area



San Antonio Metropolitan Area
County Property Tax Per Capita Capacity Index

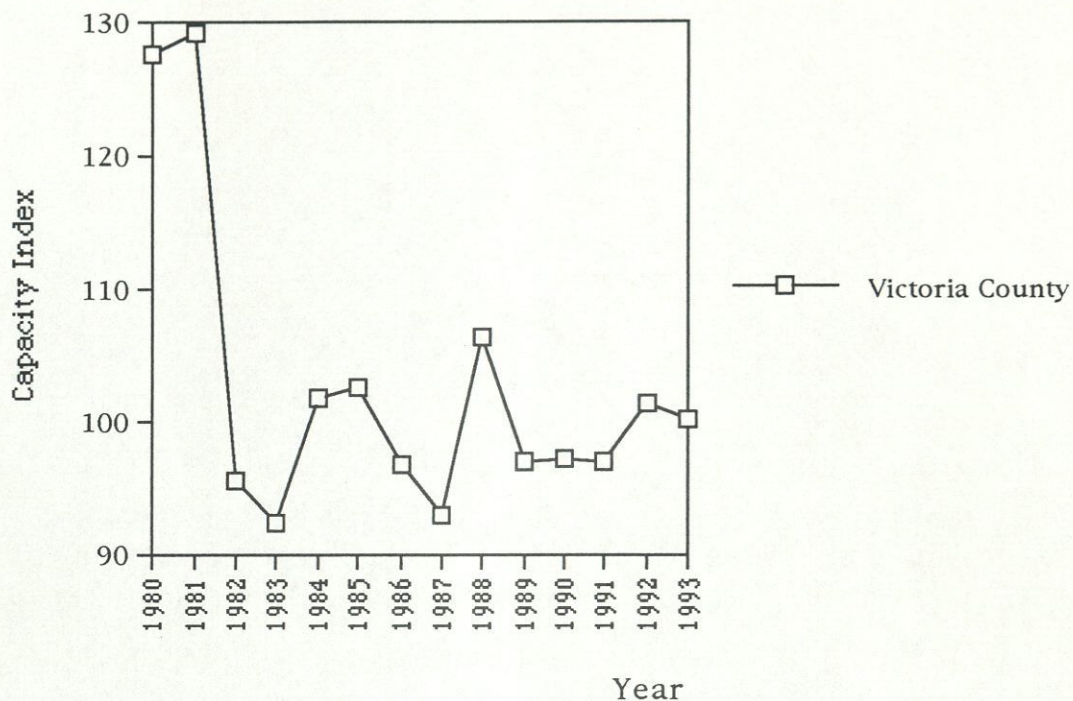
The 1980 Capacity Index for this four county area reflected per capita property values that were less than fifty percent of the state average. A Capacity Index of 49.75 placed the area twenty-first among Texas metropolitan areas. The value of the area Capacity Index was heavily weighted by Bexar county. Bexar county contained nearly ninety percent of the metropolitan population and consistently had the lowest or second lowest Capacity Index, usually in the sixty to seventy point range. Relative per capita property values increased from 1980 to 1987 as indicated by the Capacity Index increase from 49.93 to 78.35. The improved relative property values changed the rank of the San Antonio to thirteen, an eight place improvement over it's 1980s rank. At the end of the study period relative property values had declined slightly, the Capacity Index was 70.83 and the rank was down to eighteen.

San Antonio Metropolitan Area

San Antonio Metropolitan Area
County Property Tax Per Capita Effort Index

The initial year saw the individual Effort Indexes of the area counties clustered around one hundred. The area Effort Index measured 98.53 and the area ranked sixteenth among Texas metropolitan areas. Individual county Effort Indexes varied substantially over the first half of the period with the result of a somewhat lower area Effort Index, 88.86; the second lowest among metropolitan areas. County property tax rates had increased relative to other metropolitan areas by 1993. The Effort Index measured 114.44, the seventh highest. Overall, the area Effort Index reflects the Bexar county experience. Of the area counties, in 1993 only Bexar county attained an Effort Index in excess of one hundred.

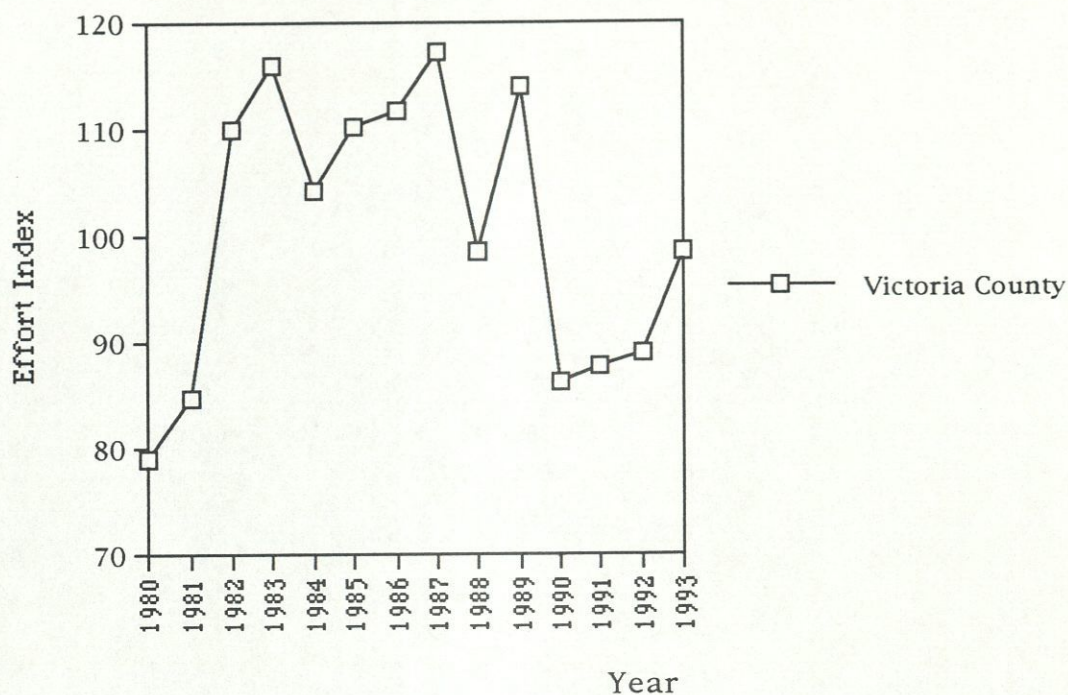
Victoria Metropolitan Area



Victoria Metropolitan Area
County Property Tax Per Capita Capacity Index

Victoria County, the sole county of the area, ranked fourth among Texas metropolitan areas with an Capacity Index of 127.58. Capacity increased slightly in 1981 and then declined sharply, over thirty points, the following year. From 1982 to the end of the study period the Capacity Index remained within ten points one hundred. The Capacity Index for 1987 and 1993 were 92.82 and 100.10 respectively. Victoria County ranked seventh in Capacity Index in both 1987 and 1993.

Victoria Metropolitan Area

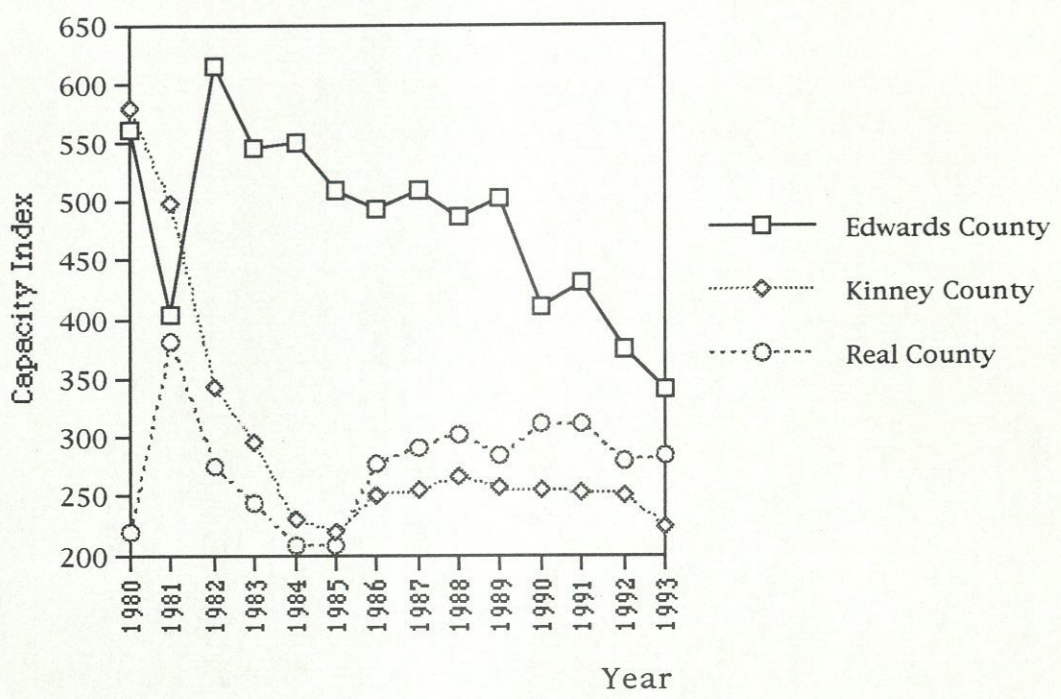


Victoria Metropolitan Area
County Property Tax Per Capita Capacity Index

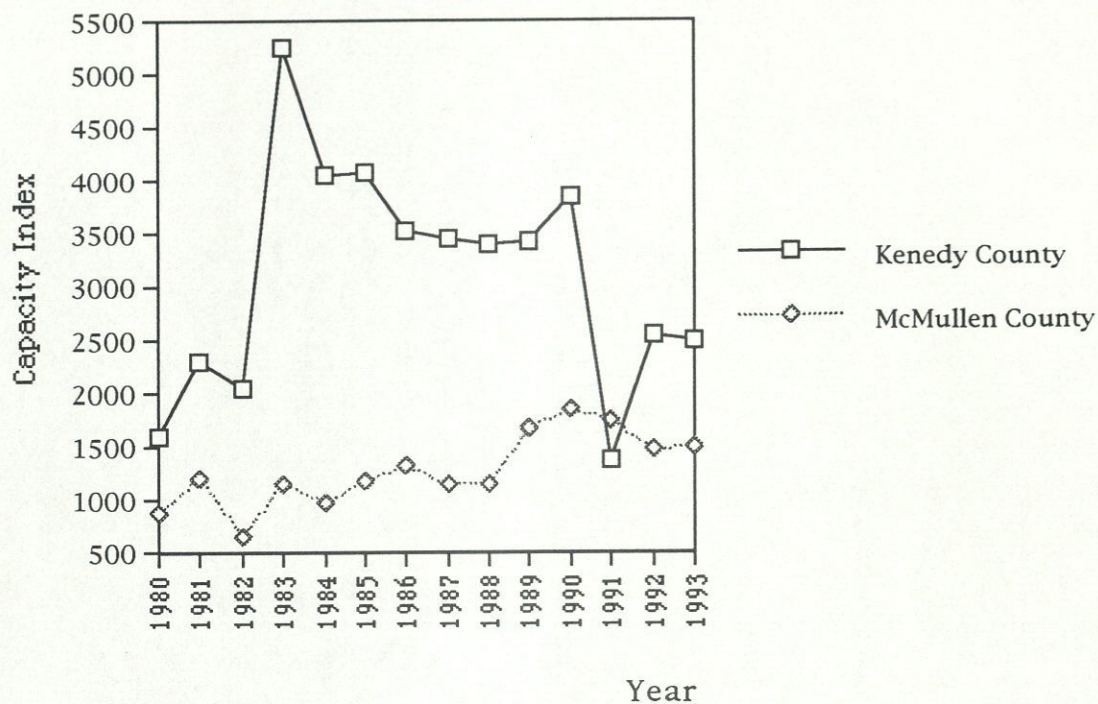
From 1980 to 1983 the Effort Index increased from just under eighty points to just under 120. The Effort Index remained above one hundred until 1989 and then dropped sharply to the mid-eighties. The 1980 Effort Index, 78.94, ranked only two places last. The increase during subsequent years increased its rank to thirteen with an Effort Index of 117.17. The 1993 Effort Index, 98.48, was just below one hundred and was the fifteenth largest Effort Index.

South Texas Region
Rural Counties

Rural South Texas Counties
Population Under 5,000
Excluding Kenedy and McMullen Counties



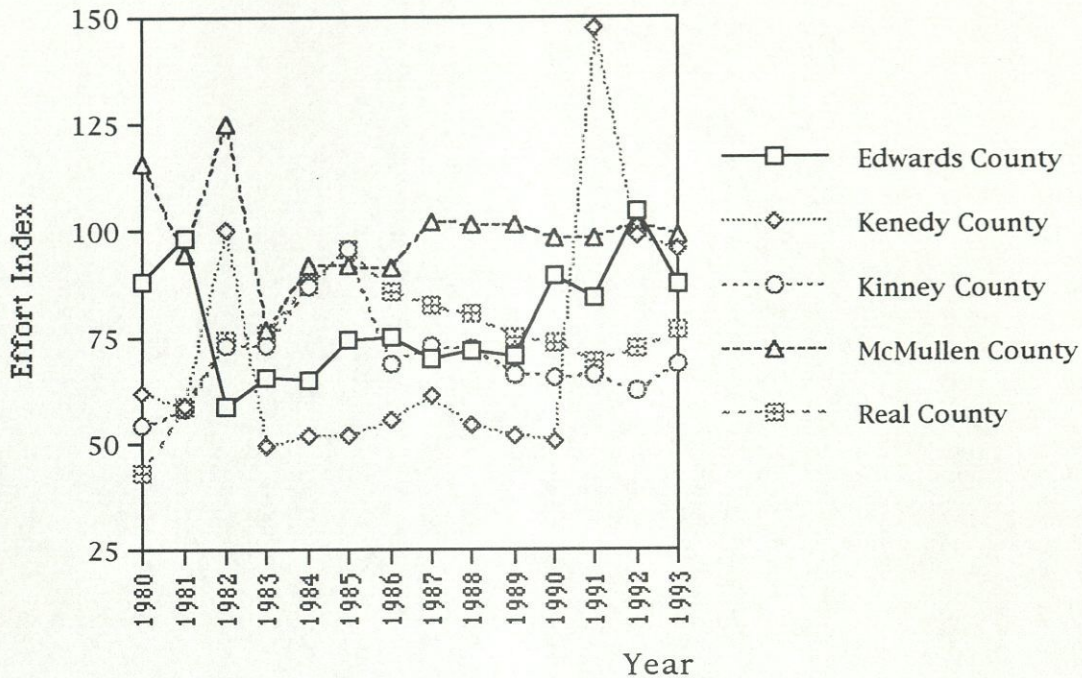
Rural South Texas Counties
Population Under 5,000
Kenedy and McMullen Counties



County Property Tax Per Capita Capacity Index

As a group, the Tax Capacity Indexes declined and converged. Also, as a group, Tax Capacity Index values exceeded 200 for every year; indexes for Kenedy and McMullen exceeded 500. These extremely high Tax Capacity Index values point out the weakness of the per capita measure in sparsely population counties.

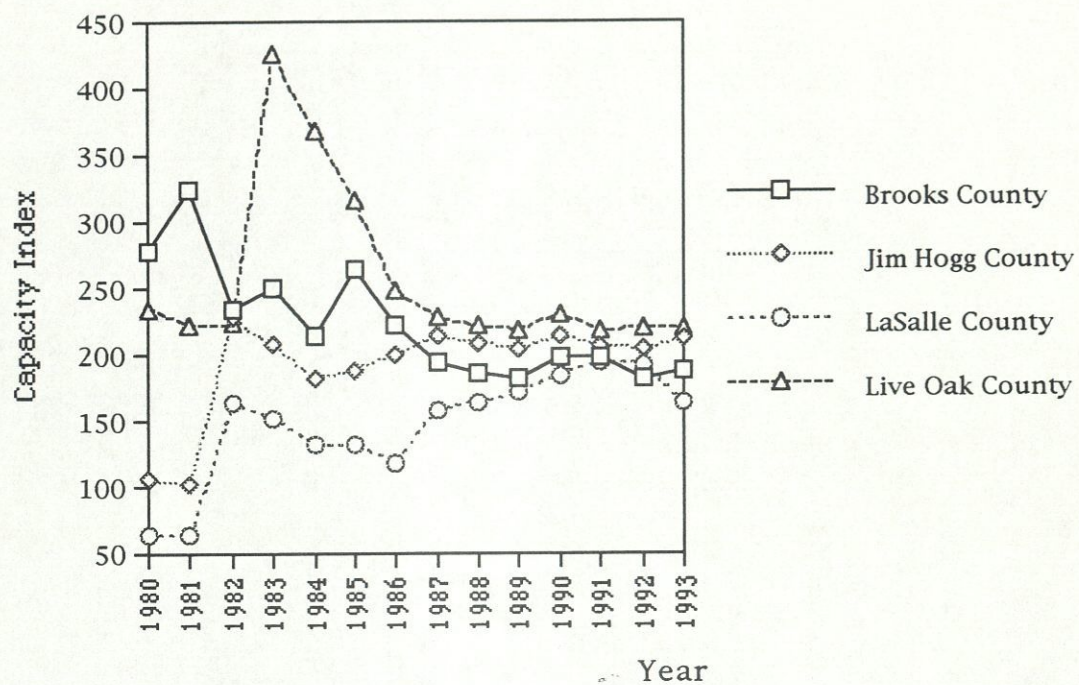
Rural South Texas Counties Population Under 5,000



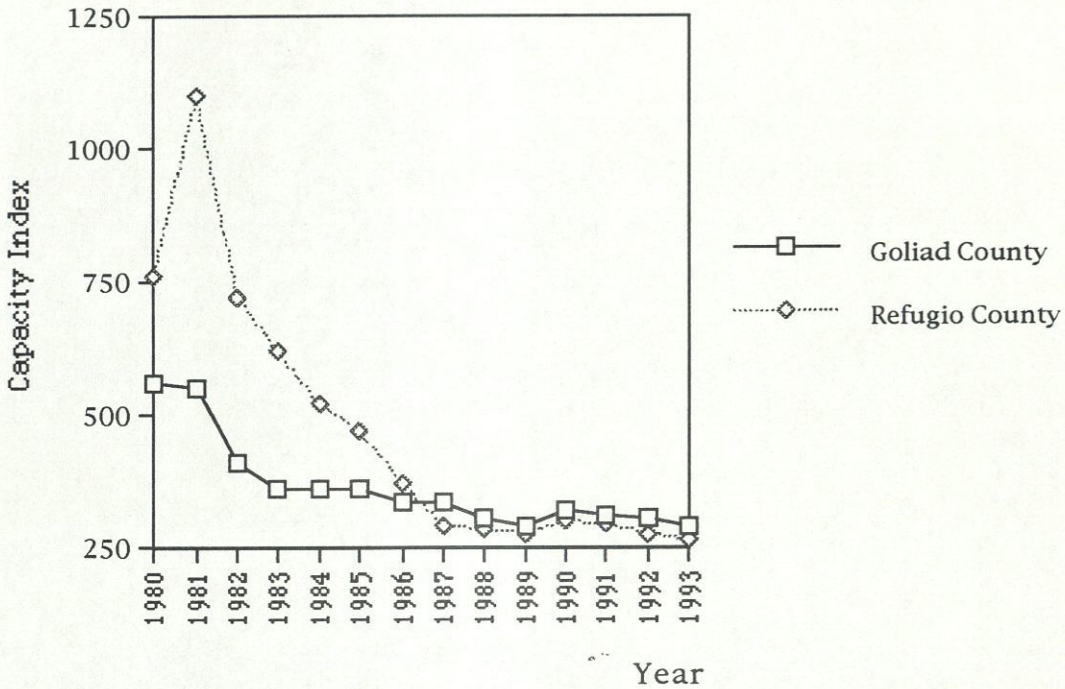
County Property Tax Per Capita Effort Index

The Tax Effort Indexes for the five counties were generally below 100 which indicated below average state county property tax rates. The values for only one county, McMullen county, exceeded one hundred in any single year. The range of values was smaller at the end of the study period than at the beginning.

Rural South Texas Counties
 Population 5,000 to 10,000
 Excluding Goliad and Refugio Counties



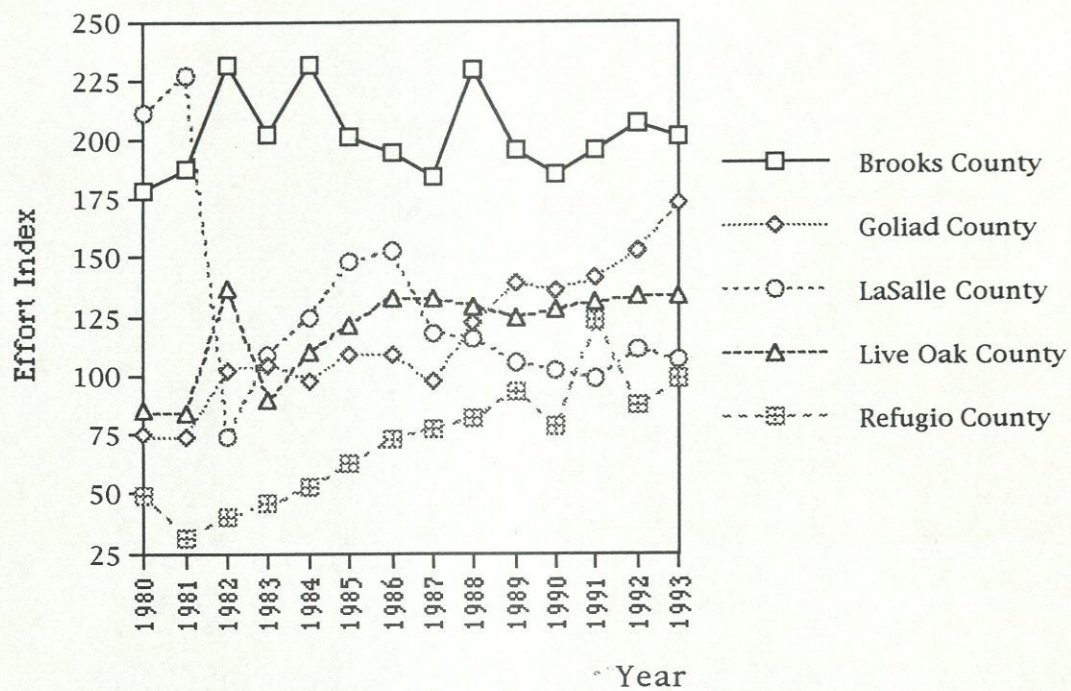
Rural South Texas Counties
Goliad and Refugio Counties



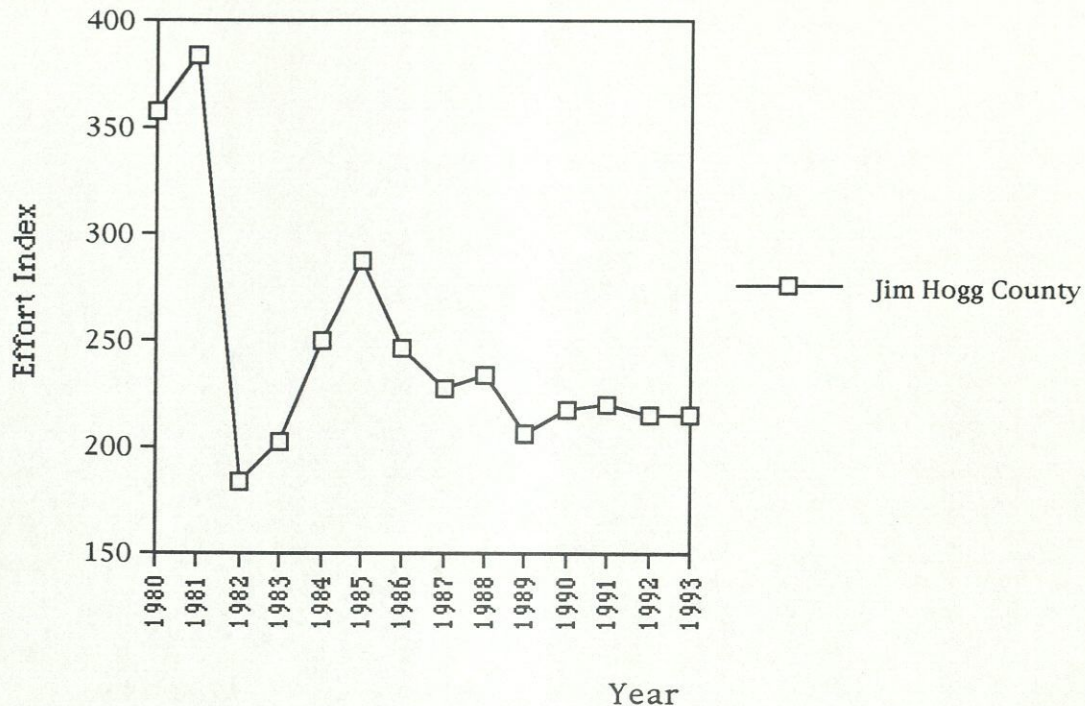
County Property Tax Per Capita Capacity Index

Extreme range of Tax Capacity Index values in 1980 was from fifty to 750 for the six counties. Nearly all of the variation had disappeared by 1993 when the index values ranged from 175 to 250. The decline in the Tax Capacity Index of Goliad, Refugio, and Live Oak counties, all of which had index values at some point exceeding 400, to approximately 250. The Tax Capacity Index for one of the six counties, LaSalle county, increased from fifty points below the state average to fifty points over the state average. Overall, the counties in this group had per capita property values that exceeded the state average per capita property values.

