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## Table of Contents

EXECUTIVE SUMMARY ..... 1
Chapter A. Introduction ..... 6
Chapter B. Literature Review, Data Sources, and Study Methodology ..... 9
Chapter C. Population Dynamics in Williamson County ..... 17
Chapter D. Workforce Dynamics in Williamson County ..... 28
Chapter E. Overall Economic Growth ..... 32
Chapter F. Real Estate Market. ..... 42
Chapter G. Local Government Revenues ..... 48
Chapter H. Local Government Expenditures ..... 63
Chapter I. Educational Dynamics and Economic Growth ..... 73
Chapter J. Does Population Growth Pay for Itself? ..... 85
Chapter K. A Comparative Approach to Economic and Population Growth ..... 103
Chapter L. Conclusion ..... 118
Works Cited ..... 120
Appendix Price Index ..... 123
Appendix Chapters C-I ..... 124

## EXECUTIVE SUMMARY

The most rapidly growing county in the state of Tennessee and among the most prosperous counties in the entire nation, Williamson County has historically performed exceptionally well regarding population growth and economics. Considering recent data, indicators suggest the county will continue experiencing this growth. Therefore, it is important to understand the relationship between population and economic growth. Given the importance of the issue and the worthiness of understanding it for future endeavors, the Business and Economic Research Center (BERC) at Middle Tennessee State University, sponsored by Williamson County Association of Realtors, has composed this study to examine comprehensively the population growth and economic dynamics in Williamson County, TN.

Using data from a variety of sources, this study compiled, analyzed, and established benchmarks necessary in achieving the goal of the project, i.e., enabling validation of future decisions regarding the dynamics between population and economic growth. The study is organized into chapters that cover the following topics:

- Population Dynamics
- Workforce Dynamics
- Economic Growth
- Real Estate Market
- Local Government Revenues
- Local Government Expenditures
- Educational Dynamics
- Who Pays for the Growth?

Following these topics, we use a comparative approach to economic and population growth to delve deeper into an understanding of the apparent relationships between them.

## Population Growth

- Williamson County recorded more than a $65 \%$ percent growth rate in the past 15 years, compared to Tennessee's growth rate of 16 percent for the same period.
- Population density in Williamson County increased from 151 people per square mile in 1992 to 389 in 2017 and is expected to grow to 541 in 2027.
- Net migration increased from 754 households in 1992 to 2,028 households in 2016.
- Net average adjusted household income of migrants was positive and significant, suggesting the county attracts wealthier individuals.
- In a 25-year period (1992 to 2017), the population of school-age children grew 139 percent in Williamson County, compared to about 20 percent for the state.


## Workforce Dynamics

- Between 2007 and 2016, the civilian labor force grew nearly 27 percent in Williamson County, more than in any of the counties selected for this study.
- At 2.7 percent, Williamson County's unemployment rate is one of the two lowest of the counties covered in this study.
- Human capital formation in Williamson County is noteworthy. The percentage of the population holding a bachelor's degree or above in Williamson County is 57 percent. The next highest percentage in Tennessee is in Davidson County, 38 percent.


## Economic Growth

- Employment growth in Williamson County increased 46 percent from 2007 to 2017.
- The per capita income in Williamson County has grown about 94 percent in the past 25 years.
- The sources of job growth exhibited in the analysis are fueled by regional (county-level) growth dynamics rather than sectoral or national growth trends.
- Regarding specialization, several sectors, including the management of companies, have a stronger presence in the region than in the nation as a whole.
- Over the years, the Williamson County economy has experienced more structural changes than the U.S. economy.


## Real Estate Market

- Williamson County saw steady growth in the total number of building permits issued from 2012 to 2017.
- The county's homeownership rate is approximately 17 percentage points higher than that of the state.
- Williamson County has the largest per capita residential property assessment value of all counties covered in this assessment (in 2009 dollars).


## Local Government Revenues

- Total county revenues reached $\$ 664.3$ million (in 2009 dollars) in 2015 , recording a 430 percent growth from 1992.
- In 2015, tax revenues collected totaled $\$ 320.4$ million in Williamson County, an increase of about 290 percent from 1992.
- The share of intergovernmental revenue in total revenue decreased since 1992 from 25.5 percent to 19.6 percent in 2015.
- Williamson County property taxes in 2015 were $\$ 210.3$ million, an increase of 39 percent from 2010. No other county in our study experienced an increase greater than 15 percent from 2010 to 2015.
- While many counties saw a decline in per capita property tax revenue from 2010 to 2015, Williamson County had a 20 percent increase.
- The share of property tax revenue to total revenue in Williamson County dipped from 1992 to 2002 but has recently begun to increase from its 2010 figures.
- Overall, total revenue growth has been significantly higher than population growth in Williamson County.


## Local Government Expenditures

- Total expenditures increased 426 percent from 1992 to 2015.
- Capital outlays totaled $\$ 120$ million in 2015 , an increase of 58 percent from 2010 to 2015.
- Nearly 18 percent of total expenditures were for capital outlays in 2015, the highest share seen in the counties covered by this study.
- Almost half of the Williamson County government's total expenditures (47.4 percent) are for education.
- Williamson County's outstanding debt reached $\$ 522.3$ million in 2015, an increase of 255 percent from 1992.


## Educational Dynamics

- Williamson County's population over 25 holding a bachelor's degree or above has climbed to nearly 57 percent, almost 19 percentage points above the next largest percentage of such degree holders (38 percent in Davidson County).
- The average ACT score of students in the Williamson County school system was 25.2 in 2016. The next two highest were Weakley County (21.3) and Knox County (21.1).
- The college readiness score for Williamson County students suggests close to half of graduating high school students are college-ready (45 percent). Only one other county (Knox) covered by this study scored above 20 percent.
- In 2015, the per capita educational expenditure at \$1,537 (in 2009 dollars) ranked highest among the largest Tennessee counties in this study.
- Williamson County receives an annual average of just under 40 percent of its intergovernmental educational funds through state transfer.


## Does Population Growth Pay for Itself?

- In Williamson County, the total population grew by almost 140 percent between 1992 and 2015 . Over the same period, county revenue increased 430 percent, while county expenditures increased 426 percent.
- Does population growth pay for itself? This study's simulation of 1,196 new households suggests that
(a) total state and local government receives about $\$ 20$ million in taxes and fees (in 2009 dollars) from these new households;
(b) on average, using the latest available data, the cost of these households to the county government is about $\$ 10.6$ million (in 2009 dollars);
(c) also, these households contribute $\$ 34$ million (in 2009 dollars) to the federal government; and
(d) on balance, this simulation suggests that new households pay for itself in Williamson County.


## Chapter A. Introduction

A review of the data for Williamson County reveals the county has historically outperformed the state of Tennessee in major economic indicators. For example, as of January 2018, the unemployment rate in Williamson County was 2.5 percent, which was 1.3 percentage points lower than Tennessee's unemployment rate in the same month. Other historical indicators suggest similar trends:

- Williamson County's population has grown more than 70 percent since 2000, compared with 17 percent growth of Tennessee's population.
- Real GDP per capita has grown more than 55 percent in Williamson County, compared with about 17 percent growth in Tennessee since 2000.

Why is there so much discrepancy in growth dynamics between Williamson County and the state of Tennessee? There may be multiple factors contributing to this difference. A review of the literature suggests that significant drivers of population growth in a region include employment opportunities, amenities, and relative wages.

What, then, is the relationship between population growth and economic welfare in a region? Economic literature does not provide a clear answer but suggests that contextual indicators may factor in the direction of the relationship. In this study, the Business and Economic Research Center (BERC) at Middle Tennessee State University provides a comprehensive analysis of population growth and economic dynamics in Williamson County, Tennessee. This analysis addresses the following primary research questions:

- What is the relationship between economic growth and population growth?
- What is the relationship between population growth and local government finances?
- Where does Williamson County rank among Tennessee counties regarding local government finances by source of revenue and type of expenditure?
- How is population growth financed in Williamson County compared with other counties in Tennessee?

The remainder of this report is organized as follows. Chapter B presents a brief literature review, study methodology, and data sources as well as the econometric models used to analyze the relationship between population growth and economic growth across the selected counties. Chapter C focuses on the population side of the growth equation. In this chapter, the major indicators discussed include population growth from historical and comparative perspectives; net migration, one component of population growth; net adjusted gross income of population inflows and outflows; growth of school-age children (under 18); growth of dependent population; and population density over the years. The population indicators discussed in this chapter have important implications for growth in local government finances including both revenues and expenditures.

Chapter D touches on the critical component of any economic development initiative: workforce dynamics. In this context, the present study provides a brief historical perspective on the quantity and quality of the available workforce in Williamson County. Human capital formation from a historical perspective will shed light on overall population and economic growth dynamics in Williamson County.

Chapter E puts the county's economy under a microscope. It begins with overall employment and per capita income growth as well as average household income growth from historical and comparative perspectives. The study then breaks down the sources of growth by analyzing historical employment data by industry. Understanding the source of growth helps to determine whether and how the county demonstrates unique growth dynamics compared with the U.S. or Tennessee. This chapter also explores structural change, local specialization of industries, and economic diversity.

Any analysis of population and economic growth as well as local government finances should carefully capture housing market dynamics. Chapter F begins with total housing sales and explores the housing value index, total residential and commercial property assessment (real),
and real estate transfer and mortgage taxes collected in the county. The purpose of this chapter is to demonstrate the value of real property from which a significant portion of the government finances is extracted.

After a thorough assessment of the various growth dynamics, Chapter $G$ answers the following critical questions. How does county government revenue grow over time, given the county's population and economic growth dynamics? Is the county government's revenue growth rate faster than population and economic growth rates? What are significant components of county revenue, and how do they behave over time and across regions? A major highlight of this section is a study of property tax and its growth over the years.

Chapter H looks at the other side of the county finance equation and deals with county government spending in comparative and historical contexts. The emphasis is on top spending categories only. Chapter I isolates the major spending category for county government: education. In addition to looking at educational spending indicators, this chapter briefly highlights educational achievement in the county from historical and comparative perspectives.

Chapter J discusses the cumulative results of the study's findings framed as responses to the following questions: who pays for growth, what is the extent of growth financing through debt, and what are the patterns of county spending and revenues? Chapter $K$ carries this discussion further by analyzing population and economic growth dynamics among the counties that show some similarities to Williamson County.

Finally, Chapter L offers a brief conclusion to the study.

## Chapter B. Literature Review, Data Sources, and Study Methodology

Population growth and economic growth are undisputedly connected, but the economic literature does not provide a clear answer to the question of whether population growth leads to economic growth or vice versa. As is evident in the literature review that follows, the attribution of causality can vary according to the contextual indicators examined. The Business and Economic Research Center (BERC) at Middle Tennessee State University has identified significant interconnected indicators in carrying out a comprehensive analysis of population growth and economic dynamics in Williamson County, Tennessee. This analysis will address the following major research questions:

- What is the relationship between economic growth and population growth?
- What is the relationship between population growth and local government finances?
- Where does Williamson County rank among Tennessee counties in terms of local government finances, by sources of revenue and types of expenditures?
- How does Williamson County finance population growth, and how does this compare to other counties in Tennessee?

The literature review will focus on three primary areas of investigation. The first is an examination of population demographics and their impact. Second, we will review studies that examined the fiscal and economic growth associated with population growth. Finally, we will focus on how the housing market in a region of study interconnects with factors in the first two areas, i.e., population demographics, impact of demographics, fiscal growth, and economic growth in the region of study.

## B.1. Population Growth

Middle Tennessee has long been a region of greater-than-average population growth. Much of this growth has been concentrated in and around the Nashville Metropolitan Statistical Area (MSA). This population growth and diversity of Nashville and surrounding counties combined with the nature of local industries allowed the region to weather the Great Recession (Harper 2013). Many of the counties surrounding Nashville have strong non-basic, service-producing sectors, which are "less vulnerable to business cycles" (Harper 2013). In fact, professional business services including finance, information services, insurance, and real estate drove 267 of the 382 MSA increases in gross domestic product in 2016 (Rodriguez and Panek 2017).

In the Nashville MSA between 1990 and 2010, the employment ratio increased by 42 percent (Harper 2013). It is estimated that the employment ratio will grow by 80 percent in the greater Nashville area with the lion's share of the growth in Davidson County, an estimated increase of 37.8 percent. According to economic predictions, middle Tennessee will create more than 300,000 new jobs by 2040. Population increasing in tandem with a growing number of jobs represents a pattern of interdependence between the two factors. The relationship seems positive, as the alternative would be an increase in population without new job creation.

Along with positive employment trends, there are changes in both population size and composition in the areas surrounding Nashville. According to predictions by the U.S. Economic Development Administration's Comprehensive Economic Development Strategy (CEDS), Davidson, Rutherford, and Williamson counties will soon be among the top five of Tennessee's most populated counties. Williamson has the highest growth rate: its population was 184,035 in 2010 and is expected to grow to 488,000 by 2040, a 165 percent increase. Residents 65 years and older represent 11 percent of the county's population, and forecasts predict this percentage will continue to increase. Additionally, Hispanic residents represent about nine percent of the population, a proportion that is estimated to increase to 20 percent by 2040. With changes in population demographics, Williamson County faces new governmental questions and challenges. How do local governments react to population changes? How do they best utilize taxes to encourage continued economic growth?

## Population Growth and Local Government Finances

Population growth brings two essential changes to local government finances, namely more tax dollars and more public expenditures. The ratio of taxes to expenditures depends on the structure of the population's growth and demographics. Ladd (1994) outlines two scenarios whereby new residents are added to a population. In one model, the new residents are identical to the current residents regarding levels of education, income, etc. The outcome of this model shows only an increase in public expenditure due to additional people demanding public services. However, in the second model, the new residents are different demographically from the current population. In this case, regarding public services, there is an increase in both level and types of demands, leading to greater increases in public spending. Understanding the makeup of both economic migrants to the area and the current population is necessary for an
understanding of how local governments must adapt to promote the most efficient levels of economic growth and development.

According to a report by Greenwood et al. (2003), a pattern exists connecting rapid population growth and intensive development. Higher levels of population density result. The authors assert that infrastructure investments for police and fire services generally rise significantly in real per capita figures as a result of population growth. However, they note, denser development can lead to lower external costs as more people shift into accessing the same utilities and services without the cost necessary for building new infrastructure (Greenwood et al. 2003). This leads to a "growth dividend," a term that refers to the situation when a local government can continue to provide the same level and quality of services while spending less per person. Unfortunately, in the Greenwood et al. study, the quality indicators were difficult to prove due to a lack of evidence across time. Nonetheless, the report suggests that cost efficiencies for local governments can be attained through density of development (Greenwood et al. 2003). Therefore, while Ladd (1994) proposes that costs increase with increases in diversity of the population, Greenwood et al. (2003) point out that higher population density may lead to a decrease in public expenditures, such as for safety and utilities.

In light of the findings of the case studies referenced above, the logical next challenge regarding local government expenditures is to understand what factors determine the allocation of public resources. Several empirical studies have sought to address this question. BERC found particularly relevant to the current study work done by Borcheding and Deacon (1972) and Bergstrom and Goodman (1973), which primarily consider municipal and local government spending within developed countries. Their findings were included in a summary of related public finance literature by Gebremariam and Gebremedhin (2006), who determined local government spending is generally driven by the preferences of local voters and taxpayers and by the local fiscal structure. The authors also found that the impact of voter and taxpayer preferences vary considerably by sector, affecting both the composition and total amount of local expenditures. Further findings from the same reports show that income elasticity of local public expenditures is positive and significant, whereas estimates of tax-price elasticity are negative and significant. Furthermore, population density and per capita income taxes have positive and significant effects on local public expenditure per capita. The effects of population size, density, and demographics vary when it comes to types of local expenditures.

For example, an increase in the proportion of the elderly in a community is likely to lead to an increase in spending on health, Social Security, etc. (Gebremariam and Gebremedhin 2006). Based on U.S. local government data, this study also asserts there is empirical evidence to support the presence of a spatial relationship in local expenditure decisions. Specifically, local governments tend to reference neighboring counties' spending when making their own spending decisions.

