SPENDING TRENDS

of County Governments in Arkansas









Spending Trends of Arkansas County Governments:2000-2017

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Highlights

Total county government expenditures in Arkansas increased from \$832 million in 2000 to \$1.1 billion in 2017, a 37% increase. In 2017, most expenditures were for Law Enforcement and Public Safety (38%), followed by General and Other (26%) and Highways and Streets (22%). These three spending categories accounted for 86% of total county government expenditures.

Although total county government expenditures increased statewide during the study period from 2000-2017, there was considerable variation among counties. Some counties experienced large increases in expenditures, while others had declining spending during this time. Further analysis that takes into account population and income changes, as well as regional differences and economic dependency of counties reveals additional variations in spending patterns.

Urban and rural counties had distinct spending patterns during the study period:

- Expenditures grew more quickly in Arkansas' 13 urban counties. Total urban expenditures increased from \$372 million to \$538 million, or 45% from 2000 to 2017.
- Arkansas' 62 rural counties saw expenditures increase from \$460 million to \$604 million, or 31% from 2000 to 2017.
- Per capita total spending in rural countries grew at a faster rate compared to urban counties, increasing 34%, from \$364 in 2000 to \$489 in 2017. Rural counties also spent considerably more per person than urban counties for the duration of the study period.
- Per capita total spending in urban counties increased 16%, from \$263 in 2000 to \$305 in 2017.
- Expenditures per \$1,000 of personal income decreased 11% in urban counties, whereas they increased 13% in rural counties during the 17-year study period.

Rural counties can be further subdivided into three regions (Coastal Plains, Delta and Highlands regions). Comparing the three Rural regions and the Urban region show that:

- Each region spent more in 2017 than in 2000. However, the Urban region experienced the highest growth in total expenditures (45%), while the Highlands had the highest growth in expenditures among the Rural regions (39%).
- From 2000 to 2017, spending grew by 35% in the Coastal Plains and 21% in the Delta.
- The Coastal Plains region had the highest per capita spending for each year in the study period and the highest growth in per capita spending (52%), increasing from \$445 to \$675. The lowest growth in per capita spending occurred in the Urban region (16%), where spending increased from \$263 to \$305.
- Expenditures per \$1,000 of personal income grew in every Rural region of the state, whereas it declined in the Urban region during the study period. The highest growth was observed in the Coastal Plains (26%).

When counties are divided based on their economic dependency, we find that:

- While nonspecialized counties had the highest total expenditures during the study period, the highest growth in spending occurred in recreation-dependent (67%) counties.
- Recreation-dependent counties experienced the highest growth in per capita expenditures (53%)
 while nonspecialized counties had the lowest (19%).
- Farming-dependent counties had the highest expenditures per \$1,000 of personal income in 2017.

Introduction

County government expenditures support the infrastructure and services needed for residents to live and work, and for businesses to better compete in an increasingly global economy. These services are critical to residents' quality of life and necessary for economic development. Therefore, it is essential to understand the spending patterns among different counties in Arkansas, and how these counties maintain and improve the services demanded by businesses and residents in the county.

As the Arkansas constitution requires counties maintain a balanced budget, spending is constrained by the ability of county governments to generate revenue. In addition to maintaining a balance budget, the Arkansas constitution requires each county to provide:

- administration of justice through the courts,
- · law enforcement protection and operation of the jail,
- real and personal property tax administration,
- · court and public records management.

While these are the only services required by the Arkansas constitution, a variety of other critical services are typically funded by county governments. Non-mandated services provided by county governments in Arkansas usually include:

- highways and streets,
- · water, sewer, and other utilities,
- solid waste,
- non-police emergency services,
- · community and rural development, and
- agricultural assistance

In this study, the authors examine trends in county government spending during the 17-year study period from 2000 to 2017 and observe how counties adjust spending to adapt to revenue and population changes. We compare relative and absolute expenditures among counties, regions and economic dependency classifications to identify counties and groups of counties that face similar difficulties in providing services to their residents.

Data Notes

A variety of data sources were used in this publication. County expenditure figures came from the annual General Purpose Financial Statements for each county government that were released by the Legislative Joint Auditing Committee of Arkansas' Division of Legislative Audit. Population estimates for 2000-2017 were provided by the U.S. Census Bureau. Consumer price indices (CPI) used to adjust for inflation were provided by the U.S. Department of Labor's Bureau of Labor Statistics. Economic dependency categories were obtained from the Economic Research Service of USDA.

County government expenditure data released by the Division of Legislative Audit were inconsistent in the reporting format among counties and over time. There were also other problems with the data, some of which included reporting similar transactions into different income or expense accounts, not reporting dedicated revenue for county hospitals, and missing data. We attempted to reconcile these issues by contacting the counties of concern and adjusting the data accordingly to make the data consistent over time and among counties. This enabled the authors to analyze and identify major trends and differences among counties and regions. However, the data should not be used as precise accounting information.

All dollar values are reported in 2017 constant (real) U.S. dollars unless otherwise indicated.

Section One: Trends in County Government Expenditures



Change in Total Expenditures

This section discusses the overall trends in county government expenditures and how spending has changed among counties and over time. Total county government spending increased 37% from \$832 million in 2000 to \$1.14 billion in 2017 (Figure 1). A spike in spending is observed in 2001, when ice storms caused road damage that required extensive repairs throughout much of the state. Many counties received disaster relief funds from the federal government to cover some of the increase in expenses.

Interestingly, statewide county government spending declined slightly before the Great Recession, then increased during the first two years of the Great Recession followed by two years of declining spending before increasing slowly to a high in 2016. While total spending by Arkansas county governments grew statewide during the 17-year study period, there was wide variability in spending among counties.

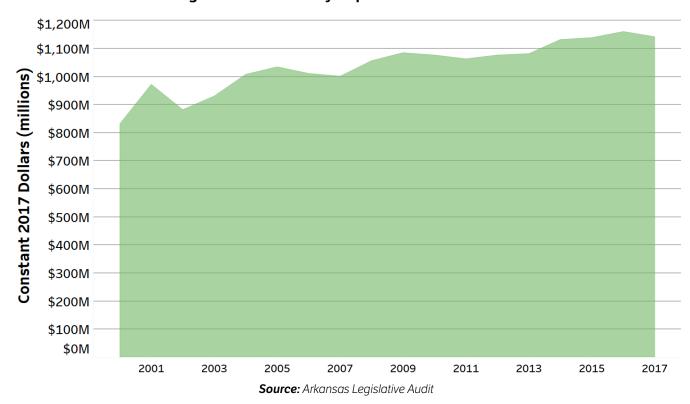


Figure 1. Total County Expenditures 2000-2017

Sixty-two of Arkansas' 75 counties experienced growth while 13 counties, mostly in east and southern Arkansas, experienced declines in total county government expenditures from 2000 to 2017. Spending in 6 of the 13 counties declined more than 10%. The largest percent decrease in county-level total expenditures during this period was -33% in Howard County (Figure 2). The most growth occurred in Drew County (185%), which constructed a new surgery center in its hospital using bond revenue from the previous year. The median percent change was 32%. To understand the full story behind a county's budget, it is important to consider the overall trend during this timeframe. A decrease in total expenditures from 2000-2017 does not necessarily indicate fiscal distress.¹

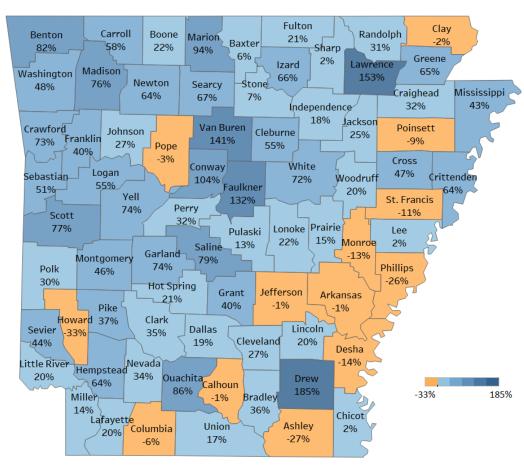


Figure 2. Percent Change in Total Revenue (2000-2017)

Source: Arkansas Legislative Audit

¹More information about spending trends for each county is available by accessing the University of Arkansas Cooperative Extension County Government Finance PowerPoints at https://uaex.uada.edu/govfinance or by contacting your local county extension agent or wmiller@uaex.edu or Ellie Wheeler ewheeler@uada.edu.