Rural South Texas Counties
 Population 5,000 to 10,000
 Excluding Jim Hogg County



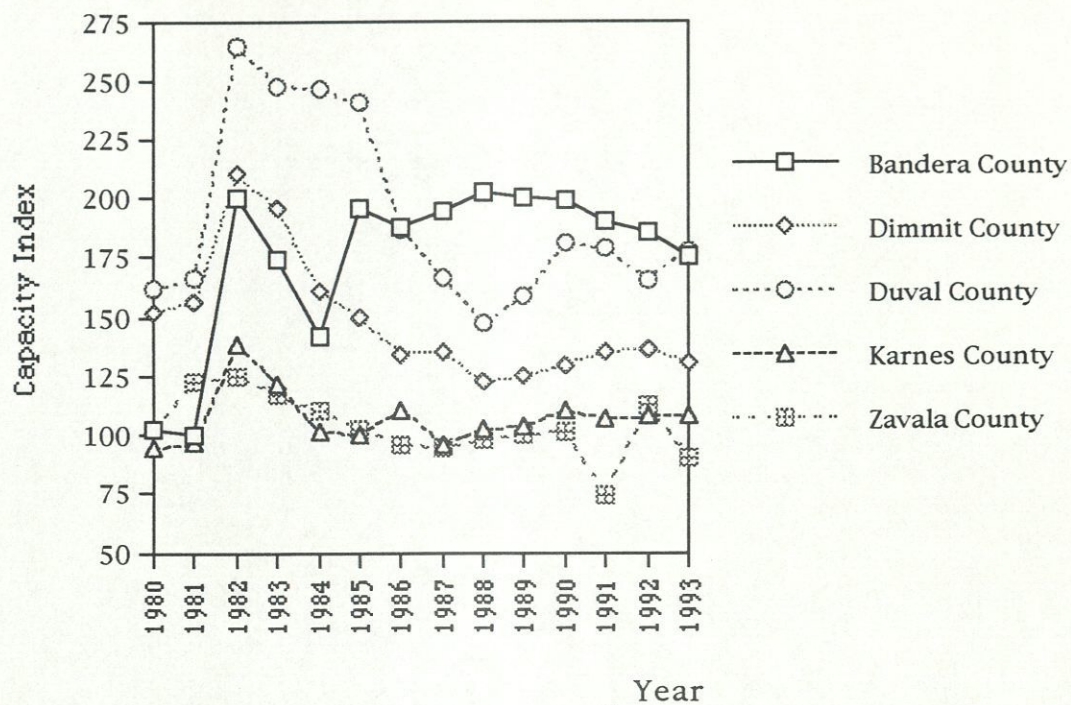
Rural South Texas Counties Jim Hogg County



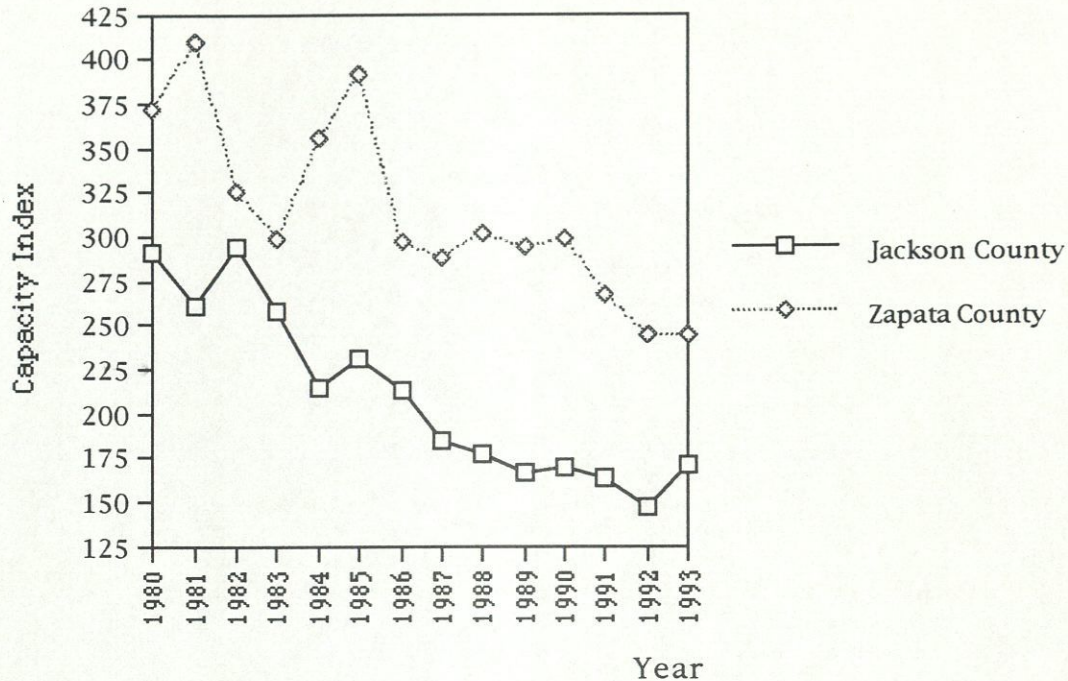
County Property Tax Per Capita Effort Index

Indexes for four counties exhibited upward trends from 1983, starting generally at values less than one hundred. By the end of the study period, the Tax Effort Indexes for these counties were near or above the one hundred mark. These counties experienced relative increases in county property tax rates over the ten year period. The Brooks county Tax Effort Index was 175 in 1980. The index value never fell below that level but vacillated between 175 and 225. The third tier was Jim Hogg county. The Tax Effort Index was 350 in 1980, declined to approximately 180 in 1982, increased to 275 by 1985, and then slowly dampened to approximately 200. Overall, the area counties that had Tax Effort Indexes that reflected above average property rates maintained rates above average and area counties that had Tax Effort Indexes that reflected below average property tax rates increased the rates relative to the state over the study period.

Rural South Texas Counties
 Population 10,000 to 15,000
 Excluding Jackson and Zapata Counties



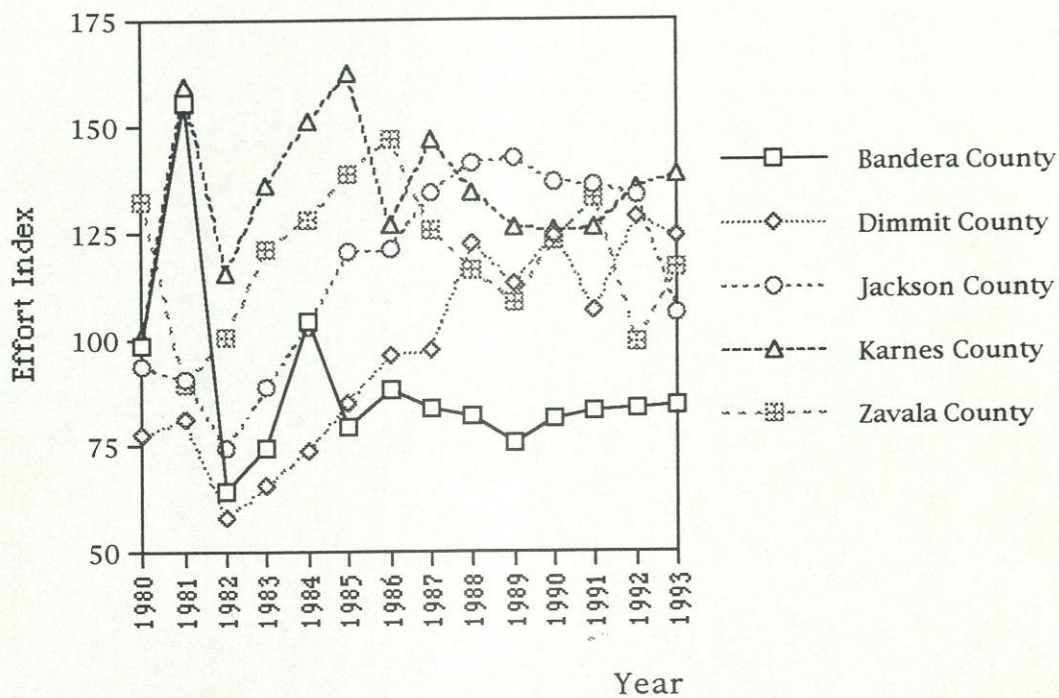
Rural South Texas Counties Jackson and Zapata Counties



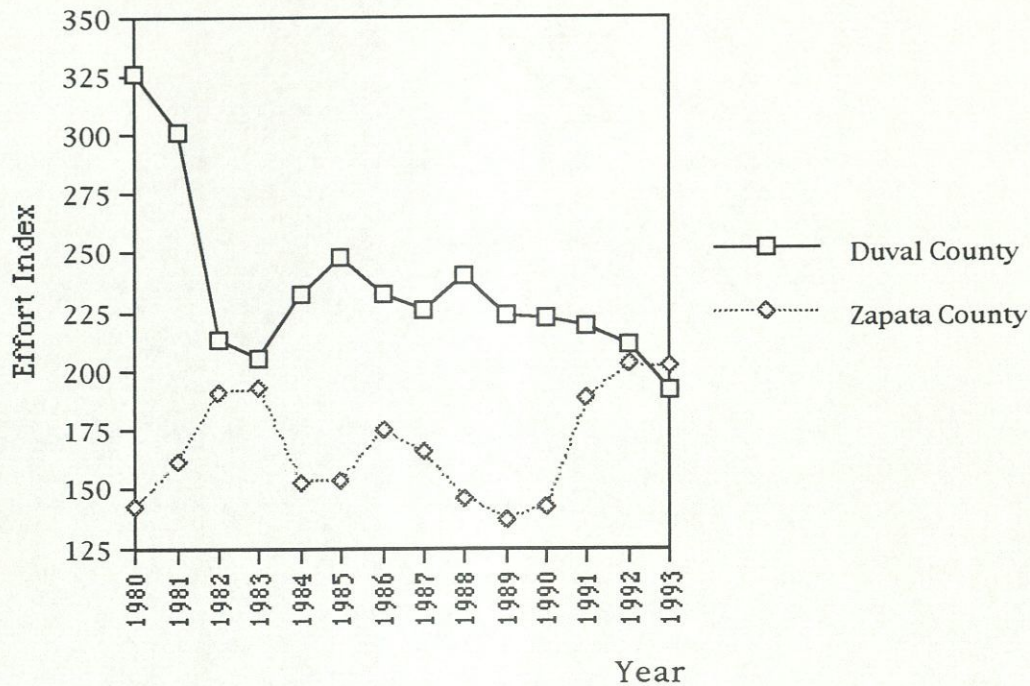
County Property Tax Per Capita Capacity Index

The Tax Capacity Indexes for this seven county group were generally above one hundred reflecting per capita property values above the state average. General trend of decreasing values from early 1980s through early 1990s, with the exception of Bandera county, was apparent. Jackson county experienced the greatest amount of Tax Capacity loss.

Rural South Texas Counties
 Population 10,000 to 15,000
 Excluding Duval and Zapata Counties



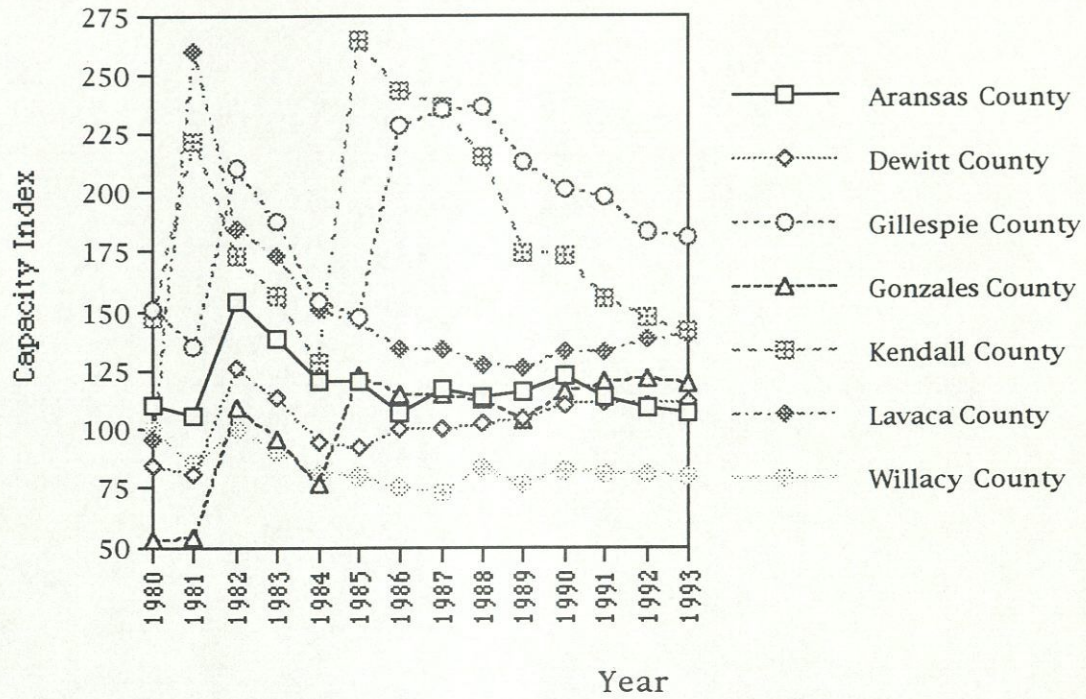
Rural South Texas Counties Duval and Zapata Counties



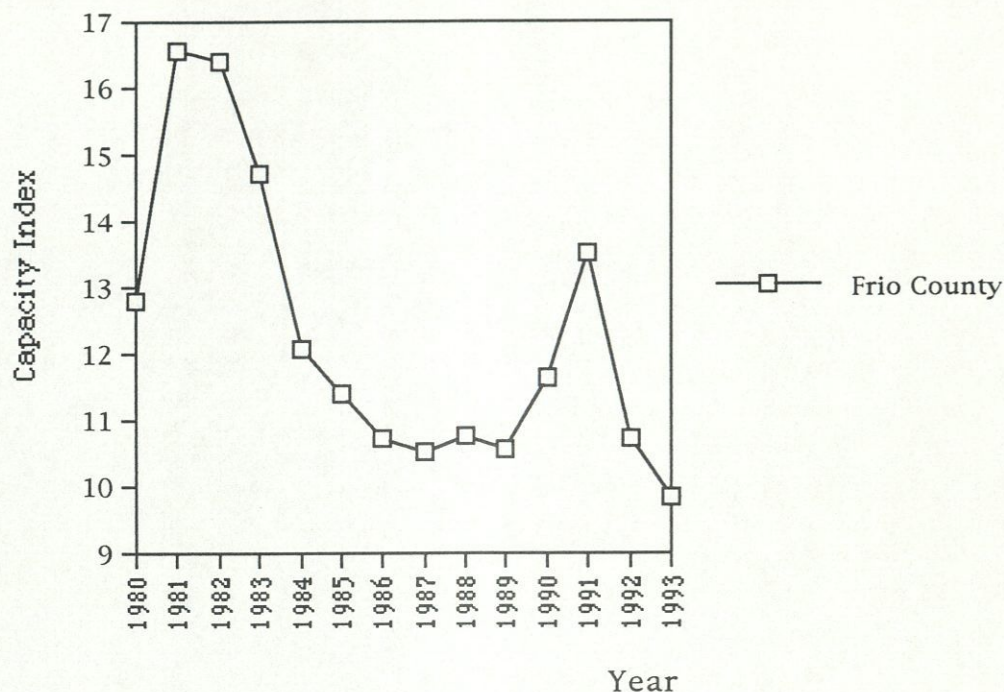
County Property Tax Per Capita Effort Index

The range of Tax Effort Index values in 1980 was similar to the range of values in 1993 but the clustering within the range indicated a moderate overall increase. Four of the seven 1980 index values were less than one hundred. By 1993, only one county's value was less than one hundred. The trend indicated an increase in county property tax rates relative to other counties in the state.

Rural South Texas Counties
 Population 15,000 to 20,000
 Excluding Frio County



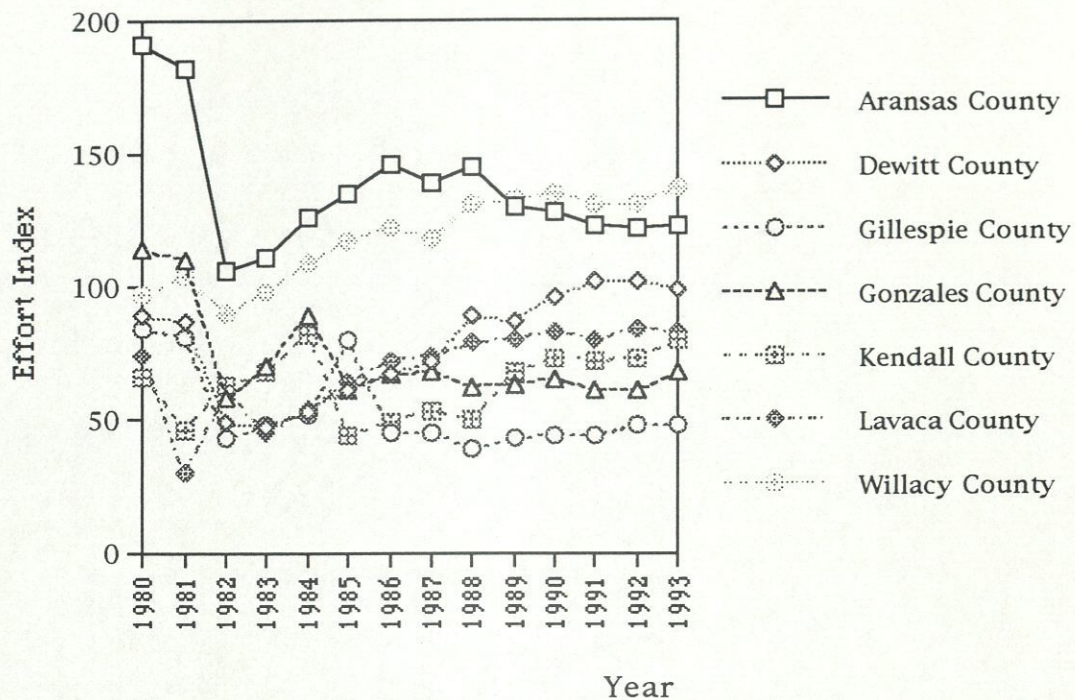
Rural South Texas Counties Frio County



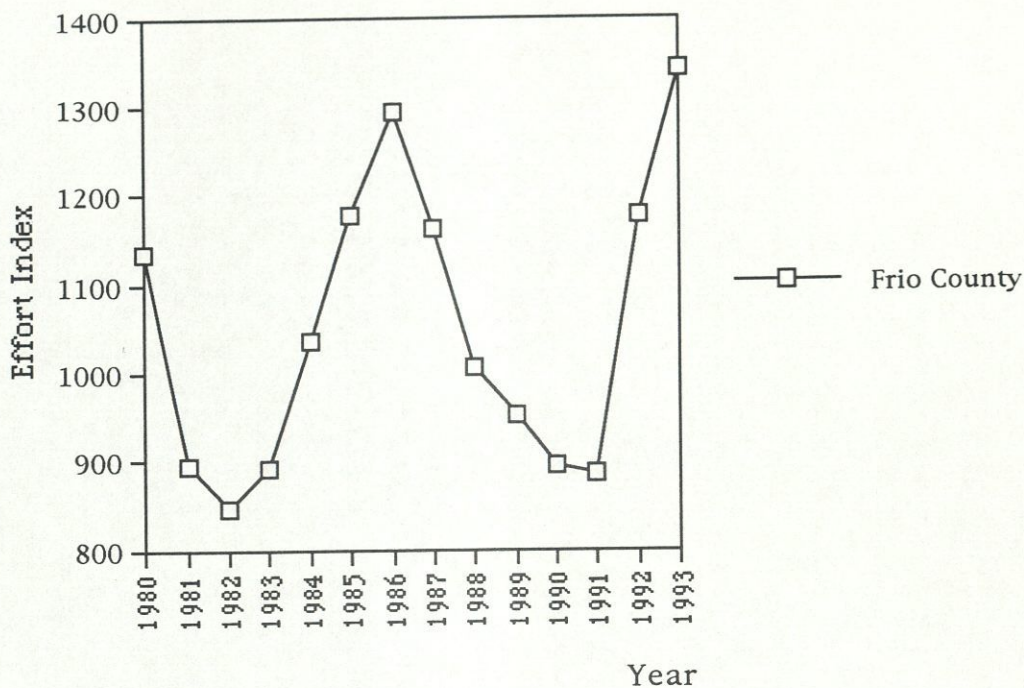
County Property Tax Per Capita Capacity Index

Capacity Indexes increased sharply in the early 1980s and then declined gradually over the subsequent years. Some tighter clustering was apparent and overall increase in Tax Capacity Indexes. The trend was one of increasing per capita county property values relative to the rest of the state. The one exception was Frio county that had index levels that never exceed seventeen and declined to a 1993 index of less than ten.