In a report by Boex and Edwards (2014) focusing on differential impacts between transfers and OSRs (own source revenue), one common finding was that increases in transfers tend to lead to increases in local expenditures, although the size of the impact is usually less than directly proportional. The transfers are generally greater than the resulting local expenditures. In addition, this study found that increases in one particular local tax did not generally result in major increases across types of expenditures. Rather, a majority of the resources resulting from the particular increased tax was generally spent on large projects such as road infrastructure. Boex and Edwards (2014) indicate it is possible to engage in locally funded redistribution policies, but only under the agreement of a local social contract or to the degree that wealthier urban taxpayers cannot avoid an additional tax burden.

## Population Growth and Economic Growth

To further expand on public demand for public services, in the Tiebout (1956) model an individual resident has the opportunity and desire to migrate to a given city or to elect particular city officials when the move or the vote will best provide that resident's preferred "tax-service" bundle. This means that individuals use information about taxes and public services along with their personal preferences in making decisions about both where to live and where to work. Tiebout's model of individual choice is supported by Paulson et al. (2008), who find, concerning state income taxes, that higher levels of marginal tax rates actually have significant negative effects on economic growth. Creating an attractive city or local government geography, based on taxes and amenities, is therefore integral to population inflows. Attraction to cities, counties, and regions also involves economic opportunities, which result from economic growth. Therefore, taxes, public services, and economic opportunities provide the catalyst for increases in economic migration.

Economic opportunities are necessary to attract residents who will in turn promote economic growth where they live. According to Pillay (2011), there is a close relation between economic development and levels of knowledge in the community population. On a country level of analysis, Knowledge Economy Index (KEI) benchmark numbers show that the correlation between education level and economic development is 67 percent, where lower-scoring countries have lower levels of economic development (Pillay 2011). Pillay's findings on an aggregate country level show that population makeup matters with respect to levels of education and economic growth. In another example, examining other factors of economic growth, Bartik (2009) found that increasing quality and quantity of both labor demand and supply caused the state of Wisconsin to experience increased economic development. This suggests that economic development is driven in part by increases in quantity and quality of the labor force.

## B.2. Economic Growth and Business Climate

Economic development and opportunities take various forms, many stemming from job creation. Following Bartik's (2009) assessment that labor demand underpins economic development as well as labor supply, Tennessee saw private sector employment growth of 2.67 percent in 2016, which is the "highest rate of growth in the nation, and surpasses national growth of 1.79 percent" (Scott et al. 2017). Showing the same pattern of positive growth, Williamson County in 2016 had "the fifth largest percent increase in private sector jobs in Tennessee," the lowest unemployment rate, and the highest median household income (Scott et al. 2017). Across the state, the negative correlation between unemployment rates and private sector growth holds as does the negative correlation between unemployment rates and median household income. This means the growth associated with Tennessee and Williamson County is a strong and pervasive force, increasing median incomes as well as decreasing unemployment rates.

The increased number of private-sector jobs is indicative of both expansion of existing firms and the creation/location of new firms in both Williamson County and the state of Tennessee. Scott et al. (2017) point to expansions of large businesses such as FedEx and Bridgestone. However, Gebremariam and Gebremedhin (2006) point to fostering the development of small businesses as a time-honored means for local governments to increase economic growth and, consequently, economic migrants. While goods-based markets use transportation to reach
markets, service-based companies, which have a large hold in Nashville, can succeed only in markets where preferences are diverse enough to sustain them (Gebremariam and Gebremedhin 2006). This means that as population and median income increase, the number of companies that provide specialized services will increase, supplying the economy with private-sector jobs. The high level of Williamson County's median household income may support the trend of increased service specialization. Looking into the increases in the numbers of businesses in this area will serve to explain further what drives the increases in privatesector jobs.

Examining the makeup of job creation, a Tennessee Department of Labor and Workforce report from 2016 shows that nonfarm employment in Tennessee increased 2.5 percent from 2014 to 2015, adding 69,700 net new jobs. Specifically, private service jobs increased by 2.8 percent, and goods-producing jobs grew by 3.4 percent, which was the highest growth in Tennessee. According to the report, Computer and Mathematical Occupations (3.1 percent), Construction and Extraction Occupations (2.6 percent), Business and Financial Operations Occupations (2.4 percent), Healthcare Support Occupations ( 2.4 percent), and Healthcare Practitioners and Technical Occupations (2.1 percent) were the most significant and fastest-growing occupations from 2015 to 2016 . Overall, the state of Tennessee experienced a one percent increase in population from 2015 to 2016. Other significant figures included an increase in total labor force, decreasing unemployment rates, an average annual wage increase, a median wage increase, and per capita income increase. As long as employment indicators such as these continue to indicate a thriving labor environment, it is expected that economic migrants will come to Tennessee in search of economic opportunities, thus affecting regional dynamics such as the housing market.

## B.3. Housing

The housing market plays an integral role in economic development, as available and affordable housing represents the main factor for individuals' decisions to move into or out of regions. From a historical perspective of urban development since 1980, Frey (2012) notes that in many urban areas the housing and job markets stabilized first and booming economic growth followed. As Frey (2012) observed, housing markets can be an indicator of future economic growth. Housing construction is also a result of economic growth, as growth induces more economic migrants who demand housing.

Housing additionally plays an important role for local governments in the form of property taxation. Increases in home-owning populations leads to increased tax revenues-an important outcome of increased in-migration and demand for housing. Housing is such an important factor for governments on every level that they often become involved in housing market operations. For example, the Tennessee Housing Development Association (THDA) assisted development by providing fixed-rate mortgage loans in the state for people with low and moderate income (Arik 2017). In 2017, TDHA actively contributed to $\$ 1.1$ billion in construction, real estate, and finance (Arik 2017).

Williamson County, in the context of high population and economic growth, is vital both to the economic growth of the middle Tennessee region and to the growth of the state. However, in the face of its unprecedented growth, the county's local governments face important fiscal and policy questions. The following analyses will provide a fuller understanding of the factors involved in and composition of growth in Williamson County, useful information to those who will frame the answers to those fiscal and policy questions.

## B.4. Data Sources

This study uses a variety of data sources to capture the various socioeconomic dynamics. To create consistent data series across reference units, such as local government revenues and expenditures, the study relies on single-source data. The list below includes the major data sources:

- Bureau of Economic Analysis (www.bea.gov)
- Bureau of Labor Statistics (www.bls.gov)
- Census Bureau (www.census.gov)
- Tennessee Department of Education
- Tennessee Comptroller of Treasury
- Internal Revenue Services (www.irs.gov)
- Woods and Poole, subscription data services
- Tennessee Housing Development Agency
- Census Bureau, Local Government Finances


## B.5. Methodology

To capture growth dynamics in Williamson County, this study uses various methods across topics and chapters. Details of these methods are fully explained in the related chapters. This section briefly highlights the basic approaches:

- Growth dynamics in Williamson County are captured across several dimensions, such as population, employment, and local government, rather than providing a narrow perspective.
- To assess the trend and for comparison, the study uses about 25 large Tennessee counties consistently across data categories. Comparison tables are presented in the appendix. Throughout the report, a narrow sample of large counties is used for comparison.
- All monetary figures are inflation-adjusted (in 2009 dollars) real dollars.
- To assess economic growth dynamics, the study uses such tools as the Shift-Share Analysis, Location Quotient, Structural Change and Similarity Indices, and Diversity Index. These tools are explained in the related chapters.
- To compare different data categories, the study uses a baseline year (1992) and sets the value of each indicator for 1992 to 100 . This allows us to compare different types of data on the same X-Y plane.
(6) In order to answer the question of whether population growth pays for itself, this study uses the IMPLANpro model developed for Williamson County to assess the impact of the net increase in the number of households in Williamson County.
(7) Finally, this study identifies 13 similar high-growth driver counties across the U.S. and looks at the relationship between population and economic growth variables. In this section, for a consistent perspective, only non-educational local finance data are used. Time-series cross-sectional panel data are used to measure the relationships among different variables.


## Chapter C. Population Dynamics in Williamson County

Both quantity and quality of population dynamics are at the heart of regional economic and fiscal policies. Depending on local issues, different aspects of the population as a revenue generator, labor force, or consumer base emerge as critical. Because of their pivotal role in regional economics and finances, both growth and decline of population and their various components may have significant regional implications.

What is the population growth pattern in Williamson County? How has population density in Williamson County changed relative to other counties in Tennessee? What role does migration play in population growth in the county? Who migrates to Williamson County, the wealthy or the disadvantaged? How has the dependent population (under age 18 and over age 65) grown over the years? What is the implication for local government finances of these population dynamics? This chapter explores these critical questions.

## C.1. Population Growth

Local government finances are closely tied to the number and density of population in a region. On one hand, a growing population generates revenues for local governments through household spending patterns and other local economic activities; on the other hand, a growing population increases pressure on government resources, such as educational expenditure, physical infrastructure needs, and police and fire protection. The ideal situation, and the one many local stakeholders expect, is a balance between local revenues generated by and local expenditures associated with the growing population. However, in many cases, this balance may not be easy to achieve.

How has the population evolved in Williamson County? As the table that follows shows, Williamson County has experienced phenomenal population growth over the past 25 years, nearly 157 percent. Rutherford County experienced the closest growth with a high rate of 143 percent. In contrast, in about the same period, the state of Tennessee recorded only about 33 percent population growth. Over the past 15 years, a similar trend is visible. Williamson County recorded nearly 70 percent growth, significantly higher than Tennessee's 16 percent growth for the same period.

To present growth from a historical perspective, the graph that follows shows the population index for the selected regions. To create the index, each region's population in 1992 is set to 100. Among the major counties, only Rutherford seems to be enjoying a hyper-growth rate similar to that of Williamson.

Is this growth trend likely to continue? According to population projections, the Williamson County population is expected to grow from 226,437 in 2017 to 315,525 in 2027, a rate of nearly 40 percent. In the same period, Tennessee's population is expected to grow only about 11 percent. What does this mean for the county's resources? Although population growth creates revenue, high growth rates may also increase pressure on the existing provision of goods and services. We will address this issue in more detail in the following sections.

Population Snapshot


Source: Woods and Poole, Census Bureau (www.census.gov), BERC

Finally, the map that follows shows major Tennessee counties' growth rates for the past 25 years. Williamson, Rutherford, Montgomery, Wilson, and Sevier counties have experienced exceptional population growth, each recording a growth rate of more than 70 percent.


Source: Woods and Poole, Census Bureau (www.census.gov), BERC

## C.2. Population Density

According to research on local government finances, population density is closely related to the cost of providing local services. As population density increases, the marginal cost of delivering services starts declining. However, many factors affect the extent of decline in marginal cost. In this chapter, we will explore the trend in population density across the selected counties and then compare total local government spending with population density.

Population density here refers to the number of people per square mile. As presented in the following table, population density in Williamson County increased from 151 in 1992 to 389 in 2017. It is expected to increase to 541 by 2027. Since the denominator (county land area) is unchanging over time, the growth in density mirrors the growth in population.

| Population Density (1992-2027): Selected Years and Forecast |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2017 | 2022 | 2027 |
| DAVIDSON | 1,046 | 1,125 | 1,143 | 1,205 | 1,292 | 1,375 | 1,441 | 1,506 |
| HAMILTON | 536 | 562 | 575 | 599 | 637 | 663 | 680 | 697 |
| KNOX | 688 | 741 | 766 | 824 | 867 | 906 | 955 | 1,006 |
| MADISON | 146 | 158 | 168 | 174 | 177 | 176 | 180 | 184 |
| MONTGOMERY | 200 | 235 | 256 | 298 | 344 | 370 | 409 | 452 |
| RUTHERFORD | 210 | 265 | 317 | 394 | 443 | 509 | 567 | 631 |
| SHELBY | 1,121 | 1,167 | 1,196 | 1,220 | 1,244 | 1,243 | 1,270 | 1,295 |
| WASHINGTON | 292 | 319 | 336 | 361 | 383 | 394 | 415 | 436 |
| WEAKLEY | 56 | 59 | 59 | 59 | 60 | 58 | 58 | 59 |
| WILLIAMSON | 151 | 190 | 235 | 291 | 331 | 389 | 459 | 541 |
| WILSON | 125 | 144 | 163 | 187 | 209 | 239 | 271 | 308 |

Source: Woods and Poole, Census Bureau (www.census.gov), BERC

## C.3. Components of Population Growth: Net Migration

Over the years, Williamson County's population has grown dramatically. What is the source of this growth? What role does migration play? A review of net househoold migration (household inflow minus household outflow) shows the county has been attracting a significant number of additional residents every year. Compared with all major counties in Tennessee, net migration has increased from 754 households in 1992 to 2,028 in 2016. What motivates migration? The primary reasons are economic opportunities and local amenities. When those two factors are present in a single location, it is likely the location will experience an inflow of people. More than all other major counties, Williamson County continues to attract people who are looking for both economic opportunities and quality of life.

|  | Household Dynamics: | Net Migration (1992-2016) |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Counties | 1992 | 2002 | 2012 | 2016 |
| DAVIDSON | 1,874 | -789 | 909 | 335 |
| HAMILTON | 741 | -211 | 430 | 1,429 |
| KNOX | 1,726 | 1,276 | 311 | 870 |
| MADISON | 350 | -38 | -184 | -105 |
| MONTGOMERY | 719 | 549 | -343 | -6 |
| RUTHERFORD | 1,609 | 1,769 | 981 | 1,909 |
| SHELBY | -579 | $-1,559$ | $-3,617$ | $-2,668$ |
| WASHINGTON | 458 | 229 | -87 | 297 |
| WEAKLEY | 34 | -63 | -125 | -181 |
| WILLIAMSON | $\mathbf{7 5 4}$ | $\mathbf{8 7 8}$ | $\mathbf{1 , 5 5 6}$ | 2,028 |
| WILSON | 493 | 449 | 968 | 1,235 |

Source: Internal Revenue Service (www.irs.gov) and BERC

## C.4. Components of Population Growth: Average Household Income-Outflow versus Inflow

 A concept related to net migration is average household income of households migrating to and from a county. Who are the people moving to and from a county? If the net adjusted gross income is positive, the county is attracting more spending power to the county, which has implications for local government revenues.A review of net adjusted household gross income shows that Williamson County is uniquely positioned in attracting a significant amount of resources to the county. In 1992, the net gross household income was about $\$ 78$ million. In 2016, a total of $\$ 368$ million (in current dollars) was added to the resource basis of the county. Williamson is consistently performing better than the other major counties in Tennessee. For example, Shelby is losing more high-income families than it attracts. Davidson presents a mixed result, as its net adjusted gross income is negative in some years.

|  | Net Adjusted Gross Income Due to Migration | $(1992-2016)$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 2}$ | 2016 |
| DAVIDSON | $\$ 11,296,000$ | $-\$ 112,839,000$ | $-\$ 64,619,000$ | $\$ 232,747,000$ |
| HAMILTON | $\$ 19,082,000$ | $-\$ 6,994,000$ | $\$ 65,109,000$ | $\$ 99,970,000$ |
| KNOX | $\$ 58,390,000$ | $\$ 61,470,000$ | $\$ 58,014,000$ | $\$ 36,110,000$ |
| MADISON | $\$ 12,163,000$ | $-\$ 2,730,000$ | $-\$ 6,191,000$ | $-\$ 11,404,000$ |
| MONTGOMERY | $\$ 15,234,000$ | $\$ 8,633,000$ | $-\$ 24,500,000$ | $-\$ 38,592,000$ |
| RUTHERFORD | $\$ 49,730,000$ | $\$ 59,234,000$ | $\$ 49,207,000$ | $\$ 107,382,000$ |
| SHELBY | $-\$ 58,290,000$ | $-\$ 145,555,000$ | $-\$ 296,357,000$ | $-\$ 271,735,000$ |
| WASHINGTON | $\$ 11,300,000$ | $\$ 19,373,000$ | $-\$ 903,000$ | $\$ 23,046,000$ |
| WEAKLEY | $\$ 688,000$ | $-\$ 272,000$ | $-\$ 5,455,000$ | $-\$ 7,539,000$ |
| WILLIAMSON | $\$ 78,727,000$ | $\$ 109,933,000$ | $\$ 165,457,000$ | $\$ 367,515,000$ |
| WILSON | $\$ 18,839,000$ | $\$ 39,544,000$ | $\$ 69,332,000$ | $\$ 96,939,000$ |

Source: IRS and BERC

## C.5. Components of Population Growth: Number of School-Age Children (Under 18)

One of the primary drivers of local government spending is education. The number of schoolage children (under 18) is one of the best ways to predict the future cost of educational resources in a county. In this section, we review the trend in the number of school-age children across the major counties in Tennessee.