Slight Growth in Per Capita Expenditures

Per Capita Expenditures indicate the average cost per person for the county to provide services to its residents, businesses, governmental and non-governmental entities. The per capita measure is used to make comparisons across Arkansas counties of different population sizes. Changes in per capita expenditures could indicate one or more underlying causes, which suggest a need for additional information to determine the cause. For example, an increase in per capita expenditures could indicate an increase in services provided or the additional per capita cost to provide the same services as population declines. A decline in per capita expenditures could indicate a decline in services provided, increased efficiency or providing the same services at reduced cost per person due to economies of scale. While total expenditure trends are important to show the changing cost of county services over time, they do not account for population changes. Per capita measures allow counties to compare their per person expenditures over time and with counties of various population sizes.

It should also be noted that there are sometimes economies of scale in providing services. Therefore, counties with larger population may be able to provide similar services at a reduced cost per person. In 2017 there was a strong inverse relationship between total population and per capita expenditures among the 75 counties. This means that, in general, counties with a larger population had lower per capita expenditures.

During the 17-year study period, there was an increase in per capita total county government expenditures. County governments spent \$311 per person in 2000 and \$380 per person in 2017, an increase of 22% (Figure 3). However, from 2005 to 2017 there was only a 2% increase in per capita expenditures statewide. Although per capita expenditures followed an overall upward trend, per capita expenditures spiked to \$362 in 2001 as a result of the infrastructural repairs mentioned previously. Per capita expenditures declined in 2002 and then increased rapidly to \$372 in 2005. This was followed by two years of decline before beginning a slow growth, reaching a peak of \$388 in 2016.

Sixty-eight counties in the state spent more per capita in 2017 than in 2000. Nonetheless, large variations in per capita county government spending were observed among Arkansas' 75 counties. Drew County had the highest overall expenditures per capita in 2017 (\$1,364) while Lonoke County had the lowest (\$207). As noted earlier, Drew County made major capital investments in 2017 by using bond proceeds to construct a new surgery center and make other improvements to the Drew County hospital. The median per capita expenditure for 2017 was \$483. Drew County had the highest per capita percentage increase during that time (190%), and Howard County had the lowest (-29%).

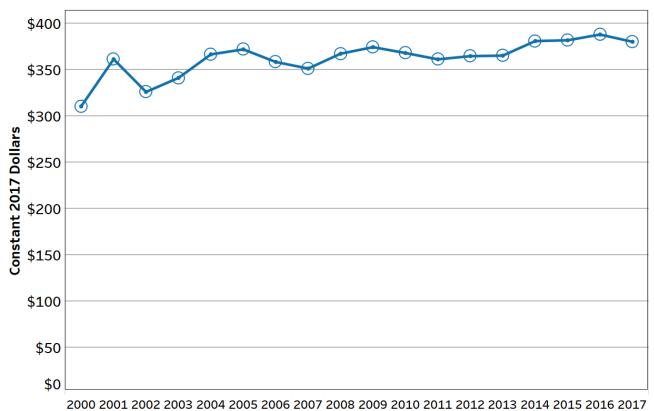


Figure 3. Per Capita Total County Expenditures (2000-2017)

Source: Arkansas Legislative Audit and U.S. Census Bureau

Decline in Expenditures Per \$1,000 in Personal Income

Expenditures per \$1,000 of income indicate how much income on average goes to pay for county services. During the 17-year study period, total expenditures per \$1,000 in personal income decreased slightly from \$9.58 in 2000 to \$9.16 in 2017 (Figure 4). Expenditures per \$1,000 in personal income peaked in 2001 as a result of previously mentioned infrastructural repairs, then fluctuated between 2001 and 2009 before trending downward from 2009 to 2017. There remains considerable variation among counties for this measure. In 2017, expenditures per \$1,000 in personal income ranged from a low of \$2.96 in Benton County to a high of \$38.21 in Drew County. The median was \$14.15. Counties also varied greatly in the change in expenditures per \$1,000 of personal income. While there was a statewide decline in this measure during this 17-year period, over two-thirds (51) of Arkansas' 75 counties had an increase in county government expenditures per \$1,000 of personal income.

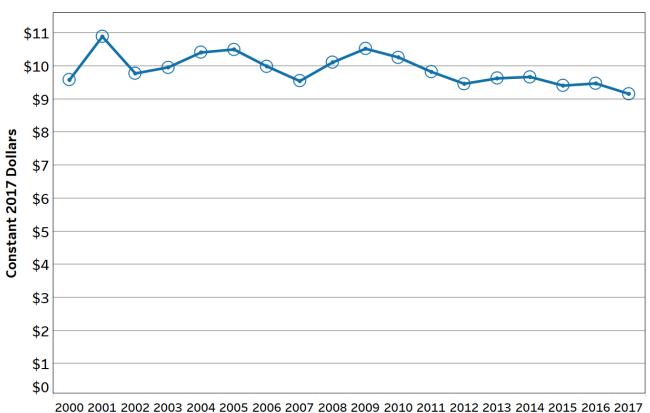


Figure 4. Total County Expenditures Per \$1,000 of Personal Income (2000-2017)

2003 2004 2003 2000 2007 2000 2003 2010 2011 2012 2013 2014 2013 2010 201

Source: Arkansas Legislative Audit U.S. Bureau of Economic Analysis

Section Two: County Government Expenditures by Category



Defining Major and Minor Category Expenditures

While trends in overall expenditures are important to understand how the cost of providing county services is changing, changes within specific spending categories can offer deeper insight into the financial situations of county governments. In this study, we partition each of the numerous expenditures of Arkansas counties, reported annually to Arkansas Legislative Audit, into three major and four minor expenditure categories.

Major expenditure categories include:

- Law enforcement and public safety expenditures include operational expenses for the county sheriff and law enforcement and the construction and upkeep of law enforcement facilities, including jails. This category also includes the 911 system, and for some counties, payments to other government entities for housing inmates.
- **Highways and streets** expenditures include the construction and upkeep of county roads.
- General and other expenditures include the operation and maintenance expenses of the county government, as well as other ad hoc expenses that do not fit into other expenditure categories.

Combined, the three major expenditure categories accounted for 86% of county government spending statewide in 2017 (Figure 5). Law enforcement and public safety (38% in 2017), accounted for the largest share of total county government expenditures in every year of the 17-year study period except 2001, when highways and streets spending accounted for a slightly larger share.

Minor expenditure categories, which accounted for 14% of all spending in 2017, are:

- **Debt Service** expenditures includes spending on principal and interest for all debt instruments. Debt instruments include bonds, capital leases and promissory notes.
- Recreation and Culture expenditures include spending for county parks and other public spaces.
- Health and Social Services expenditures include spending for county health centers and other social services.
- Capital Outlay expenditures include county government spending to purchase and maintain fixed assets, such as land, buildings and machinery.