Rural South Texas Counties
 Population 15,000 to 20,000
 Excluding Frio County



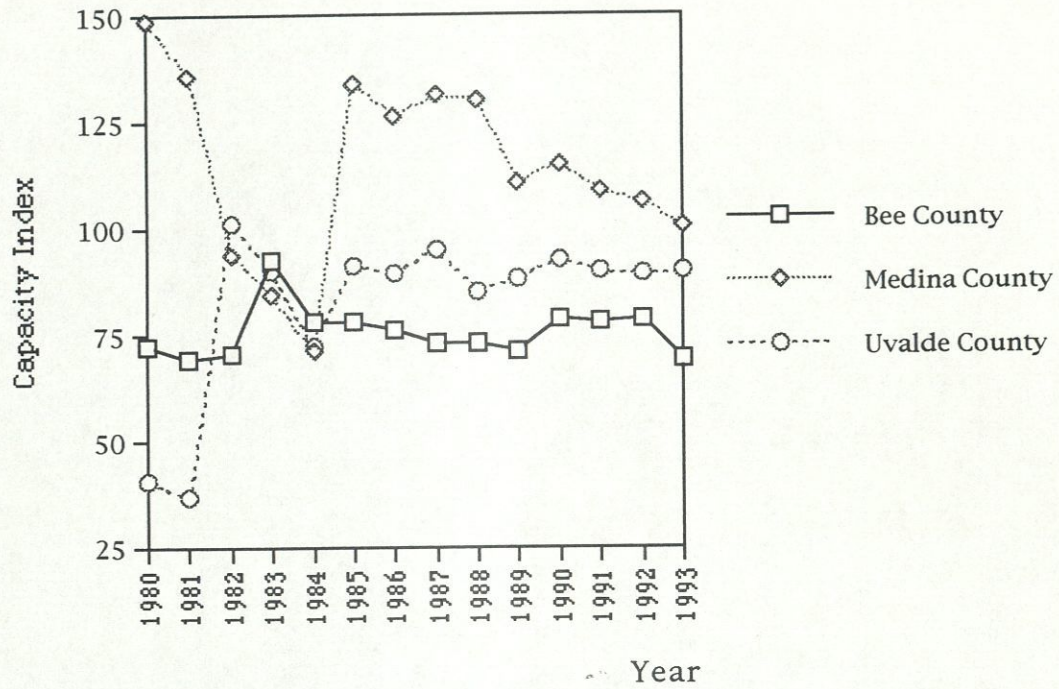
Rural South Texas Counties Frio County



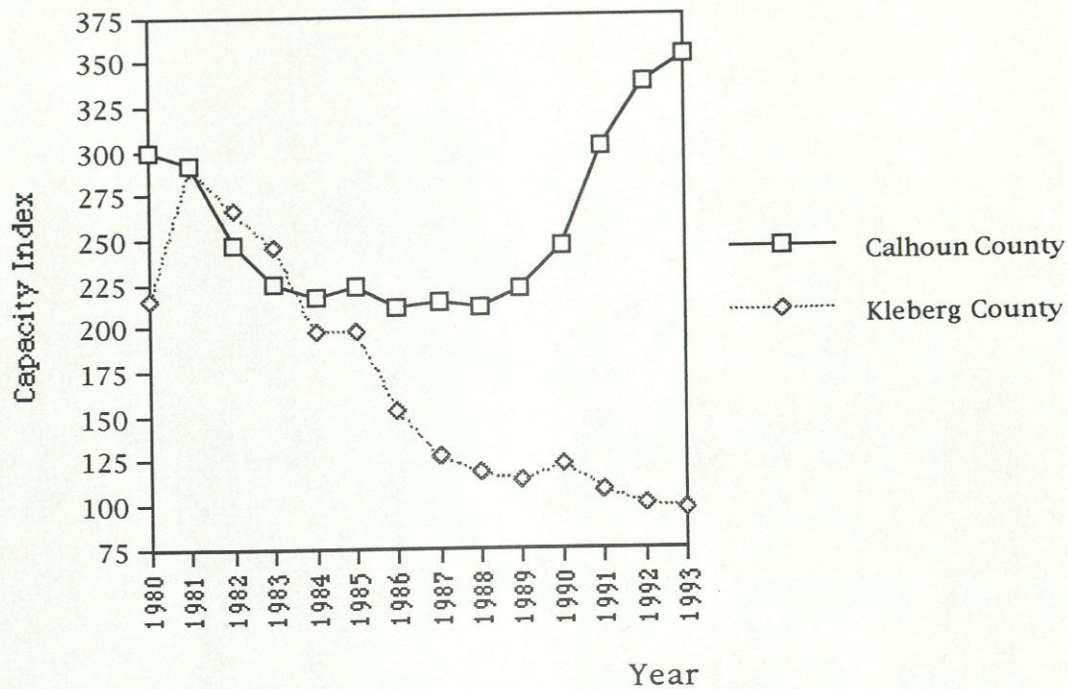
County Property Tax Per Capita Effort Index

Tax Effort Indexes reflected county property tax rates below state average rates. Indexes declined moderately until 1982 and then remained constant for the duration. The Frio county index that never dropped below 800 and the Index for Aransas county remained in the 100 to 200 interval. Tax Effort Indexes for all other counties remained below one hundred. The indexes for the group reflected long term below average county property tax rates. The exception to the group was Frio county that exhibited extremely high relative tax rates; reflecting extremely low relative per capita property tax values.

Rural South Texas Counties
Population 20,000 to 30,000
Excluding Calhoun and
Kleberg Counties



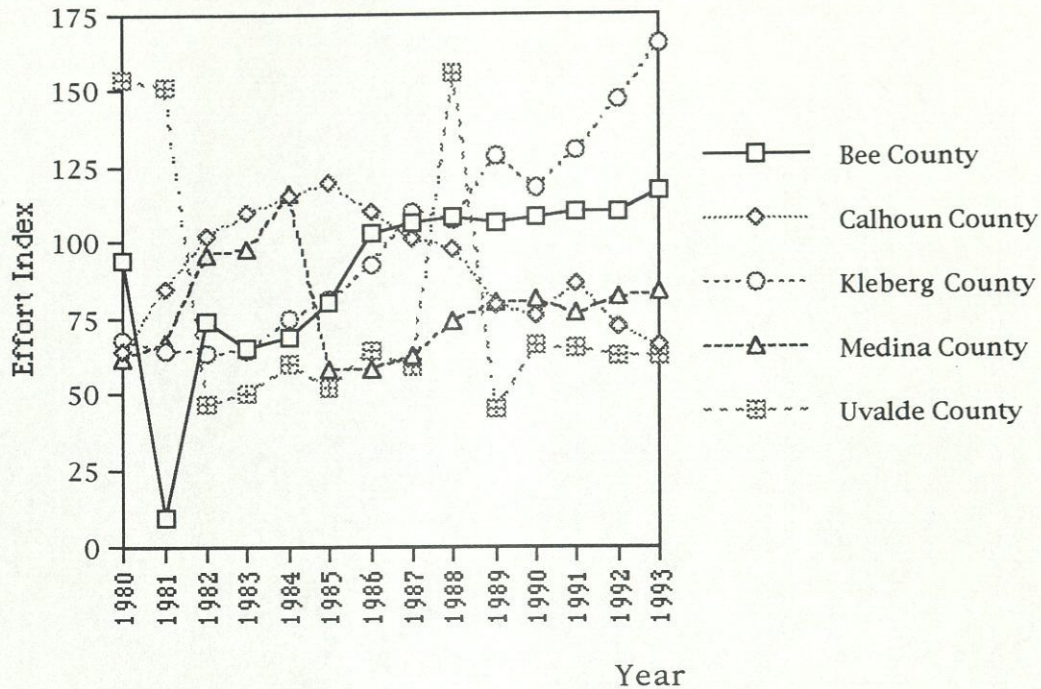
Rural South Texas Counties
Population 20,000 to 30,000
Calhoun and Kleberg Counties



County Property Tax Per Capita Capacity Index

The 1980 Tax Capacity Indexes fell into one of two levels; less than 150 and above 200. The range of values for the former group decreased over time from 50-150 to 75-100. Two out of the three counties consistently had index values less than one hundred. The 1980 values for the second group, comprised of Calhoun and Kleberg counties, ranged from 225-300. Over time the Tax Capacity Index for Kleberg county decreased to one hundred and the index for Calhoun county declined to 225 and then increased to 350 by the end of the study period. With the exception of Calhoun county the Tax Capacity Indexes reflected county per capita property values were at or slightly below the state average.

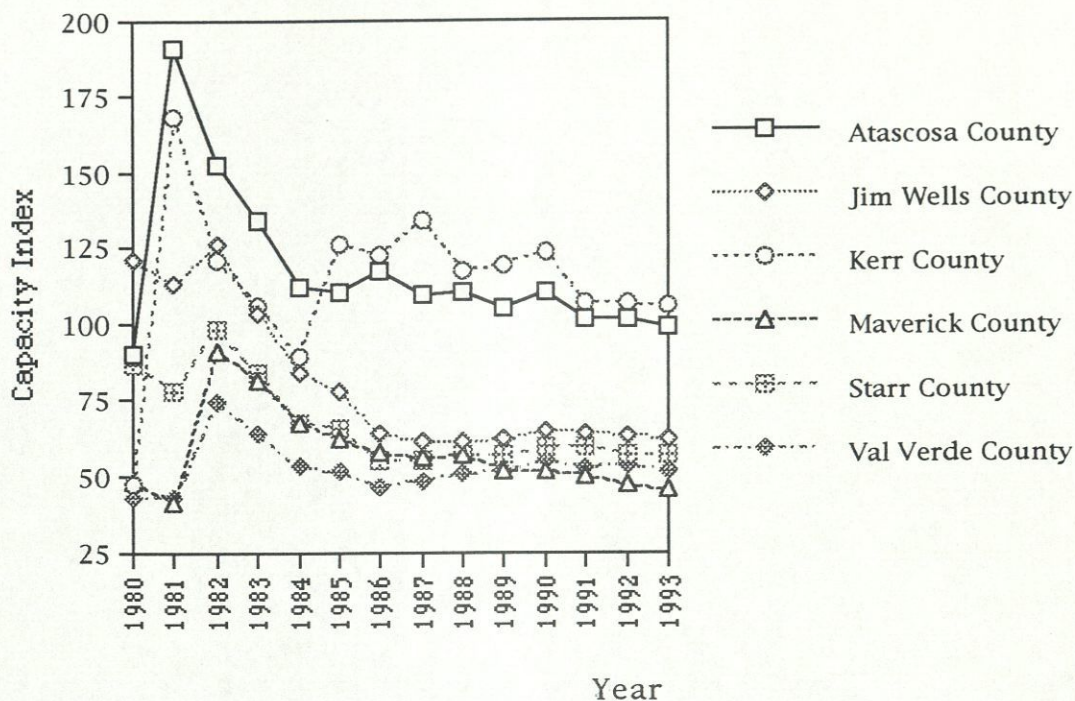
Rural South Texas Counties Population 20,000 to 30,000



County Property Tax Per Capita Effort Index

Tax Effort Index values were generally below one hundred in 1980. Values for individual counties varied over time but as a group the range remained stable but the rank order changed. Bee county had the highest value in 1980 and the lowest value in 1993. Overall, the Tax Effort Indexes for these counties reflected below state average county property tax rates.

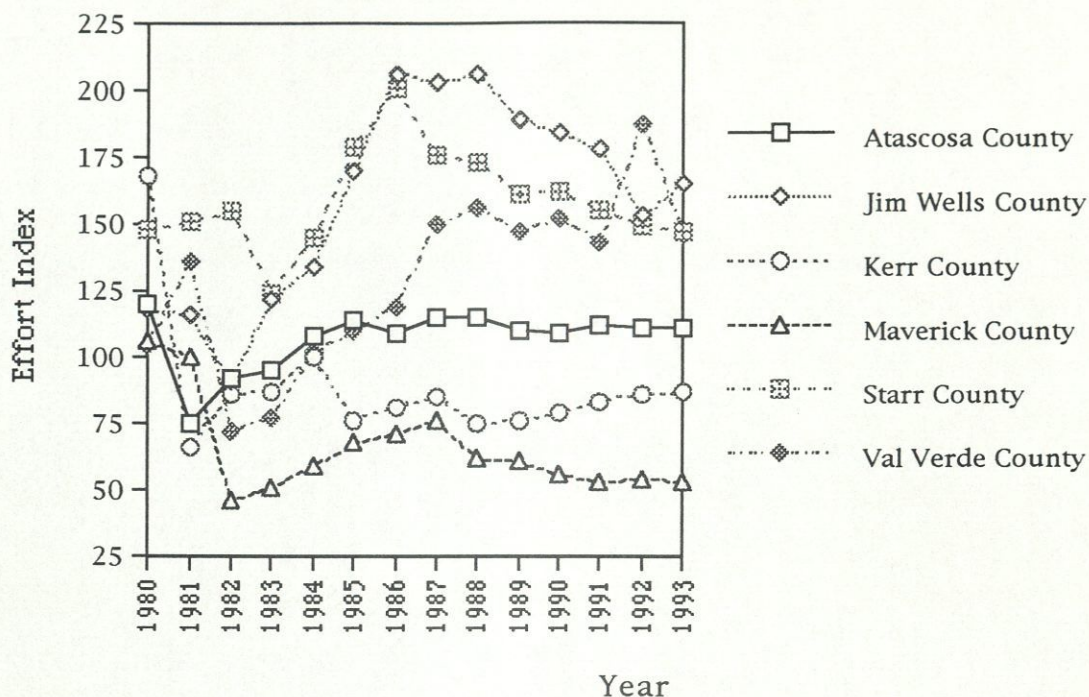
Rural South Texas Counties Population Over 30,000



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes increased sharply between 1980 and 1982, declined through the middle 1980s, and then remained relatively stable for the duration of the study period. Counties clustered into two groups; the values for one group remained under one hundred from 1984, while the values for the other group remained over one hundred throughout the study. The Tax Capacity Indexes in 1993 reflected per capita property values for the group that were near or significantly below the state average.

Rural South Texas Counties Population Over 30,000

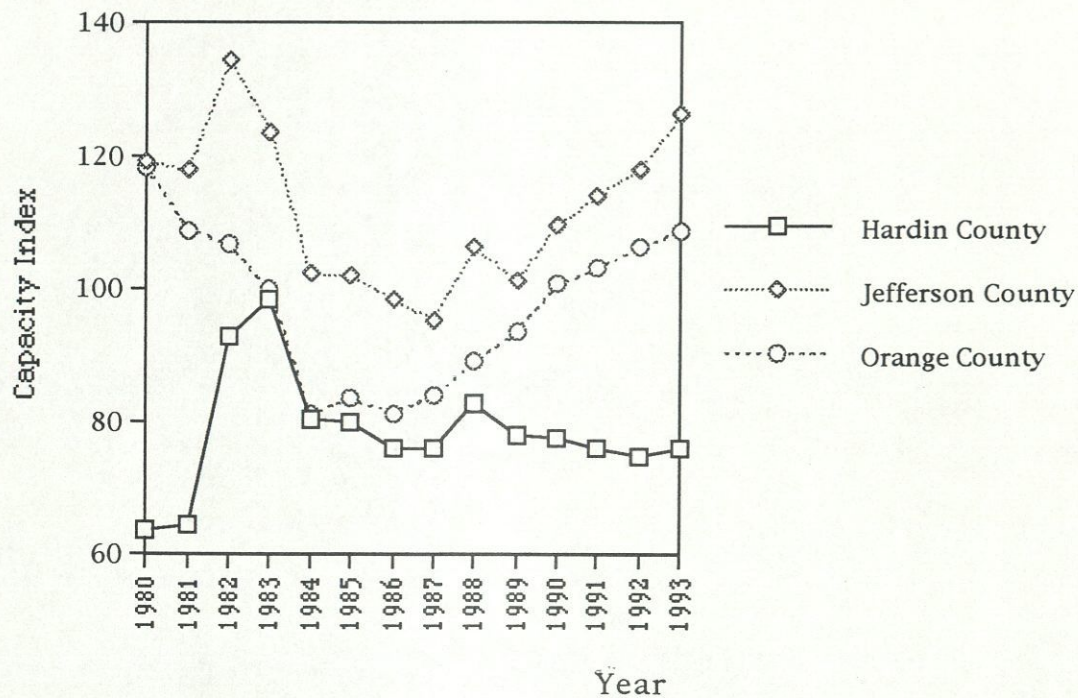


County Property Tax Per Capita Effort Index

The 1980 Tax Effort Index values ranged from 100 to 175. Over the next fourteen years the values diverged as some values rose to as high as 200 and some fell to below fifty. By 1993, the Tax Effort Index values ranged from fifty to 175 with no apparent clustering. County property tax rates averaged approximately the state average but the dispersion was greater in the later years than in the earlier ones.

Southeast Texas Region Metropolitan Areas

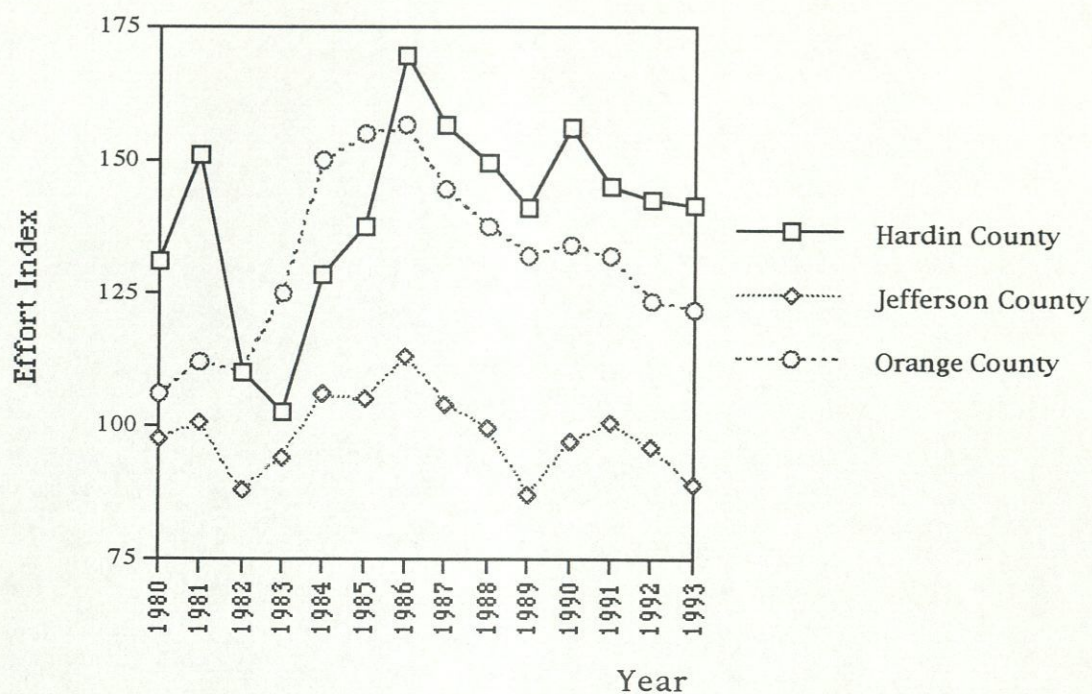
Beaumont Port Arthur Metropolitan Area



Beaumont-Port Arthur Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index for the three county metropolitan area indicated above average county per capita property values in 1980 and 1993, 112.68 and 116.13 respectively, but property values ten percent below average in 1987, 90.36. The area remained in the top ten with respect to capacity over the duration, finishing second highest among the state metropolitan areas. The Capacity Index of two of three counties in area were well above state average in early years. The Capacity Index of third county, Hardin, began far below state average, peaked at 100 and the remained below for duration of time period. The Indexes for other two counties, increased slowly from the mid-1980s and finished above the state average.

Beaumont Port Arthur Metropolitan Area

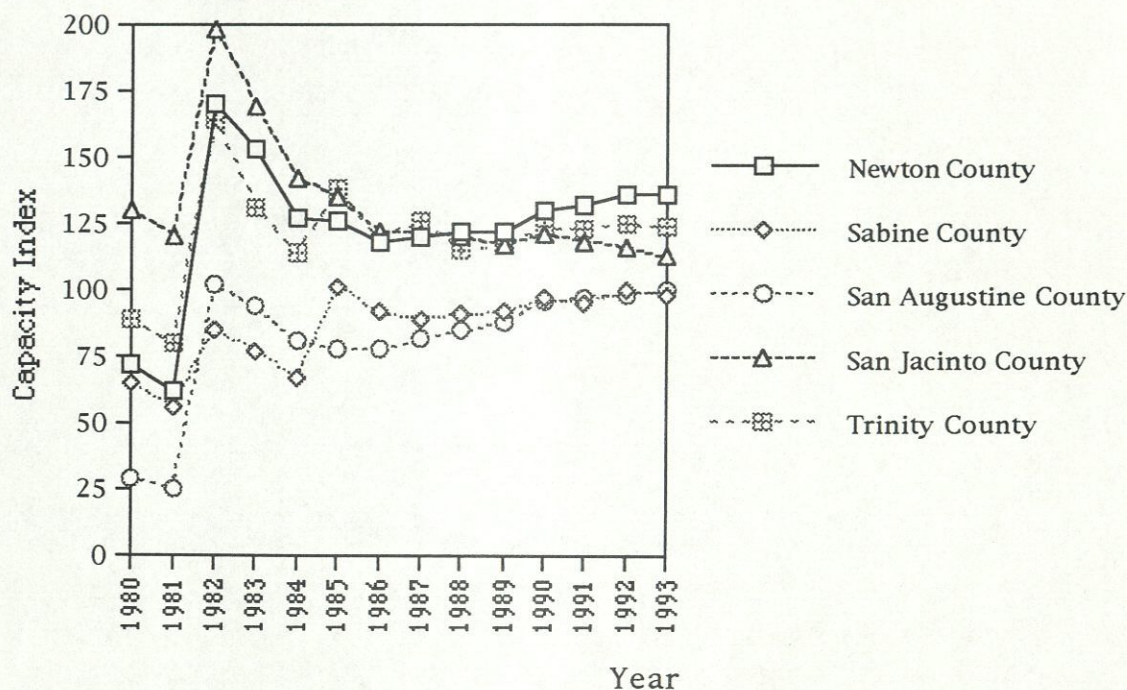


Beaumont-Port Arthur Metropolitan Area
County Property Tax Per Capita Effort Index

The time trend of the Effort Index for the metropolitan area was opposite that of the area Capacity Index. Like the Capacity Index, the Effort Index was above 100, 102.86, at the outset. While the Capacity Index declined in the first half the Effort Index increased to 118.83. After 1987, when the area capacity was rising relative to other Texas metropolitan areas, the Effort Index declined to 102.44. Hardin county consistently was above the state average Effort Index. After 1986, Hardin County had the largest Effort Index of area counties. Jefferson county consistently had the lowest Effort Index and was the only area county with an the county with the least Effort Index and was the only one average below the state average.

Southeast Texas Region Rural Counties

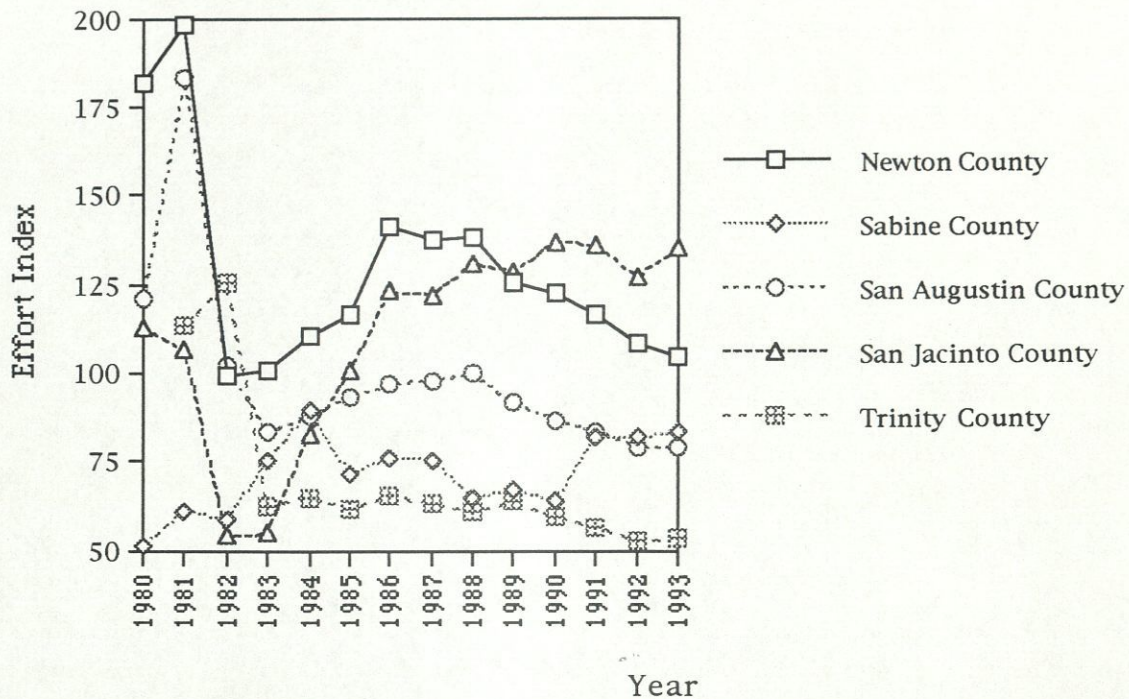
Rural Southeast Texas Counties Population Under 15,000



County Property Tax Per Capita Capacity Index

The trend of the Tax Capacity Indexes for the five counties was one of convergence at and slightly above the state average. The 1980 index values ranged from 25 to 125 and only one value exceeded one hundred. Indexes increased sharply during the early 1980s, declined modestly through the middle of the decade, and then remained relatively stable for the duration. Tax Capacity Indexes generally did not decline to early 1980 levels. The overall indication was one of higher per capita county property values at the end of the period than at the of values that exceeded the state average.