As presented in the following table, the number of school-age children in Williamson County has grown faster than in any other major county in Tennessee. The growth rate for a 25 -year period (1992-2017) was 139 percent in Williamson County, while it was about 20 percent for the state of Tennessee. For the past 15 years, the growth rate was 54 percent in Williamson County versus seven percent in the state. The data in recent years (see appendix) shows Williamson County is growing by nearly 1,000 per year in this age category. This growth suggests the county must add a minimum of one new school every year. The average national median cost of constructing a high school was approximately $\$ 45$ million in 2013 (http://www.ncef.org).

| Population Under 18 Years Old (1992-2027) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 2017 | Growth (1992-2017) | Growth <br> (2002-2017) | Growth <br> (2017-2027) | 2027 |
| DAVIDSON | 149,419 | 24.71\% | 17.67\% | 22.58\% | 183,157 |
| HAMILTON | 75,823 | 8.29\% | 6.54\% | 9.58\% | 83,087 |
| KNOX | 97,509 | 24.16\% | 13.22\% | 14.57\% | 111,720 |
| MADISON | 22,290 | 4.87\% | -6.13\% | 6.99\% | 23,847 |
| MONTGOMERY | 54,034 | 83.89\% | 38.12\% | 30.05\% | 70,270 |
| RUTHERFORD | 77,597 | 123.26\% | 49.91\% | 17.81\% | 91,417 |
| SHELBY | 236,631 | 0.66\% | -6.51\% | 6.37\% | 251,698 |
| WASHINGTON | 24,837 | 19.92\% | 7.77\% | 11.81\% | 27,771 |
| WEAKLEY | 6,583 | -6.37\% | -11.14\% | 9.27\% | 7,193 |
| WILLIAMSON | 61,415 | 138.53\% | 54.06\% | 15.22\% | 70,761 |
| WILSON | 32,372 | 67.45\% | 33.00\% | 23.23\% | 39,893 |
| Tennessee | 1,510,087 | 19.90\% | 6.73\% | 10.66\% | 1,670,995 |
| United States | 73,885,333 | 11.09\% | 1.30\% | 8.30\% | 80,017,208 |

Source: Woods and Poole, Census Bureau (www.census.gov), BERC
MTSU BERC
A Case Study for Williamson County
Page | 23

Across the selected counties in Tennessee, what percentage of the total population is under $18 ?$ The table below shows Williamson County's share of school-age population is the highest among the selected counties, five percentage points higher than Tennessee's, and nearly six percentage points higher than Davidson County's for 2017. This high percentage share of school-age population is not new for Williamson County, which has had a historically high percentage of population under 18.

| Percent of Population Under 18 Years Old (1992-2027) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| DAVIDSON | 22.81\% | 22.38\% | 22.11\% | 22.00\% | 21.69\% | 21.46\% | 21.33\% | 21.64\% | 23.24\% | 24.21\% |
| HAMILTON | 24.07\% | 23.52\% | 22.82\% | 22.03\% | 21.29\% | 21.11\% | 21.03\% | 21.09\% | 21.63\% | 21.97\% |
| KNOX | 22.45\% | 22.38\% | 22.11\% | 21.97\% | 21.59\% | 21.30\% | 21.22\% | 21.17\% | 21.38\% | 21.84\% |
| MADISON | 26.16\% | 25.97\% | 25.39\% | 24.81\% | 23.38\% | 22.95\% | 22.85\% | 22.73\% | 22.87\% | 23.24\% |
| MONTGOMERY | 27.22\% | 28.17\% | 28.33\% | 27.88\% | 27.42\% | 27.01\% | 26.88\% | 27.07\% | 28.20\% | 28.85\% |
| RUTHERFORD | 26.78\% | 26.62\% | 26.34\% | 26.42\% | 25.60\% | 25.00\% | 24.90\% | 24.64\% | 23.78\% | 23.41\% |
| SHELBY | 27.78\% | 28.16\% | 28.04\% | 27.25\% | 25.76\% | 25.38\% | 25.23\% | 25.22\% | 25.55\% | 25.74\% |
| WASHINGTON | 21.72\% | 21.47\% | 21.04\% | 20.68\% | 19.87\% | 19.59\% | 19.37\% | 19.31\% | 19.20\% | 19.54\% |
| WEAKLEY | 21.79\% | 21.70\% | 21.51\% | 20.16\% | 19.74\% | 19.62\% | 19.56\% | 19.63\% | 20.17\% | 21.16\% |
| WILLIAMSON | 29.17\% | 29.29\% | 29.11\% | 29.20\% | 28.60\% | 27.93\% | 27.63\% | 27.12\% | 24.49\% | 22.43\% |
| WILSON | 27.19\% | 26.51\% | 26.16\% | 25.49\% | 24.45\% | 23.99\% | 23.95\% | 23.77\% | 23.04\% | 22.70\% |
| Tennessee | 24.94\% | 24.71\% | 24.41\% | 24.01\% | 23.11\% | 22.71\% | 22.58\% | 22.49\% | 22.43\% | 22.49\% |
| United States | 25.93\% | 26.01\% | 25.36\% | 24.57\% | 23.47\% | 22.94\% | 22.79\% | 22.67\% | 22.47\% | 22.39\% |

Source: Woods and Poole, Census Bureau (www.census.gov), BERC

## C.6. Components of Population Growth: Number of Population over 65

At the other end of the population spectrum is the old-age dependent population. Although a considerable number of people over the age of 65 are still in the workforce, they nevertheless represent an age group that is termed dependent. The significant presence of this group in a region may be considered either a revenue generator or a cost element.

| Population Over 65 Years Old |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Growth | Growth | Growth |  |
| Counties | 2017 | (1992-2017) | (2002-2017) | (2017-2027) | 2027 |
| DAVIDSON | 80,290 | 31.61\% | 27.78\% | 23.56\% | 99,205 |
| HAMILTON | 61,356 | 55.12\% | 42.41\% | 26.96\% | 77,899 |
| KNOX | 71,175 | 60.50\% | 45.42\% | 32.94\% | 94,617 |
| MADISON | 16,080 | 47.48\% | 41.46\% | 26.81\% | 20,391 |
| MONTGOMERY | 18,237 | 121.92\% | 65.27\% | 40.99\% | 25,713 |
| RUTHERFORD | 32,631 | 204.79\% | 121.78\% | 55.36\% | 50,694 |
| SHELBY | 120,181 | 35.05\% | 35.54\% | 26.29\% | 151,778 |
| WASHINGTON | 23,105 | 72.03\% | 51.17\% | 27.74\% | 29,514 |
| WEAKLEY | 6,079 | 17.31\% | 23.71\% | 13.93\% | 6,926 |
| WILLIAMSON | 29,642 | 308.86\% | 170.36\% | 110.69\% | 62,453 |
| WILSON | 21,375 | 206.19\% | 132.79\% | 63.71\% | 34,992 |
| Tennessee | 1,080,067 | 68.27\% | 50.52\% | 33.29\% | 1,439,668 |
| United States | 50,857,393 | 57.17\% | 43.17\% | 35.67\% | 69,000,340 |

Source: Woods and Poole, Census Bureau (www.census.gov), BERC

Similar to the young dependent population, Williamson County's elderly dependent population increased nearly 310 percent in the past 25 years, nearly 170 percent in the past 15 years, and is expected to grow 110 percent between 2017 and 2027. Compared with other counties in Tennessee, these growth figures are significantly larger. What do these figures imply for county revenues and expenditures? The presence of a significant old-age dependent population may
increase pressure on the county's welfare, healthcare, pension, and recreational spending. Furthermore, the working-age population may be taxed more to cover increased costs for the retired population.

To better understand the dynamics of the old-age population, we need to look at its share of the total population. The percentage of those over 65 in the total population of Williamson County is relatively smaller than that of other major counties in Tennessee. Although the number of people over 65 has grown dramatically over the years, that number represents a significantly smaller portion of the total county population in Williamson County than in several other major counties.

| Percent of Population over 65 Years Old |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| DAVIDSON | 11.62\% | 11.28\% | 10.94\% | 10.44\% | 10.68\% | 11.25\% | 11.45\% | 11.63\% | 12.61\% | 13.11\% |
| HAMILTON | 13.60\% | 13.80\% | 13.81\% | 14.18\% | 15.23\% | 16.39\% | 16.71\% | 17.07\% | 19.10\% | 20.60\% |
| KNOX | 12.68\% | 12.67\% | 12.57\% | 12.64\% | 13.72\% | 14.80\% | 15.15\% | 15.45\% | 17.09\% | 18.50\% |
| MADISON | 13.42\% | 12.80\% | 12.16\% | 12.46\% | 13.97\% | 15.50\% | 16.09\% | 16.39\% | 18.37\% | 19.87\% |
| MONTGOMERY | 7.61\% | 7.61\% | 7.99\% | 7.97\% | 8.11\% | 8.80\% | 9.06\% | 9.14\% | 9.84\% | 10.56\% |
| RUTHERFORD | 8.25\% | 7.74\% | 7.49\% | 7.85\% | 8.94\% | 9.82\% | 10.09\% | 10.36\% | 11.81\% | 12.98\% |
| SHELBY | 10.51\% | 10.23\% | 9.82\% | 9.87\% | 10.78\% | 12.09\% | 12.53\% | 12.81\% | 14.41\% | 15.52\% |
| WASHINGTON | 14.08\% | 13.90\% | 13.95\% | 14.48\% | 15.99\% | 17.37\% | 17.64\% | 17.96\% | 19.40\% | 20.76\% |
| WEAKLEY | 16.06\% | 15.21\% | 14.27\% | 14.82\% | 16.23\% | 17.57\% | 17.87\% | 18.12\% | 19.25\% | 20.37\% |
| WILLIAMSON | 8.22\% | 8.12\% | 8.01\% | 9.00\% | 10.64\% | 12.07\% | 12.47\% | 13.09\% | 16.47\% | 19.79\% |
| WILSON | 9.82\% | 9.82\% | 9.87\% | 11.04\% | 13.47\% | 14.92\% | 15.20\% | 15.70\% | 17.89\% | 19.92\% |
| Tennessee | 12.71\% | 12.51\% | 12.38\% | 12.84\% | 14.23\% | 15.41\% | 15.74\% | 16.09\% | 17.88\% | 19.38\% |
| United States | 12.61\% | 12.62\% | 12.35\% | 12.56\% | 13.74\% | 14.88\% | 15.24\% | 15.61\% | 17.54\% | 19.30\% |

Source: Woods and Poole, Census Bureau (www.census.gov), BERC

## C.7. Critical Assessment

The population in Williamson County has grown dramatically over the past 25 years.
Compared with other large counties in Tennessee, the growth is simply phenomenal. What are the implications of population growth on county revenues and expenditures? Population growth means:

- Increased pressure on county resources to meet the demand for services
- Additional capital spending for K-12 education
- More spending on non-capital school activities
- Increased economic activity and associated tax revenues
- Increased demand for real estate and increasing property tax revenues

In the following chapters, we will further explore how these population growth dynamics are translated into increased economic activity and local government finances.

## Chapter D. Workforce Dynamics in Williamson County

Healthy workforce dynamics are essential for a county to grow and manage local government finances. In this chapter, we will briefly cover the following indicators: labor force, unemployment rate, and human capital formation.

## D.1. Labor Force in Historical Perspective

Availability of labor force for increasing economic activity is one of the indicators used to attract businesses to a region. As emphasized in the population chapter, Williamson County is a population magnet. The growth rate of the civilian labor force suggests the county is an attractive location for economic migrants. Between 2007 and 2016, the civilian labor force grew nearly 27 percent, more than in all the counties selected for this study. In the same period, Madison, Shelby, and Washington counties recorded a negative growth rate in their civilian labor force. Overall, the civilian labor force suggests healthy labor market dynamics in the county.


Source: BERC, Woods and Poole, and BLS
MTSU BERC
A Case Study for Williamson County
Page | 28

## D.2. Unemployment Rate

How strong is the job market in Williamson County? Are those residents seeking employment able to find it? The county unemployment rate is lower than in any of the comparison counties, as seen in the table below. An unemployment rate of 2.7 percent in 2017 suggests the labor market is extremely tight even though the civilian labor force has grown significantly over the years.

| Unemployment Rate (1990-2017) (In Percent) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| COUNTY NAME | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 | 2017 |
| DAVIDSON | 4.8 | 3.3 | 4.3 | 3.8 | 6.2 | 5.0 | 4.4 | 3.6 | 2.7 |
| HAMILTON | 5.6 | 4.8 | 4.3 | 3.9 | 6.9 | 6.2 | 5.3 | 4.6 | 3.6 |
| KNOX | 4.6 | 3.5 | 3.6 | 3.4 | 6.1 | 5.4 | 4.7 | 4.0 | 3.2 |
| MADISON | 6.0 | 4.7 | 5.2 | 7.5 | 9.4 | 6.3 | 5.6 | 4.6 | 3.3 |
| MONTGOMERY | 6.2 | 4.5 | 5.1 | 4.7 | 7.6 | 6.6 | 5.8 | 5.1 | 4.1 |
| RUTHERFORD | 4.8 | 3.7 | 4.1 | 3.7 | 6.5 | 5.2 | 4.5 | 3.7 | 2.9 |
| SHELBY | 5.8 | 4.6 | 5.2 | 5.1 | 8.6 | 7.6 | 6.4 | 5.3 | 4.3 |
| WASHINGTON | 5.4 | 4.1 | 5.3 | 4.0 | 7.1 | 6.3 | 5.6 | 4.8 | 3.8 |
| WEAKLEY | 4.5 | 5.9 | 6.2 | 6.5 | 10.9 | 8.5 | 6.8 | 5.8 | 4.9 |
| WILLIAMSON | 3.8 | 2.1 | 3.4 | 3.7 | 5.0 | 4.5 | 4.0 | 3.4 | 2.7 |
| WILSON | 5.2 | 3.8 | 4.2 | 4.0 | 6.4 | 5.3 | 4.6 | 3.8 | 2.9 |
| Tennessee | 6.5 | 5.3 | 5.2 | 4.7 | 7.8 | 6.6 | 5.6 | 4.7 | 3.7 |
| United States | 7.5 | 4.9 | 5.8 | 4.6 | 8.1 | 6.2 | 5.3 | 4.9 | 4.4 |

Source: BERC and BLS

## D.3. Educational Attainment Level

In this section, we look briefly at human capital formation in Williamson County. The table and graph that follow demonstrate that human capital formation in terms of educational attainment in Williamson County is simply unmatched by any other county in Tennessee. It is interesting to note that Williamson County and other large Tennessee counties started almost at the same level in 1970 with 9.8 percent of the population holding a bachelor's degree or higher. In 2016, the percent of the population holding a bachelor's degree or higher in Williamson County increased to nearly 57 percent. In second place was Davidson County, 19 percentage points lower with 38 percent.

| Percent of Population over 25 with a Bachelor's Degree or Higher (1970-2016) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Name | 1970 | 1980 | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| DAVIDSON | 12.1 | 19.5 | 24.4 | 30.5 | 34.1 | 34.4 | 35.0 | 36.0 | 36.5 | 37.3 | 38.2 |
| HAMILTON | 10.2 | 15.5 | 19.7 | 23.9 | 27.0 | 27.4 | 27.8 | 27.2 | 28.1 | 28.7 | 29.6 |
| KNOX | 11.4 | 18.8 | 23.9 | 29.0 | 33.8 | 34.0 | 34.2 | 34.4 | 34.5 | 34.6 | 35.7 |
| MADISON | 4.0 | 7.2 | 7.7 | 10.6 | 11.5 | 11.2 | 13.2 | 13.1 | 13.2 | 13.5 | 14.1 |
| MONTGOMERY | 9.1 | 14.5 | 16.5 | 19.3 | 22.2 | 22.7 | 22.7 | 23.5 | 24.0 | 24.7 | 25.3 |
| RUTHERFORD | 9.9 | 14.8 | 18.7 | 22.9 | 26.3 | 27.0 | 27.9 | 28.3 | 28.9 | 30.1 | 30.2 |
| SHELBY | 9.9 | 15.9 | 20.8 | 25.3 | 27.8 | 28.3 | 28.7 | 29.0 | 29.8 | 30.3 | 30.2 |
| WASHINGTON | 9.4 | 15.0 | 18.9 | 22.9 | 27.9 | 28.2 | 28.9 | 29.4 | 30.8 | 30.6 | 30.9 |
| WEAKLEY | 5.9 | 9.8 | 10.3 | 15.3 | 18.4 | 17.8 | 20.5 | 20.2 | 19.5 | 20.4 | 21.1 |
| WILLIAMSON | 9.8 | 23.6 | 34.2 | 44.4 | 51.8 | 51.5 | 52.0 | 52.8 | 54.1 | 55.7 | 56.6 |
| WILSON | 5.6 | 11.7 | 15.6 | 19.6 | 24.0 | 24.7 | 25.9 | 26.0 | 26.7 | 28.3 | 28.9 |

Source: Census Bureau and BERC


## D.4. Critical Assessment

Williamson County has healthy workforce dynamics, and its human capital formation is unequaled by any of the reference counties. The only issue is that the tight labor market may cause difficulty in hiring for certain sectors.