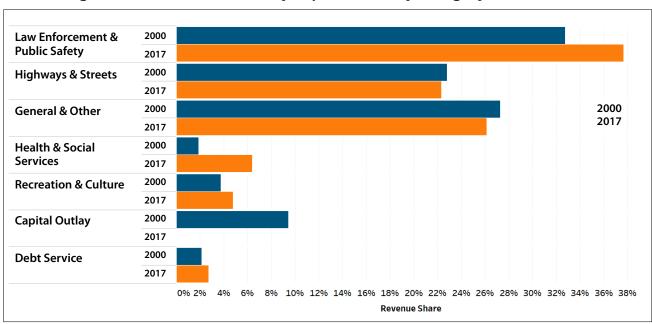


Figure 5. Share of Total County Expenditures by Category (2000 & 2017)

Source: Arkansas Legislative Audit

Total Expenditures for Major Categories

Spending in all three major categories of county government grew statewide from 2000 to 2017. Law enforcement and public safety spending increased the most (58%), from \$272 million to \$430 million. However, from 2013 to 2017 spending for law enforcement and public safety remained flat. While general and other spending accounted for the second most total spending in most years of the 17-year study period, it grew less than spending in the other major expenditure categories (31%). Spending for highways and streets increased 34% during this period, but increased substantially from 2013 to 2015, which was largely due to increased revenue for county roads from the temporary 0.5% statewide sales tax passed in 2013. While expenditures in each major category increased statewide, counties varied greatly in their expenditure trends.

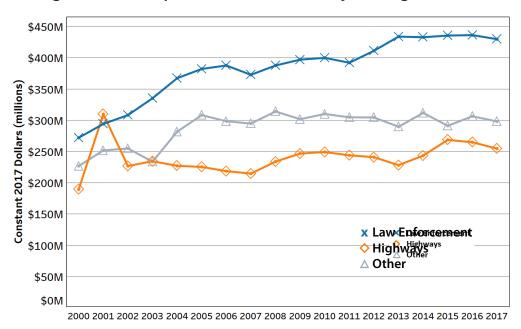


Figure 6. Total Expenditures for Three Major Categories (2000-2017)

Source: Arkansas Legislative Audit

- Law Enforcement and Public Safety: During the 17-year study period, law enforcement and public safety spending decreased in five counties (Dallas, Desha, Lee, Phillips and Jefferson) and increased by 100% or more in 19 counties. Lawrence County spent \$1.3 million on law enforcement and public safety in 2000 and \$7.7 million in 2017; this 492% increase was the largest in the state and primarily the result of the construction of a new detention center in 2017. The county with the largest decrease was Desha, which spent \$1.2 million in 2000 and \$968,000 in 2017, representing a 23% decrease.
- Highways and Streets: There was also considerable variability in highways and streets spending among counties during the study

- period, from a decrease of 38% in Dallas County to an increase of 187% in Garland County. Of Arkansas' 75 counties, 12 had decreases in highways and streets spending between 2000 and 2017 despite the increase in spending from 2013 to 2017. Five counties in Arkansas increased spending on highways and streets by 100% or more from 2000 to 2017.
- General and Other: General and other spending decreased in 17 Arkansas counties, with changes ranging from a decrease of 72% in Howard County to an increase of 145% in Faulkner County. Increases of more than 100% were observed in four counties (Faulkner, Hempstead, Saline and Benton).

Total Expenditures for Minor Categories

During the 17-year study period, minor category expenditures exhibited higher statewide year-to-year variability than the major category expenditures (Figure 7).

- **Debt Service:** Debt service spending was the largest minor category expenditure statewide from 2003 to 2008. Despite fluctuating, debt service grew from \$18 million in 2000 to \$31 million in 2017, an increase of approximately 74%.
- Recreation and Culture: Recreation and culture spending exhibited the most consistent growth, with no big year to year changes. From 2000 to 2014, recreation and culture spending increased from \$31 million to \$58 million, or 86%. Since 2014, spending for this category has tapered off, declining to \$55 million in 2017, resulting in total growth of 76% over the 17-year study period.
- Health and Social Services: Health and social services expenditures grew slowly from 2000 to 2007 before spiking to \$50 million in 2009 then tapering off through 2015. Since then, expenditures on health and social services have seen another upswing, growing to \$73 million in 2017. Over the entire study period, statewide county government spending on health and social services grew 366%, from \$16 million to \$73 million.
- Capital Outlay: Capital outlay spending was the only category that decreased statewide between 2000 and 2017, however, the decline was the result of a change in reporting rather than an actual decline in capital expenditures.² Capital outlays were \$78 million in 2000 and \$0 from 2009 to 2017.

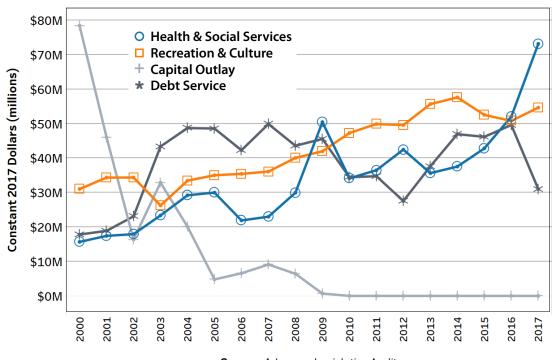


Figure 7. Total Expenditures for Four Minor Categories (2000-2017)

Source: Arkansas Legislative Audit

² Instead of reporting capital expenditures as capital outlays, capital expenditures were reported as expenditures in the appropriate expenditure category, i.e. capital expenditures for roads were reported as road expenditures not capital outlays.

Per Capita Expenditures

Trends in per capita expenditures by category were similar to the overall trends discussed above, however, as a result overall population growth in Arkansas, Figure 8 shows increases in the per capita measures were more moderate statewide.

- **Law Enforcement and Public Safety per capita:** Law enforcement and public safety spending per capita increased 41% from 2000 to 2017 (from \$102 to \$143). Lawrence County had the largest increase in per capita law enforcement and public safety expenditures, increasing from \$73 to \$463 per capita, or 531% from 2000 to 2017. As noted previously, this was primarily due to the construction of a new detention center in 2017. Only Pope County had per capita expenditures decrease in this category, dropping slightly from \$133 to \$132, or down 1%. Per capita spending on law enforcements and public safety in 2017 ranged from a high of \$463 in Lawrence County to a low of \$73 in Bradley County.
- Highways and Streets per capita: In 2017 per capita spending on roads ranged from a low of \$33 in Pulaski County to a high of \$317 in Newton County. During the study period, per capita spending on highways increased 20% statewide, from \$71 to \$85. Despite statewide growth, seven counties had decreases in per capita highways and streets expenditures during the 17-year study period. The largest decrease, 39%, occurred in Lonoke County, and the largest increase, 157%, occurred in Garland County.
- General and Other per capita: Per capita general and other expenditures grew from \$85 in 2000 to \$99 in 2017, an increase of 16%. There was a wide range of growth outcomes among counties during this time. Changes in per capita general and other spending from 2000 to 2017 ranged from an increase of 152% in Hempstead County to a decrease of 70% in Howard County. In 2017, Calhoun County's general and other spending per person was the highest in Arkansas at \$295, while Pope County had the lowest at \$44.

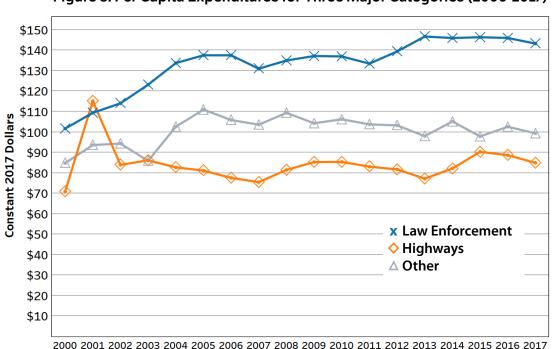


Figure 8. Per Capita Expenditures for Three Major Categories (2000-2017)

Source: Arkansas Legislative Audit and U.S. Census Bureau

Figure 9 shows that per capita trends for minor category expenditures also followed trends similar to the overall trends discussed above.

