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### **Faculty Paper Series**

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# Texas State and Local Government Expenditures: A Comparison with Other States for 1996

by

Judith I. Stallmann judystal@tamu.edu

Department of Agricultural Economics 2124 TAMU Texas A&M University College Station, Texas 77843-2124

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Judith I. Stallmann

Associate Professor and Extension Economist

Texas Agricultural Extension Service Department of Agricultural Economics Texas A&M University System

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ABSTRACT: This report is part of an educational series on Texas state and local taxes and public expenditures. State and local government expenditures per capita and per \$1,000 of personal income in Texas are compared with those of the fifty states and the District of Columbia. For each expenditure the national average, median, maximum and minimum are given along with the corresponding expenditure for Texas and Texas's rank nationally. For all state and local expenditures, Texas ranks 42nd per capita and 40th per \$1,000 of personal income. Texas ranks just below the median on education and public safety. It ranks below the median on transportation and social services expenditures. Texas ranks lowest in the nation on administrative expenditures. It ranks 24th in debt held per capita.

Taxation and budget issues are continuing concerns in Texas. The level of expenditures is a perennial concern for two reasons: 1) expenditures affect the taxes that Texans pay, 2) citizens also have views on the types of expenditures that government should or should not make and how high those expenditures should be. In addition, devolution of federal programs to state and local government has increased interest in the allocation of state and local expenditures. This report provides basic information about the level and allocation of public budgets, and the implications of that allocation. Such information may allow citizens and state and local decision-makers to better compare alternative spending proposals.

Given the ongoing nature of budget debates, at both the national and state levels, a comparison of the Texas state and local expenditure systems with those of

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other states may be helpful. This publication is the fourth in a series of documents about state and local public finances in Texas. The first document of this series provided basic information on the major state and local taxes in Texas (Jones, Stallmann and Tanyeri-Abur). The second explained the constitutional amendment on property taxes that citizens passed by voter referendum in August, 1997 (Stallmann). The third compared the major state and local taxes of Texas with those of other states and analyzed the impact of the system on the state (Stallmann and Jones). This report examines how public monies are used at the state and local level.

The report begins with a general description of trends in state expenditures from 1985 to 1999. Unfortunately, similar data are not readily available for local government expenditures. Then the paper compares major state and local expenditures in Texas with those of other states. The expenditure information is from fiscal year 1996. While the dollar amount of expenditures has changed since 1996, in most cases the relative ranking of states has remained fairly stable.

#### **State Expenditures**

Before comparing expenditures across states, this section reviews the history of expenditures at the state level in Texas. Similar data overtime are not readily available for local governments. Net state expenditures have increased from approximately \$16.5 billion in 1985 to approximately \$45.7 billion in 1999 (Texas Comptroller's Website). This increase in due to three factors: 1)inflation, 2)rapid population increase requiring increased expenditures, and 3) increased demands for some public services.

Not only have state expenditures increased over the last 15 years, but also how the state uses its public monies has changed (Figure 1). Health and human services are now a larger percentage of state expenditures than they were in 1985, increasing from approximately 20% of state expenditures to 34% percent. While state spending on education has increased from \$8.6 billion in 1985 to \$17.2 billion in 1999, education accounted for approximately 52% of state expenditures in 1985 and now is approximately 38% of state expenditures. State spending on transportation has declined from a high of 13-14% of the state budget from 1986-88 to 8% in 1999. Public safety and corrections have increased from 3.8% of state expenditures in 1985 to 6.3% in 1999. It should be noted that the expenditures above are reported in more detailed categories than will be used below.

#### **Analysis Methods**

To compare expenditures among states, a basis of comparison must be established (see next section). This report compares expenditures among states by:

- comparing the expenditure per resident (or per capita) of each state, and
- comparing the expenditure per \$1,000 of personal income in each state.

The national per capita expenditure was calculated by summing the total expenditures across all states and dividing by the national population. The national expenditure per \$1,000 of personal income was summed as above and divided by national personal income. The median expenditure and the state with that expenditure are also presented. The median is defined as the halfway point. Half of the states have an expenditure higher than the median and half have an expenditure lower than the median.

Because the comparisons include the District of Columbia, the median state is that state which ranks twenty-sixth. The table for each expenditure also reports the highest and lowest expenditures per capita and per \$1000 of personal income among the states. In addition, the dollar value of the expenditure for Texas and the relative rank of Texas among the fifty states and the District of Columbia is reported.