## Chapter E. Overall Economic Growth

How has Williamson County grown over the years? What does economic growth look like in Williamson County compared with other large counties in Tennessee? What is the source of economic growth or decline in the county? Has there been a structural change in the economy? How diverse is the county's economy? This chapter will assess economic growth through these different lenses.

## E.1. Employment Growth

Has employment grown in Williamson County? If yes, how does the growth compare with other large counties in Tennessee? The table below presents dynamics in growth in total jobs in the county. As of 2017, Williamson County had about 193,500 jobs. Since1992, total employment grew by 314 percent in Williamson County.

|  | Total Employment |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2007 | 2017 | Growth (1992-2017) | Growth (2002-2017) | $\begin{array}{r} \text { Growth } \\ (2007-2017) \end{array}$ | 2022 | 2027 |
| DAVIDSON | 418,729 | 510,464 | 541,026 | 636,596 | 52.03\% | 24.71\% | 17.66\% | 691,313 | 746,359 |
| HAMILTON | 193,988 | 232,315 | 247,895 | 262,649 | 35.39\% | 13.06\% | 5.95\% | 278,150 | 291,366 |
| KNOX | 223,246 | 270,747 | 300,375 | 324,463 | 45.34\% | 19.84\% | 8.02\% | 350,491 | 375,038 |
| MADISON | 52,374 | 65,415 | 69,984 | 74,679 | 42.59\% | 14.16\% | 6.71\% | 79,295 | 83,400 |
| MONTGOMERY | 37,466 | 56,827 | 63,582 | 76,314 | 103.69\% | 34.29\% | 20.02\% | 85,676 | 94,977 |
| RUTHERFORD | 71,365 | 108,831 | 140,170 | 168,306 | 135.84\% | 54.65\% | 20.07\% | 187,476 | 206,737 |
| SHELBY | 529,353 | 619,412 | 652,306 | 679,356 | 28.34\% | 9.68\% | 4.15\% | 721,525 | 761,263 |
| WASHINGTON | 62,273 | 73,653 | 81,568 | 82,698 | 32.80\% | 12.28\% | 1.39\% | 90,224 | 97,380 |
| WEAKLEY | 16,110 | 17,095 | 16,445 | 16,490 | 2.36\% | -3.54\% | 0.27\% | 16,962 | 17,280 |
| WILLIAMSON | 46,751 | 95,684 | 132,431 | 193,473 | 313.84\% | 102.20\% | 46.09\% | 226,853 | 262,180 |
| WILSON | 28,948 | 43,622 | 54,405 | 66,349 | 129.20\% | 52.10\% | 21.95\% | 75,849 | 85,919 |
| Tennessee | 2,837,283 | 3,409,207 | 3,708,674 | 4,042,071 | 42.46\% | 18.56\% | 8.99\% | 4,361,152 | 4,664,651 |
| United States | 138,167,200 | 165,159,164 | 179,885,716 | 198,989,688 | 44.02\% | 20.48\% | 10.62\% | 214,599,006 | 229,158,435 |

Source: BERC, BEA, Woods and Poole

The growth rate in Williamson County over the last 25 years is not matched by any other large county. In the same period, for example, Rutherford County experienced a 136 percent growth rate. That rate is the closest to the Williamson County rate. Over the last 15 years, there is a
similar pattern: 102 percent growth rate in Williamson County and about 55 percent in Rutherford County. By all measures and across all periods, Williamson County outperformed all large counties in Tennessee. It is important to note that "total employment" refers to the total jobs available in the county.

## E.2. Per Capita Income Growth

Does the county's phenomenal job growth translate into increased per capita income? How? The following table presents inflation-adjusted per capita income over the years across the large counties in Tennessee. In 1992, Williamson County's per capita income was 1.25 times larger than the second largest per capita income in Davidson County. In 2017, the gap widened between per capita incomes in these two counties: Williamson County's per capita income is 1.43 times larger than the per capita income in Davidson County.

| Per Capita Income (in 2009 dollars) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2012 | 2017 | Growth <br> (1992-2017) | Growth $(2002-2017)$ | Growth <br> (2012-2017) | 2022 | 2027 |
| DAVIDSON | \$31,812 | \$43,683 | \$44,976 | \$54,142 | 70.19\% | 23.94\% | 20.38\% | \$58,602 | \$63,172 |
| HAMILTON | \$29,450 | \$35,894 | \$41,700 | \$43,412 | 47.41\% | 20.95\% | 4.11\% | \$46,578 | \$49,562 |
| KNOX | \$28,765 | \$34,863 | \$39,279 | \$42,989 | 49.45\% | 23.31\% | 9.45\% | \$45,676 | \$48,139 |
| MADISON | \$25,204 | \$29,455 | \$33,911 | \$36,925 | 46.50\% | 25.36\% | 8.89\% | \$39,645 | \$42,114 |
| MONTGOMERY | \$26,111 | \$31,155 | \$36,925 | \$36,011 | 37.92\% | 15.59\% | -2.48\% | \$38,371 | \$40,450 |
| RUTHERFORD | \$26,559 | \$30,690 | \$32,468 | \$35,693 | 34.39\% | 16.30\% | 9.93\% | \$37,075 | \$38,149 |
| SHELBY | \$29,443 | \$39,766 | \$40,402 | \$43,066 | 46.27\% | 8.30\% | 6.59\% | \$46,227 | \$49,276 |
| WASHINGTON | \$25,579 | \$30,138 | \$34,988 | \$36,679 | 43.39\% | 21.70\% | 4.83\% | \$39,615 | \$42,378 |
| WEAKLEY | \$21,900 | \$25,803 | \$28,773 | \$30,530 | 39.41\% | 18.32\% | 6.11\% | \$32,862 | \$35,003 |
| WILLIAMSON | \$39,796 | \$50,738 | \$72,636 | \$77,107 | 93.76\% | 51.97\% | 6.16\% | \$80,939 | \$83,832 |
| WILSON | \$27,162 | \$34,673 | \$37,436 | \$40,060 | 47.49\% | 15.54\% | 7.01\% | \$41,730 | \$43,103 |
| Tennessee | \$26,106 | \$32,711 | \$36,541 | \$39,781 | 52.38\% | 21.61\% | 8.87\% | \$42,601 | \$45,191 |
| United States | \$29,457 | \$37,049 | \$41,728 | \$45,335 | 53.90\% | 22.36\% | 8.64\% | \$48,500 | \$51,342 |

Source: BERC, Woods and Poole, and BEA

Over the last 25 years, per capita income in Williamson County has grown by about 94 percent, the most significant growth among the large counties. The county achieved a similar growth rate between 2002 and 2017, raising the per capita income by 52 percent. In the last five years, even though many
other large counties have experienced a greater increase in per capita income than Williamson County, the per capita income gap between Williamson County and the closest follower is still expected to be 1.38 times in 2022.

## E.3. Components of Economic Growth: Shift-Share Assessment

The review of both employment and per capita income shows that Williamson County has experienced dramatic growth over the years. What are the sources of this economic growth? To identify the sources of growth, this section will employ Shift-Share Analysis to break down sectoral employment growth by two periods: (1) 1992 to 2017, and (2) 2002 to 2017. When we look at the sectoral employment growth rates in Williamson County, we observe that almost all sectors, with the exception of manufacturing and farming, tripled in size over the last 25 years.

|  | Employment by Sector |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

Source: Woods and Poole, BERC

The specification for the component of the Shift-Share Analysis is as follows:
NE (National Effect) for 1992-2017 for Sector A = (Employment in Sector A in the County in 1992) X [(Total U.S. Employment in 2017/Total U.S. Employment in 1992) - 1]

IM (Industry Mix Effect) for 1992-2017 for Sector A = (Employment in Sector A in the County in 1992) X [(U.S. Employment in Sector A in 2017/U.S. Employment in Sector A in 1992) (Total U.S. Employment in 2017/Total U.S. Employment in 1992)]

RE (Regional Effect) for 1992-2017 for Sector A = (Employment in Sector A in the County in 1992) X [(Employment in Sector A in the County in 2017/ Employment in Sector A in the County in 1992) - (Employment in Sector A in the U.S. in 2017/Employment in Sector A in the U.S. in 1992)]

TE (Total Effect) for 1992-2017 for Sector A = (NE $+\mathrm{IM}+\mathrm{RE}$ ), or (Employment in Sector A in the County in 2017 - Employment in Sector A in the County in 1992)

Shift-Share Analysis shows that employment growth in Williamson County is primarily driven by the local strength of the sector rather than national impact or industry mix impact. The table below presents three periods that trace the job growth in the county: 1992-2017, 2002-2017, and 2012-2017. For each period, the analysis shows that the sources of job growth are the regional (county-level) dynamics rather than sectoral and national growth trends.

For example, between 2012 and 2017, management of companies and enterprises sector recorded a gain of 4,826 jobs in the county. Of these, 636 jobs were due to the national effect; 322 jobs were due to industry mix effect; and 3867 jobs due to county-specific factors. From the data presented in the table, it is easy to observe the strength of the county-specific factors in promoting the strong job growth across the various industrial sectors.

| Source of Sectoral Growth: Shift-Share Analysis |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Source of Sectoral Growth: Shift-Share Analysis Williamson County | 1992-2017 |  |  |  | 2002-2017 |  |  |  | 2012-2017 |  |  |  |
|  | NE1992 | IM1992 | RE1992 | TE1992 | EE2002 | M2002 | E2002 | TE2002 | NE2012 | M2012 | RE2012 TE2012 |  |
| FARM EMPLOYMENT | 834 | -1,065 | -415 | -646 | 386 | -527 | -493 | -634 | 140 | -110 | -39 | -9 |
| FORESTRY, FISHING, RELATED ACTIVITIES and OTHER EMPLOYMENT | 71 | -9 | 134 | 196 | 47 | 0 | 81 | 128 | 33 | 6 | 19 | 58 |
| MINING EMPLOYMENT | 75 | 54 | 205 | 335 | 41 | 142 | 120 | 304 | 51 | -87 | 81 | 45 |
| UTILITIES EMPLOYMENT | 40 | -27 | 75 | 87 | 45 | -37 | -48 | -41 | 19 | -7 | -2 | 10 |
| CONSTRUCTION EMPLOYMENT | 1,387 | 252 | 4,761 | 6,400 | 1,280 | -708 | $\underline{2,729}$ | 3,301 | 790 | 496 | 1,158 | 2,444 |
| MANUFACTURING EMPLOYMENT | 1,660 | -2,488 | 632 | -196 | 776 | -1,296 | 304 | -215 | 359 | -106 | 91 | 344 |
| WHOLESALE TRADE EMPLOYMENT | 700 | -235 | 3,419 | 3,884 | 545 | -101 | $\underline{2,370}$ | 2,814 | 381 | 101 | 1,561 | 2,043 |
| RETAIL TRADE EMPLOYMENT | 2,612 | -955 | 13,214 | 14,871 | 2,244 | -938 | 8,546 | 9,851 | 1,981 | 261 | 738 | 2,981 |
| TRANSPORTATION and WAREHOUSING EMPLOYMENT | 147 | 49 | 1,866 | 2,062 | 201 | 101 | 1,111 | 1,413 | 191 | 140 | 344 | 675 |
| INFORMATION EMPLOYMENT | 892 | -704 | 3,185 | 3,374 | 665 | -959 | 2,450 | 2,156 | 362 | -208 | 1,990 | 2,144 |
| FINANCE and INSURANCE EMPLOYMENT | 1,495 | 477 | 13,277 | 15,249 | 2,152 | 947 | 5,038 | 8,138 | 1,742 | -955 | $\underline{2.188}$ | 2,975 |
| Real estate and rental and LEASE EMPLOYMENT | 702 | 1,221 | $\underline{9,006}$ | 10,929 | 979 | 2,316 | 4,453 | 7,747 | 984 | 968 | 1,716 | 3,668 |
| PROFESSIONAL and TECHNICAL SERVICES EMPLOYMENT | 2,056 | 2,172 | 15,533 | 19,761 | 2,204 | 1,749 | 9,718 | 13,671 | 2,106 | 508 | $\underline{2,877}$ | 5,490 |
| MANAGEMENT of COMPANIES and EnTERPRISES EMPLOYMENT | 188 | 142 | 9,791 | 10,121 | 177 | 174 | $\underline{9,332}$ | 9,683 | 636 | 322 | 3,867 | 4,826 |
| ADMINISTRATIVE and WASTE SERVICES EMPLOYMENT | 939 | 523 | 10,836 | 12,298 | 1,039 | 240 | 8,080 | 9,359 | 1,070 | -189 | 3,926 | 4,806 |
| EDUCATIONAL SERVICES EMPLOYMENT | 187 | 331 | 2,610 | 3,127 | 253 | 379 | 1,683 | 2,315 | 328 | 106 | 168 | 602 |
| HEALTH CARE and SOCIAL ASSISTANCE EMPLOYMENT | 1,355 | 1,487 | $\underline{10,955}$ | 13,796 | 1,377 | 1,541 | $\underline{7.234}$ | 10,152 | 1,385 | 122 | $\underline{2,909}$ | 4,416 |
| ARTS, ENTERTAINMENT, and RECREATION EMPLOYMENT | 909 | 877 | 3,217 | 5,003 | 883 | 593 | 1,281 | 2,757 | 686 | -63 | 279 | 901 |
| ACCOMMODATION and FOOD SERVICES EMPLOYMENT | 1,385 | 1,158 | 7.684 | 10,227 | 1,489 | 1,288 | 3,327 | 6,104 | 1,255 | 910 | -82 | 2,083 |
| OTHER SERVICES, EXCEFT PUBLIC ADMINISTRATION EMPLOYMENT | 1,345 | 642 | 4,933 | 6,921 | 1,306 | 142 | 2,156 | 3,603 | 915 | 13 | 816 | 1,744 |
| FEDERAL CIVILIAN GOVERNMENT EMPLOYMENT | 106 | -125 | 658 | 639 | 67 | -61 | 549 | 554 | 42 | -43 | 507 | 505 |
| FEDERAL MILITARY EMPLOYMENT | 213 | -341 | 293 | 165 | 107 | -149 | 168 | 126 | 70 | -110 | 54 | 15 |
| STATE and LOCAL GOVERNMENT EMPLOYMENT | 1,284 | -536 | 7.371 | 8,119 | 1,338 | -968 | 4,133 | 4,503 | 1,091 | -796 | 926 | 1,221 |

Source: BERC Calculations
Note: NE = Jobs Change Due to Factors; IM = Change Due to Industry Mix Effect; RE = Change Due to Regional Effect; and TE = Total Change in Jobs

## E.4. Economic Growth and Industry Specialization (Location Quotient)

Although the Shift-Share Analysis gives us important information about the sources of growth, it does not indicate the level of competitiveness of each sector. To measure that level of competitiveness, we employ the location quotient method to estimate the level of specialization of each sector relative to the U.S. economy. The specification of the location quotient is as follows: Location Quotient (LQ) = Share of Industry in the County Economy/Share of Industry in the U.S. Economy. If the LQ for Sector A is higher than 1 (LQ>1), that means Sector A is much more competitive in the county than it is nationally. The county is exporting goods and services associated with sector A . If the LQ is less than $1(\mathrm{LQ}<1)$, Sector A is less developed in the county. The county is importing goods and services associated with that sector. If the $L Q=1$, then Sector $A$ is as competitive in the county as in the nation.