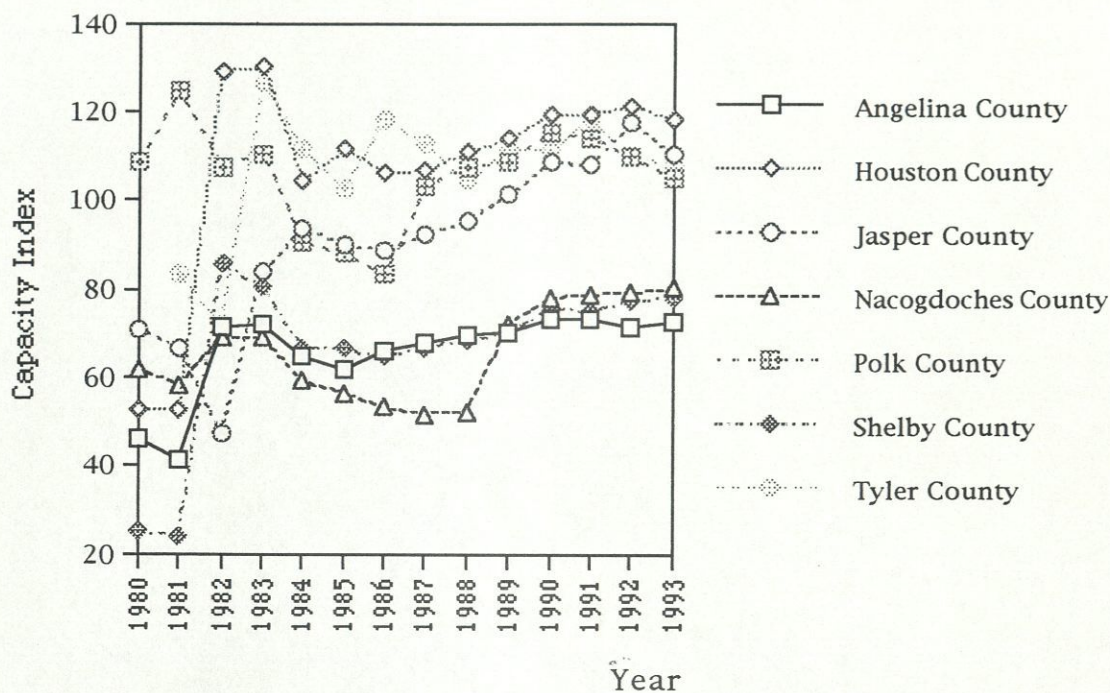
Rural Southeast Texas Counties Population Under 15,000



County Property Tax Per Capita Effort Index

Tax Effort Indexes also exhibited a trend of convergence but to a lesser degree of clustering. The 1980 values ranged from 50 to 180 with only one value less than one hundred. The 1993 values ranged from 50 to 125 with only one value greater than one hundred. The downward trend in the values of the Tax Effort Indexes indicated a downward trend in the county property tax rates relative to the state. County property tax rates were less than the state average in at least three of the five counties in every year since 1983.

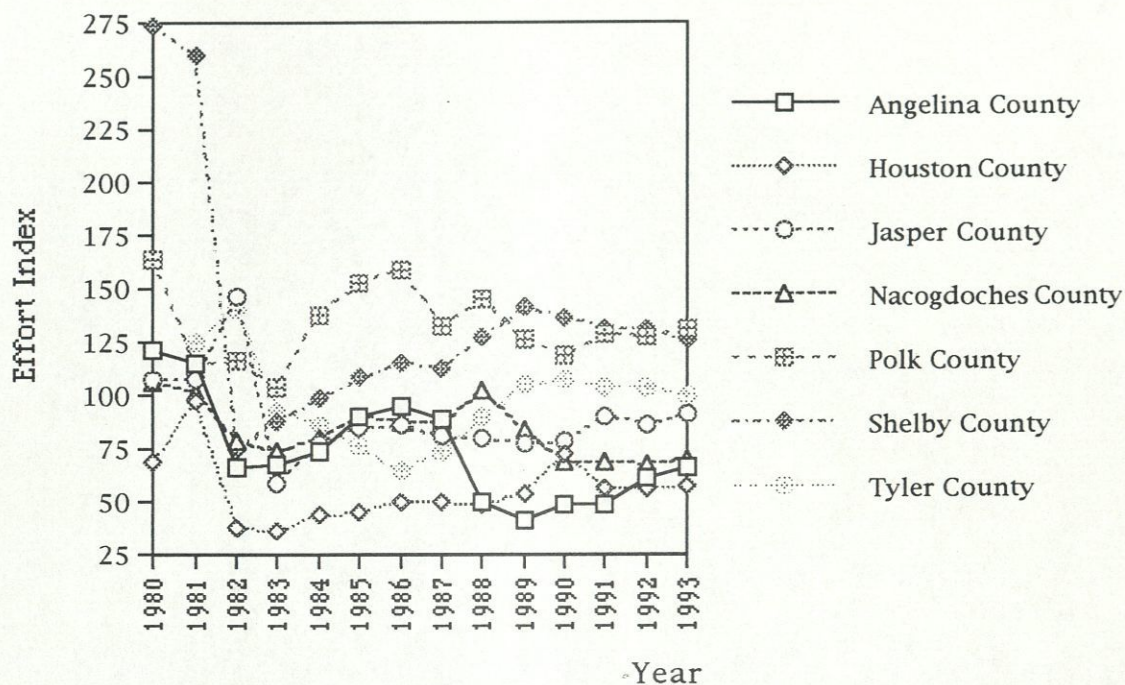
Rural Southeast Texas Counties Population Over 15,000



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes indicated a split in capacity among the seven counties. All but one county had 1980 Tax Capacity Indexes less than one hundred. After 1982 the counties separated into those with index values below eighty and those with values around one hundred. From the mid-1980s values for the group with lower values ranged from sixty to eighty. The values for the group with relatively higher values increased from the nineties to slightly above one hundred. At the end of the study period the indexes indicated that four of the counties had county per capita property tax values that were less than eighty percent of the state average while three of the counties had county per capita property tax values that were approximately ten percent higher than the state average

Rural Southeast Texas Counties Population Over 15,000

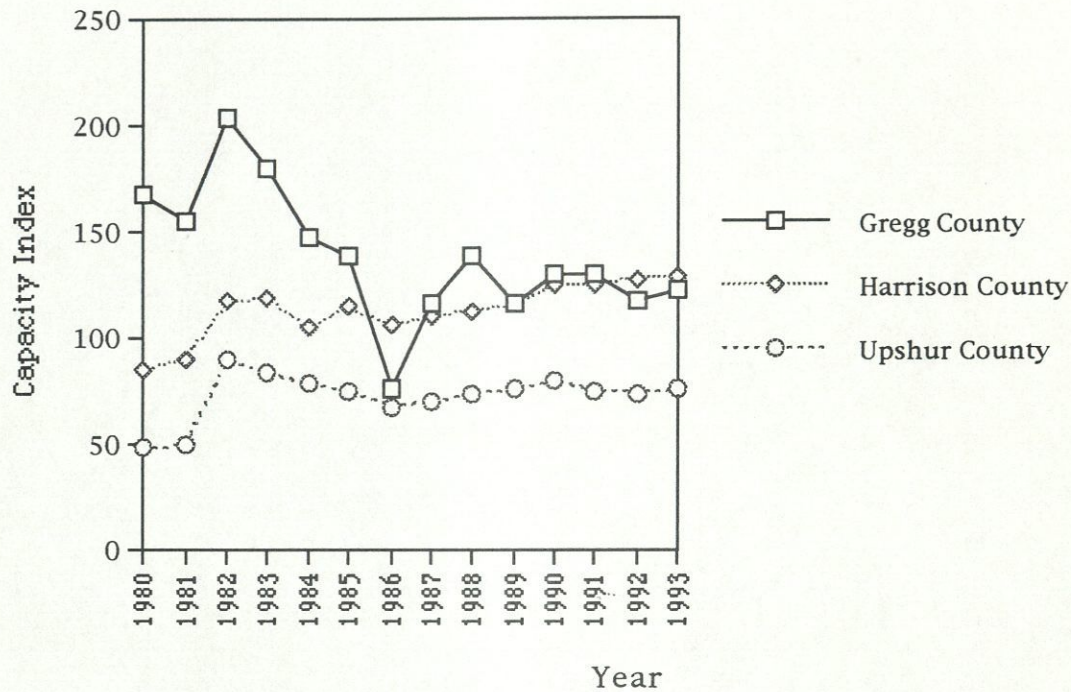


County Property Tax Per Capita Effort Index

From 1982 the Tax Effort Index values ranged from thirty to one hundred fifty. The range of values at the end of the study period was slightly narrower. From 1990, all but two counties had Tax Effort Indexes below one hundred from 1990. Overall, Tax Effort Indexes indicated county property tax rates that were below the state average, some less than fifty percent of the average.

Upper East Texas Region Metropolitan Areas

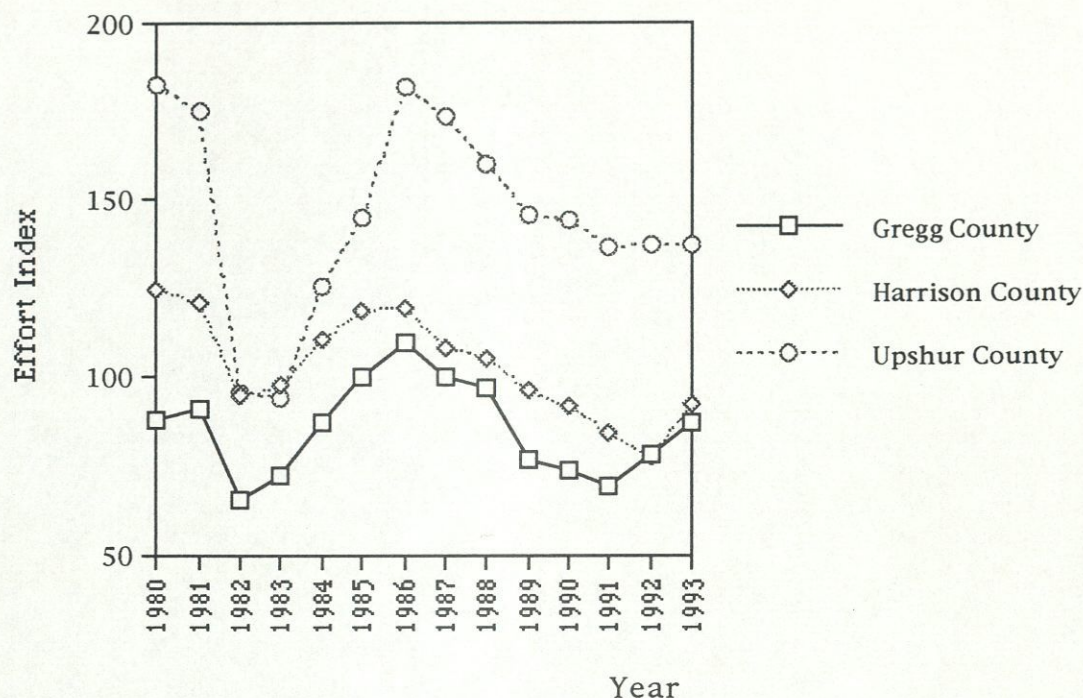
Longview-Marshall Metropolitan Area



Longview-Marshall Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index for the three county area indicated above average per capita property values over the study period. The 1980 index of 124.12 was ranked fifth highest of all Texas metropolitan areas. The Capacity Index declined to 106.68 by 1987 but the rank increased to fourth largest. By the end of the study period the area's Capacity Index had recovered to 115.92 and the rank had improved to third highest of Texas metropolitan areas. Gregg county, the area's most populous county, experienced only one year in which the Capacity Index was below one-hundred.

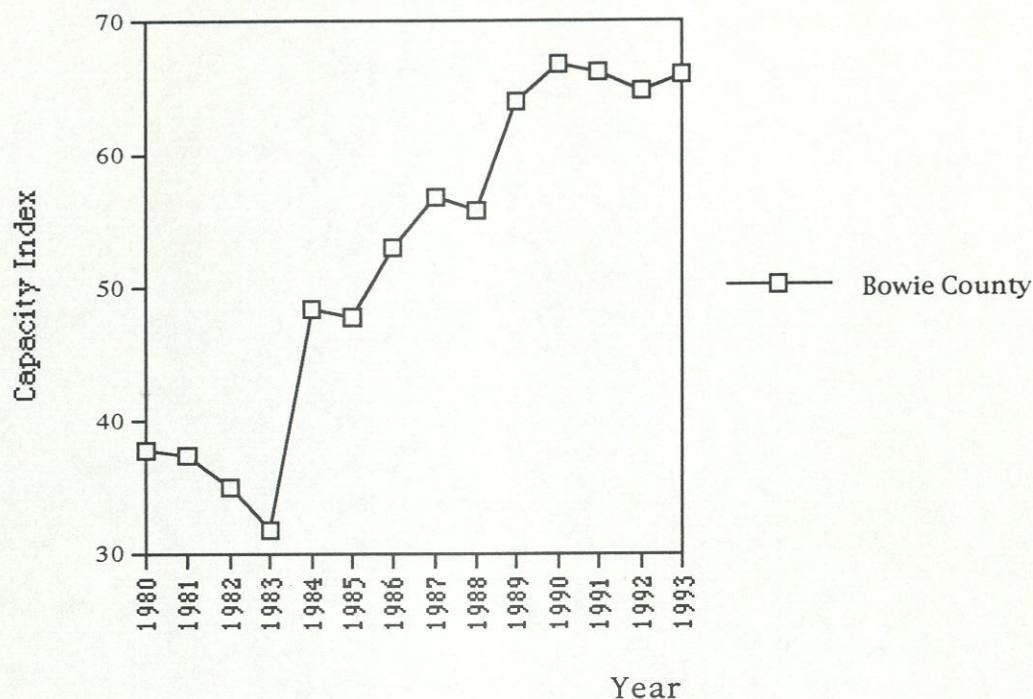
Longview-Marshall Metropolitan Area



Longview-Marshall Metropolitan Area County Property Tax Per Capita Effort Index

The Effort Index exhibited a flat trend in the first half of the study followed by a decline in the second half. The 1980 and 1987 measures were virtually equal, 113.70 compared to 113.92, but the rank dropped from nine to fifteen. Other metropolitan areas increased property tax rates relative to the Longview-Marshall area. By 1993 the Effort Index measured below the one hundred benchmark, 97.01, and the rank had decreased to sixteen. The Effort Index for the most populous county, Gregg County, remained below one hundred for all by the middle three years of the study.

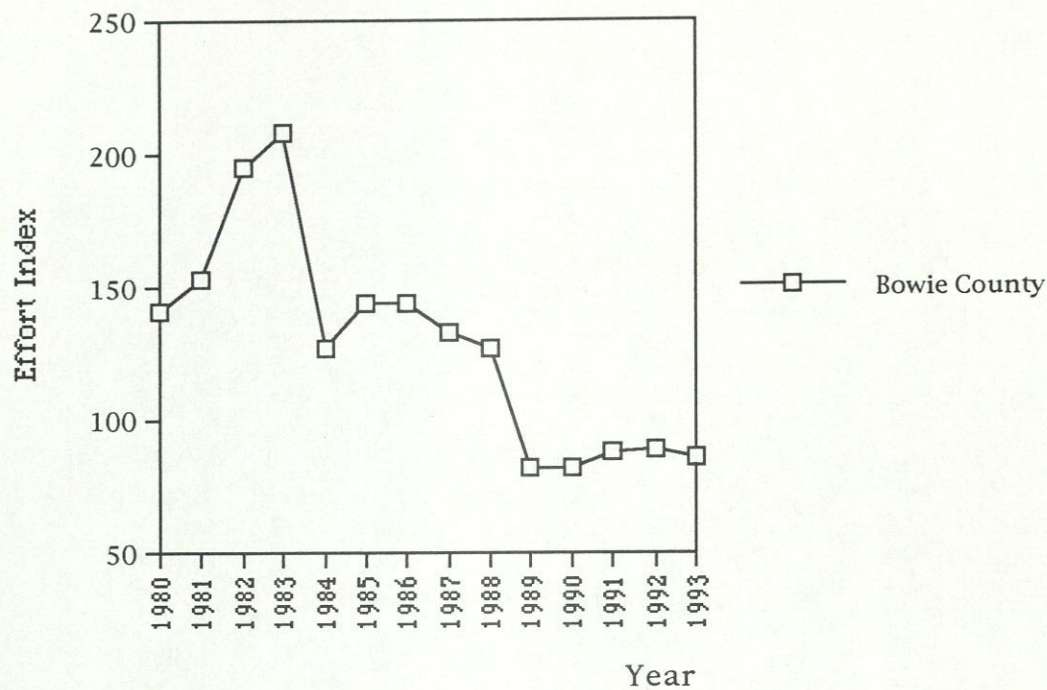
Texarkana Metropolitan Area



Texarkana Metropolitan Area County Property Tax Per Capita Capacity Index

The Capacity Index for the single county area steadily increased after decreasing to its lowest value in 1983. The area Capacity Index at the beginning of the study period was more than sixty points below the state average, the lowest among Texas metropolitan areas. The decline over the next four years was overcome by 1987 when the Capacity Index measured 56.79, still below state average but ranked twenty-two. Per capita property values continued to improve as indicated by the 1993 Capacity Index, 65.98, and the improvement in rank to twenty-one. The improvements reflected an improvement in per capita property value but not enough to achieve the state average.

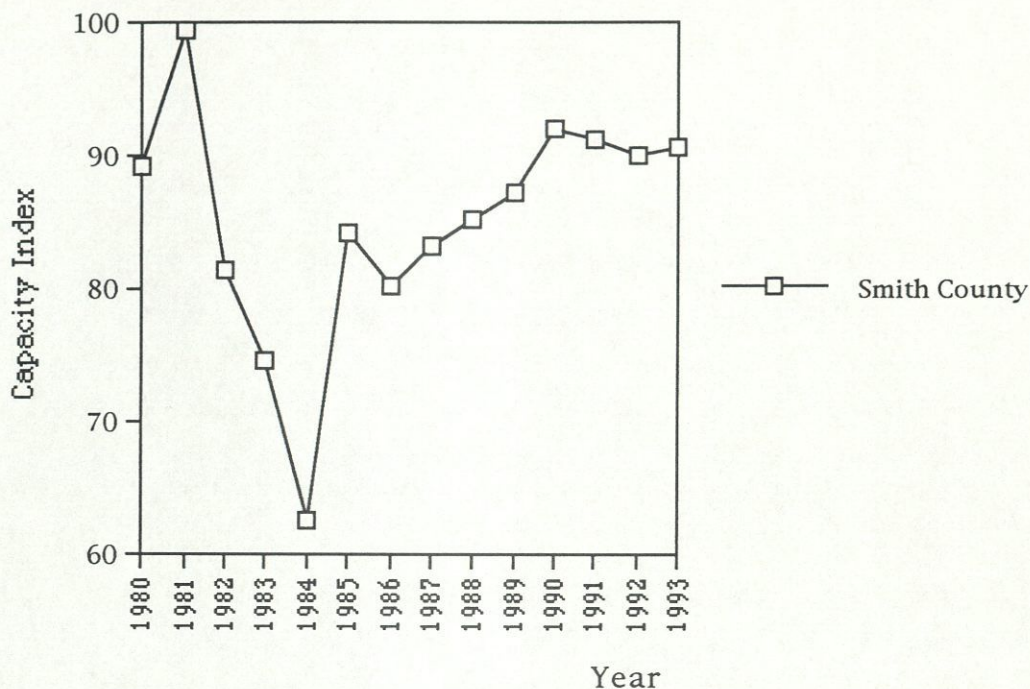
Texarkana Metropolitan Area



Texarkana Metropolitan Area County Property Tax Per Capita Effort Index

The Effort Index exhibits a pattern of reductions in property tax values, relative to the state average, over the years of increasing per capita property values. The area began the period with a Effort Index of 140.17, third highest among Texas metropolitan areas. It continued to rank third in 1987 but its Effort Index was down to 132.61. The 1993 Effort Index, 85.67, indicated below state average county property tax rates. It ranked twenty-third.

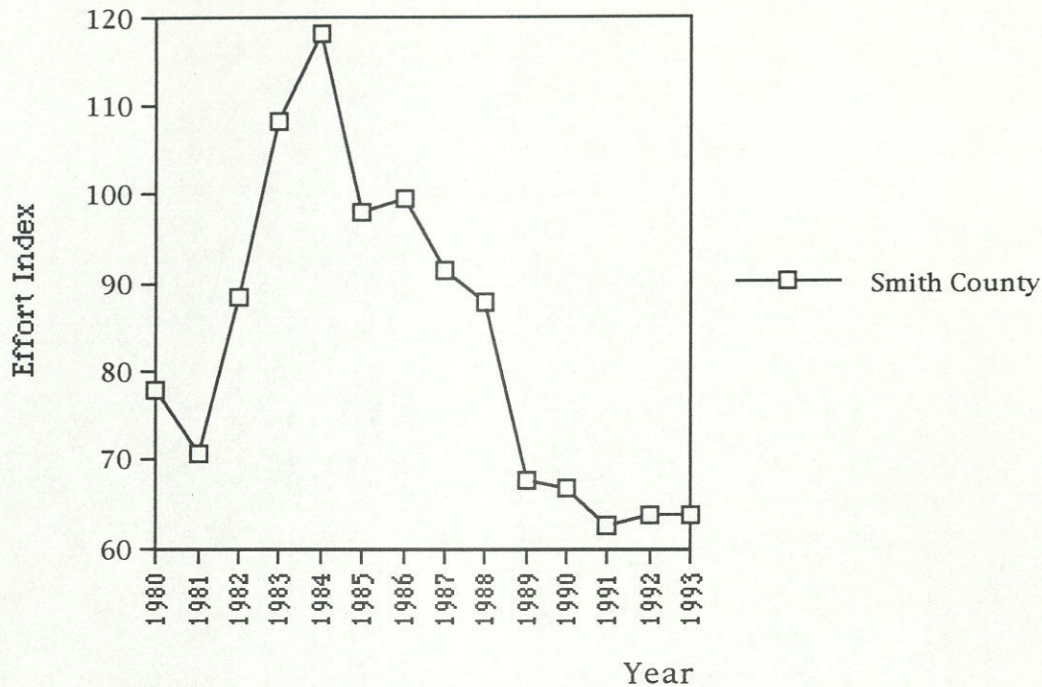
Tyler Metropolitan Area



Tyler Metropolitan Area
County Property Tax Per Capita Capacity Index

Smith county, the only county in the area, had slightly below state average property values for every year except 1981. The 1980 area Capacity Index was 89.11, tenth largest among state metropolitan areas. The Capacity Index increased by over ten points from 1980 to 1981 but declined by nearly forty points by 1984. It then increased by over twenty points in 1985. From 1985 forward the trend was steady and upward. Overall the Capacity Index declined slightly between 1980 and 1987 to 83.11 and hence fell to twelfth among metropolitan areas. By 1993 the Capacity Index for the area had increased to 90.51 and a rank of eleven.