- **Debt Service per capita:** In 2017, 16 Arkansas Counties had no debt service spending. Van Buren County had the highest per capita spending in this category with \$208. Changes over the 17-year study period also varied widely. Decreases of 100% occurred in nine counties, and 20 counties had increases of 100% or more. Nevada County had the largest growth rate, increasing from 51 cents in 2000 to \$96 in 2017.
- Recreation and Culture per capita: Recreation and culture spending increased about 50% statewide, from approximately \$12 to \$18. There was also very wide variability among counties, with a decrease of 100% in Miller County and increases of more than 100% in 23 counties. The largest increase occurred in White County, which spent only 21 cents per person on recreation and culture in 2000 and \$15 in 2017. Arkansas County spent \$90 per person on recreation and culture, more than any other county.
- Health and Social Services per capita: Health and social services spending quadrupled statewide, from \$6 in 2000 to \$24 in 2017. Among counties, changes in health and social services ranged from a decrease of 96% in Cleburne County (from \$8 to 30 cents) to an increase from \$2 to \$787 in Drew County. Increases of more than 100% occurred in 38 counties while decreases occurred in 14 counties. Drew County had the highest per capita health and social services spending in 2017 (\$787) while Cleburne County had the least (30 cents).
- Capital Outlay per capita: As with total expenditures, capital outlay spending, which decreased 100%, was the only minor category expenditure to decrease statewide during the 17-year study period.

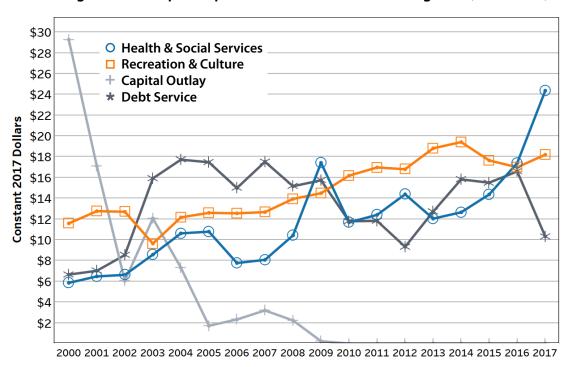


Figure 9. Per Capita Expenditures for Four Minor Categories (2000-2017)

Source: Arkansas Legislative Audit and U.S. Census Bureau

SPOTLIGHT: Expenditures Per Capita in Drew County

Population density varies across Arkansas geographies; however, we can account for some of these differences by using a per capita measure of expenditures. For example, Table 1 shows law enforcement and public safety expenditures in Drew County are \$151. That indicates that the county government in Drew County spends about \$151 per person on expenses like police officer salaries and jail operations. When compared to the average and median for counties in Arkansas, Drew County has higher expenditures per capita for two of the three major categories (highways & streets and general & other). This may be because some more densely populated areas are able to take advantage of economies of scale, where costs are spread over a larger population. As noted previously, the high per capita total expenditures for Drew County in 2017 is primarily the result of the construction of a new surgery center and renovations for the Drew County hospital. This suggests a need to look at trends over time and not rely solely on point to point changes.

Table 1. Expenditures Per Capita by Major Category (2017)

	All Counties	County Median	Example: Drew County	My County
Law Enforcement & Public Safety	\$143	\$152	\$151	
Highways & Streets	\$85	\$125	\$219	
General & Other	\$99	\$116	\$129	
Total – All Expenditure Categories	\$380	\$483	\$1,364	

Source: Arkansas Legislative Audit and U.S. Census Bureau

Which revenues does your county rely on most per-capita?

You can find per-capita revenue information for your county at https://uaex.edu/govfinance.

SPOTLIGHT: Expenditures by Personal Income in Pope County

Household and individual incomes, including wages and salaries vary across different areas of the state. Therefore, it is useful to account for variations in income and show the relative cost of county services by comparing county expenditures for every \$1,000 in personal income. For example, Table 2 shows expenditures of highways and streets per \$1,000 of income in Pope County is \$2.34. This means that for every \$1,000 of income received by Pope County residents, about 0.2% is spent on roads. When compared to the median for counties in Arkansas, Pope County has lower expenditure by personal income for the three major revenue sources.

Table 2. Expenditures per \$1,000 in personal income by major category (2017)

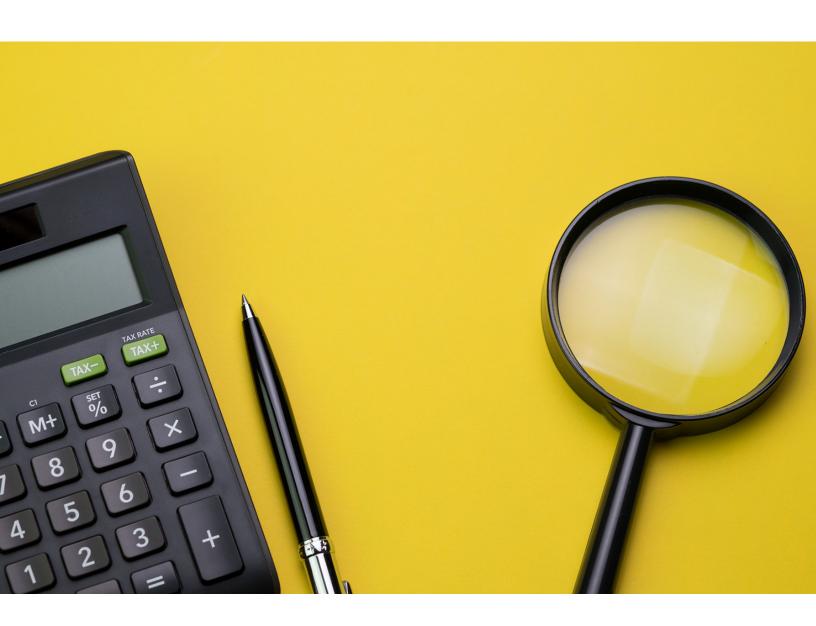
	All Counties	County Median	Example: Pope County	My County
Law Enforcement & Public Safety	\$3.45	\$4.53	\$3.88	
Highways & Streets	\$2.04	\$3.61	\$2.34	
General & Other	\$2.39	\$3.65	\$1.31	
Total Expenditures-All Expenditure Categories	\$9.16	\$14.15	\$9.54	

Source: Arkansas Legislative Audit and U.S. Bureau of Economic Analysis

Which revenues does your county rely on most per-capita?

You can find per-capita revenue information for your county at https://uaex.edu/govfinance.

Section Three: Three Perspectives for County Government Expenditures



Because of the variation in demographic, geographic and economic qualities of communities across Arkansas, it is helpful to group counties into similar categories for comparison. The classification schemes are used to determine if expenditure differences can be associated with different demographic, economic or social-cultural conditions. We categorize Arkansas' 75 counties based on three different components:

- Urban and Rural: The 1999 Census designation of metropolitan versus non-metropolitan counties is used as a proxy for urban versus rural counties in the state. Populations residing in counties with large cities are classified as metropolitan, and those counties are grouped into a category termed "urban." This category considers rural areas broadly, despite considerable economic differences among rural counties. The next category, "Geographic Regions" allows for comparison of different rural regions.
- Geographic Regions: We divided the state into one "Urban region" and divided the rural category into three geographic regions: The Delta, Highlands and Coastal Plains. These four regions can be used to make more detailed comparisons among rural and urban regions.
- Economic Dependency: Counties are classified based on their economic dependency as defined by the typology codes developed by the USDA Economic Research Service: manufacturing-dependent, farming-dependent, services-dependent, federal/state government-dependent and non-specialized. To be considered economically dependent on an industry, a minimum share of earnings threshold must be met by the county.