Source: BERC calculations

As highlighted in the table above, especially since 2007, Williamson County has become a headquarter capital in the United States. Management of Companies and Enterprises sector employment is 4.26 times more concentrated in the county compared with the U.S. economy. Over time, some of the major sectors within the retail trade started losing ground while professional services, information, and finance and insurance sectors maintained their competitive advantages compared with the U.S. economy.

## E.5. Structural Change in the County Economy

Location quotient analysis suggests that some industries lost their appeal in the county over time. Has there been a structural change in the county's economy? To explore that, we compared two periods: 1997 to 2007 and 2007 to 2017 . This chapter also looks briefly at the similarity index between the county's and the U.S. economy.

The table below suggests that the Williamson County economy experienced a certain degree of structural change between 1992 and 2007 and again between 2007 and 2017. The structural change in Williamson County was larger than the structural change in the U.S. economy during the same period.

The result of the analysis of similarities between the county economy and the U.S. economy shows that they are not similar to each other. Over the years, these two economies maintained their differences as the index value remains around 40. An index value of " 0 " suggests similar economic structures.
$\operatorname{SCI}=1 / 2 *[\operatorname{sum}(|X(i, t)-X(i, t-1)|)]$
$\operatorname{KSI}=\operatorname{sum}[(\mid X(i, R)-X(i, N))]$

| Structural Change and Similarities |  |  |  |
| :--- | ---: | ---: | ---: |
|  | $1997-2007$ | $2007-2017$ |  |
| SCI (Williamson) | 10.23 | 7.69 |  |
| SCI (U.S.) | 6.60 | 4.38 |  |
|  | 1997 | 2007 | 2017 |
| KSI (County-U.S.) | 42.28 | 37.03 | 40.17 |

Source: BERC
$S C I=$ Structural Change Index
KSI $=$ Similarities Index

## E.6. Economic Growth and Economic Diversity-Historical and Cross-Sectional Perspectives

 Finally, we look briefly at the economic diversity of the county economy. To measure the diversity, we will employ an analytical tool formulated as Diversity Index $=1$ - sum (employment share of each industry) $\wedge 2$. Level of the industry diversification provides insights into the growth performance of a region. A diversity score of " 0 " suggests a none-diversified economy, while a score of " 1 " suggests a fully diversified economy.The chart below shows that both the U.S. and the county economies are very diversified. However, over the years, while the U.S. economy became increasingly diversified, Williamson County become slightly less diversified, then bounced back to a certain extent, but never caught up with the U.S. economy on the diversity index.


## E.7. Critical Assessment

This chapter assessed the state of the count economy from a historical perspective. Based on the assessments, we can draw the following conclusions.

- Williamson County has experienced unprecedented employment and income growth in the last 25 years.
- Employment growth in the county is driven primarily by regional factors rather than industry or national conditions.
- Although the county has seen a relative loss in strength in agriculture and retail sectors over time, it has become a business headquarter capital in the U.S. as the management of companies and enterprises sector is currently four times more concentrated in the county than in the nation.
- Although not substantial, the county economy experienced some structural changes over the years. Regarding the similarities with the U.S. economy, a certain degree of dissimilarity exists between two the economies as the index value hovers around 40 out of 200 (completely dissimilar).
- The county economy is highly diversified. However, it is not as diverse as the U.S. economy.

This chapter reviews some of the critical variables associated with the status of the real estate market in Williamson County. The economic and demographic vibrancy of the county is directly associated with the real estate market. The fiscal health of local government, in general, is tied to the availability and growth of the taxable base, which includes the real estate aggregates in a county. In this context, we briefly review several indicators from historical and cross-sectional comparative perspectives.

## F.1. Housing Permits and Homeownership Rates

What is the trend in county housing permits? As one of the critical leading indicators, housing permits tell us about the state of economic activity in a region. If new housing permits increase over time, this suggests the county economy is expanding. The table below presents the state of housing starts across counties and over time. Housing permits in Williamson County started increasing around 2012 and were continuing to grow as of 2017.

| Housing Permits by Year and County |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 | 2017 |
| DAVIDSON | 1,899 | 2,320 | 2,979 | 3,373 | 1,384 | 2,669 | 3,896 | 3,924 | 6,410 |
| HAMILTON | 1,241 | 1,437 | 1,545 | 1,435 | 972 | 983 | 1,219 | 1,351 | 2,133 |
| KNOX | 2,683 | 2,417 | 2,619 | 2,661 | 928 | 1,246 | 1,488 | 1,597 | 2,798 |
| MADISON | 19 | 27 | 18 | 24 | 17 | 9 | 3 | 5 | 6 |
| MONTGOMERY | 1,396 | 1,194 | 1,278 | 1,507 | 1,373 | 1,266 | 1,116 | 1,307 | 1,716 |
| RUTHERFORD | 1,673 | 2,214 | 2,958 | 2,844 | 1,317 | 1,803 | 2,099 | 2,448 | 3,569 |
| SHELBY | 4,601 | 3,844 | 4,184 | 2,355 | 1,220 | 946 | 1,003 | 1,109 | 1,692 |
| WASHINGTON | 294 | 401 | 646 | 691 | 305 | 416 | 458 | 310 | 574 |
| WEAKLEY | 50 | 140 | 106 | 75 | 36 | 33 | 23 | 37 | 41 |
| WILLIAMSON | 1,083 | 1,608 | 1,554 | 1,039 | 1,060 | 1,585 | 1,965 | 2,004 | 2,859 |
| WILSON | 527 | 912 | 926 | 1,246 | 747 | 959 | 962 | 1,209 | 2,236 |

Source: Census Bureau and BERC

As the demand for new housing increases with economic expansion and population growth, an increase in the homeownership rate provides stable communities and wealth accumulation for community members. Williamson County has one of the highest county homeownership rates in Tennessee. Although the homeownership rate declined slightly from 85.80 percent in 2009 to 83.36 percent in 2016, it remains about 17 percentage points higher than the homeownership rate for the state of Tennessee.

| Homeownership Rate |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| DAVIDSON | 61.52 | 60.00 | 59.15 | 57.88 | 56.72 | 55.74 | 55.60 | 55.59 |
| HAMILTON | 69.85 | 68.29 | 68.06 | 67.36 | 66.51 | 65.88 | 66.03 | 66.16 |
| KNOX | 71.38 | 71.57 | 70.85 | 69.95 | 69.22 | 67.97 | 66.99 | 66.53 |
| MADISON | 69.06 | 68.39 | 67.18 | 67.76 | 66.56 | 65.02 | 64.24 | 63.35 |
| MONTGOMERY | 66.80 | 66.60 | 65.25 | 64.57 | 62.84 | 62.31 | 61.06 | 61.10 |
| RUTHERFORD | 71.81 | 71.11 | 70.78 | 69.70 | 69.58 | 68.42 | 67.98 | 66.81 |
| SHELBY | 63.55 | 62.99 | 62.10 | 61.03 | 59.93 | 58.63 | 57.84 | 56.47 |
| WASHINGTON | 71.50 | 70.25 | 68.98 | 69.47 | 68.70 | 69.45 | 69.05 | 68.39 |
| WEAKLY | 69.10 | 66.90 | 66.60 | 66.04 | 66.90 | 67.23 | 69.76 | 68.98 |
| WILLIAMSON | $\mathbf{8 5 . 8 0}$ | $\mathbf{8 5 . 5 1}$ | $\mathbf{8 4 . 8 3}$ | $\mathbf{8 4 . 3 5}$ | $\mathbf{8 4 . 0 0}$ | 83.76 | 84.12 | 83.36 |
| WILSON | 83.33 | 83.46 | 82.56 | 81.10 | 80.56 | 79.52 | 79.14 | 78.22 |
| Tennessee | 71.1 | 71 | 69.3 | 67.9 | 66.8 | 66.7 | 66.5 | 66.4 |
| Source: Census Bureau (www.census.gov) and BERC |  |  |  |  |  |  |  |  |

## F.2. New and Existing Home Sales and Values from a Historical Perspective

What observations can be made regarding the sales volume of new and existing homes and their median values in Williamson County? Historical data indicate a vibrant real estate market across Tennessee regarding the number of new and existing home sales. Williamson County had 3,907 home sales in 2012. This number reached 5,830 in 2016 at a growth rate of nearly 50 percent in a short period.

| All Home Sales: Volume (1992-2016) |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 |
| DAVIDSON | 7,384 | 9,638 | 10,185 | 12,979 | 6,876 | 10,867 | 13,341 | 13,599 |
| HAMILTON | 3,352 | 3,909 | 4,402 | 4,664 | 3,683 | 4,459 | 5,104 | 6,010 |
| KNOX | 6,369 | 4,840 | 5,376 | 2,916 | 4,371 | 5,995 | 7,564 | 8,038 |
| MADISON | 560 | 1,443 | 1,451 | 1,608 | 931 | 1,118 | 1,140 | 1,305 |
| MONTGOMERY | 2,298 | 2,317 | 2,618 | 4,523 | 3,005 | 2,471 | 2,938 | 3,613 |
| RUTHERFORD | 2,146 | 3,989 | 4,901 | 7,098 | 2,844 | 4,317 | 6,664 | 7,507 |
| SHELBY | 11,655 | 13,482 | 11,400 | 8,421 | 5,477 | 6,640 | 7,622 | 8,692 |
| WASHINGTON | 1,250 | 1,432 | 1,482 | 2,125 | 1,231 | 1,452 | 1,690 | 1,915 |
| WEAKLEY | 235 | 248 | 309 | 349 | 217 | 230 | 254 | 270 |
| WILLIAMSON | 2,037 | 3,335 | 4,062 | 3,908 | 3,907 | 5,160 | 5,791 | 5,830 |
| WILSON | 921 | 1,502 | 1,685 | 2,320 | 1,541 | 2,414 | 2,505 | 2,563 |
| Tennessee | 59,853 | 73,471 | 76,317 | 88,385 | 54,610 | 73,327 | 87,723 | 96,876 |

Source: THDA, BERC, and Comptroller's Office, TN

How does the median price compare with other counties? The table that follows shows inflation-adjusted median prices across counties. The median home price in Williamson County is almost twice that of Davidson County.

| All Home Sales: Median Price $(1992-2016)$ |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties |  |  |  |  |  |  |  |  |
| DAVIDSON |  |  |  |  |  |  |  |  |
| HAMILTON |  |  |  |  |  |  |  |  |

Source: THDA, BERC, and Comptroller's Office, TN

## F.3. Value of Assessed Property from a Historical Perspective

Total assessed real property values (both residential and commercial) are the basis for property tax collections in the county. To present a comparative perspective, all values are inflationadjusted and on a per capita basis. From a historical perspective, Williamson County has by far the largest per capita residential property assessment value. All values in these tables are in 2009 dollars.

| Assessed Value of Residential Property |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Counties | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| DAVIDSON | 11,716 | 13,436 | 14,001 | 13,348 | 13,379 | 18,010 |
| HAMILTON | 10,069 | 11,957 | 12,783 | 12,419 | 12,343 | 13,336 |
| KNOX | 10,780 | 12,421 | 13,481 | 13,125 | 13,055 | 14,005 |
| MADISON | 7,718 | 8,452 | 8,612 | 8,367 | 8,337 | 8,266 |
| MONTGOMERY | 6,771 | 8,717 | 9,395 | 10,009 | 10,090 | 9,998 |
| RUTHERFORD | 10,028 | 11,728 | 11,122 | 10,706 | 10,677 | 10,694 |
| SHELBY | 9,799 | 11,022 | 10,394 | 9,173 | 9,142 | 9,863 |
| WASHINGTON | 9,512 | 11,052 | 13,392 | 12,473 | 12,328 | 12,046 |
| WEAKLEY | 5,115 | 5,069 | 5,484 | 5,465 | 5,507 | 5,484 |
| WILLIAMSON | 20,516 | 26,249 | 25,788 | 25,494 | 30,339 | 30,317 |
| WILSON | 11,824 | 14,467 | 14,421 | 13,994 | 16,187 | 16,073 |
| Tennessee | 9,396 | 11,227 | 11,742 | 11,229 | 11,428 | 12,131 |

Source: BERC and Comptroller's Office, TN

As presented in the table below, industrial and commercial real estate assessment value in Williamson County is the second highest in Tennessee on a per capita basis.

|  | Industrial and Commercial Real Estate Assessment Value |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Counties | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| DAVIDSON | 11,813 | 11,053 | 11,008 | 11,782 | 11,947 | 18,795 |
| HAMILTON | 7,016 | 7,543 | 7,668 | 7,837 | 7,827 | 8,913 |
| KNOX | 6,136 | 6,201 | 7,118 | 7,496 | 7,440 | 8,351 |
| MADISON | 5,700 | 6,125 | 6,929 | 7,143 | 7,110 | 7,141 |
| MONTGOMERY | 3,845 | 4,684 | 5,055 | 5,070 | 5,055 | 4,995 |
| RUTHERFORD | 5,710 | 5,815 | 6,421 | 6,856 | 6,867 | 6,959 |
| SHELBY | 6,716 | 6,114 | 5,581 | 5,543 | 5,547 | 6,271 |
| WASHINGTON | 5,079 | 5,510 | 6,447 | 6,326 | 6,331 | 6,409 |
| WEAKLEY | 2,913 | 2,825 | 2,957 | 3,165 | 3,185 | 3,157 |
| WILLIAMSON | 9,252 | 9,526 | 11,070 | 10,939 | 13,982 | 13,770 |
| WILSON | 4,349 | 5,658 | 6,407 | 6,111 | 6,939 | 7,041 |
| Tennessee | 5,426 | 5,567 | 5,838 | 5,996 | 6,167 | 7,110 |

Source: BERC and Comptroller's Office, TN

## F.4. Critical Assessment

Real estate market indicators closely follow the trend reflected thus far in the examination of economic and population growth in Williamson County. There is a healthy real estate market with a significantly higher assessed value of residential and commercial real property than in most counties in Tennessee. A brief review of real estate market indicators leads to the following notable observations.

- Housing permits are increasing.
- The homeownership rate in Williamson County is higher than in any other Tennessee county.
- The number of existing and new home sales is significant.
- Williamson County has significantly higher median home prices for existing and new homes (inflation-adjusted prices).
- In Williamson County, on per capita basis, there is a significant total assessed value of real property.


## Chapter G. Local Government Revenues

How does the county finance its operations? What are the sources of local government revenue? How does local government revenue grow over time? In this chapter, we will approach these questions using a consistent database that captures the dynamics of local government revenues. All monetary values are inflation-adjusted 2009 dollars. Most of the indicators analyzed in this chapter cover the period 1992-2015. Although recent data about county revenues are available through county audit reports in the comptroller's office, we decided to use a single source of data for the analysis to maintain consistency. For each data category, four sets of figures are presented: inflation-adjusted total values, inflation-adjusted per capita values, percent share of the variable in total revenues, and revenue growth rates comparing three periods (1992-2015, 2002-2015, and 2010-2015) along with corresponding population growth rates.

This chapter will cover the following data categories: total county revenues, total revenues from own sources, total taxes, total intergovernmental revenues, total charges and miscellaneous revenues, property taxes, and state intergovernmental revenues. Snapshot tables covering several periods and the 11 largest counties are included. An appendix provides a full perspective on most indicators included in the study.

## G.1. Total Revenues from a Historical Perspective

What does total county revenue include? In this chapter, major categories of county revenue are intergovernmental revenues, taxes, total charges and miscellaneous revenues, and revenues of all major component units such as education.