Tyler Metropolitan Area

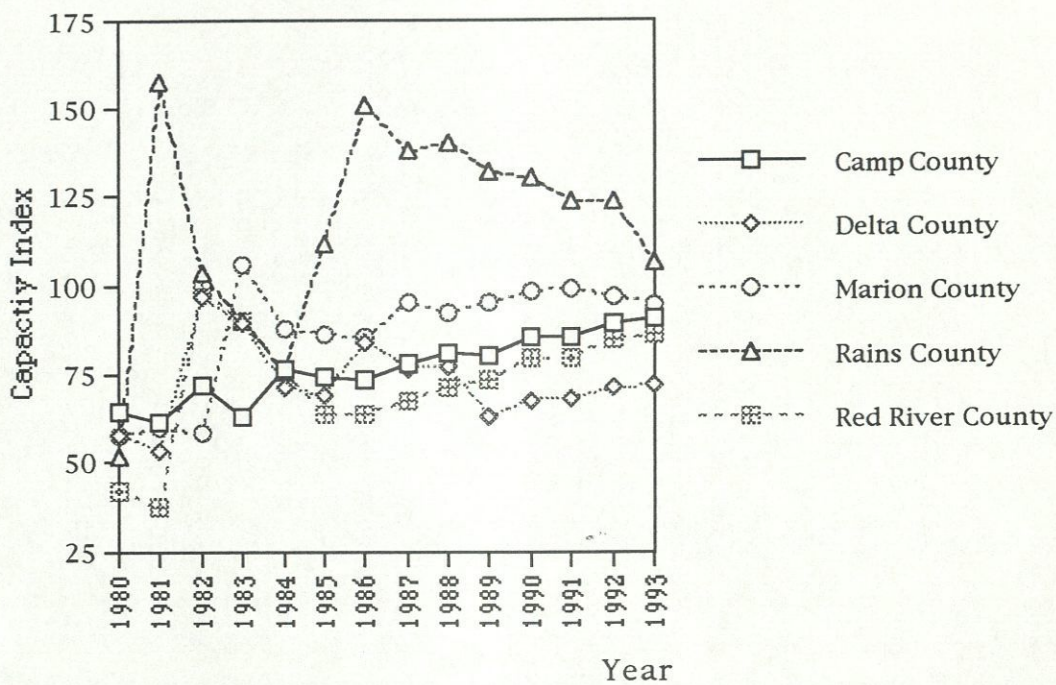


Tyler Metropolitan Area
County Property Tax Per Capita Effort Index

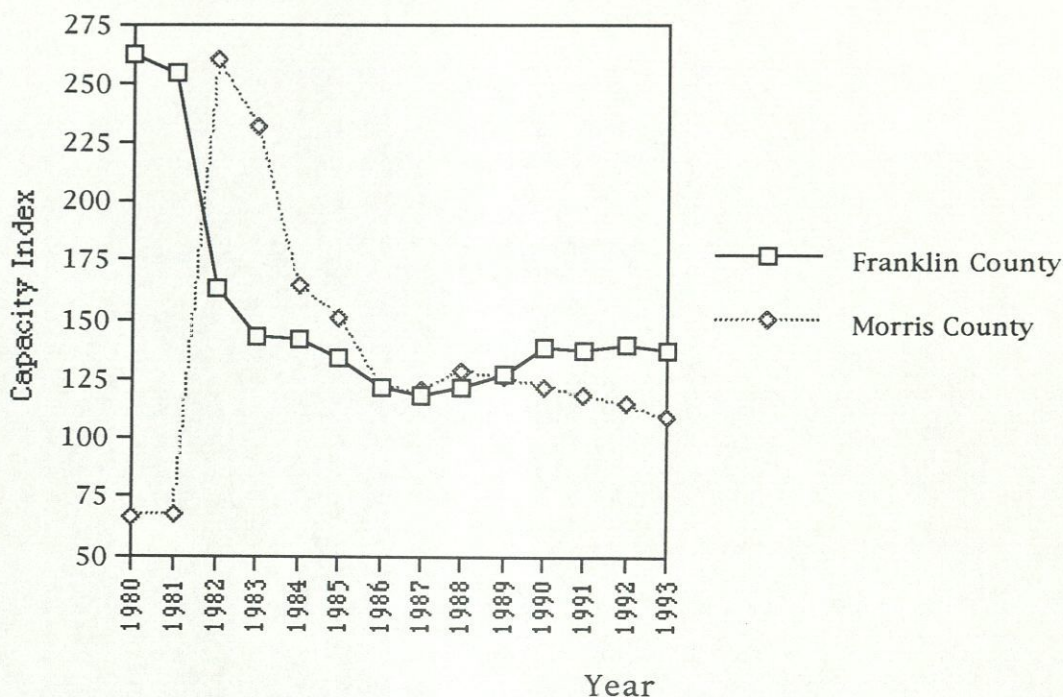
The Effort Index corresponded to the changes in the Capacity Index for the first half of the study period. The peak in the Effort Index occurred the same year as the trough in the Capacity Index. The area's Effort Index declined from 1984 to the end of the study period. The 1980 Effort Index, 77.78, was larger than only one other area Effort Index. Property tax rates were closer to the state average in 1987, as demonstrated by the 91.31 Effort Index, but were nearly forty points below the state average by 1993, as the 63.68 value indicated.

Upper East Texas Region Rural Counties

Rural Upper East Texas Counties Population Under 20,000 Excluding Franklin and Morris Counties



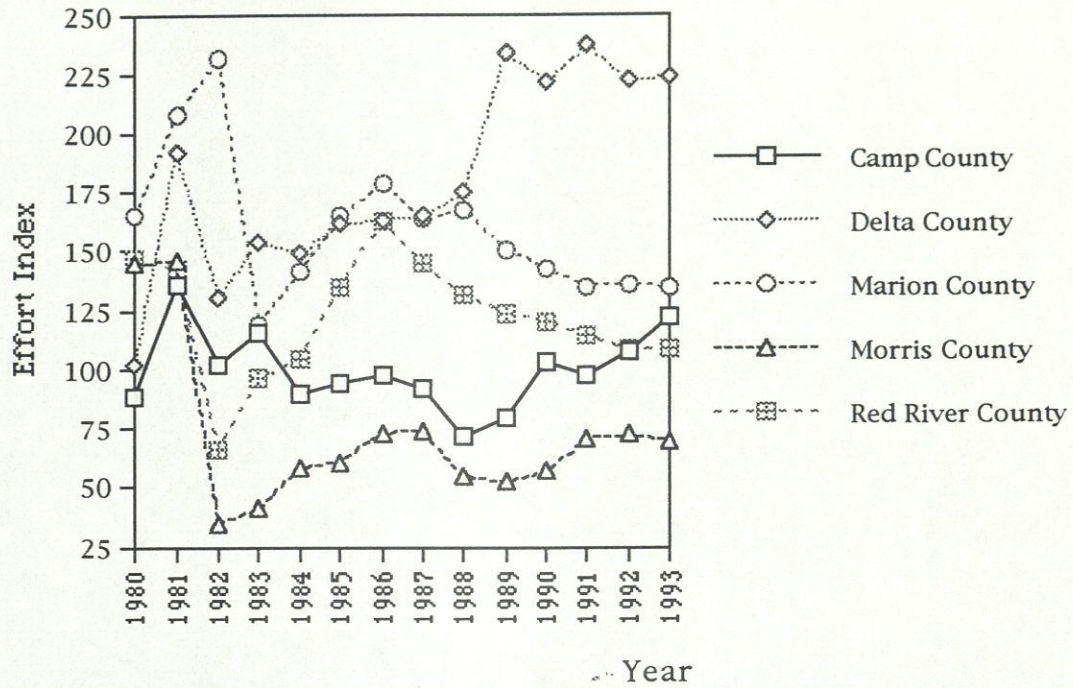
Rural Upper East Texas Counties Franklin and Morris Counties



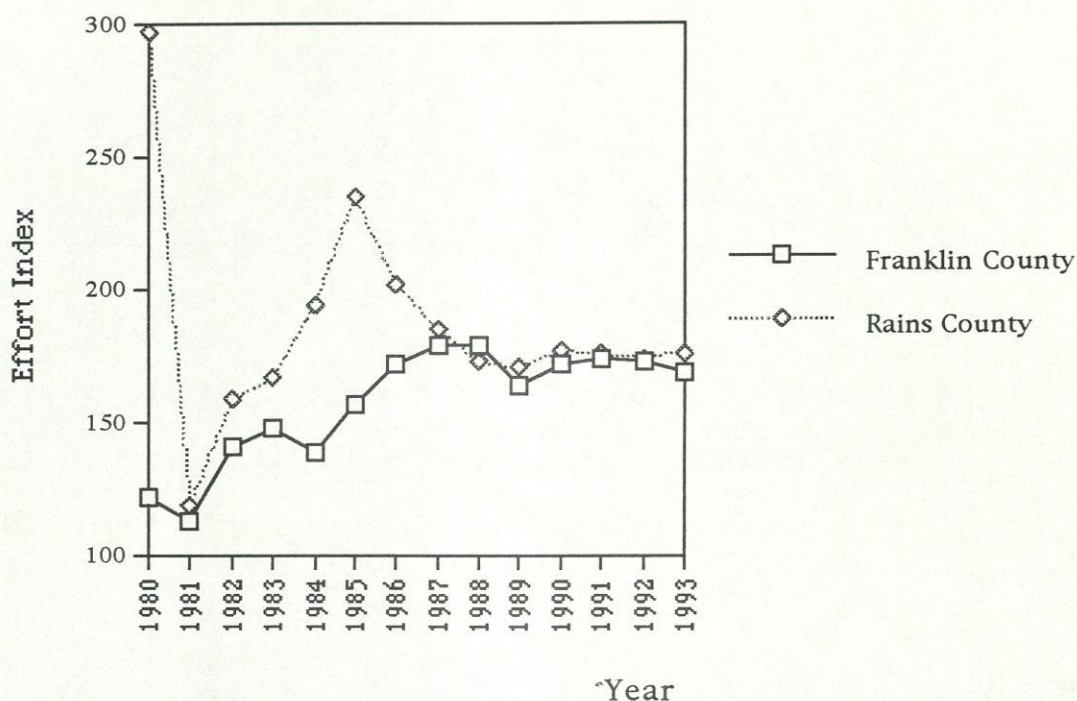
County Property Tax Per Capita Capacity Index

Tax Capacity Indexes for two of the seven counties indicated extraordinarily high relative property values in the early 1980s. Index values for both counties declined over time to values more closely aligned with the values of the other five counties. Tax Capacity Indexes for the other counties were generally under one hundred at the outset but increased slowly but steadily through 1993. Index values for the five generally never exceeded one hundred, reflecting below state average county property tax values.

Rural Upper East Texas Counties
 Population Under 20,000
 Excluding Franklin and Rains Counties



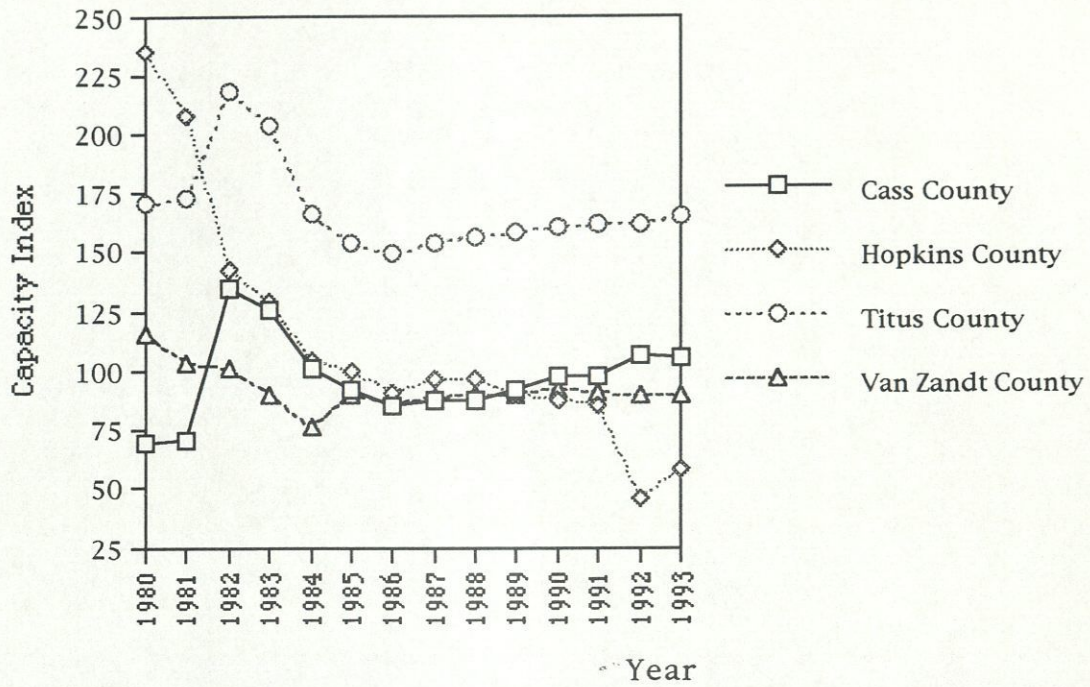
Rural Upper East Texas Counties Franklin and Rains Counties



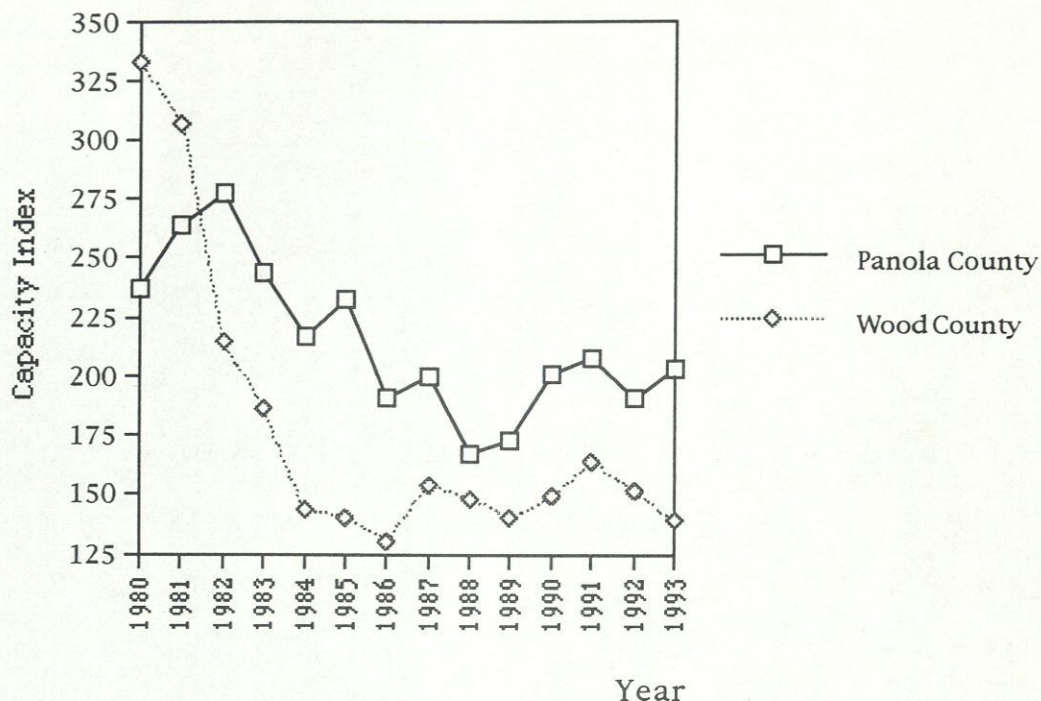
County Property Tax Per Capita Effort Index

The Effort Indexes ranged from approximately 80 to 170, with the exception of Rains county which had an index of 300. The group generally increased tax effort in the early 1980s and then exhibited a sharp decline to the middle of the decade. The trend was mixed for the duration with indexes for some counties stabilizing and others rising and then declining. Although Rains county started the study period at 300 it finished near 175, and not with the group's highest tax rate.

Rural Upper East Texas
 Population 20,000 to 40,000
 Excluding Panola and Wood Counties



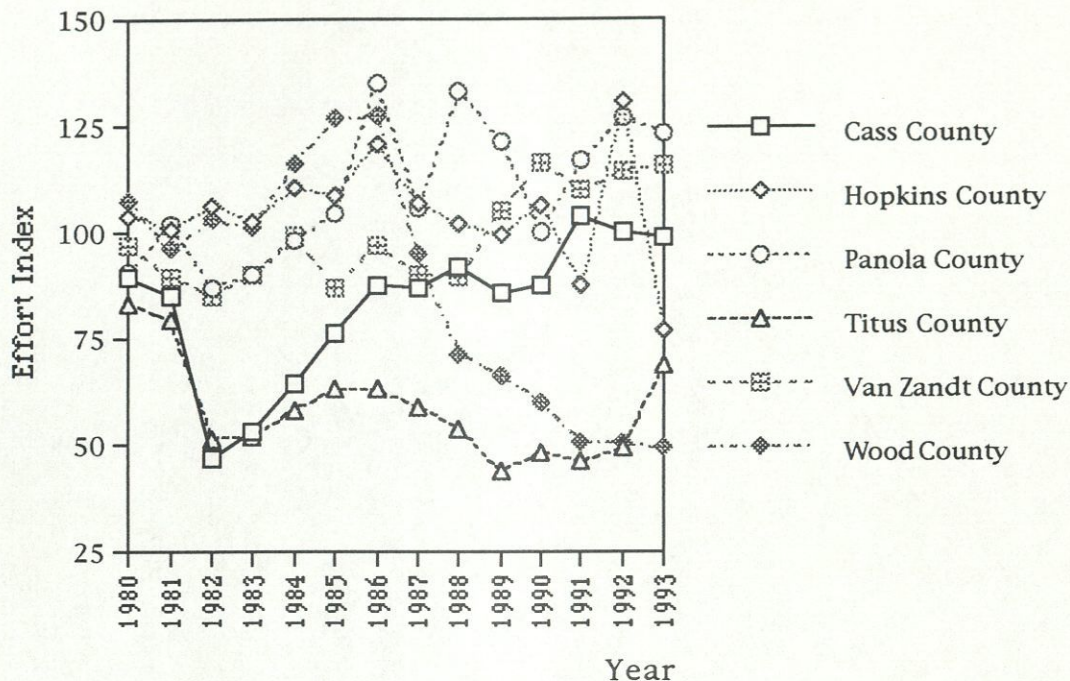
Rural Upper East Texas Counties Panola and Wood Counties



County Property Tax Per Capita Capacity Index

Tax Capacity Indexes for this six county group generally split into two tiers. One group of three consistently exceeded 125, although values for two of the three exhibited a downward trend from the early 1980s. The other group had index values that hovered in the nineties to one hundred range. The values for this group remained stable from the mid-1980s. With the exceptions of Hopkins and Van Zandt counties, this group had Tax Capacity Indexes that indicated above average county per capita property values above the state average; some more than fifty percent above the average.

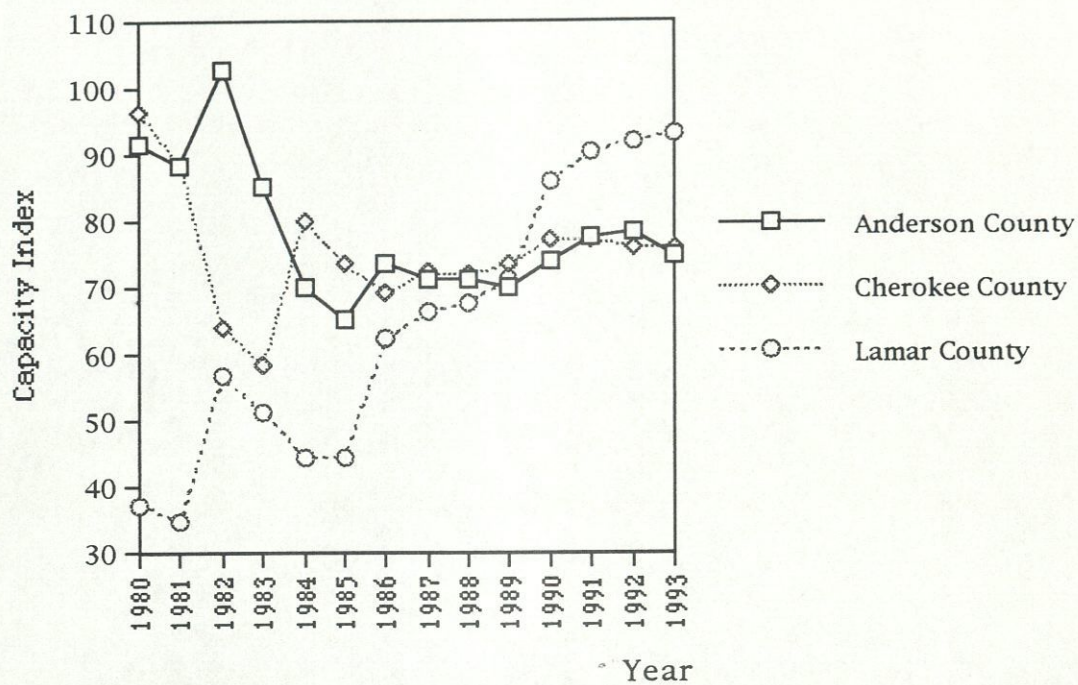
Rural Upper East Texas Counties
Population 20,000 to 40,000



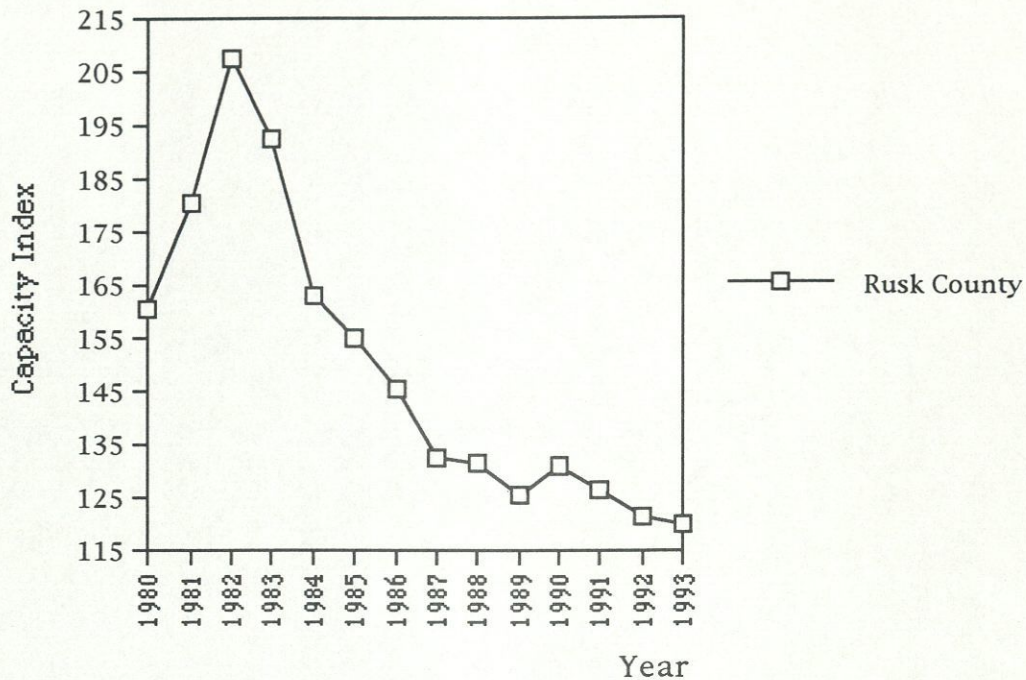
County Property Tax Per Capita Effort Index

The 1980 Tax Effort Indexes values clustered in a relatively narrow band around one hundred. Over time Tax Effort Indexes diverged, reflecting a variety of relative tax rates among the group's counties. By the end of the study date Tax Effort Index values ranged from less than fifty to nearly 125; only two of which were greater than one hundred. Panola county, the county with the highest Tax Effort Index in 1993 also had the highest Tax Capacity Index.