Perspective #1: Urban and Rural

Urban counties tend to have higher average personal incomes, denser populations, and different economic environments. For more meaningful comparisons, it is helpful to compare county government expenditures of urban versus rural counties (Figure 10). There are 62 counties that are considered rural in Arkansas and 13 that are considered urban.

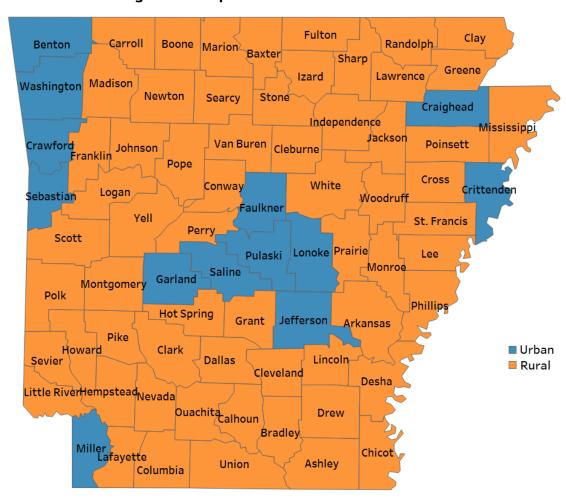


Figure 10. Map of Urban and Rural Counties

Key Takeaways:

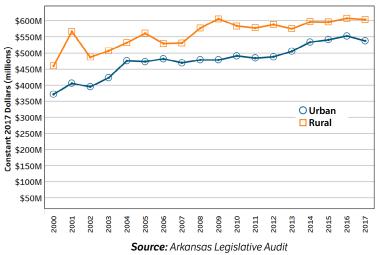
- Total expenditures are increasing for both urban and rural counties, although expenditures grew faster in urban counties.
- Per capita total spending in rural countries showed more volatility and grew at a faster rate compared to urban counties, which is not surprising since many rural counties lost population during this period.
- Both urban and rural counties spent a larger share on law enforcement than on any other expenditure category. Urban counties spent a considerably smaller share on highways and streets compared to rural counties.

Total Expenditures

Arkansas is a largely rural state, and most county government expenditures occur in Arkansas' rural counties. Figure 11 shows that spending by rural county governments of the state exceeded the spending of urban county governments every year from 2000 to 2017. Although rural counties outspent urban counties during the 17-year study period, expenditures grew more quickly in urban counties:

- Total urban expenditures increased from \$372 million to \$538 million, or 45%.
- Total rural expenditures grew from \$460 million to \$604 million, or 31%.

Figure 11. Total County Expenditures sorted by Urban vs. Rural regions (2000-2017)

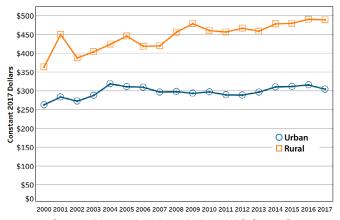


This should not be surprising since there has been an outmigration of people from rural to urban Arkansas counties. This increase in urban populations requires counties to provide services to more people, which increases county government expenditures.

Per Capita Expenditures

Between 2000 and 2017, the population of rural counties decreased 2% while the population of urban counties increased 25%. As a result, urban counties increased their expenditures at a faster rate than rural counties as shown in the previous section. In contrast to total expenditures, per capita county government spending grew more rapidly in Arkansas' rural counties (Figure 12). This is because rural counties still had to provide services, but there were fewer people to share the cost of these services. Per capita expenditures increased nearly 43% in counties losing population during this period compared to an increase of only 18% in counties with

Figure 12. Per Capita County Expenditures sorted by Urban vs. Rural regions (2000-2017)



Source: Arkansas Legislative Audit and U.S. Census Bureau

increasing populations. Rural counties also spent considerably more per person than urban counties for the duration of the study period.

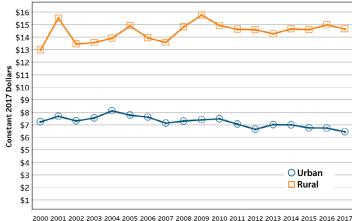
- Urban: Per capita total spending in urban counties increased 16%, from \$263 in 2000 to \$305 in 2017. Despite overall growth and rapid growth from 2002 to 2004, urban expenditures showed a period of slight decline from 2004 to 2011, decreasing from \$319 to \$289 or 9%. While urban counties per capita spending grew for most years after 2012, it did not reach the per capita spending level in 2004.
- Rural: Per capita total spending in rural countries showed more volatility and grew at a faster rate from \$364 to \$489 (34%).

Expenditures per \$1,000 of Personal Income

Figure 13 shows there were also considerable differences between urban and rural counties in the amount and trends of total expenditures per \$1,000 of personal income.

• **Urban:** From 2000- 2017, personal income grew 64% in urban counties, much faster than the 16% growth experienced in rural counties during that time. Because personal income grew faster than expenditures, this growth in income drove down the expenditures per \$1,000 of personal income. Expenditures per \$1,000 in personal income decreased 11% for urban counties during the 17-year study period, from \$7.24 to \$6.45.

Figure 13. Total County Expenditures by \$1,000 in Personal Income sorted by Urban vs. Rural regions (2000-2017)



Source: Arkansas Legislative Audit and U.S. Bureau of Economic Analysis

Rural: Spending per \$1,000 of personal income was considerably higher in rural counties than urban counties. Not surprisingly it takes a larger share of personal income in rural counties to pay for county government services. Total expenditure growth in rural counties was 13%, from \$12.98 to \$14.66, between 2000 and 2017.

Relative Importance of Expenditures by Category

Major category expenditures accounted for most of the spending in both urban and rural counties in 2017. Figure 14 shows that for urban counties in Arkansas, 89% of all spending was for law enforcement and public safety, highways and streets, and general operating expenses. Rural counties spent 84% of their budgets on these major expense categories. The largest share of total spending was for law enforcement and public safety for both urban (43%) and rural (33%) counties. Rural and urban counties also differed on the share spent on highways and streets, with rural counties spending a larger share (26%) than urban counties (18%). Urban and rural counties spent approximately the same share on general and other expenses, 27% and 26% respectively.

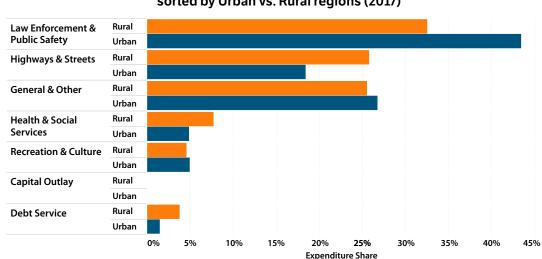


Figure 14. Relative Importance of Expenditure Categories sorted by Urban vs. Rural regions (2017)

Source: Arkansas Legislative Audit

Major Category Spending Patterns

Law enforcement and Public Safety

County government spending on law enforcement has grown at a faster rate compared to growth in spending overall. Total county government expenditures for all categories increased 37% from 2000 to 2017. During that time, spending on law enforcement and public safety increased by 58%, from \$272 million to \$430 million. The share of spending on law enforcement and public safety has increased 5 percentage points overall for counties in Arkansas, from 33% in 2000 to 38% in 2017. Spending on law enforcement grew faster in rural areas (64%) compared to urban areas (53%) during that time.

The differences in growth rates between urban and rural areas are more pronounced in terms of per capita spending. Rural areas spent 67% more per capita on public safety from 2000 to 2017, while urban areas increased spending by just 23% during that time. The differences in growth in the per capita measures are only partially a result of differences in population change in urban and rural counties. Between 2000 and 2017, the population of rural counties decreased 2% while the population of urban counties increased 25%. Total spending for law enforcement and public safety also increased at a faster rate in rural counties. This is partially due to the construction of new jails in many counties during this period. As a result, rural counties experienced a much higher increase in the cost of law enforcement and public safety per person.