#### **Establishing a Basis of Comparison**

Comparing expenditures across states may seem straightforward, but types of expenditures are not uniform from state to state. To compare expenditures among states requires establishing a basis of comparison:

#### State and local expenditures are reported together rather than separately.

In some states an expenditure is the responsibility of the state government, in others of the local government, and in still others it is a shared responsibility. For example, in Virginia roads are the responsibility of state government, while in Texas the responsibility is shared between state and local governments. To meaningfully compare highway expenditures across states, all such expenditures, both state and local, must be included.

#### Expenditures are measured per resident.

Because state populations vary, comparing total expenditures of each state is not useful. Instead, the average expenditure for an individual resident of the state—a per capita expenditure—is a better way to measure the relative expenditures of a state. The per capita calculation does not, however, reflect the distribution of expenditures among different groups within the state, such as low, medium and high income groups. It also does not imply that every citizen is a recipient of this expenditure, it is an average.

In addition, states with large populations may have economies of scale in some public services. In this case, their costs per capita would be lower. Texas is the second most populous state, so that it has the potential for some economies of scale.

#### • Expenditures are also measured per \$1,000 of personal income.

Another way of comparing expenditures among states is by the amount of expenditures per \$1,000 of personal income. This comparison is useful because average incomes vary among states. A state with low per capita income may have higher expenditures on some categories and lower on others. Texas ranks 32<sup>nd</sup> in the nation in per capita income.

#### Similar expenditures must be aggregated.

Similar expenditures must be aggregated. For example, regulatory expenditures in Texas are aggregated into public safety expenditures along with police, fire and corrections. (Census Bureau)

#### Expenditures on individuals and businesses are aggregated.

Some expenditures directly benefit individuals, some directly benefit businesses, and some benefit both. Highways benefit both individuals and businesses. It might seem that only expenditures that benefit individuals should be included in the per capita calculation and that expenditures that benefit businesses should be calculated separately, as an average per business. All expenditures are aggregated, however, because all expenditures ultimately benefit individuals as businesses are owned by individuals (proprietors and stockholders). In addition, data are not available to separate expenditures by business and individual.

#### All expenditures are counted as benefitting residents of that state.

All expenditures by state and local governments within a state are counted as benefitting residents of that state. In fact, many expenditures benefit people and businesses who are out-of-state residents. For example, highway expenditures benefit not only Texans, but also people traveling through Texas and out-of state-businesses shipping products into or through Texas. These benefits will not be reflected in this report due to lack of information on out-of-state benefits.

#### **Factors that Influence Expenditures**

There are many factors that affect the level of expenditures within a state. For example, low expenditures may be the result of several positive factors. It may indicate that the state is a very careful administrator of the public monies. Particularly for large states there may be economies of scale in some public services, resulting in lower costs per capita. There are also cases where the particular state has lower costs for other reasons (Stiglitz). For example, Texas might have lower costs of building highways per mile than does Colorado because of its climate and terrain.

Low expenditures might also be because citizens prefer fewer government services, incomes of citizens are too low to pay for more services, or the state and local governments may be ignoring the needs of some citizens.

All governments have limited budgets. In the case of specific expenditures, the trade-off may have been made to spend less on that item in order to spend more on another deemed more important to citizens.

We did, however, correlate spending with population, as a gross test of

economies of scale. We also correlated spending with per capita income. On some services high income would be expected to increase demand while for others low income would increase demand. In general we did not find significant correlations be between expenditures and per capita income and population. This is likely because more than a single factor influences a given level of expenditure. Given the large number of factors that influence expenditures, further research would be needed to determine the reason or reasons for the level of expenditures within a state.

#### Total State and Local Expenditures in the United States

While there are many similarities in the structure of expenditures among states, there are some important differences also. Two states with similar total spending may allocate that spending very differently to match the needs and the mix of services that their citizens desire. In addition, citizens of one state may want higher overall levels of spending by government than do citizens of another state. It is fairly clear that citizens of California want more and different services from state and local government than do Texans.

State and local expenditures per capita in Texas were \$4393 per capita in fiscal 1996, ranking the state 42<sup>nd</sup> nationally (Table 1). In fiscal 1993 the state ranked 40<sup>th</sup> in per capita expenditures (Fleenor). State and local expenditures per capita in the United States were \$5270, up from \$4697 in fiscal 1993 (Fleenor). Alaska had the highest expenditure per capita, \$11927; and Arkansas the lowest, \$3857.