Rural Upper East Texas Counties
Population Over 40,000
Excluding Rusk County



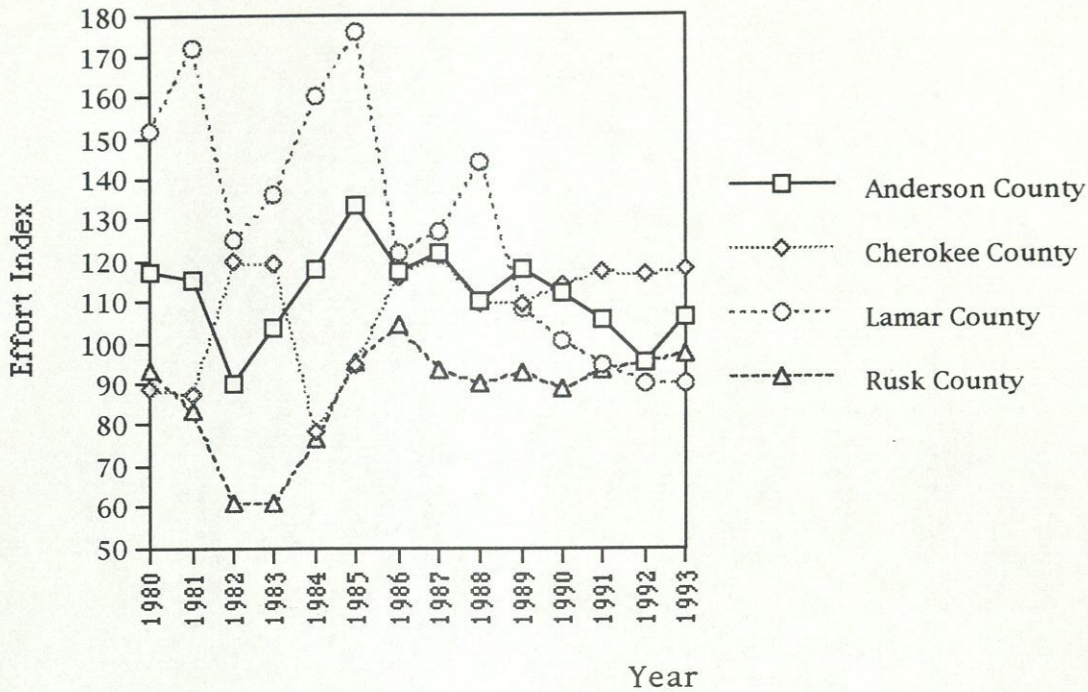
Rural Upper East Texas Counties Rusk County



County Property Tax Per Capita Capacity Index

Tax Capacity Index for one of the four counties, Rusk county, was significantly above one hundred but exhibited a steady downward trend after 1982. All the indexes for the other three counties indicated below state average county property values for the duration of the study period. The variation among the three values was greater in 1980 than in the early 1990s or at the end of the study period.

Rural Upper East Texas Counties Population Over 40,000

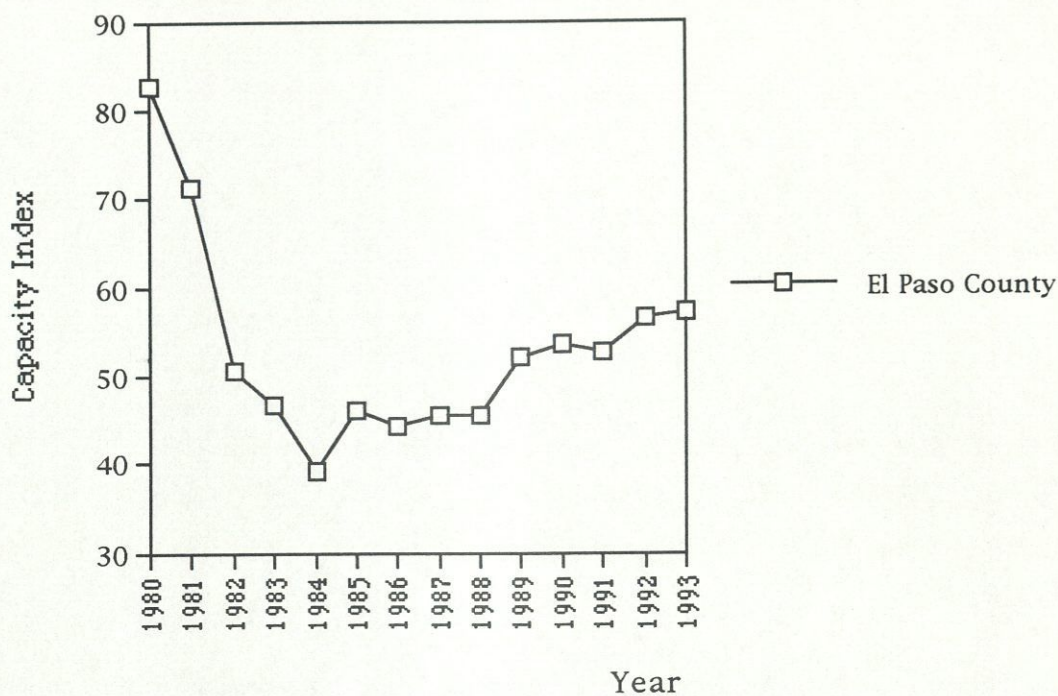


County Property Tax Per Capita Effort Index

Tax Effort Indexes, at the outset, ranged from near ninety to slightly over 150. Index values fluctuated significantly for individual counties over time but the values tended to converge toward the ninety to 120 band of values. Two counties had Tax Effort Index values below one hundred and two exceed one hundred. Rusk county had Tax Effort Index that reflected the lowest property tax rates among the group; Rusk county had the greatest property values of the group

Upper Rio Grande Region Metropolitan Areas

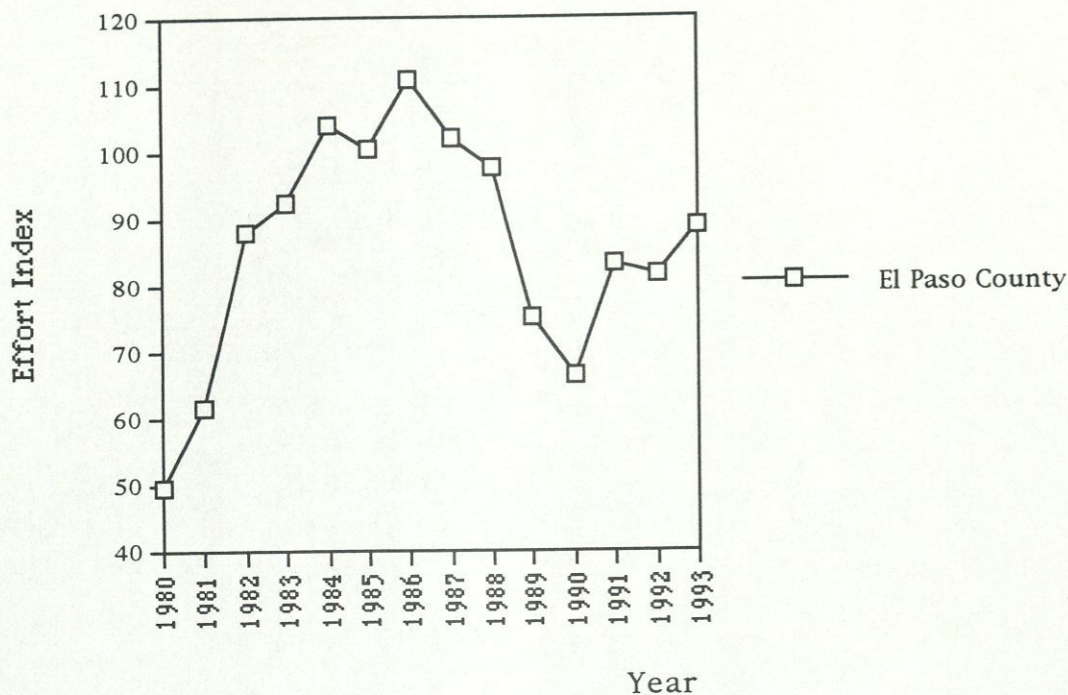
El Paso Metropolitan Area



El Paso Metropolitan Area
County Property Tax Per Capita Capacity Index

The Capacity Index for the single county area was 82.76 in 1980 and worsened considerably by the mid-1980s. The 1984 value was approximately forty, the lowest level of the study period. The moderate upward trend from mid-1980s was sufficient only to finish time period approximately twenty-five points below the 1980 value and more than forty points below the state average.

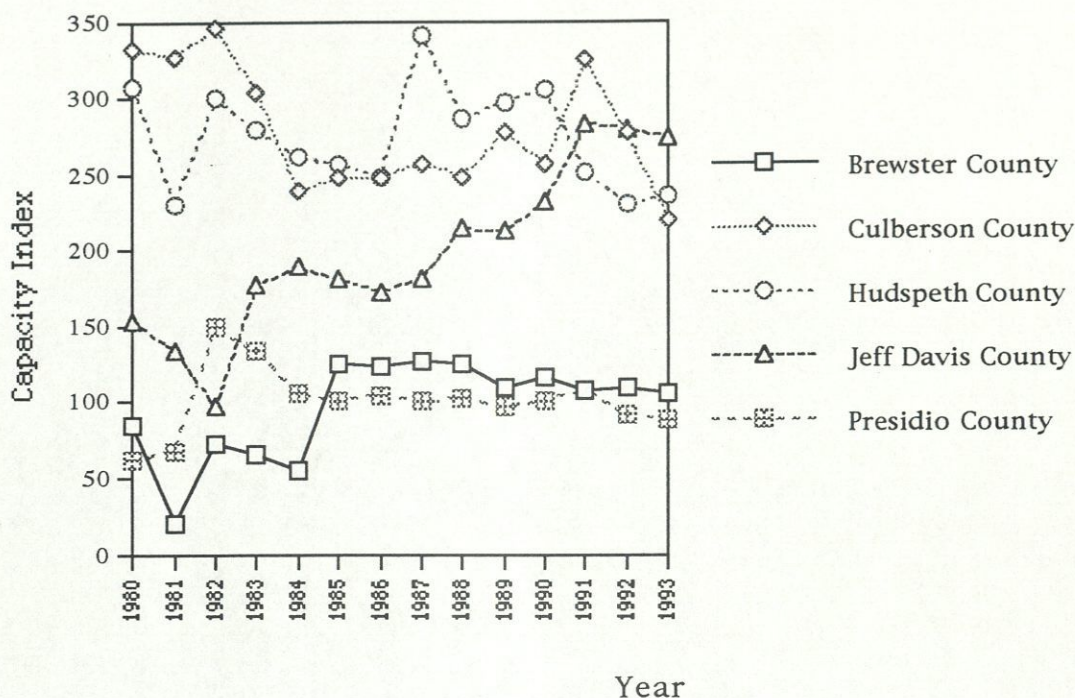
El Paso Metropolitan Area



El Paso Metropolitan Area
County Property Tax Per -Capita Effort Index

The 1980 Effort Index of fifty points indicated below state average property tax rates. The Effort Index increased substantially over the subsequent four years, the same period of Capacity Index decline, This reflected an increased in property tax rates relative to the state average. The peak in the Effort Index was in 1986, approximately 110, and by 1990 the Effort Index had declined to the mid sixties. Only during the middle years of the study did the Effort Index indicated property tax rates in the area to be above state average rates. El Paso ranked twenty-one of twenty-seven in Effort Index in 1993.

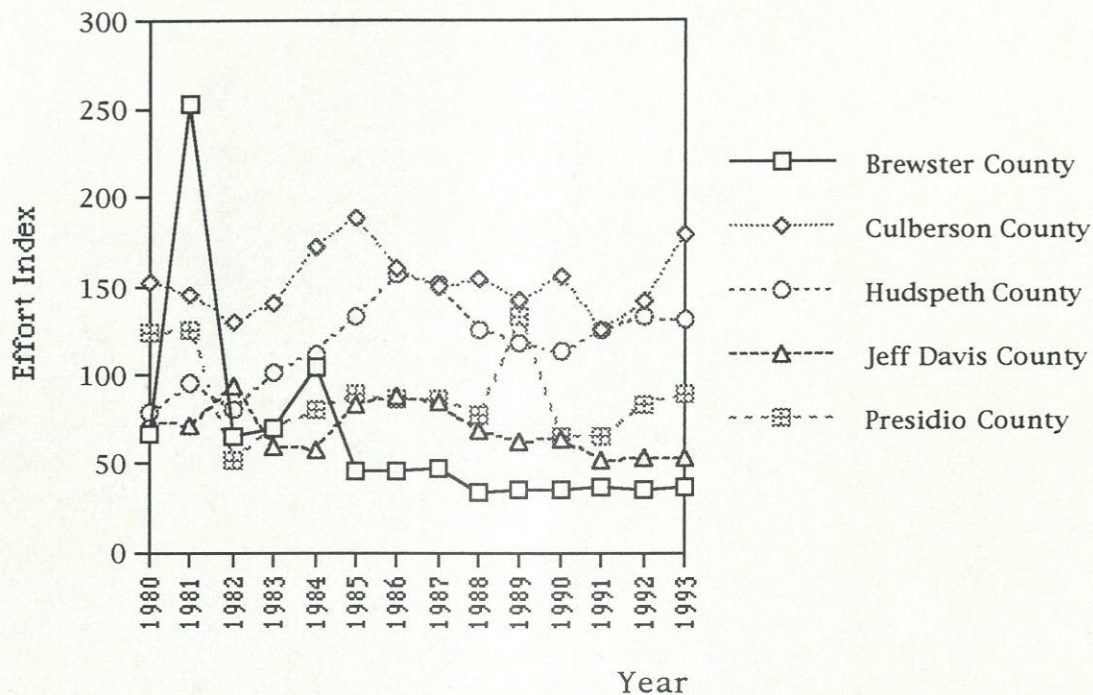
Rural Upper Rio Grande Counties



County Property Tax Per Capita Capacity Index

The 1980 Tax Capacity Index value indicated a rough two group clustering. Two counties had Tax Capacity Index values that fell short of one hundred, one county had a value in the fifty to sixty range. The Tax Capacity Index for these two counties generally increased to one hundred which indicated relative improvements in property values but never to the extent of attaining above state average values. The values for the other three counties ranged from 150 to 340. The Tax Capacity Index values for these counties ranged from 210 to 260 by 1993. The range narrowed but the center of the range increased. The index for Jeff Davis county showed clear and significant improvement in relative per capita property values

Rural Upper Rio Grande Counties

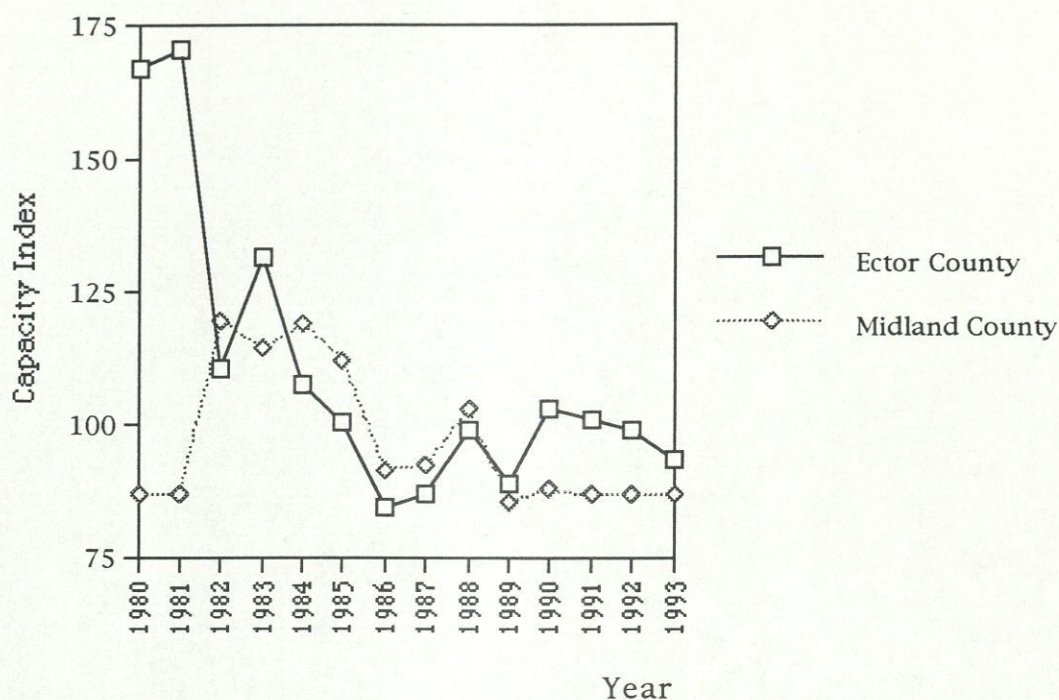


County Property Tax Per Capita Effort Index

A slight downward trend in the Tax Effort Indexes as well as a wider range of values for this group. In 1980, the Tax Effort Index ranged from approximately sixty to 150. By 1993 the range had widened to approximately forty to 175. Although it was not the case throughout, the counties with the greatest and least values for 1980 were the same counties in 1993. Overall, relative tax rates declined over time but continued to reflect state average rates.

West Texas Region
Metropolitan Areas

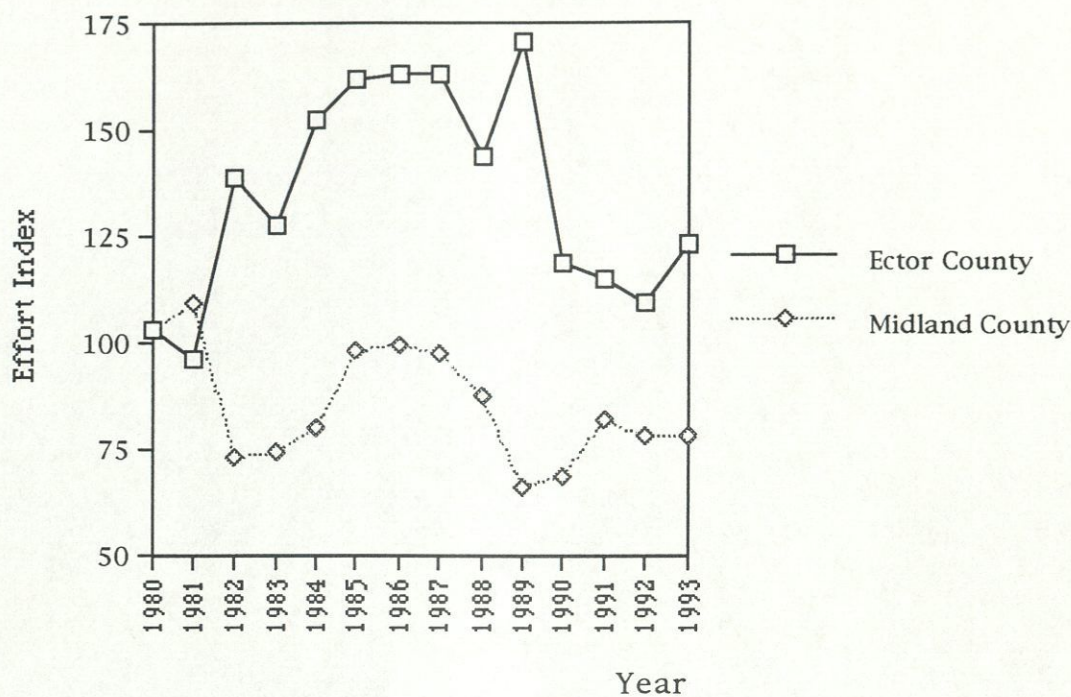
Odessa-Midland Metropolitan Area



Odessa-Midland Metropolitan Area
County Property Tax Per Capita Capacity Index

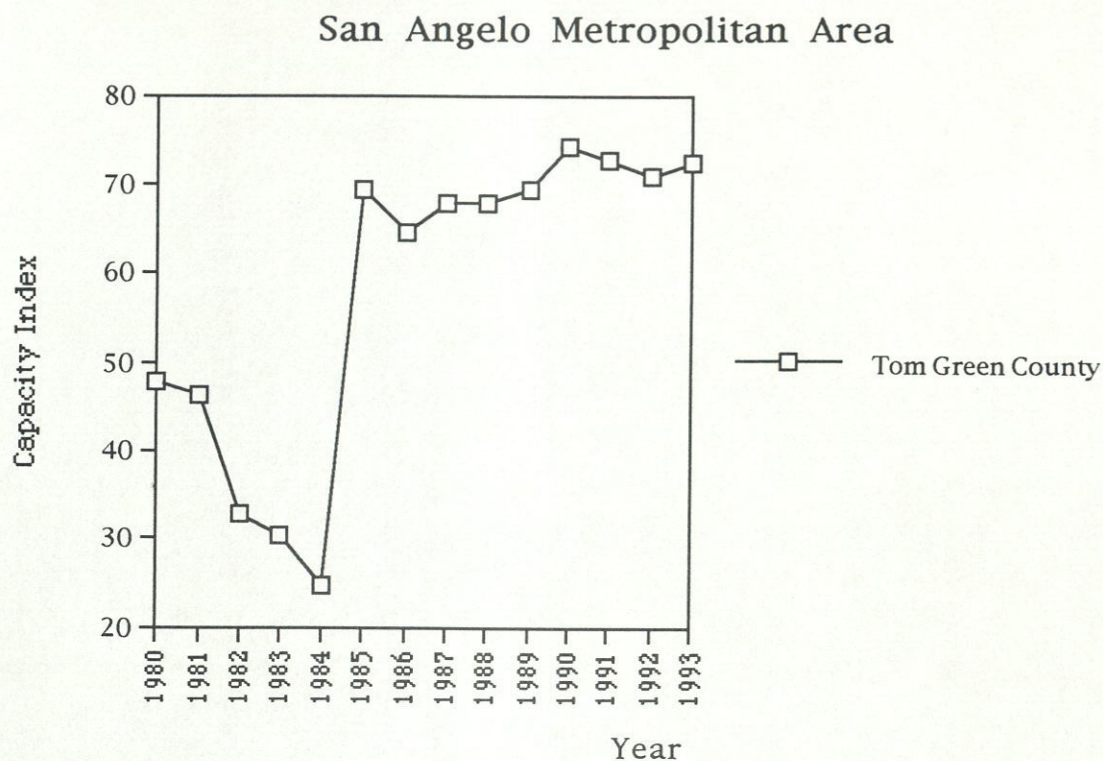
The pattern of the Capacity Index for this two county area may reflect the conditions in the oil and gas industries. The area had the third highest Capacity Index in 1980, 133.33. For the first few years of the study, the Capacity Index reflects declining property values in the area. In 1987, the value of 89.30 indicated per capita property values in the area to be below state average. By the end of the study period, the Capacity Index improve only slightly to 90.18. The area's Capacity Index was ranked twelfth among Texas metropolitan areas.

Odessa-Midland Metropolitan Area



Odessa-Midland Metropolitan Area
County Property Tax Per Capita Effort Index

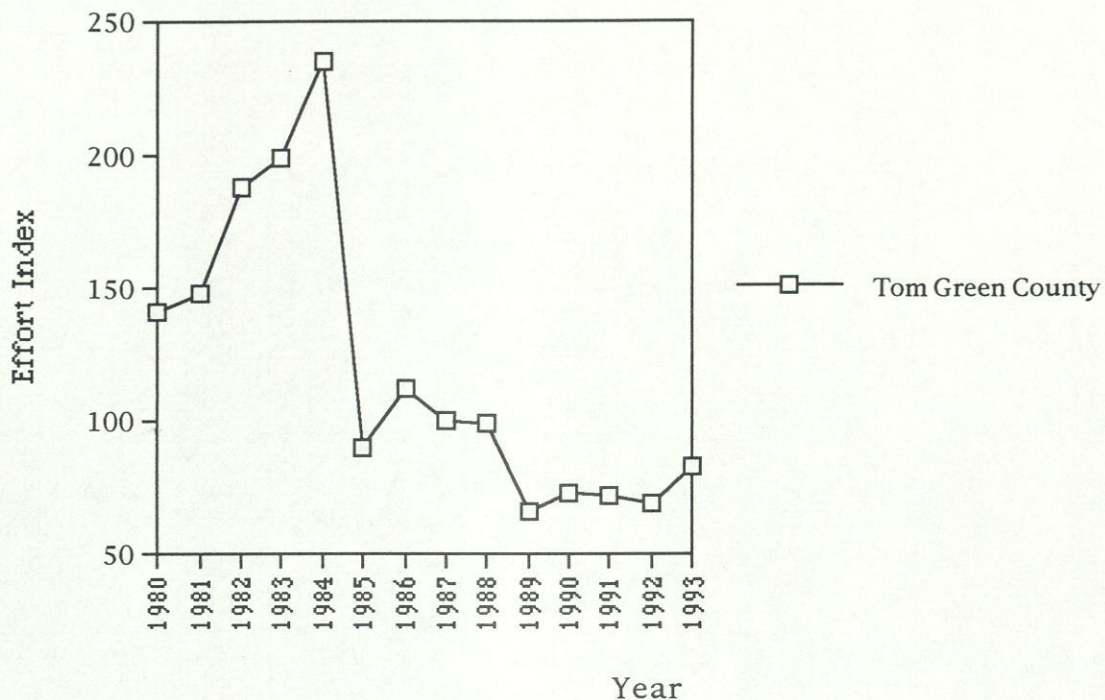
The Effort Index for this area had nearly equal values at the beginning and the end of the study period, 102.71 and 101.33 respectively. During the intervening years property tax rates in both area counties increased relative to the state and then decreased. The 1987 Effort Index of 132.43 was the fourth largest value of the Texas metropolitan areas. By 1993, the area ranked fourteenth in Effort Index, one position lower than in 1980.