In 2015, inflation-adjusted total revenues of the Williamson County government were $\$ 664.3$ million, an increase of 430 percent from $\$ 125.3$ million in 1992. In that period, Williamson County's growth rate of total revenues is the largest among the 11 largest counties in Tennessee, while its population increased about 140 percent.

When we shorten the period, we still see tremendous growth in county revenues. There was revenue growth of 68 percent between 2002 and 2015 and about 28 percent between 2010 and 2015. In the corresponding periods, the county population increased 55 percent, and 15 percent, respectively.

| Counties | Total Revenues (in 2009 dollars) |  |  |  | Growth - Revenues |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 2002 | 2010 | 2015 | $\left\lvert\, \begin{aligned} & 1992- \\ & 2015 \end{aligned}\right.$ | $\begin{aligned} & 2002- \\ & 2015 \end{aligned}$ | $\begin{aligned} & 2010- \\ & 2015 \end{aligned}$ | 1992- <br> 2015 | $\begin{array}{r} 2002 \\ 2015 \end{array}$ | $\begin{array}{r} 2010- \\ 2015 \end{array}$ |
| DAVIDSON | \$2,288,654,993 | \$2,847,826,442 | \$3,625,884,136 | \$3,720,978,984 | 62.58\% | 30.66\% | 2.62\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$652,614,206 | \$1,004,754,696 | \$1,171,770,632 | \$1,273,571,670 | 95.15\% | 26.75\% | 8.69\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$420,577,951 | \$665,765,724 | \$738,766,195 | \$822,058,622 | 95.46\% | 23.48\% | 11.27\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$299,136,991 | \$607,195,510 | \$757,591,021 | \$789,526,950 | 163.93\% | 30.03\% | 4.22\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$199,955,241 | \$238,834,092 | \$328,595,319 | \$443,484,258 | 121.79\% | 85.69\% | 34.96\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$150,074,132 | \$278,354,081 | \$455,460,242 | \$526,053,836 | 250.53\% | 88.99\% | 15.50\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,281,661,399 | \$1,806,291,850 | \$2,052,741,189 | \$2,482,936,766 | 93.73\% | 37.46\% | 20.96\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$78,752,063 | \$116,221,630 | \$148,055,640 | \$136,399,010 | 73.20\% | 17.36\% | -7.87\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$65,132,738 | \$92,280,461 | \$103,583,760 | \$98,939,542 | 51.90\% | 7.22\% | -4.48\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$125,260,861 | \$394,670,036 | \$520,130,247 | \$664,304,309 | 430.34\% | 68.32\% | 27.72\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$70,515,008 | \$149,024,723 | \$188,874,898 | \$218,109,992 | 209.31\% | 46.36\% | 15.48\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

How does total revenue per capita grow over time? In 1992, total revenue per capita was $\$ 1,419$ (in 2009 dollars). In real dollars, total revenue per capita rose to $\$ 3,138$ in 2015, an increase of 121 percent from 1992. In subsequent periods, the per capita growth rate in Williamson County was 8.9 percent between 2002 and 2015 and 11.11 percent between 2010 and 2015. From a comparative perspective, Davidson, Washington, and Weakley counties experienced a decline in per capita local government revenue between 2010 and 2015.

| Per Capita Total County Revenues (in 2009 dollars) |  |  |  |  | Growth - Revenues (Per Capita) |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$4,358 | \$4,960 | \$5,773 | \$5,486 | 25.88\% | 10.61\% | -4.98\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$2,243 | \$3,222 | \$3,474 | \$3,602 | 60.56\% | 11.80\% | 3.69\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$1,202 | \$1,710 | \$1,706 | \$1,821 | 51.46\% | 6.52\% | 6.74\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$3,682 | \$6,494 | \$7,710 | \$8,089 | 119.66\% | 24.56\% | 4.91\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$1,852 | \$1,729 | \$1,897 | \$2,294 | 23.87\% | 32.66\% | 20.95\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$1,156 | \$1,416 | \$1,727 | \$1,763 | 52.47\% | 24.45\% | 2.09\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,514 | \$2,001 | \$2,210 | \$2,652 | 75.15\% | 32.54\% | 19.99\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$826 | \$1,061 | \$1,200 | \$1,079 | 30.71\% | 1.73\% | -10.01\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$2,018 | \$2,679 | \$2,957 | \$2,925 | 44.91\% | 9.16\% | -1.11\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$1,419 | \$2,882 | \$2,825 | \$3,138 | 121.11\% | 8.90\% | 11.11\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$992 | \$1,602 | \$1,647 | \$1,694 | 70.75\% | 5.74\% | 2.83\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

## G.2. Sources of Revenue

Revenue from its own sources. How much revenue does the county generate from its own sources? In 2015, the inflation-adjusted revenues from its own sources for Williamson County were $\$ 534$ million, reflecting growth of about 473 percent from 1992. In later periods, revenues from its own sources continued to increase. For example, the county experienced 70 percent revenue growth between 2002 and 2015 and 32 percent growth between 2010 and 2015. Among the 11 largest counties in Tennessee, Williamson County had the second-highest revenue growth from its own sources between 2010 and 2015.

| Total Revenues from Own Sources (in 2009 dollars) |  |  |  | Growth - Revenues Own |  |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$1,927,585,532 | \$2,151,002,062 | \$3,106,303,799 | \$3,193,915,840 | 65.70\% | 48.49\% | 2.82\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$562,580,077 | \$811,657,914 | \$937,997,895 | \$904,633,681 | 60.80\% | 11.46\% | -3.56\% | 21.55\% | 13.37\% | 4.82\% |
| kNOX | \$271,747,280 | \$470,678,793 | \$482,346,807 | \$555,459,852 | 104.40\% | 18.01\% | 15.16\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$254,670,322 | \$535,198,491 | \$673,246,240 | \$717,416,721 | 181.70\% | 34.05\% | 6.56\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$147,150,810 | \$135,486,125 | \$171,876,875 | \$231,445,639 | 57.28\% | 70.83\% | 34.66\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$102,807,229 | \$174,563,600 | \$277,170,374 | \$327,190,106 | 218.26\% | 87.43\% | 18.05\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,046,250,035 | \$1,470,706,742 | \$1,654,605,374 | \$1,559,439,538 | 49.05\% | 6.03\% | -5.75\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$55,601,869 | \$74,872,195 | \$93,160,064 | \$91,141,842 | 63.92\% | 21.73\% | -2.17\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$49,206,926 | \$62,527,220 | \$69,688,056 | \$68,996,447 | 40.22\% | 10.35\% | -0.99\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$93,273,561 | \$315,184,051 | \$404,576,353 | \$534,085,367 | 472.60\% | 69.45\% | 32.01\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$45,255,546 | \$101,535,989 | \$117,055,080 | \$138,413,971 | 205.85\% | 36.32\% | 18.25\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

What is the per capita revenue from its own sources, and how did it grow over time? In 1992, Williamson County's average per capita revenue from its own sources was $\$ 1,057$, which increased to $\$ 2,523$ in 2015. The figures in the next table are inflation-adjusted in 2009 dollars.

| Per Capita Total Revenues from Own Sources (in 2009 dollars) |  |  |  |  | $\begin{gathered} \text { Growth - Revenue Own (PC) } \\ \text { 1992-2015 2002-2015 2010-2015 } \end{gathered}$ |  |  | Growth - Population <br> 1992-2015 2002-201 2010-2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 |  |  |  |  |  |  |
| DAVIDSON | \$3,670 | \$3,746 | \$4,946 | \$4,709 | 28.28\% | 25.70\% | -4.80\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$1,934 | \$2,602 | \$2,781 | \$2,558 | 32.30\% | -1.69\% | -8.00\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$777 | \$1,209 | \$1,114 | \$1,230 | 58.40\% | 1.80\% | 10.47\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$3,135 | \$5,724 | \$6,852 | \$7,350 | 134.45\% | 28.41\% | 7.27\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$1,363 | \$981 | \$992 | \$1,197 | -12.15\% | 22.05\% | 20.67\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$792 | \$888 | \$1,051 | \$1,096 | 38.43\% | 23.43\% | 4.34\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,236 | \$1,629 | \$1,782 | \$1,666 | 34.76\% | 2.24\% | -6.50\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$583 | \$684 | \$755 | \$721 | 23.71\% | 5.52\% | -4.44\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$1,525 | \$1,815 | \$1,990 | \$2,039 | 33.76\% | 12.34\% | 2.51\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$1,057 | \$2,301 | \$2,197 | \$2,523 | 138.73\% | 9.64\% | 14.84\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$637 | \$1,091 | \$1,021 | \$1,075 | 68.84\% | -1.51\% | 5.30\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

What is the share of revenues from own sources in total county revenue? In 1992, inflationadjusted revenues from own sources constituted about 75 percent of total Williamson County revenues. Over time the share of revenues from own sources increased to nearly 81 percent in 2015.

| Share of Total Revenues from Own Sources in Total Revenues |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Counties | 1992 | 2002 | 2010 | 2015 |
| DAVIDSON | $84.2 \%$ | $75.5 \%$ | $85.7 \%$ | $85.8 \%$ |
| HAMILTON | $86.2 \%$ | $80.8 \%$ | $80.0 \%$ | $71.0 \%$ |
| KNOX | $64.6 \%$ | $70.7 \%$ | $65.3 \%$ | $67.6 \%$ |
| MADISON | $85.1 \%$ | $88.1 \%$ | $88.9 \%$ | $90.9 \%$ |
| MONTGOMERY | $73.6 \%$ | $56.7 \%$ | $52.3 \%$ | $52.2 \%$ |
| RUTHERFORD | $68.5 \%$ | $62.7 \%$ | $60.9 \%$ | $62.2 \%$ |
| SHELBY | $81.6 \%$ | $81.4 \%$ | $80.6 \%$ | $62.8 \%$ |
| WASHINGTON | $70.6 \%$ | $64.4 \%$ | $62.9 \%$ | $66.8 \%$ |
| WEAKLEY | $75.5 \%$ | $67.8 \%$ | $67.3 \%$ | $69.7 \%$ |
| WILLIAMSON | $\mathbf{7 4 . 5 \%}$ | $\mathbf{7 9 . 9 \%}$ | $\mathbf{7 7 . 8 \%}$ | $\mathbf{8 0 . 4 \%}$ |
| WILSON | $64.2 \%$ | $68.1 \%$ | $62.0 \%$ | $63.5 \%$ |

Source: BERC and Census Bureau, Local Government Finances

Revenues from total taxes. Local tax revenues make up an important part of total local government revenues. In 2015, total tax revenues collected in Williamson County were \$320.4 million, a growth of about 290 percent from 1992. The growth of inflation-adjusted tax revenues continued to grow by 74 percent between 2002 and 2015 and by 38 percent between 2010 and 2015. The increase of tax revenues between 2010 and 2015 was the highest among the 11 largest counties in Tennessee.

Total taxes per capita increased from $\$ 932$ in 1992 to $\$ 1,514$ in 2015 . For this period, the growth of total taxes per capita was 62 percent. From 2010 to 2015, the growth was nearly 20 percent.

| Per Capita Total Taxes (in 2009 dollars) |  |  |  |  | $$ |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 |  |  |  | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$1,275 | \$1,385 | \$1,833 | \$1,991 | 56.15\% | 43.77\% | 8.62\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$506 | \$779 | \$946 | \$899 | 77.83\% | 15.38\% | -4.95\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$650 | \$1,065 | \$988 | \$998 | 53.48\% | -6.25\% | 1.01\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$708 | \$1,038 | \$912 | \$996 | 40.71\% | -4.05\% | 9.14\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$563 | \$731 | \$821 | \$838 | 49.06\% | 14.67\% | 2.19\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$660 | \$657 | \$860 | \$864 | 30.78\% | 31.38\% | 0.50\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$689 | \$1,159 | \$1,187 | \$1,158 | 68.09\% | -0.08\% | -2.44\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$526 | \$576 | \$660 | \$631 | 20.05\% | 9.66\% | -4.39\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$407 | \$559 | \$484 | \$530 | 30.24\% | -5.25\% | 9.37\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$932 | \$1,342 | \$1,262 | \$1,514 | 62.37\% | 12.83\% | 19.94\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$525 | \$798 | \$866 | \$903 | 71.91\% | 13.06\% | 4.28\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Finally, a look at the share of total taxes in total county revenues indicates that it decreased from 65.7 percent in 1992 to 44.7 percent in 2010. It started growing again in 2015, reaching 48.2 percent.

| Total Taxes (in 2009 dollars) |  |  |  |  | $$ |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 |  |  |  | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$669,624,025 | \$795,232,495 | \$1,151,261,645 | \$1,350,573,159 | 101.69\% | 69.83\% | 17.31\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$147,113,044 | \$243,085,720 | \$319,137,655 | \$317,974,809 | 116.14\% | 30.81\% | -0.36\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$227,501,609 | \$414,616,934 | \$427,917,523 | \$450,577,726 | 98.05\% | 8.67\% | 5.30\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$57,477,551 | \$97,014,195 | \$89,633,361 | \$97,175,766 | 69.07\% | 0.17\% | 8.41\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$60,726,774 | \$100,979,353 | \$142,129,598 | \$162,076,525 | 166.89\% | 60.50\% | 14.03\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$85,734,467 | \$129,205,920 | \$226,717,362 | \$257,773,495 | 200.66\% | 99.51\% | 13.70\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$583,106,275 | \$1,046,220,582 | \$1,102,352,120 | \$1,084,136,060 | 85.92\% | 3.62\% | -1.65\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$50,131,480 | \$63,037,276 | \$81,473,247 | \$79,747,171 | 59.08\% | 26.51\% | -2.12\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$13,125,577 | \$19,254,015 | \$16,963,592 | \$17,919,091 | 36.52\% | -6.93\% | 5.63\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$82,281,031 | \$183,748,093 | \$232,411,242 | \$320,436,423 | 289.44\% | 74.39\% | 37.87\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$37,324,810 | \$74,270,143 | \$99,258,261 | \$116,231,127 | 211.40\% | 56.50\% | 17.10\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

| Share of Total Taxes in Total Revenues |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 5}$ |
| DAVIDSON | $29.3 \%$ | $27.9 \%$ | $31.8 \%$ | $36.3 \%$ |
| HAMILTON | $22.5 \%$ | $24.2 \%$ | $27.2 \%$ | $25.0 \%$ |
| KNOX | $54.1 \%$ | $62.3 \%$ | $57.9 \%$ | $54.8 \%$ |
| MADISON | $19.2 \%$ | $16.0 \%$ | $11.8 \%$ | $12.3 \%$ |
| MONTGOMERY | $30.4 \%$ | $42.3 \%$ | $43.3 \%$ | $36.5 \%$ |
| RUTHERFORD | $57.1 \%$ | $46.4 \%$ | $49.8 \%$ | $49.0 \%$ |
| SHELBY | $45.5 \%$ | $57.9 \%$ | $53.7 \%$ | $43.7 \%$ |
| WASHINGTON | $63.7 \%$ | $54.2 \%$ | $55.0 \%$ | $58.5 \%$ |
| WEAKLEY | $20.2 \%$ | $20.9 \%$ | $16.4 \%$ | $18.1 \%$ |
| WILLIAMSON | $\mathbf{6 5 . 7 \%}$ | $\mathbf{4 6 . 6 \%}$ | $\mathbf{4 4 . 7 \%}$ | $48.2 \%$ |
| WILSON | $52.9 \%$ | $49.8 \%$ | $52.6 \%$ | $53.3 \%$ |

Source: BERC and Census Bureau, Local Government Finances

Total intergovernmental revenues. What is the trend in total intergovernmental revenues? In 1992, total intergovernmental revenues were about $\$ 32$ million, increasing over time by 307 percent and reaching $\$ 130$ million in 2015. In the period between 2010 and 2015, the growth rate was 13 percent.