Historic trends for total and per capita law enforcement and public safety expenditures in Urban and Rural regions can be found in the Appendix (Figures 25 and 26).

Highways

County government spending on highways and streets increased 34% overall during the study period. In contrast to law enforcement and public safety spending, urban areas increased spending on highways and streets at higher rate than rural areas (47% versus 28%). Growth of highways and streets spending per capita was also impacted by population change since counties must maintain the same county road system with fewer people to share the cost. Per capita county spending on highways and streets grew by 20% from 2000 to 2017. This per capita growth was higher in rural areas (30%) compared to urban areas (18%).

Historic trends for expenditures on highways and roads in Urban and Rural regions can be found in the Appendix (Figures 27 and 28)

General and Other

County government spending on the general and other category has increased by 31% from 2000 to 2017. Urban counties have increased spending on this category faster than rural counties (50% versus 18%). Per capita county spending on this category grew 17% during the study period. This per capita growth was similar in rural and urban areas (21% and 20% respectively).

Perspective #2: Geographic Regions

We divided the state into one urban region and divided the rural category into three geographic regions: The Delta, Highlands and Coastal Plains (Figure 15). Separating the rural category into three distinct regions allows more detailed comparisons.

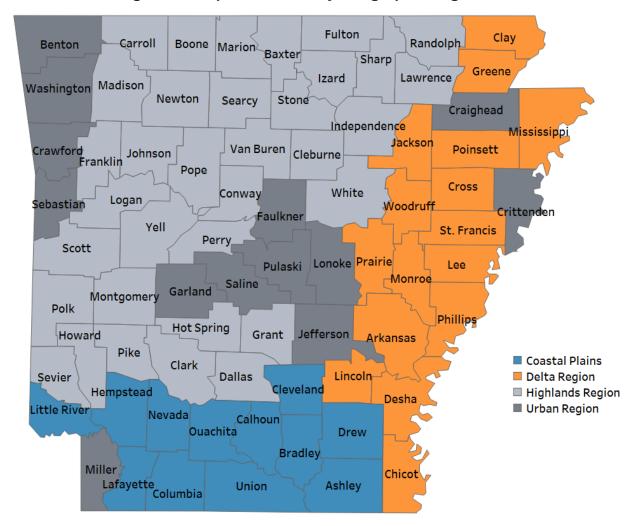


Figure 15. Map of Counties by Geographic Region

Key Takeaways:

- The Urban region experienced the highest total expenditure growth, while the Highlands had the highest growth in expenditures among the Rural regions.
- The Coastal Plains region had the highest per capita spending for each year in the study period and the highest growth in per capita spending. It also had the most growth in expenditures per \$1,000 of personal income.
- Spending on law enforcement and public safety makes up a large share of total county government spending for all regions. The Urban, Highlands and Delta regions all spent a larger share on law enforcement and public safety than on any other individual category.

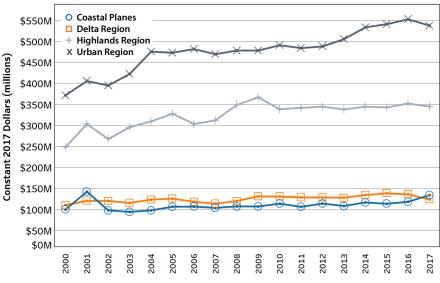
Total Expenditures

There was also significant variability in total expenditure growth between the Urban and three Rural regions of the state during the 17-year study period. Figure 16 shows that the Urban region experienced the highest growth (45%) compared to 39% for the Highlands, 34% for the Coastal Plains and 12% for the Delta.

While the Highlands had the highest total expenditure growth among the rural counties during the study period, this growth occurred from 2000 to 2009. Since 2009, total expenditures in the

Highlands region declined 6%. Total spend-

Figure 16. Total County Expenditures Sorted by Region (2000-2017)



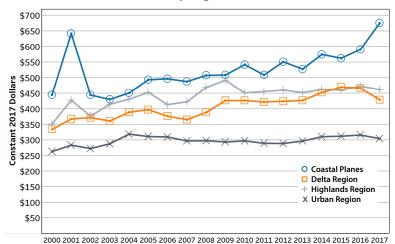
Source: Arkansas Legislative Audit

ing by county governments in the Delta region remained relatively flat during this 17-year period with only slight year-to-year variations. This is in contrast to the Coastal Plains regions, which experienced a spike to total spending in 2001, remained relatively flat from 2002 to 2013, and then increased from 2014 to 2017.

Per Capita Expenditures

Population change had a noticeable, but not the only impact on per capita total county government expenditures during the 17-year study period. The population in the Highlands and Urban regions grew 6% and 25%, respectively, dampening the growth of per capita spending for these regions due to economies of scale. During that time, the Coastal Plains and Delta regions populations decreased by 12% and 13% respectively, resulting in growth in per capita total spending in those areas. However, the cost of providing law enforcement and public safety services in rural counties grew dramatically from 2000 to 2017. Therefore, part of the increase in per capita total expenditures in rural counties is the result of this and other expenditure increases.

Figure 17. Per Capita County Expenditures Sorted by Region (2000-2017)



Source: Arkansas Legislative Audit and U.S. Census Bureau

The Coastal Plains region differs from the other three regions in the state regarding per capita total expenditures in three ways. Figure 17 shows that the Coastal Plains region had the highest per capita spending for each year in the study period, the highest growth in per capita spending and increasing per capita expenditures when other regions experienced little or no growth. In 2017 total per capita spending ranged from a high of \$675 in the Coastal Plains to a low of \$305 in the Urban region. Per capita spending in the Highlands and Delta regions were somewhat higher than in the Urban region, but substantially lower than in the Coastal Plains region at \$462 and \$429 respectively. During the study period, the Coastal Plains region experienced per capita spending growth of 52% compared to 31% in the Highlands, 28% in the Delta and 16% in the Urban region.

Expenditures per \$1,000 of Personal Income

There was also significant variability in total expenditure growth between the Urban and three Rural regions of the state during the 17-year study period. Figure 16 shows that the Urban region experienced the highest growth (45%) compared to 39% for the Highlands, 34% for the Coastal Plains and 12% for the Delta.

While the Highlands had the highest total expenditure growth among the rural counties during the study period, this growth occurred from 2000 to 2009. Since 2009, total expenditures in the Highlands region declined 6%. Total spending by county governments in the Delta region remained relatively flat during this 17-year period with only slight year-to-year variations. This is in contrast to the Coastal Plains regions, which experienced a spike to total spending in 2001, remained relatively flat from 2002 to 2013, and then increased from 2014 to 2017.

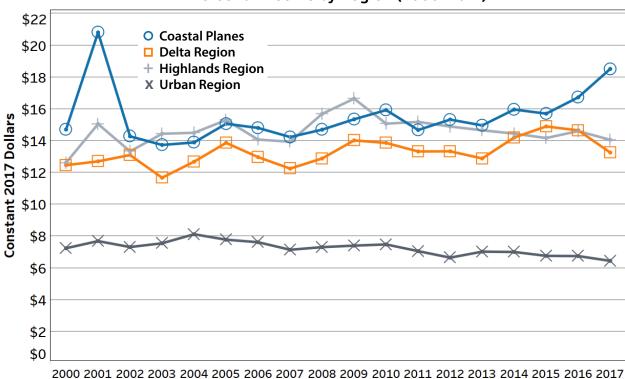


Figure 18. Total County Expenditures Per \$1,000 in Personal Income by Region (2000- 2017)

2002 2003 2004 2003 2006 2007 2008 2009 2010 2011 2012 2013 2014 2013 2016 201

Source: Arkansas Legislative Audit and U.S. Bureau of Economic Analysis

Relative Importance of Expenditures by Category

Spending on law enforcement and public safety makes up a large share of total county government spending for all regions of the state (Figure 19). In 2017, the Urban, Highlands and Delta regions all spent a larger share on law enforcement and public safety than on any other individual category. The Urban region spent a larger share of its budget (43%) on this metric than any other region in the state. The Coastal Plains region spent the smallest share of its budget on law enforcement compared to other regions, but it was still the second largest share of expenditures and represented a substantial portion (25%) of that region's spending.