In fiscal 1996 state and local expenditures per \$1000 of personal income in the United States were \$214, this is slightly lower than the \$221 spent in fiscal 1993 (Fleenor). When compared by expenditures per \$1000 of personal income, Alaska again had the

highest expenditures, \$428 per \$1000 of personal income. Virginia spent the least, \$171 per \$1000 of personal income. Texas spent \$195 per \$1000 of personal income, ranking 40<sup>th</sup> in the nation. This is down from the \$204 per \$1000 of personal income that Texas spent in fiscal 1993 when it ranked 38<sup>th</sup> in the nation (Fleenor).

The tax analysis showed that in general Texas is a low tax state (Stallmann and Jones). Thus, it is not surprising that Texas also ranks low in total expenditures. Texas ranks second in population so there may be some economies of scale that could result in lower costs for public services.

Table 1: Total State and Local Expenditures, Fiscal 1996

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$5270	\$214
Median	4886 Maryland	213 Kentucky
Maximum	11927 Alaska <sup>1</sup>	458 Alaska²
Minimum	3857 Arkansas	171 Virginia
Texas Average and Rank	4393 42	195 40

Source: Moody, D9 and BEA

#### **Education Expenditures**

Education expenditures include K-12 expenditures, higher education, any special

<sup>&</sup>lt;sup>1</sup> Washington, D.C. ranks second at \$10,808, New York third at \$8,008. Then there is a large drop to fourth ranked Hawaii at \$6,391.

<sup>&</sup>lt;sup>2</sup> Washington, D.C. ranks second at \$315. Then there is a drop to third ranked Wyoming at \$287.

education expenditures, educational assistance and subsidy programs and public libraries. Education is the major expenditure at the local level in Texas. As shown above, it is also a major expenditure for the state. In some states, the state finances the majority of K-12 education while in others, as in Texas, the majority of K-12 educational expenditures are local. In Texas, community colleges are also financed locally while other higher education is financed solely by the state. Texas spent \$1466 per capita on education in fiscal 1996 (Table 2). It ranked 29<sup>th</sup> in educational expenditures per capita, near the median. The United States average was \$1504 and expenditures ranged from \$2563 per capita in Alaska to \$1200 in Tennessee.

Table 2: Education Expenditures, Fiscal 1996

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$1504	\$61
Median	1504 Virginia	65 Texas and Arkansas
Maximum	2563 Alaska¹	98 Alaska
Minimum	1200 Tennessee	36 Washington, D.C.
Texas Average and Rank	1466 29	65 2-way tie for 26 & 27

Source: Moody, D9 and BEA

<sup>&</sup>lt;sup>1</sup> Wyoming ranks second at \$2019.

Texas spent \$65 per \$1000 of personal income on education, the national median. Expenditures ranged from \$98 per \$1000 of personal income in Alaska to \$36 in Washington, D.C. The national average expenditure was \$61 per \$1000 of personal income.

#### **Transportation Expenditures**

Transportation expenditures include highways, airports, parking facilities, water transport and terminals, and transit subsidies. The state ranked 39<sup>th</sup> in transportation expenditures per capita, surprising given the physical size of the state, recent rapid population growth and two of the nation's major airports (Table 3). The median expenditure per capita was \$317, by Florida, and the national expenditure was \$298 per capita. Expenditures ranged from \$1154 in Alaska to \$165 in Washington, D.C. Alaska and Washington D.C. also ranked highest and lowest in expenditures per \$1000 of personal income. Texas, with expenditures of \$12 per \$1000 of personal income, ranked 32<sup>nd</sup>, a tie with the states of Tennessee, Georgia, and Colorado. The median was \$13

The low expenditure in Washington, D.C. is not surprising, given that it is a small city. The high expenditure by Alaska also is not surprising given its size and the low population. Not only are roads costly, but many small airports are a part of its transportation system. Wyoming, also a large state with low population, ranks second on both measures. On the other hand, given its size, rapid population growth, and two major airports it is surprising that Texas ranks below the median on both measures of transportation spending. Alternatively, the low expenditures might indicate efficiency in road building, lower costs per mile of road, or economies of scale in road or airport use

because of rapid population growth. If the low expenditures are not the result of such economies, then, with both the increased population and truck traffic entering the state as a result of NAFTA, low transportation expenditures may cause a severe bottleneck in the state's transportation system and hamper the ability of the state to profit from the increased trade. It might also affect national benefits from NAFTA, as much trade passes through Texas.