| Total Intergovernmental Revenues (in 2009 dollars) |  |  |  |  | Growth - IGR |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$361,069,460 | \$696,824,380 | \$519,580,337 | \$527,063,144 | 45.97\% | -24.36\% | 1.44\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$90,034,129 | \$193,096,783 | \$233,772,737 | \$368,937,989 | 309.78\% | 91.06\% | 57.82\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$148,830,671 | \$195,086,931 | \$256,419,388 | \$266,598,771 | 79.13\% | 36.66\% | 3.97\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$44,466,669 | \$71,997,019 | \$84,344,781 | \$72,110,229 | 62.17\% | 0.16\% | -14.51\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$52,804,431 | \$103,347,967 | \$156,718,444 | \$212,038,619 | 301.55\% | 105.17\% | 35.30\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$47,266,904 | \$103,790,481 | \$178,289,869 | \$198,863,730 | 320.73\% | 91.60\% | 11.54\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$235,411,363 | \$335,585,108 | \$398,135,815 | \$923,497,228 | 292.29\% | 175.19\% | 131.96\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$23,150,194 | \$41,349,435 | \$54,895,576 | \$45,257,168 | 95.49\% | 9.45\% | -17.56\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$15,925,812 | \$29,753,240 | \$33,895,704 | \$29,943,095 | 88.02\% | 0.64\% | -11.66\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$31,987,300 | \$79,485,985 | \$115,553,894 | \$130,218,942 | 307.10\% | 63.83\% | 12.69\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$25,259,462 | \$47,488,733 | \$71,819,818 | \$79,696,020 | 215.51\% | 67.82\% | 10.97\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Per capita intergovernmental revenue increased from $\$ 362$ in 1992 to $\$ 615$ in 2015, an increase of 70 percent. Between 2010 and 2015, per capita intergovernmental revenue decreased about two percent.

| Per Capita Total Intergovernmental Revenues (in 2009 dollars) |  |  |  |  | Growth - IGR (PC) |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$688 | \$1,214 | \$827 | \$777 | 13.02\% | -35.97\% | -6.07\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$309 | \$619 | \$693 | \$1,043 | 237.14\% | 68.52\% | 50.56\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$425 | \$501 | \$592 | \$591 | 38.81\% | 17.89\% | -0.27\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$547 | \$770 | \$858 | \$739 | 34.96\% | -4.06\% | -13.94\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$489 | \$748 | \$905 | \$1,097 | 124.27\% | 46.58\% | 21.25\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$364 | \$528 | \$676 | \$666 | 83.00\% | 26.17\% | -1.41\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$278 | \$372 | \$429 | \$987 | 254.67\% | 165.34\% | 130.10\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$243 | \$378 | \$445 | \$358 | 47.54\% | -5.13\% | -19.47\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$493 | \$864 | \$968 | \$885 | 79.36\% | 2.46\% | -8.54\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$362 | \$580 | \$628 | \$615 | 69.73\% | 6.00\% | -1.97\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$355 | \$510 | \$626 | \$619 | 74.17\% | 21.24\% | -1.18\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances
MTSU BERC
A Case Study for Williamson County
Page | 56

What about the share of intergovernmental revenue in total revenues? In 1992, about 26 percent of total revenues were intergovernmental revenues. This share declined to 19.6 percent in 2015.

|  | Share of Intergovernmental Revenues in Total Revenues |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | 2015 |
| DAVIDSON | $15.8 \%$ | $24.5 \%$ | $14.3 \%$ | $14.2 \%$ |
| HAMILTON | $13.8 \%$ | $19.2 \%$ | $20.0 \%$ | $29.0 \%$ |
| KNOX | $35.4 \%$ | $29.3 \%$ | $34.7 \%$ | $32.4 \%$ |
| MADISON | $14.9 \%$ | $11.9 \%$ | $11.1 \%$ | $9.1 \%$ |
| MONTGOMERY | $26.4 \%$ | $43.3 \%$ | $47.7 \%$ | $47.8 \%$ |
| RUTHERFORD | $31.5 \%$ | $37.3 \%$ | $39.1 \%$ | $37.8 \%$ |
| SHELBY | $18.4 \%$ | $18.6 \%$ | $19.4 \%$ | $37.2 \%$ |
| WASHINGTON | $29.4 \%$ | $35.6 \%$ | $37.1 \%$ | $33.2 \%$ |
| WEAKLEY | $24.5 \%$ | $32.2 \%$ | $32.7 \%$ | $30.3 \%$ |
| WILLIAMSON | $\mathbf{2 5 . 5 \%}$ | $20.1 \%$ | $\mathbf{2 2 . 2 \%}$ | $\mathbf{1 9 . 6 \%}$ |
| WILSON | $35.8 \%$ | $31.9 \%$ | $38.0 \%$ | $36.5 \%$ |

Source: BERC and Census Bureau, Local Government Finances

Per capita intergovernmental state revenue. Because state intergovernmental revenue makes up a substantial portion of total intergovernmental revenue, we look only at per capita state intergovernmental revenue in this section. Similar to our discussion in previous chapters, per capita state intergovernmental revenue increased about 71 percent between 1992 and 2015, reaching $\$ 604$. However, between 2010 and 2015, it declined by 2.6 percent.

| Per Capita Total State IGR (in 2009 dollars) |  |  |  |  | $$ |  |  | Growth - Population 1992-2015 2002-2015 2010-2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAVIDSON | \$652 | \$702 | \$799 | \$739 | 13.41\% | 5.36\% | -7.52\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$232 | \$498 | \$613 | \$1,021 | 339.44\% | 104.96\% | 66.57\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$398 | \$469 | \$542 | \$560 | 40.70\% | 19.33\% | 3.32\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$520 | \$724 | \$803 | \$700 | 34.53\% | -3.30\% | -12.89\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$470 | \$708 | \$862 | \$1,032 | 119.45\% | 45.71\% | 19.78\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$360 | \$519 | \$668 | \$651 | 80.76\% | 25.57\% | -2.59\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$237 | \$328 | \$364 | \$926 | 290.69\% | 182.52\% | 154.52\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$205 | \$347 | \$325 | \$337 | 64.13\% | -2.83\% | 3.61\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$479 | \$840 | \$931 | \$869 | 81.42\% | 3.41\% | -6.72\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$354 | \$571 | \$620 | \$604 | 70.67\% | 5.91\% | -2.59\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$353 | \$509 | \$616 | \$589 | 66.99\% | 15.72\% | -4.35\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Total charges and miscellaneous revenues. Finally, in this section, we briefly highlight the trend in a significant revenue source in recent years: charges and miscellaneous revenues. Per capita charges and miscellaneous revenues totaled $\$ 125$ in 1992. This figure grew dramatically to $\$ 1,009$ in 2015, a 710 percent increase. Between 2010 and 2015, the growth rate was about 8 percent.

| Per Capita Total Charges and Misc. Revenues (in 2009 dollars) |  |  |  |  | Growth - Charges \& Misc. (PC) |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$673 | \$872 | \$731 | \$703 | 4.51\% | -19.41\% | -3.81\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$1,427 | \$1,823 | \$1,834 | \$1,650 | 15.65\% | -9.48\% | -10.01\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$126 | \$144 | \$126 | \$198 | 56.51\% | 37.51\% | 57.50\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$2,427 | \$4,686 | \$5,940 | \$6,277 | 158.57\% | 33.93\% | 5.67\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$801 | \$250 | \$172 | \$359 | -55.17\% | 43.63\% | 108.97\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$132 | \$231 | \$191 | \$233 | 76.85\% | 0.78\% | 21.61\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$491 | \$489 | \$460 | \$483 | -1.60\% | -1.24\% | 4.98\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$57 | \$108 | \$95 | \$90 | 57.20\% | -16.54\% | -4.76\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$59 | \$216 | \$335 | \$293 | 395.96\% | 35.90\% | -12.55\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$125 | \$960 | \$935 | \$1,009 | 710.33\% | 5.17\% | 7.96\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$112 | \$293 | \$155 | \$172 | $54.41 \%$ | -41.22\% | 11.19\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

## G.3. Property Taxes from a Historical and Cross-Sectional Perspective

Among local taxes, property tax has a special place, as many local government functions are financed by locally generated taxes. Williamson County has a solid property tax base per capita. In this section, we look at revenue generated from property taxes and how its share has evolved over the years.

In 2015, Williamson County's revenue from property taxes was $\$ 210.3$ million, an increase of 285 percent from $\$ 54.7$ million in 1992. Between 2002 and 2015, the county saw 84 percent growth, and between 2010 and 2015, 39 percent. No other county in our sample list experienced a growth rate of more than 15 percent between 2010 and 2015.

| Counties | Property Tax (in 2009 dollars) |  |  |  | Growth - Property Tax <br> 1992-2015 2002-2015 2010-2015 |  |  | Growth - Population <br> 1992-2015 2002-2015 2010-2015 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DAVIDSON | \$368,316,222 | 686,035,192 | \$779,987,802 | \$848,362,730 | 130.34\% | 23.66\% | 8.77\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$95,949,310 | \$179,223,970 | \$241,539,355 | \$242,016,423 | 152.23\% | 35.04\% | 0.20\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$126,170,028 | \$240,630,932 | \$239,009,178 | \$241,226,332 | 91.19\% | 0.25\% | 0.93\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$25,073,433 | \$39,757,549 | \$42,179,768 | \$45,944,959 | 83.24\% | 15.56\% | 8.93\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$32,653,090 | \$55,920,953 | \$83,680,757 | \$96,420,383 | 195.29\% | 72.42\% | 15.22\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$52,994,657 | \$80,343,065 | \$132,312,868 | \$137,466,775 | 159.40\% | 71.10\% | 3.90\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$312,715,752 | \$619,892,167 | \$724,701,681 | \$721,722,491 | 130.79\% | 16.43\% | -0.41\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$24,960,137 | \$29,844,072 | \$46,298,683 | \$43,542,715 | 74.45\% | 45.90\% | -5.95\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$7,582,454 | \$10,389,762 | \$9,476,356 | \$10,602,753 | 39.83\% | 2.05\% | 11.89\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$54,663,328 | \$114,472,535 | \$151,785,978 | \$210,315,032 | 284.75\% | 83.73\% | 38.56\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$29,557,725 | \$48,449,454 | \$64,631,639 | \$68,883,185 | 133.05\% | 42.18\% | 6.58\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Per capita property tax revenue increased from $\$ 619$ in 1992 to $\$ 994$ in 2015, an increase of 60.4 percent. While many counties in our reference list experienced a decline in per capita property tax revenues between 2010 and 2015, Williamson County recorded a 20 percent increase, suggesting a shift from other revenues to property taxes and charges and miscellaneous revenues.

| Per Capita Property Tax (in 2009 dollars) |  |  |  |  | Growth - Property Tax (PC) |  |  | Growth - Poulation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992-2015 | 2002-2015 | 2010-2015 | 1992-2015 | 2002-2015 | 2010-2015 |
| DAVIDSON | \$701 | \$1,195 | \$1,242 | \$1,251 | 78.33\% | 4.68\% | 0.71\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$330 | \$575 | \$716 | \$684 | 107.52\% | 19.11\% | -4.41\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$361 | \$618 | \$552 | \$534 | 48.16\% | -13.52\% | -3.18\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$309 | \$425 | \$429 | \$471 | 52.50\% | 10.70\% | 9.65\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$302 | \$405 | \$483 | \$499 | 64.92\% | 23.19\% | 3.26\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$408 | \$409 | \$502 | \$461 | 12.83\% | 12.67\% | -8.17\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$369 | \$687 | \$780 | \$771 | 108.66\% | 12.26\% | -1.21\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$262 | \$272 | \$375 | \$345 | 31.65\% | 26.47\% | -8.14\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$235 | \$302 | \$271 | \$313 | 33.40\% | 3.90\% | 15.84\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$619 | \$836 | \$824 | \$994 | 60.41\% | 18.87\% | 20.54\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$416 | \$521 | \$564 | \$535 | 28.65\% | 2.72\% | -5.09\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Finally, the share of property tax revenues in total revenues declined from 43.6 percent to 29 percent from 1992 to 2002 but started increasing again in recent years, reaching nearly 32 percent in 2015.

| Share of Property Tax in Total Revenues |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Counties | 1992 | 2002 | 2010 | 2015 |
| DAVIDSON | $16.1 \%$ | $24.1 \%$ | $21.5 \%$ | $22.8 \%$ |
| HAMILTON | $14.7 \%$ | $17.8 \%$ | $20.6 \%$ | $19.0 \%$ |
| KNOX | $30.0 \%$ | $36.1 \%$ | $32.4 \%$ | $29.3 \%$ |
| MADISON | $8.4 \%$ | $6.5 \%$ | $5.6 \%$ | $5.8 \%$ |
| MONTGOMERY | $16.3 \%$ | $23.4 \%$ | $25.5 \%$ | $21.7 \%$ |
| RUTHERFORD | $35.3 \%$ | $28.9 \%$ | $29.1 \%$ | $26.1 \%$ |
| SHELBY | $24.4 \%$ | $34.3 \%$ | $35.3 \%$ | $29.1 \%$ |
| WASHINGTON | $31.7 \%$ | $25.7 \%$ | $31.3 \%$ | $31.9 \%$ |
| WEAKLEY | $11.6 \%$ | $11.3 \%$ | $9.1 \%$ | $10.7 \%$ |
| WILLIAMSON | $43.6 \%$ | $29.0 \%$ | $29.2 \%$ | $31.7 \%$ |
| WILSON | $41.9 \%$ | $32.5 \%$ | $34.2 \%$ | $31.6 \%$ |

Source: BERC and Census Bureau, Local Government Finances

## G.4. Critical Assessment

An analysis of local government revenues shows that inflation-adjusted total revenues increased dramatically between 1992 and 2015. The increase in total revenues was about four times higher than the population growth in the same period. When we look at inflationadjusted total revenues, we still see sizable growth in total revenues. Putting all revenue sources in context, we can draw several conclusions about the state of total local revenues in Williamson County:

- Overall revenue growth in the county has been consistently higher than in the largest counties in Tennessee.
- The share of intergovernmental revenue is decreasing even as total revenues increase in the county.
- Including taxes in the equation, the county is relying more on its resources suggesting that more shift in revenue sources is likely to happen.


## Chapter H. Local Government Expenditures

This chapter deals with the trend in local government expenditures. Since many of the findings will mirror issues on the revenue side, we will include a few tables in each segment. We covered educational expenditures under a separate chapter.