Of the minor category expenditures:

- The Coastal plains region spent the largest share on health expenditures and debt expenditures, and the smallest share on recreation compared to other regions.
- The Urban region spend the smallest share on debt expenditures.
- The Urban and Highlands regions spent a similar share on health and recreation expenditures.

Urban Region Law Enforcement & **Highlands Region Public Safety Coastal Plains Delta Region Urban Region Highways & Streets Highlands Region** Coastal Plains Delta Region General & Other **Urban Region** Highlands Region **Coastal Plains Delta Region Urban Region** Health & Social Highlands Region Services **Coastal Plains** Delta Region **Urban Region** Recreation & CUlture **Highlands Region Coastal Plains Delta Region** Capital Outlay **Urban Region Highlands Region** Coastal Plains **Delta Region Debt Srevice Urban Region** Highlands Region Coastal Plains Delta Region 0% 5% 10% 15% 20% 25% 30% 35% 40% 45%

Figure 19. Relative Importance of Expenditure Categories sorted by Region (2017)

Source: Arkansas Legislative Audit

Expenditure Share

Perspective #3: Economic Dependency

Six economic dependency classifications were used in this study to examine differences in county spending patterns by type of industry predominate in the county: farming, government, manufacturing, mining, non-specialized and recreation (Figure 20). Most counties in Arkansas (66 of 75) have economies that are classified as either nonspecialized (38), manufacturing-dependent (19), or government-dependent (9). Five counties are farming-dependent, and three are recreation-dependent. Only one county is classified as mining-dependent.

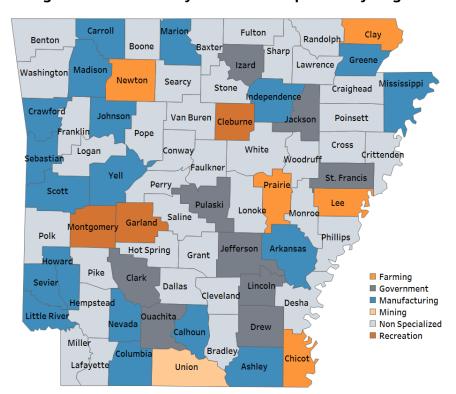


Figure 20. Counties by Economic Dependency Region

Key Takeaways:

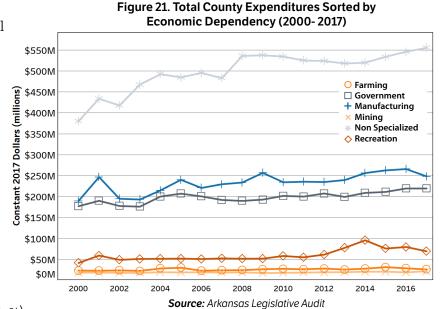
- The dependency classifications with the highest growth rates in total expenditures were the recreation-dependent (67%) and non-specialized (46%) counties.
- Recreation-dependent counties experienced the highest growth in per capita expenditures (53%) while nonspecialized counties had the lowest (19%).
- In absolute terms, farming-dependent counties had the highest expenditures per \$1,000 of personal income in 2017.
- All dependency groups had a considerable share of expenditures go towards law enforcement and public safety. The share of spending on law enforcement and public safety accounted for the largest share of total spending for government-dependent, manufacturing-dependent, and nonspecialized counties.

¹These categories are based on classification methods by the Economic Research Service (ERS) of the USDA. If a county has an industry that accounts for at least 30% of personal income in that county, it is described as being dependent on that industry. Counties that do not have one industry which comprises at least 30% are classified as nonspecialized counties

Total Expenditures

Figure 21 shows that the growth in total spending varied somewhat among dependency groups during the 17-year study period. Recreation-dependent county expenditures grew at a much higher rate than other economic dependencies during the study period.

The recreation-dependent counties had the highest rate of growth in total expenditures (67%), followed by nonspecialized counties (46%). Other dependency groups had comparatively low rates of growth during this time. The lowest growth was in farming (12%) and mining-dependent (17%)

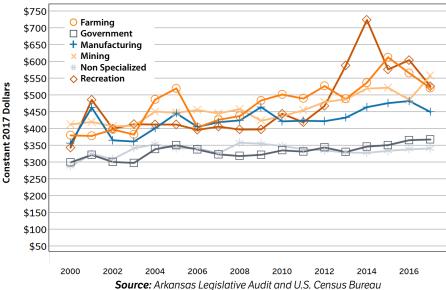


Per Capita Expenditures

counties.

While all economic dependency groups experienced growth in total expenditures, all but two groups also experienced population growth from 2000 to 2017. The two groups not experiencing population growth during this period were the farming and mining-dependent counties. Population growth often has a mitigating effect on increases in per capita metrics and population declines tend to increase per capita metrics other factors being equal (Figure 22).

 Recreation-dependent counties experienced the highest growth in per capita expenditures, Figure 22. Per Capita County Expenditures Sorted by Economic Dependency (2000- 2017)



- increasing 53% during the study period, with a peak of \$724 per capita in 2014. The next fastest growing groups were farming (37%), mining (35%), manufacturing (26%) and government-dependent counties (23%) (Figure 22).
- Non-specialized counties had the lowest growth in per capita expenditures (19%) as well as the lowest total expenditures per capita in 2017 (\$341).
- In absolute terms, the highest per capita expenditures in 2017 were in mining dependent (\$558), recreation-dependent (\$526) and farming-dependent (\$521) counties.

Expenditures per \$1,000 of Personal Income

While previous measures of spending grew for every dependency group from 2000 to 2017, this was not the case for expenditures per \$1,000 of personal income. This measure decreased 15% for the nonspecialized group .

Figure 23 shows that recreation-dependent counties experienced the highest growth rate in expenditures per \$1,000 of personal income, increasing from \$10.48 to \$13.97 (33%) during the study period, with a peak in 2014 at \$20.11. The remaining groups grew more slowly. Mining-dependent counties experienced growth in expenditures per \$1,000 in personal income of 13% followed by farming-dependent counties at 11%, and manufacturing and government-dependent counties at 9% and 5% respectively.

In absolute terms, farming-dependent (\$16.35) counties had the highest expenditures per \$1,000 of personal income in 2017. Recreation (\$13.97), manufacturing (\$12.98) and mining-dependent (\$12.84) counties also had considerable spending per \$1,000 of personal income. Government-dependent and nonspecialized counties spent \$8.45 and \$7.80 per \$1,000 of personal income, respectively.

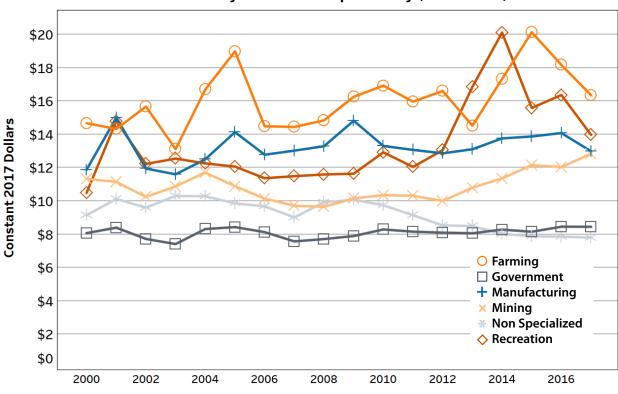


Figure 23. Total Expenditures by \$1,000 in Personal Income Sorted by Economic Dependency (2000-2017)

Source: Arkansas Legislative Audit and U.S. Bureau of Economic Analysis

Relative Importance of Expenditure Categories

The relative share of each expenditure category for dependency groups in 2017 followed similar trends seen in the relative importance of each category statewide and by region. Figure 24 shows that all dependency groups had a considerable share of expenditures go toward law enforcement and public safety. The share of spending on law enforcement and public safety accounted for the largest share of total spending for government-dependent, manufacturing dependent, and nonspecialized counties. In recreation-dependent counties, the share of spending on law enforcement and public safety was only slightly below the general and other category, which had the largest share. Among the three major category expenditures, spending on highways and streets was the lowest for all dependency categories except for farming.