San Angelo Metropolitan Area
County Property Tax Per Capita Capacity Index

As with other West Texas metropolitan area, the early 1980s were times of decreasing property value relative to the rest of the state. The per capita property values were fifty per cent of the state average, as indicated by the Capacity Index, in 1980 and dropped to a low of approximately twenty percent in 1984 before recovery in 1985. The 1987 Capacity Index, 67.81, indicated per capita property values continued to lag behind the state. The recovery continued through the end of the study period when the Capacity Index measured 72.35; a twenty-five point improvement from thirteen years earlier.

San Angelo Metropolitan Area

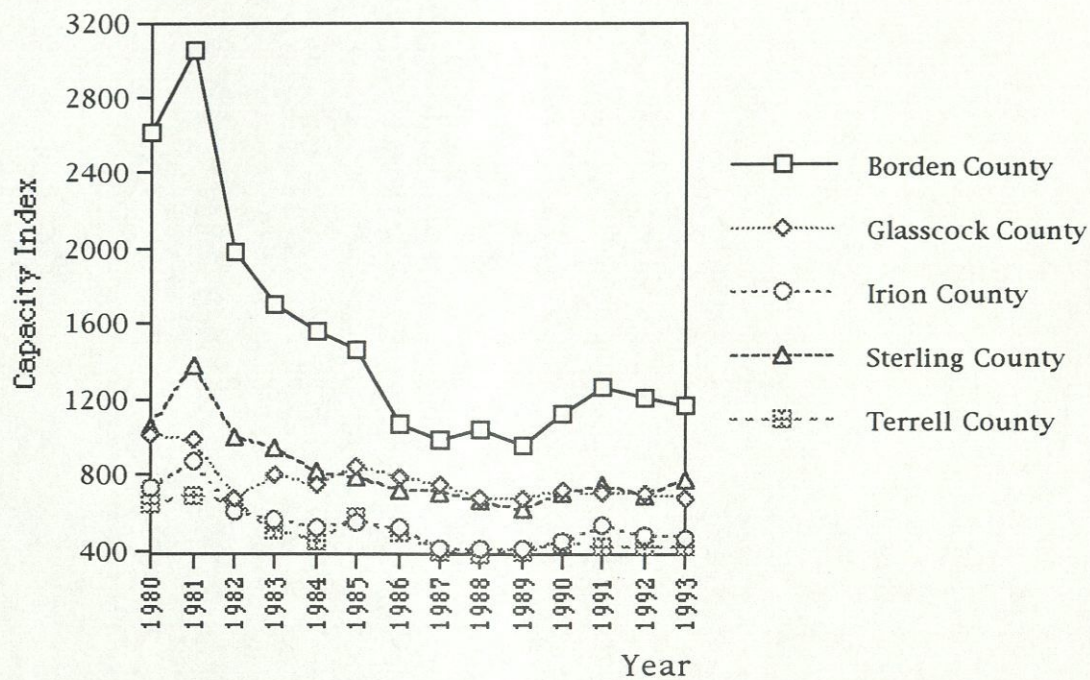


San Angelo Metropolitan Area
County Property Tax Per Capita Effort Index

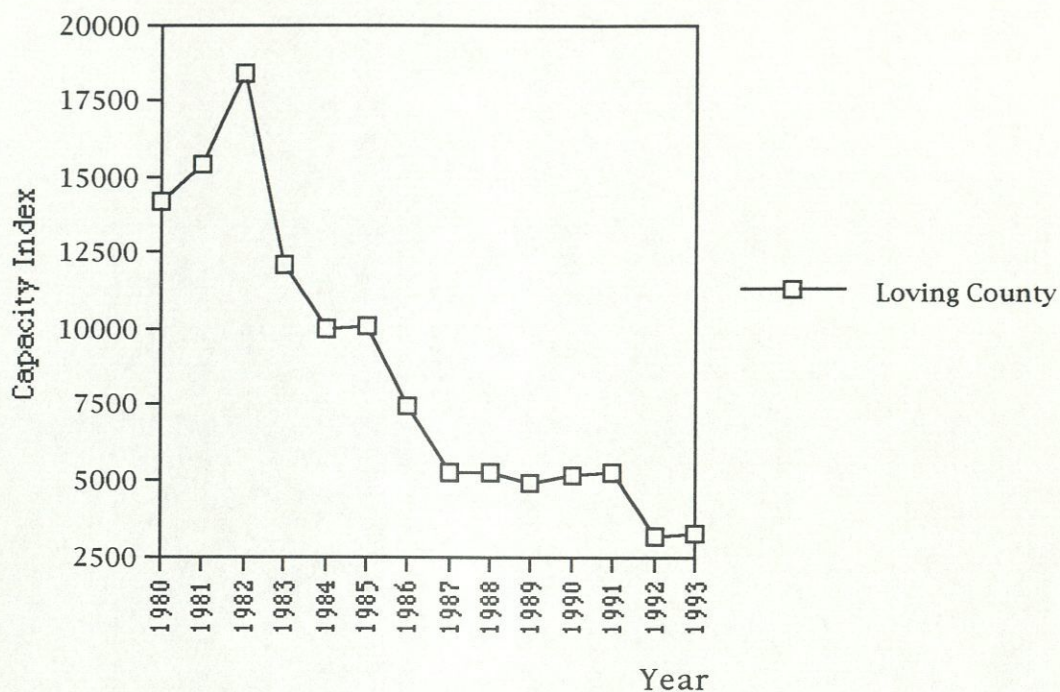
The pattern of the Effort Index closely reflects the pattern of the Capacity Index. For the years that the Capacity Index declined, the Effort Index increased. The 1985 value is significantly different from the 1984 value in both measures. After 1985 both measures remain relatively flat. The Effort Index reflects above state average property tax rates in 1980. In 1980, the area followed only one state in Effort Index measurement. The Effort Index increased sharply until 1984 and the drop to a level lower than the 1980 value. By 1987 the Effort Index, 99.85, indicated nearly state average property tax rates in the single county area. Property tax rates continued to decline, relative to the rest of the state to the degree that the 1993 Effort Index, 82.66 was larger than only one area's Effort Index.

West Texas Region Rural Counties

Rural West Texas Counties Population Under 2,000 Excluding Loving County



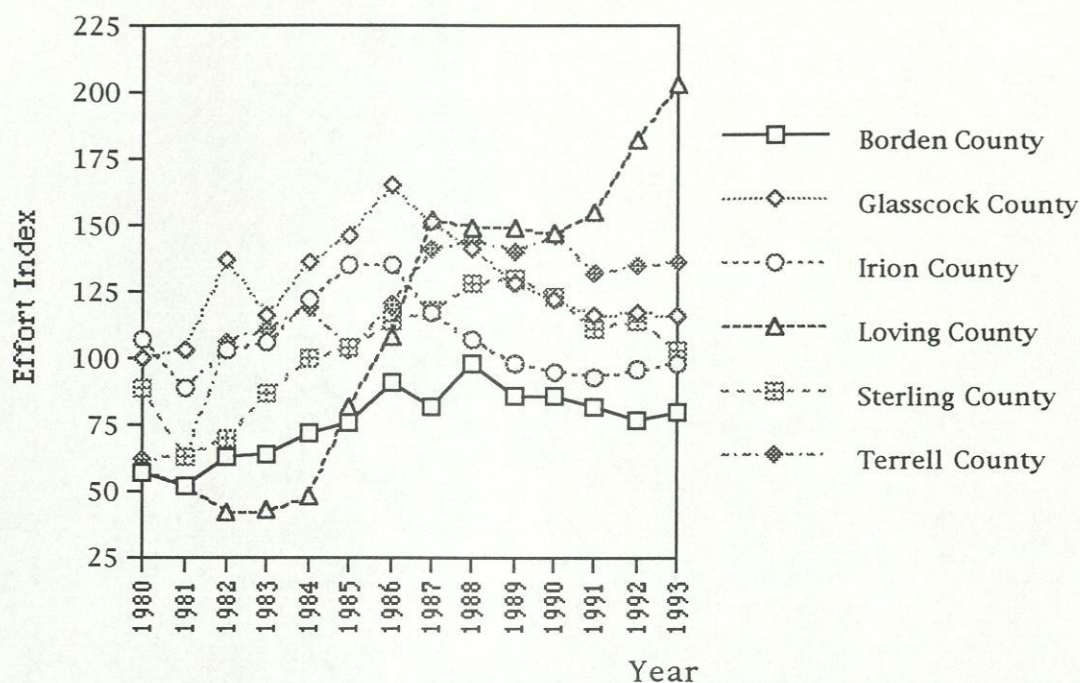
Rural West Texas Counties Loving County



County Property Tax Per Capita Capacity Index

The Tax Capacity for all six counties in this group exceeded 400 in every year. The index for Loving county exceeded 2500 for every year. This population group points to the limitations of the Tax Capacity and Tax Effort approach when jurisdictions have very low populations. Given the sparse population it was uncertain whether to attribute changes to property value changes, rate changes, or changes in population.

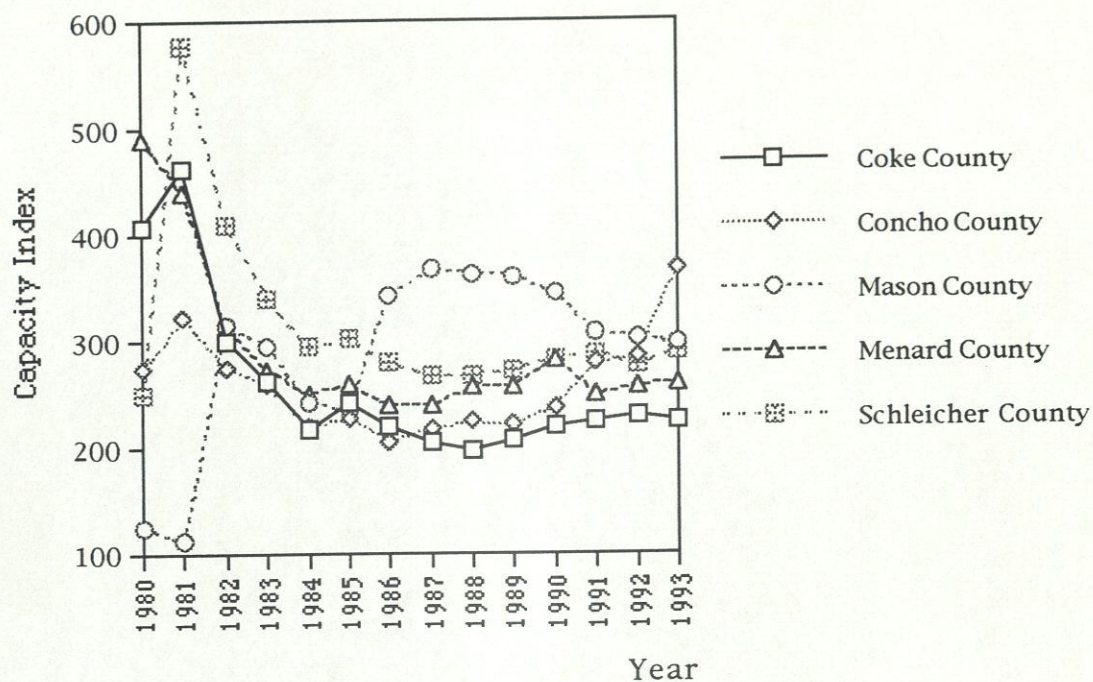
Rural West Texas Counties Population Under 2,000



County Property Tax Per Capita Capacity Index

Tax Effort Indexes for the early 1980s indicated below state average county property tax rates. General trend of increasing index values as well as dispersion. Index values ranged from sixties to just over one hundred in 1980 and from seventy-five to 200 in 1993. Only one county began period with an index value above one hundred. Half of the counties ended the time period with values over one hundred. Overall, property tax rates in these counties increased relative to the rest of the state.

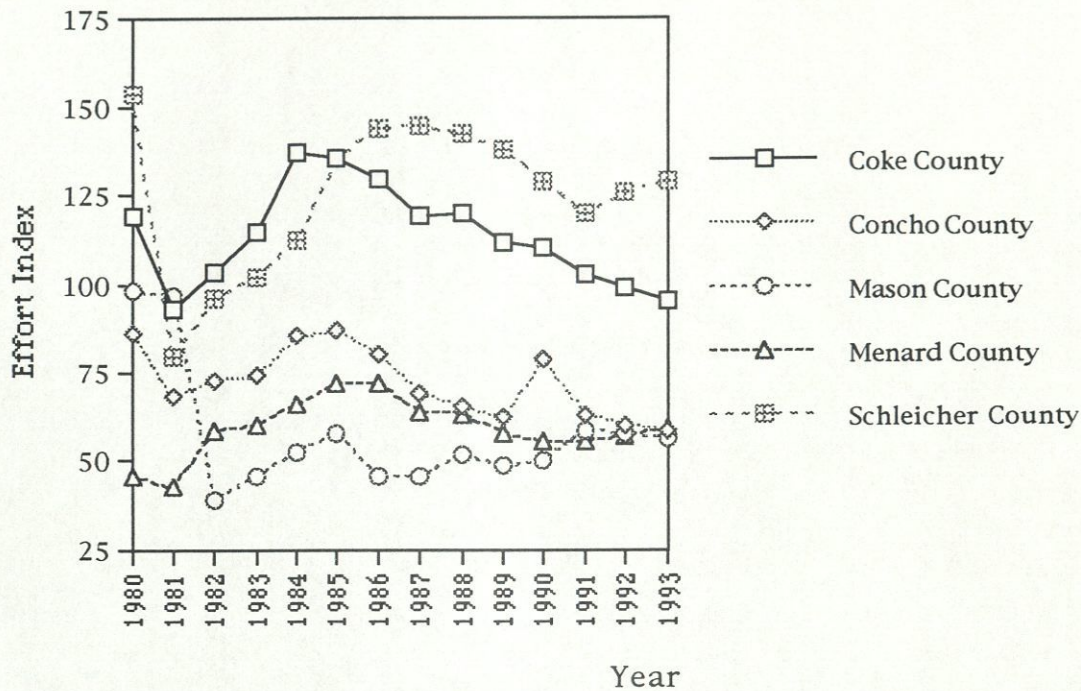
Rural West Texas Counties Population 2,000 to 4,000



County Property Tax Per Capita Capacity Index

The 1980 Tax Capacity Index for this group ranged from 110 to 500. The values generally declined from the early 1980s and converged to the 200 to 300 point range. Tax Capacity Index values reflected county per capita property values in excess of twice the state average for virtually all of the counties in every year.

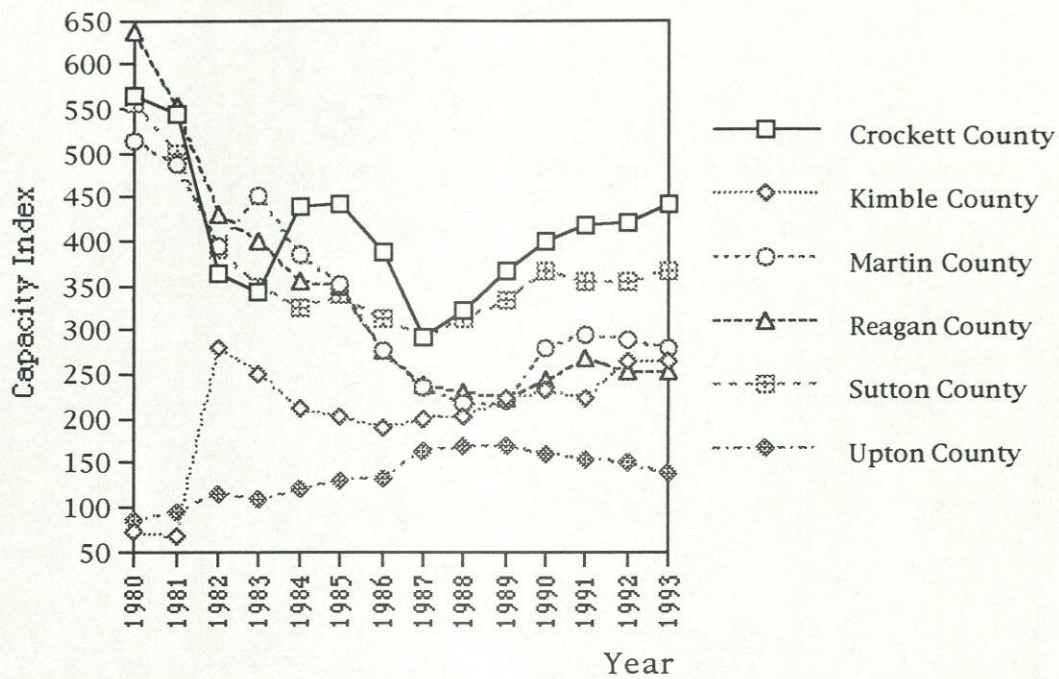
Rural West Texas Counties
Population 2,000 to 4,000



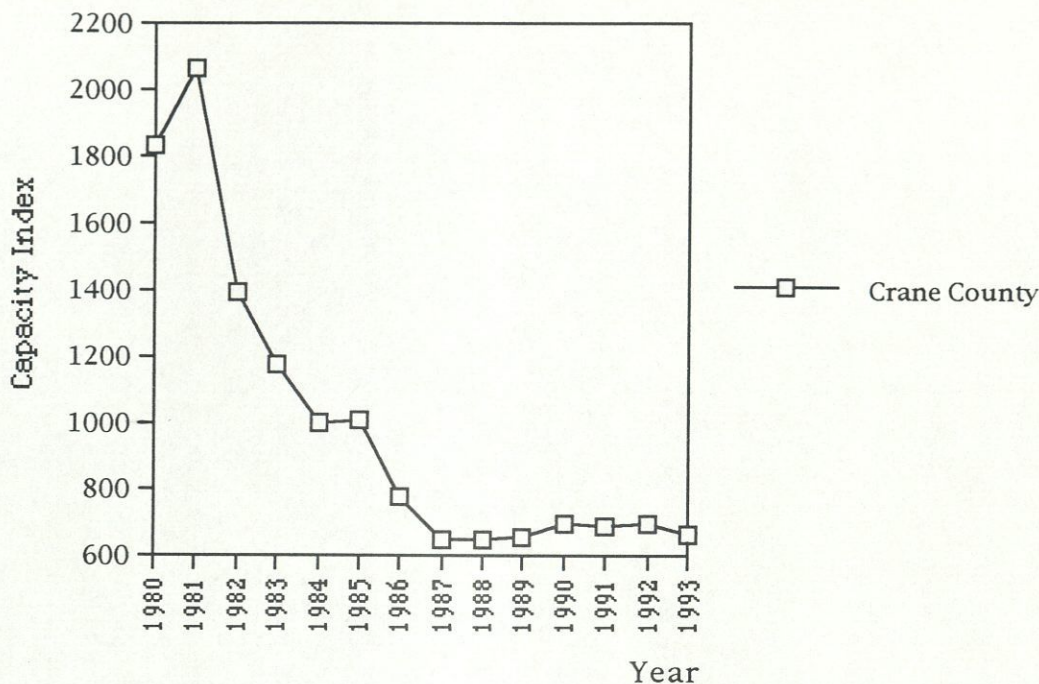
County Property Tax Per Capita Effort Index

The 1980 range of Effort Index values ranged from below fifty to over 150 with three of the values at or below one hundred. Effort Indexes generally increased to relative highs in the middle 1980s and then declined moderately. Two grouping appeared in 1990. Three counties had Tax Effort Indexes in the fifty to seventy-five point range and two counties, Coke and Schleicher counties, had values of one hundred and 125 respectively. Neither of these counties was an exception with regard to its Tax Capacity Index.

Rural West Texas Counties
Population 4,000 to 5,000
Excluding Crane County



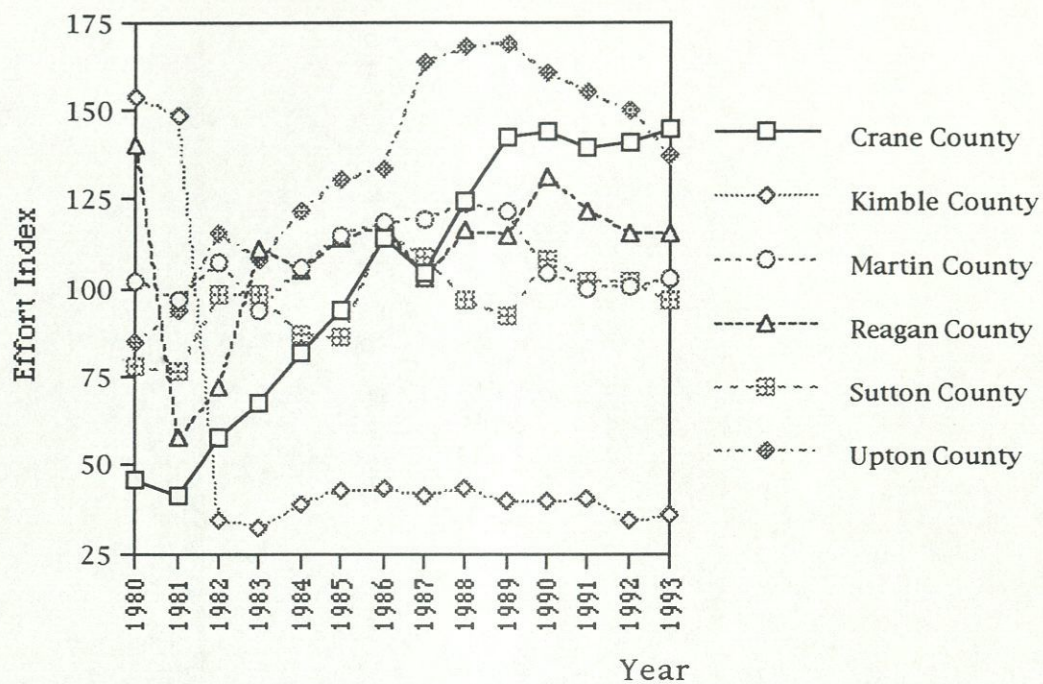
Rural West Texas Counties Crane County



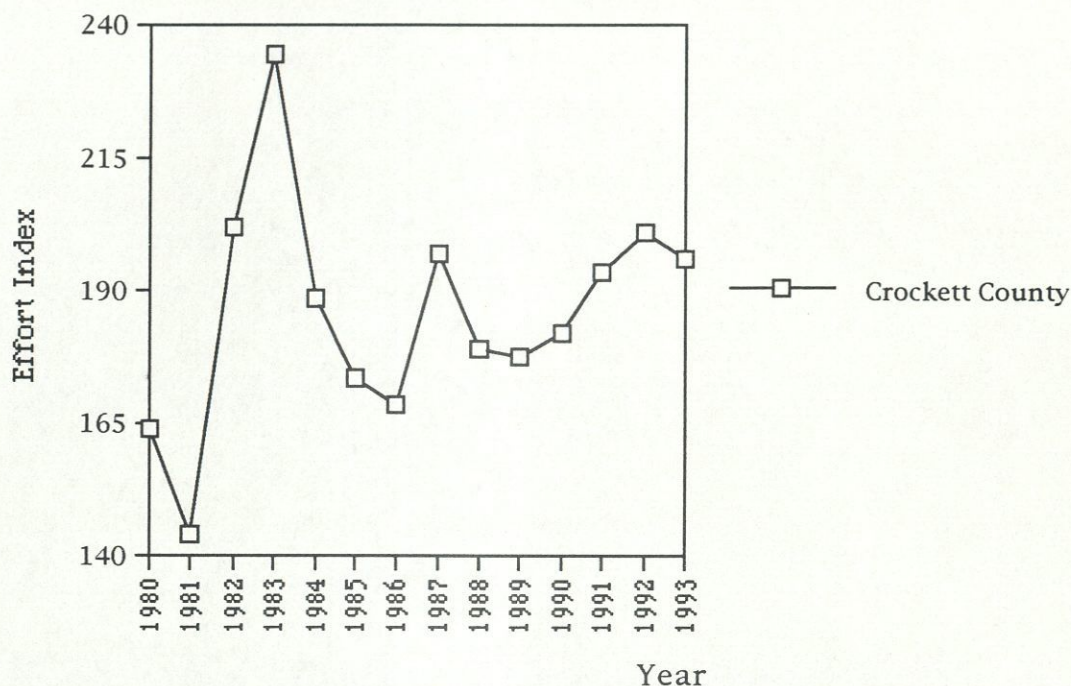
County Property Tax Per Capita Capacity Index

Tax Capacity Indexes indicated that the counties in this group fell into one of three subgroups. Crane county was alone in a subgroup with an initial index value of 1800 and no annual value under 600. The index did decline sharply until 1987 and then remained stable at approximately 650. The second subgroup was comprised of four counties that had initial index values of 500 or more. The values declined over the duration of the study period but not to levels less than 250. Index values for two of the four more closely matched the index values for the two counties of the third subgroup by 1993. The third subgroup were approximately seventy-five at the outset, increased gradually over time, exceeded one hundred by 1982, and by 1993 had attained a value of at least 150. The Tax Capacity Indexes for this group of counties indicated above average per capita property values since 1982. Per capita property values did equalize over time with the exception of Crane county.