**Table 3: Transportation Expenditures, Fiscal 1996** 

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$298	\$12
Median	317 Florida	13 7 states <sup>2</sup>
Maximum	1154 Alaska <sup>1</sup>	44 Alaska <sup>3</sup>
Minimum	165 Washington, D.C.	5 Washington, D.C.
Texas Average and Rank	270 39	12 4-way tie for 32-35 <sup>4</sup>

Source: Moody, D9 and BEA

#### **Social Services Expenditures**

Social services expenditures include traditional welfare programs, hospitals and medical care, employment security and veterans services. Spending is both a function of

<sup>&</sup>lt;sup>1</sup> Wyoming ranks second at \$631.

<sup>&</sup>lt;sup>2</sup> Utah, Virginia, Alabama, Arizona, Florida, Massachusetts, Missouri.

<sup>&</sup>lt;sup>3</sup> Wyoming ranks second at \$29.

<sup>&</sup>lt;sup>4</sup> Tennessee, Georgia, and Colorado

the level of benefits provided and the percentage of population eligible to participate in the programs. Social services expenditures ranged from \$2979 per capita in Washington, D.C. to a low of \$739 in North Dakota (Table 4). With per capita expenditures of \$953, Texas ranked 35<sup>th</sup> in the nation. The median was \$1059 spent by Oregon. The national average was \$1147.

Social services expenditures per \$1000 of personal income ranged from \$87 in Washington, D.C. to \$28 in Maryland. The median was \$44 per \$1000 of personal income and the national average was \$47. Texas ranked 32<sup>nd</sup> with expenditures of \$42 per \$1000 of personal income. As social services are devolved to the states, we may see even larger difference among the states than currently as states set their on rules for eligibility.

Poverty is a severe problem in some area of Texas. The U.S. Department of Agriculture classifies 71 rural counties as persistent poverty counties. The percentage

Table 4: Social Services Expenditures, Fiscal 1996

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$1147	\$46.54
Median	1059	44.23
	Oregon	Ohio
Maximum	2979	86.60
	Washington, D.C.1	Washington, D.C. <sup>2</sup>
Minimum	739	28.37
	North Dakota	Maryland
Texas Average	953	42.24
. ondo / troidgo	35	32

<sup>&</sup>lt;sup>1</sup> New York ranks second at \$2060.

#### **Public Safety Expenditures**

Public safety includes fire and police protection, corrections, and protective inspections and regulatory functions. With expenditures of \$187 per capita Texas ranked 30<sup>th</sup> in the nation (Table 5). The median was \$197 and the national average was \$235. The \$627 expenditure by Washington, D.C. was nearly twice as high as that of 2<sup>nd</sup> ranked New York, \$344. The minimum expenditure was \$97 by West Virginia.

**Table 5: Public Safety Expenditures, Fiscal 1996** 

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$235	\$9.54
Median	197	8.38
	Delaware	Colorado
Maximum	627	18.23
	Washington, D.C. <sup>1</sup>	Washington, D.C. <sup>2</sup>
Minimum	97	5.22
	West Virginia	West Virginia
Texas Average	187	8.27
and Rank	30	28

<sup>&</sup>lt;sup>2</sup> New York ranks second at \$70.38. of population below the poverty level is these counties has been 20 percent or more since 1960. The low spending on social services may suggest either that Texas is very efficient at targeting services to the needy, or that the state is not meeting the needs of some of the poorer citizens.

Source: Moody D. 9 and BEA.

<sup>1</sup> New York ranks second at \$344.

<sup>2</sup> Alaska ranks second at \$12.62.

Texas ranked 28<sup>th</sup> in expenditures on public safety per \$1000 of personal income.

Texas spent \$8.27 compared with the median of \$8.38 by Colorado and the national average of \$9.54. Washington, D.C. ranked highest and West Virginia lowest.

#### **Administrative Expenditures**

Administrative expenses include financial administration, judicial and legal expenditures, public buildings, and other administrative costs.

Texas, along with Arkansas, ranked lowest in the nation with per capita administrative expenditures of \$160 (Table 6). Median expenditures were \$232 by the state of Florida, close to the national average of \$234. Alaska ranked highest with administrative expenditures of \$787, followed by Washington, D.C. with expenditures of \$574.

**Table 6: Administration Expenditures, Fiscal 1996** 

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$234	\$9.50
Median	232	9.44
	Florida	New Jersey, Florida
Maximum	787	30.18
Waxiiiuiii	Alaska 1	Alaska <sup>3</sup>
Minimum	160	7.10
	Texas, Arkansas	Texas
Texas Average	160	7.10
and Rank	2-way tie for 50-51 <sup>2</sup>	51

Source: Moody, D9 and BEA

<sup>&</sup>lt;sup>1</sup> Washington, D.C. ranks second at \$574.