Among the minor category expenditures, government-dependent counties spent a larger share on health and social services compared to other dependency groups. Not surprisingly, recreation-dependent counties spent a larger share on recreation and culture expenditures compared to other dependency groups. Finally, manufacturing-dependent counties spent a larger share on debt service compared to other dependency groups.

Urban Region Law Enforcement & **Highlands Region Public Safety Coastal Plains** Delta Region **Urban Region Highways & Streets Highlands Region Coastal Plains Delta Region Urban Region** General & Other **Highlands Region** Coastal Plains **Delta Region Urban Region** Health & Social **Highlands Region** Services **Coastal Plains Delta Region** Recreation & CUlture **Urban Region Highlands Region Coastal Plains Delta Region** Capital Outlay **Urban Region Highlands Region Coastal Plains Delta Region Debt Srevice Urban Region Highlands Region Coastal Plains** Delta Region 10% 15% 20% 25% 30% 35% 40% 45%

Figure 24. Relative Importance of Expenditure Categories sorted by Economic Dependency (2017)

Source: Arkansas Legislative Audit

Expenditure Share

Summary

Although total county government expenditures in Arkansas increased 37% from 2000 to 2017, there was considerable variation among the individual counties, regions, and economic dependency groups. At the county-level, changes in government spending from 2000 to 2017 ranged from a decrease of 33% in Howard County to an increase of 185% in Drew County. Thirteen (13) counties experienced decreases in expenditures, and all but one of these counties (Jefferson) were rural.

There were differences in spending trends between urban and rural counties. Most notably, expenditures grew more quickly in Arkansas' 13 urban counties, increasing from \$372 million to \$538 million (45%) during the study period. Expenditures in rural counties increased by only 31%, from \$460 million to \$604. However, per capita total spending in rural countries grew at a faster rate compared to urban counties. Rural counties also spent considerably more per person than urban counties for the duration of the study period.

Among the three rural regions the Highlands region experienced the highest growth in total expenditures (39%) between 2000 and 2017. Spending grew by 35% in the Coastal Plains and 212% in the Delta during this period. When grouped by economic dependency the most growth is observed in Arkansas' recreation-dependent counties (67%).

For the majority of the study period, law enforcement and public safety spending accounted for the largest share of total county government expenditures. In 2017, the three major category expenditures accounted for 86% of all county government spending. These categories are Law Enforcement and Public Safety (38%), followed by General and Other (26%) and Highways and Streets (22%). Although urban counties spent a higher share of their budget on law enforcement and public safety (43%), this was also the largest expense for rural counties, taking 33% of their budgets. In contrast, the share of highways and streets spending was greater in rural counties (26%) compared to urban counties (18%).

Appendix

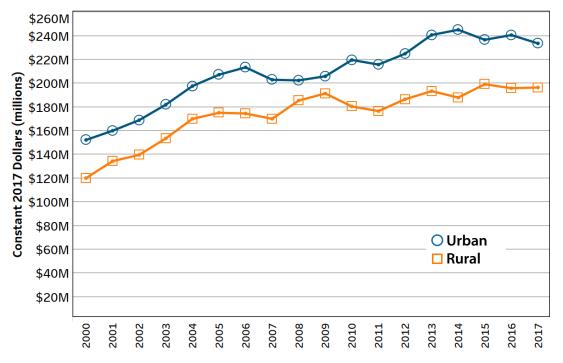
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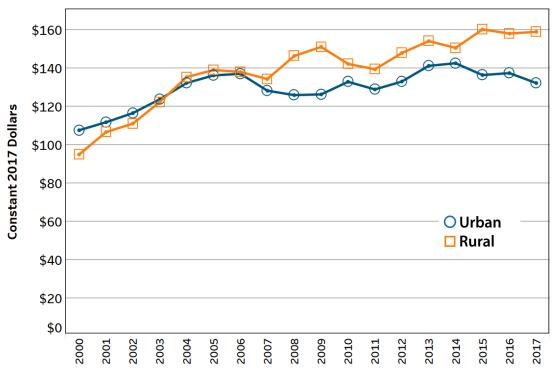
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Figure 25. Total County Law Enforcement and Public Safety Expenditures by Urban and Rural Regions (2000-2017)



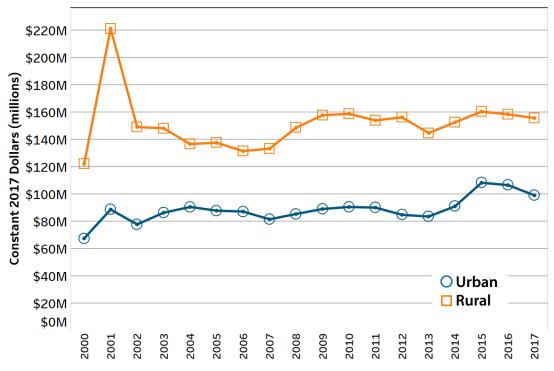
Source: Arkansas Legislative Audit and U.S. Department of Labor

Figure 26. Per Capita Total County Law Enforcement and Public Safety Expenditures by Urban and Rural Regions (2000-2017)



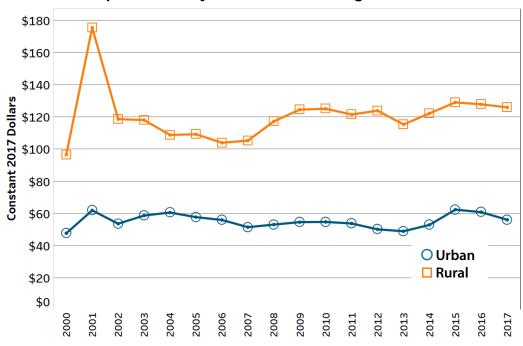
Source: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor

Figure 27. Total County Highway and Street Expenditures by Urban and Rural Regions (2000-2017)



Source: Arkansas Legislative Audit and U.S. Department of Labor

Figure 28 Per Capita County Highway and Street Expenditures by Urban and Rural Regions (2000-2017)



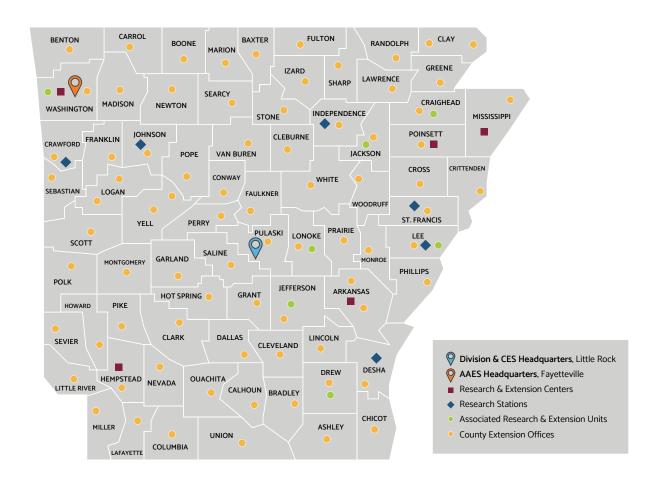
Source: Arkansas Legislative Audit, U.S. Census Bureau and U.S. Department of Labor

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