Rural West Texas Counties
Population 4,000 to 5,000
Excluding Crockett County



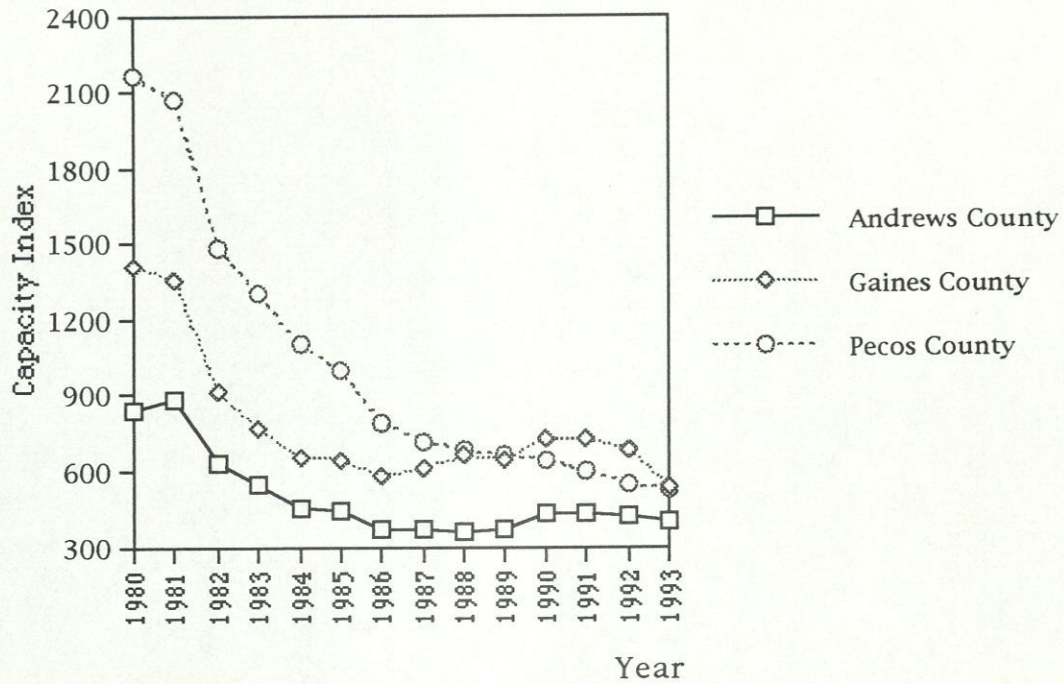
Rural West Texas Counties Crockett County



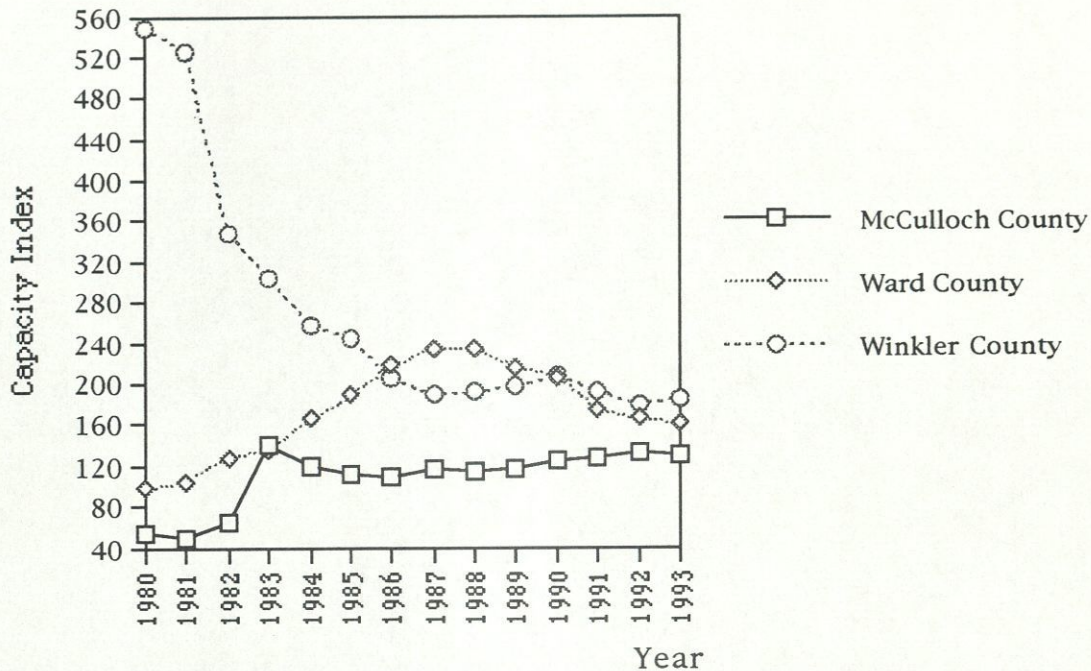
County Property Tax Per Capita Effort Index

With the exception of Crockett county, the 1980 Tax Effort Index values ranged from under fifty to over 150. Index values generally increased during the 1980s for all but one county, Kimble. By 1986, the index values for all but Kimble county exceeded one hundred. The values were approximately one hundred or over by the end of the study period. Index values for Crockett county exceeded 190. The Tax Effort Index indicated a time of increasing relative property tax rates for all but one county. For most counties, they started the time period with county property tax rates at or below the state average and finished the period with property tax rates at or above the state average.

Rural West Texas Counties
Population 5,000 to 15,000
Andrews, Gaines, and Pecos Counties



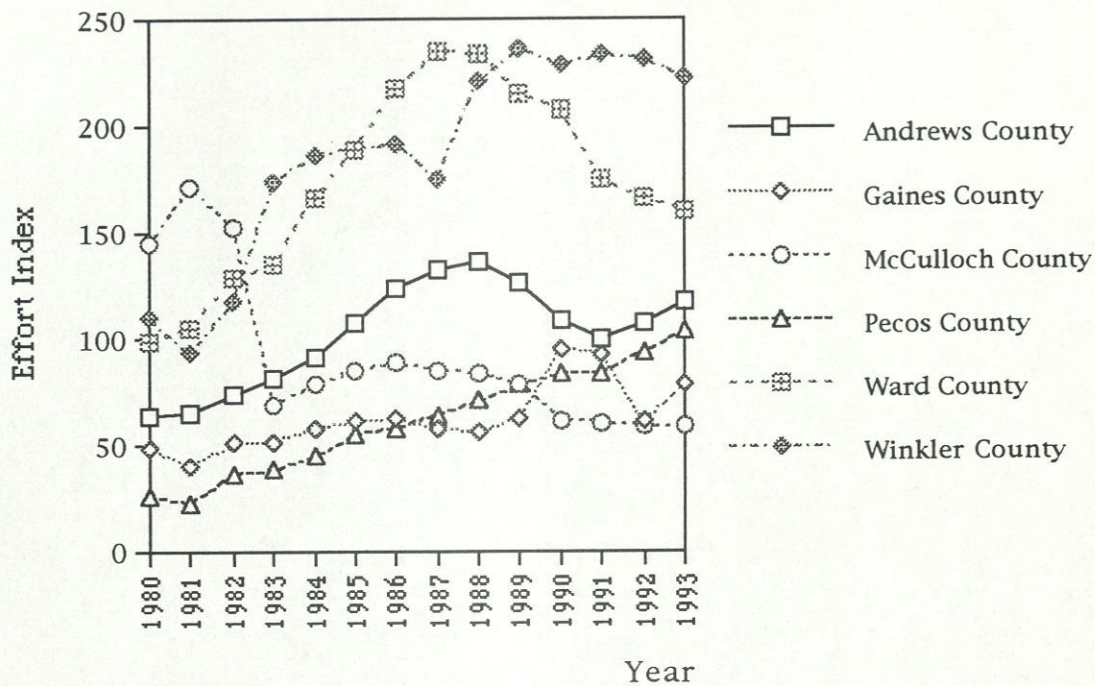
Rural West Texas Counties
Population 5,000 to 15,000
McCulloch, Ward, and Winkler Counties



County Property Tax Per Capita Capacity Index

The 1980 Tax Capacity Index values ranged from fifty to 2100 with a gap between 550 and 900. Three counties had values under 550 and three have values above 900. The indexes for the counties that had the highest values declined steadily over time. The index for the two remaining counties increased over time. The values for 1983 forward reflected per capita property values in all counties to be above the state average.

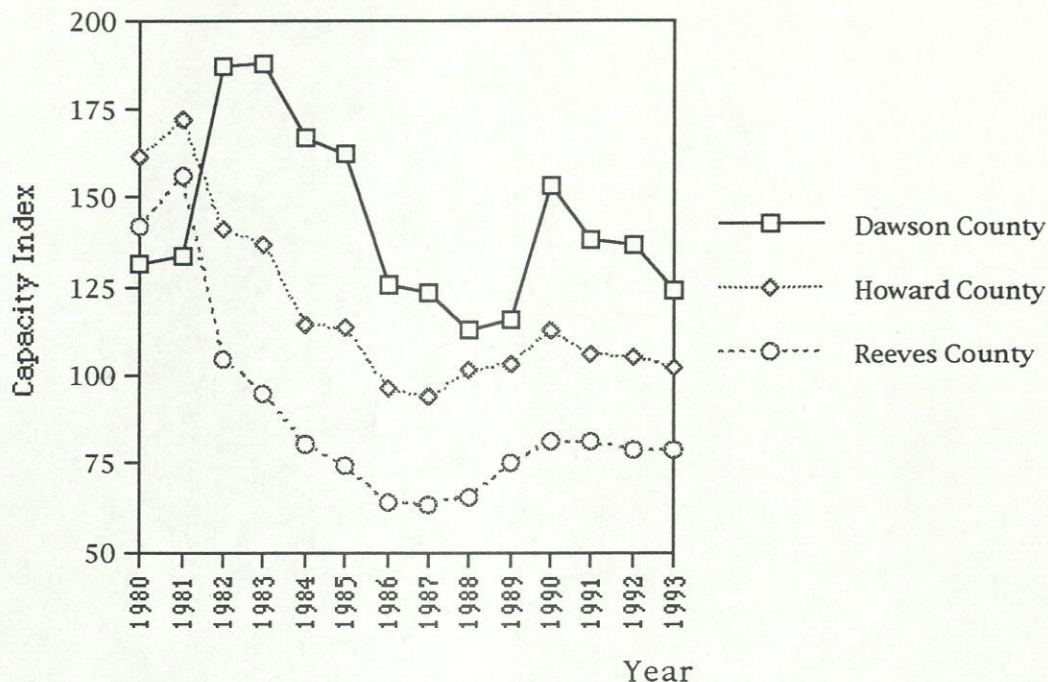
Rural West Texas Counties Population 5,000 to 15,000



County Property Tax Per Capita Effort Index

The 1980 Indexes for two of the six counties exceeded one hundred. The indexes tended to increase over time but by 1993 only two of the six counties significantly exceeded one hundred. Indexes increased steadily until 1987 and then declined moderately; not enough to return to initial lower values. Property tax rates for this group were below state averages at the beginning of the period, increased over time but not enough for all counties to have property tax rates in excess of the state average. The rates for the two counties that had rates significantly over the state average were fifty percent higher and twice as high as the state average.

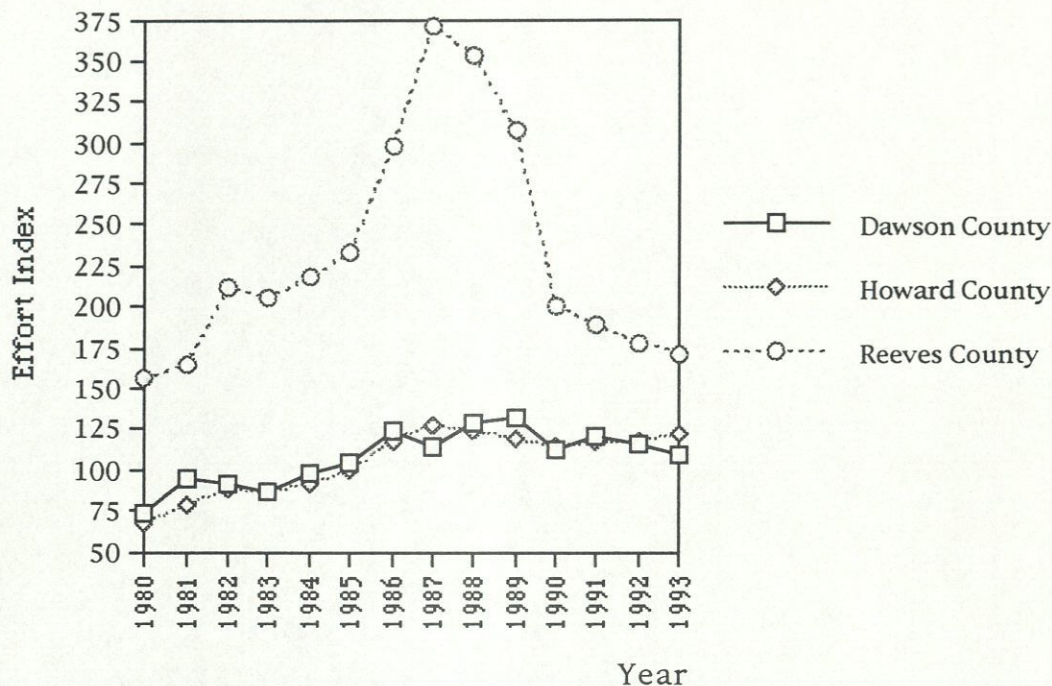
Rural West Texas Counties Population Over 15,000



County Property Tax Per Capita Capacity Index

The values of the 1980 Tax Capacity Index ranged from 130 to 160. Index values declined after 1983 to relative low values and then increased slightly during the final years of the study period. The Tax Capacity Index value for Dawson remained above one hundred, values for Howard county stabilized around one hundred, and values for Reeves county declined to below one hundred. The per capita property values were above state average values, at state average values, or below state average values, depending upon which county a person lived.

Rural West Texas Counties Population Over 15,000



County Property Tax Per Capita Effort Index

The Tax Effort Index values reflected reactions by the counties as their Tax Capacity Index values fluctuated. The Tax Effort Index values for Dawson and Howard counties were approximately seventy-five in 1980 and increased to slightly above one-hundred over time. The Tax Effort Index for Reeves county, started at approximately 150, increased sharply, relative to its counterparts, in 1987, then decreased just as sharply by 1993. The index reflected rates in Reeves county increased, decreased, and always exceeded the state average rates as well as its cohorts.

Appendix

Texas Counties by Economic Regions

Central Texas

Bastrop	Bell	Blanco	Bosque	Brazos
Burleson	Burnet	Caldwell	Coryell	Fayette
Falls	Freestone	Grimes	Hamilton	Hays
Hill	Lampasas	Lee	Leon	Limestone
Llano	Madison	McLennan	Milam	Mills
Robertson	San Saba	Travis	Washington	Williamson

Gulf Coast

Austin	Brazoria	Chambers	Colorado	Fort Bend
Galveston	Harris	Liberty	Matagorda	Montgomery
Walker	Waller	Wharton		

High Plains

Armstrong	Bailey	Carson	Childress	Cochran
Collingsworth	Crosby	Dallam	Deaf Smith	Dickens
Donley	Floyd	Garza	Gray	Hale
Hall	Hansford	Hartley	Hemphill	Hockley
Hutchinson	King	Lamb	Lipscomb	Lubbock
Lynn	Moore	Motley	Ochlitree	Oldham
Parmer	Potter	Randall	Roberts	Sherman
Swisher	Terry	Wheeler	Yoakum	

Metroplex

Benton	Collin	Cooke	Dallas	Ellis
Erath	Fannin	Grayson	Henderson	Hood
Hunt	Johnson	Kaufman	Navarro	Palo Pinto
Parker	Rockwall	Somervell	Tarrant	Wise

Northwest Texas

Archer	Baylor	Brown	Callahan	Clay
Coleman	Comanche	Cottle	Eastland	Fisher
Foard	Hardeman	Haskell	Jack	Jones
Kent	Know	Mitchell	Montague	Nolan
Runnels	Scurry	Shackelford	Stephens	Stonewall
Taylor	Throckmorton	Wichita	Wilbarger	Young

South Texas

Aransas	Atascosa	Bandera	Bee	Bexar
Brooks	Calhoun	Cameron	Comal	DeWitt
Dimmit	Duval	Edwards	Frio	Gillespie
Goliad	Gonzales	Guadalupe	Hidalgo	Jackson
Jim Hogg	Jim Wells	Karnes	Kendall	Kenedy
Kerr	Kinney	Kleberg	La Salle	Lavaca
Live Oak	Maverick	Medina	McMullen	Nueces
Real	Refugio	San Patricio	Starr	Victoria
Webb	Willacy	Wilson	Val Verde	Uvalde
Zapata	Zavala			

Southeast Texas

Angelina	Hardin	Houston	Jasper	Jefferson
Nacogdoches	Newton	Polk	Orange	Sabine
San Augustine	San Jacinto	Shelby	Trinity	Tyler

Upper East Texas

Anderson	Bowie	Camp	Cass	Cherokee
Delta	Franklin	Gregg	Harrison	Hopkins
Lamar	Marion	Morris	Panola	Rains
Red River	Rusk	Smith	Titus	Upshur
Van Zandt	Wood			

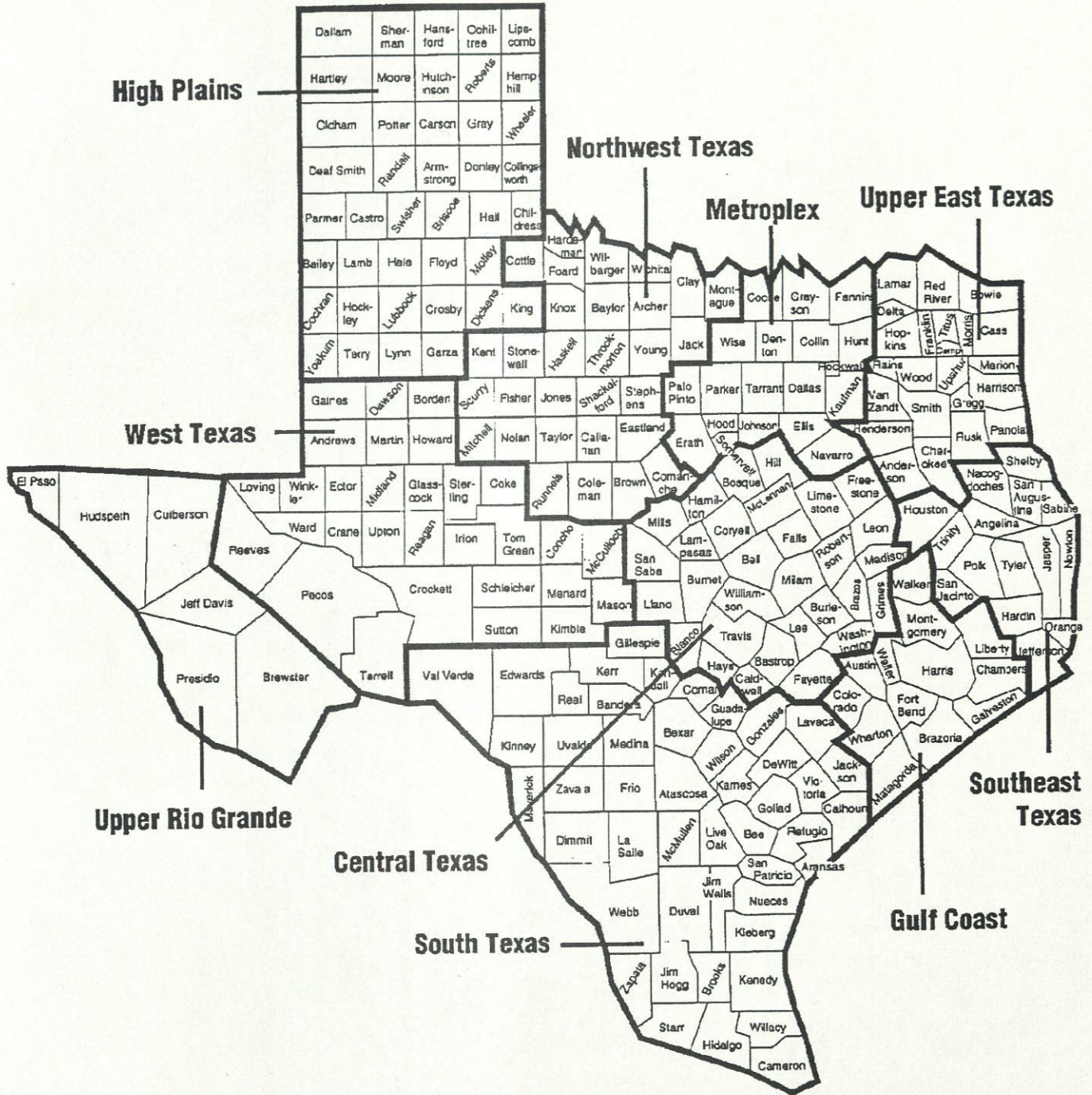
Upper Rio Grande

Brewster	Culberson	El Paso	Hudspeth	Jeff Davis
Presidio				

West Texas

Andrews	Borden	Coke	Concho	Crane
Crockett	Dawson	Ector	Gaines	Glasscock
Howard	Irion	Kimble	Loving	Martin
Mason	Menard	McCulloch	Midland	Pecos
Winkler	Reagan	Reeves	Schleicher	Sterling
Sutton	Terrell	Tom Green	Upton	Ward

Comptroller's Economic Regions of Texas



SOURCE: Texas Comptroller of Public Accounts.

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