<sup>&</sup>lt;sup>2</sup> Arkansas

<sup>3</sup> Washington, D.C. and Wyoming tie for second at \$16.68.

Texas also ranked lowest in the nation on expenditures per \$1000 of personal income. The median expenditure, by Florida and New Jersey was \$9.44 and the national average was \$9.50. Alaska once again ranked highest.

Ranking low on general administrative expenditures may indicate an efficient governmental administrative system and/or economies of scale in administration. Or it may simply reflect low public expenditures in general, which require less administration.

#### **Total Debt**

State and local governments have three major sources of revenues—taxes and fees, revenues from other governments, and debt. Governments may issue bonds especially for capital outlays, that are later repaid from taxes and fees.

Texas ranked just above the median with \$3,998 of debt per capita (Table 7). The median was \$3,896, held by Wyoming and the national average was \$4,410. Alaska held the most debt per capita, \$11,240, nearly \$3,000 more than 2<sup>nd</sup> ranked New York with \$8,251. Idaho carried the lowest debt per capita, \$1,956.

Texas also ranked just above the median with \$177 of debt per \$1000 of personal income. The median was \$173, held by Vermont, and the national average was \$179.

Alaska again ranked highest at \$431, nearly \$150 higher than 2<sup>nd</sup> ranked Utah with \$284.

Given its low rank on most expenditures, it is somewhat surprising that the state ranks higher on debt.

Table 7: Total Debt, Fiscal 1996

	Expenditure Per Capita and State	Expenditure Per \$1000 of Personal Income and State
United States Average	\$4410	\$179
Median	3896 Wyoming	173 Vermont
Maximum	11,240 Alaska <sup>1</sup>	431 Alaska²
Minimum	1956 Idaho	96 Idaho
Texas Average and Rank	3998 24	177 3-way tie for 22-24 <sup>3</sup>

Source: Moody, D20 and BEA

#### Summary

Among states Texas ranks low for state and local expenditures per capita and per \$1000 of personal income. The two areas in which Texas ranks highest are education, and public safety, where it ranks just below the median. Texas ranks lowest in the nation on administrative expenses.

The low rank on most expenditures may be the result of any one or more of several factors: 1) the state may be very efficient in its management; 2) the state may have lower costs than other states for certain reasons, for example topography; 3) given the population of the state, there may be economies of scale in some public services; 4)

Texans may prefer lower taxes and/or lower levels of certain public services than do

<sup>&</sup>lt;sup>1</sup> New York ranks second at \$8251.

<sup>&</sup>lt;sup>2</sup> Utah ranks second at \$284.

<sup>&</sup>lt;sup>3</sup> Maine and California.

citizens of other states; 5) Texans may be neglecting needed public investments in the short-run and ignoring the long-run problems this may create; 6) Texans may be ignoring the needs of certain citizens whose votes do not reach a majority which would allow them to vote for the programs we need.

Low expenditures may be the result of any one or any combination of the above factors. The first 4 factors may be reviewed as positive reasons for low expenditures, while the latter 2 may be indications of future problems because of low expenditures. The focus of this report was to determine whether state and local public expenditures were high or low compared with those of other states. The factors influencing the level of expenditures would need to be the subject of further research.

#### References:

Census Bureau. 1997 Census of Government, Vol. 4, No. 5 compendium of Government Finances. Washington, D.C.: U.S. Department of Commerce. December 2000.

Bureau of Economic Analysis (BEA). Regional Economic Information System (REIS), 1969-1998. CD-ROM. Washington, D.C.: U.S. Department of Commerce. 2000

Fleenor, Patrick (ed.). Facts & Figures on Government Finance, 3<sup>1st</sup> ed. Washington, D.C.: The Tax Foundation. 1997.

Jones, Lonnie L., Judith I. Stallmann, and Aysen Tanyeri-Abur. "Texas Taxes: A Fact Book." B-6066. Texas Agricultural Extension Service. 1997.

Moody, Scott (ed.). Facts & Figures on Government Finance, 34<sup>th</sup> ed. Washington, D.C.: The Tax Foundation. 2000.

Stallmann, Judith I. "Fact Sheet: The Property Tax Proposed Constitutional Amendment." Texas Agricultural Extension Service. 1997

Stallmann, Judith I. and Lonnie L. Jones. "Our Taxes: Comparing Texas with Other

States." B-6073. Texas Agricultural Extension Service. 1998.

Stiglitz, Joseph E. *Economics of the Public Sector*, 2<sup>nd</sup> edition. New York: W.W. Norton Company. 1988.