## H.1. Total Expenditures from a Historical Perspective

Total expenditures increased dramatically between 1992 and 2015, by 426 percent.

|  | Total Expenditures (in 2009 dollars) |  |  |  | Growth - Total Expenditure |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | $\begin{array}{r} 1992 \\ 2015 \end{array}$ | $\begin{array}{r} 2002- \\ 2015 \end{array}$ | 2010- <br> 2015 | $\begin{array}{r} 1992- \\ 2015 \end{array}$ | 2002- <br> 2015 | $\begin{array}{r} 2010- \\ 2015 \end{array}$ |
| DAVIDSON | \$2,133,199,989 | \$2,996,621,756 | \$3,607,986,976 | \$3,865,835,169 | 81.22\% | 29.01\% | 7.15\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$611,940,862 | \$928,581,743 | \$1,115,982,805 | \$1,174,549,009 | 91.94\% | 26.49\% | 5.25\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$471,947,296 | \$681,979,202 | \$760,675,042 | \$815,275,710 | 72.75\% | 19.55\% | 7.18\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$330,087,840 | \$572,656,132 | \$719,569,516 | \$736,557,028 | 123.14\% | 28.62\% | 2.36\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$193,435,813 | \$277,918,554 | \$359,167,954 | \$502,646,121 | 159.85\% | 80.86\% | 39.95\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$166,170,588 | \$331,377,732 | \$467,117,547 | \$512,915,483 | 208.67\% | 54.78\% | 9.80\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,177,465,242 | \$1,965,127,573 | \$1,866,465,329 | \$2,388,984,391 | 102.89\% | 21.57\% | 28.00\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$68,416,930 | \$107,277,025 | \$153,535,065 | \$134,158,438 | 96.09\% | 25.06\% | -12.62\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$65,969,172 | \$88,335,100 | \$102,989,582 | \$100,635,727 | 52.55\% | 13.92\% | -2.29\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$130,514,449 | \$413,114,716 | \$556,412,502 | \$686,513,642 | 426.01\% | 66.18\% | 23.38\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$71,685,736 | \$138,780,525 | \$204,134,654 | \$223,332,816 | 211.54\% | 60.93\% | 9.40\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Per capita expenditure decreased slightly between 2010 and 2015 to $\$ 2,962$.

| Total Expenditures Per Capita (in 2009 dollars) |  |  |  |  | Growth - Total Exp. (PC) |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 2002 | 2010 | 2015 | 1992- <br> 2015 | $\begin{array}{r} 2002- \\ 2015 \end{array}$ | $\begin{array}{r} 2010 \\ 2015 \end{array}$ | $\begin{array}{r} 1992- \\ 2015 \end{array}$ | $\begin{array}{r} 2002- \\ 2015 \end{array}$ | $\begin{array}{r} 2010- \\ 2015 \end{array}$ |
| DAVIDSON | \$5,681 | \$6,077 | \$5,651 | \$5,206 | -8.38\% | -14.34\% | -7.88\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$2,942 | \$3,467 | \$3,254 | \$3,034 | 3.12\% | -12.49\% | -6.77\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$1,887 | \$2,039 | \$1,728 | \$1,650 | -12.58\% | -19.11\% | -4.54\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$5,684 | \$7,132 | \$7,204 | \$6,893 | 21.27\% | -3.36\% | -4.33\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$2,506 | \$2,344 | \$2,040 | \$2,375 | -5.23\% | 1.35\% | 16.45\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$1,791 | \$1,964 | \$1,742 | \$1,570 | -12.32\% | -20.05\% | -9.88\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$1,946 | \$2,535 | \$1,977 | \$2,331 | 19.79\% | -8.06\% | 17.89\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$1,004 | \$1,141 | \$1,224 | \$970 | -3.36\% | -14.97\% | -20.75\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$2,859 | \$2,987 | \$2,892 | \$2,717 | -4.97\% | -9.02\% | -6.06\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$2,069 | \$3,513 | \$2,972 | \$2,962 | 43.21\% | -15.67\% | -0.34\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$1,410 | \$1,737 | \$1,751 | \$1,584 | 12.31\% | -8.81\% | -9.54\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Capital outlays. Total capital outlays in 2015 were $\$ 120$ million, an increase of 458 percent from 1992. While many counties' capital outlays have declined dramatically, in Williamson County growth is positive and substantial.

| Counties | Total Capital Outlays (in 2009 dollars) |  |  |  | Growth -Capital Outlays |  |  | Growth - Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 2002 | 2010 | 2015 | $\begin{array}{r} 1992- \\ 2015 \end{array}$ | $\begin{array}{r} 2002- \\ 2015 \end{array}$ | $\begin{array}{r} 2010- \\ 2015 \end{array}$ | $\begin{array}{r} 1992- \\ 2015 \end{array}$ | $\begin{array}{r} 2002- \\ 2015 \end{array}$ | 20102015 |
| DAVIDSON | \$170,654,880 | \$203,699,650 | \$276,530,944 | \$549,641,490 | 222.08\% | 169.83\% | 98.76\% | 29.16\% | 18.13\% | 8.00\% |
| HAMILTON | \$31,549,501 | \$32,178,915 | \$51,373,791 | \$32,307,889 | 2.40\% | 0.40\% | -37.11\% | 21.55\% | 13.37\% | 4.82\% |
| KNOX | \$74,723,753 | \$57,417,349 | \$45,525,464 | \$46,766,106 | -37.41\% | -18.55\% | 2.73\% | 29.05\% | 15.92\% | 4.25\% |
| MADISON | \$66,232,131 | \$60,027,017 | \$56,947,655 | \$24,076,324 | -63.65\% | -59.89\% | -57.72\% | 20.16\% | 4.39\% | -0.66\% |
| MONTGOMERY | \$18,179,148 | \$66,846,389 | \$46,069,472 | \$43,511,660 | 139.35\% | -34.91\% | -5.55\% | 79.05\% | 39.97\% | 11.59\% |
| RUTHERFORD | \$25,758,805 | \$57,566,406 | \$48,347,811 | \$25,306,674 | -1.76\% | -56.04\% | -47.66\% | 129.90\% | 51.86\% | 13.14\% |
| SHELBY | \$97,248,720 | \$274,096,631 | \$39,701,730 | \$86,168,376 | -11.39\% | -68.56\% | 117.04\% | 10.61\% | 3.71\% | 0.81\% |
| WASHINGTON | \$2,931,715 | \$2,721,461 | \$7,161,618 | \$2,322,777 | -20.77\% | -14.65\% | -67.57\% | 32.51\% | 15.37\% | 2.38\% |
| WEAKLEY | \$4,149,999 | \$6,987,062 | \$6,249,693 | \$5,954,458 | 43.48\% | -14.78\% | -4.72\% | 4.82\% | -1.78\% | -3.41\% |
| WILLIAMSON | \$21,551,459 | \$69,957,961 | \$76,019,399 | \$120,333,209 | 458.35\% | 72.01\% | 58.29\% | 139.85\% | 54.56\% | 14.95\% |
| WILSON | \$6,092,819 | \$12,200,575 | \$29,629,229 | \$18,626,063 | 205.71\% | 52.67\% | -37.14\% | 81.15\% | 38.42\% | 12.30\% |

Source: BERC and Census Bureau, Local Government Finances

Total per capita capital outlays increased from \$244 in 1992 to \$568 in 2015.

|  | Total Capital Outlays Per Capita (in 2009 dollars) |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Counties | 1992 | 2002 | 2010 | 2015 |
| DAVIDSON | $\$ 325$ | $\$ 355$ | $\$ 440$ | $\$ 810$ |
| HAMILTON | $\$ 108$ | $\$ 103$ | $\$ 152$ | $\$ 91$ |
| KNOX | $\$ 214$ | $\$ 147$ | $\$ 105$ | $\$ 104$ |
| MADISON | $\$ 815$ | $\$ 642$ | $\$ 580$ | $\$ 247$ |
| MONTGOMERY | $\$ 168$ | $\$ 484$ | $\$ 266$ | $\$ 225$ |
| RUTHERFORD | $\$ 198$ | $\$ 293$ | $\$ 183$ | $\$ 85$ |
| SHELBY | $\$ 115$ | $\$ 304$ | $\$ 43$ | $\$ 92$ |
| WASHINGTON | $\$ 31$ | $\$ 25$ | $\$ 58$ | $\$ 18$ |
| WEAKLEY | $\$ 129$ | $\$ 203$ | $\$ 178$ | $\$ 176$ |
| WILLIAMSON | $\$ 244$ | $\$ 511$ | $\$ 413$ | $\$ 568$ |
| WILSON | $\$ 86$ | $\$ 131$ | $\$ 258$ | $\$ 145$ |

Source: BERC and Census Bureau, Local Government Finances

Nearly 18 percent of Williamson County's total expenditures went to capital outlays in 2015.

|  | Share of Total Capital Outlays in Total Expenditure |  |  |  |
| :--- | :---: | :---: | :---: | ---: |
| Counties | 1992 | 2002 | 2010 | 2015 |
| DAVIDSON | $8.0 \%$ | $6.8 \%$ | $7.7 \%$ | $14.2 \%$ |
| HAMILTON | $5.2 \%$ | $3.5 \%$ | $4.6 \%$ | $2.8 \%$ |
| KNOX | $15.8 \%$ | $8.4 \%$ | $6.0 \%$ | $5.7 \%$ |
| MADISON | $20.1 \%$ | $10.5 \%$ | $7.9 \%$ | $3.3 \%$ |
| MONTGOMERY | $9.4 \%$ | $24.1 \%$ | $12.8 \%$ | $8.7 \%$ |
| RUTHERFORD | $15.5 \%$ | $17.4 \%$ | $10.4 \%$ | $4.9 \%$ |
| SHELBY | $8.3 \%$ | $13.9 \%$ | $2.1 \%$ | $3.6 \%$ |
| WASHINGTON | $4.3 \%$ | $2.5 \%$ | $4.7 \%$ | $1.7 \%$ |
| WEAKLEY | $6.3 \%$ | $7.9 \%$ | $6.1 \%$ | $5.9 \%$ |
| WILLIAMSON | $16.5 \%$ | $16.9 \%$ | $13.7 \%$ | $17.5 \%$ |
| WILSON | $8.5 \%$ | $8.8 \%$ | $14.5 \%$ | $8.3 \%$ |

Source: BERC and Census Bureau, Local Government Finances

Total wages and salaries. Total share of wages and salaries in total expenditures was 28 percent in 2015.

|  | Share of Total Salaries and Wages in Total Expenditures |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | 2015 |  |
| DAVIDSON | $30.4 \%$ | $22.4 \%$ | $14.1 \%$ | $24.6 \%$ |  |
| HAMILTON | $44.8 \%$ | $52.4 \%$ | $47.1 \%$ | $44.6 \%$ |  |
| KNOX | $45.7 \%$ | $47.7 \%$ | $47.9 \%$ | $45.8 \%$ |  |
| MADISON | $41.0 \%$ | $45.4 \%$ | $45.1 \%$ | $44.7 \%$ |  |
| MONTGOMERY | $41.3 \%$ | $40.7 \%$ | $46.2 \%$ | $29.7 \%$ |  |
| RUTHERFORD | $41.3 \%$ | $41.4 \%$ | $42.9 \%$ | $42.8 \%$ |  |
| SHELBY | $36.1 \%$ | $21.2 \%$ | $18.1 \%$ | $26.4 \%$ |  |
| WASHINGTON | $44.0 \%$ | $44.2 \%$ | $35.8 \%$ | $27.6 \%$ |  |
| WEAKLEY | $31.4 \%$ | $31.4 \%$ | $24.8 \%$ | $19.0 \%$ |  |
| WILLIAMSON | $37.0 \%$ | $29.3 \%$ | $38.0 \%$ | $28.0 \%$ |  |
| WILSON | $40.0 \%$ | $38.7 \%$ | $42.0 \%$ | $30.8 \%$ |  |

Source: BERC and Census Bureau, Local Government Finances

Educational expenditure. Educational spending represents nearly 50 percent of the county government's total expenditures.

| Share of Total Educational Expenditure in Total Expenditures |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{2 0 0 2}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 5}$ |
| DAVIDSON | $17.8 \%$ | $21.9 \%$ | $21.9 \%$ | $23.5 \%$ |
| HAMILTON | $21.8 \%$ | $34.9 \%$ | $32.4 \%$ | $31.9 \%$ |
| KNOX | $57.1 \%$ | $59.3 \%$ | $59.1 \%$ | $60.7 \%$ |
| MADISON | $30.0 \%$ | $20.8 \%$ | $16.7 \%$ | $14.2 \%$ |
| MONTGOMERY | $42.1 \%$ | $62.2 \%$ | $70.2 \%$ | $49.5 \%$ |
| RUTHERFORD | $66.5 \%$ | $66.2 \%$ | $63.9 \%$ | $63.3 \%$ |
| SHELBY | $22.0 \%$ | $30.8 \%$ | $40.1 \%$ | $50.2 \%$ |
| WASHINGTON | $54.7 \%$ | $48.0 \%$ | $45.9 \%$ | $48.7 \%$ |
| WEAKLEY | $30.8 \%$ | $34.7 \%$ | $34.4 \%$ | $34.6 \%$ |
| WILLIAMSON | $\mathbf{6 2 . 7 \%}$ | $\mathbf{4 8 . 6 \%}$ | $\mathbf{5 1 . 5 \%}$ | $\mathbf{4 7 . 4 \%}$ |
| WILSON | $60.1 \%$ | $61.4 \%$ | $63.1 \%$ | $61.8 \%$ |

Source: BERC and Census Bureau, Local Government Finances

Police protection. Finally, police protection increased dramatically over the years, representing 3.1 percent of total spending in Williamson County in 2015.

|  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Share in Total Expenditures: Police Protection |  |  |  |  |
| Counties | $\mathbf{1 9 9 2}$ | 2002 | 2010 | 2015 |
| DAVIDSON | $4.2 \%$ | $4.5 \%$ | $4.8 \%$ | $5.1 \%$ |
| HAMILTON | $2.2 \%$ | $2.7 \%$ | $1.4 \%$ | $1.5 \%$ |
| KNOX | $2.6 \%$ | $3.4 \%$ | $5.4 \%$ | $7.7 \%$ |
| MADISON | $0.7 \%$ | $0.7 \%$ | $0.9 \%$ | $1.0 \%$ |
| MONTGOMERY | $1.4 \%$ | $1.7 \%$ | $2.4 \%$ | $2.1 \%$ |
| RUTHERFORD | $2.1 \%$ | $3.3 \%$ | $3.8 \%$ | $4.3 \%$ |
| SHELBY | $2.4 \%$ | $3.7 \%$ | $8.0 \%$ | $6.1 \%$ |
| WASHINGTON | $2.5 \%$ | $4.3 \%$ | $4.0 \%$ | $4.6 \%$ |
| WEAKLEY | $1.0 \%$ | $1.5 \%$ | $1.8 \%$ | $1.8 \%$ |
| WILLIAMSON | $2.2 \%$ | $1.1 \%$ | $1.3 \%$ | $3.1 \%$ |
| WILSON | $3.7 \%$ | $3.9 \%$ | $4.8 \%$ | $4.0 \%$ |

Source: BERC and Census Bureau, Local Government Finances

## H.2. Outstanding Debt

Williamson County's outstanding debt has grown substantially over the years. In 2015, total inflation-adjusted outstanding debt was $\$ 522.3$ million, an increase of four percent from 2010 and 255 percent from 1992.

| Total Debt Outstanding (in 2009 dollars) |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Counties | 1992 | 1997 | 2010 | 2015 |  |
| DAVIDSON | $\$ 3,099,433,520$ | $\$ 3,190,084,195$ | $\$ 4,411,117,234$ | $\$ 11,669,662,319$ |  |
| HAMILTON | $\$ 773,862,142$ | $\$ 728,890,338$ | $\$ 491,855,627$ | $\$ 519,931,312$ |  |
| KNOX | $\$ 275,618,933$ | $\$ 294,891,293$ | $\$ 603,987,094$ | $\$ 582,132,060$ |  |
| MADISON | $\$ 156,029,877$ | $\$ 163,949,088$ | $\$ 365,825,898$ | $\$ 298,554,087$ |  |
| MONTGOMERY | $\$ 135,844,966$ | $\$ 139,004,111$ | $\$ 419,259,638$ | $\$ 3,142,027,385$ |  |
| RUTHERFORD | $\$ 139,608,918$ | $\$ 199,863,752$ | $\$ 401,536,600$ | $\$ 349,153,735$ |  |
| SHELBY | $\$ 1,432,601,338$ | $\$ 1,524,141,465$ | $\$ 2,149,178,087$ | $\$ 1,373,936,117$ |  |
| WASHINGTON | $\$ 18,982,012$ | $\$ 35,470,986$ | $\$ 156,519,729$ | $\$ 131,159,745$ |  |
| WEAKLEY | $\$ 6,285,842$ | $\$ 38,312,392$ | $\$ 24,896,461$ | $\$ 0$ |  |


| WILLIAMSON | $\$ 147,027,723$ | $\$ 185,675,358$ | $\$ 502,751,518$ | $\$ 522,286,972$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| WILSON | $\$ 59,446,947$ | $\$ 68,572,194$ | $\$ 171,580,770$ | $\$ 187,822,545$ |

Source: Census Bureau, Local Government Finances

Outstanding debt per capita in 2015 was $\$ 2,467$, a significant increase from $\$ 1,666$ in 1992.

|  | TotalPer Capita Debt Outstanding (in 2009 dollars) |  |  |  |
| :--- | :---: | :---: | ---: | ---: |
| Counties | $\mathbf{1 9 9 2}$ | $\mathbf{1 9 9 7}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 5}$ |
| DAVIDSON | $\$ 5,902$ | $\$ 5,556$ | $\$ 7,023$ | $\$ 17,204$ |
| HAMILTON | $\$ 2,660$ | $\$ 2,337$ | $\$ 1,458$ | $\$ 1,470$ |
| KNOX | $\$ 788$ | $\$ 757$ | $\$ 1,395$ | $\$ 1,289$ |
| MADISON | $\$ 1,921$ | $\$ 1,753$ | $\$ 3,723$ | $\$ 3,059$ |
| MONTGOMERY | $\$ 1,258$ | $\$ 1,007$ | $\$ 2,420$ | $\$ 16,255$ |
| RUTHERFORD | $\$ 1,076$ | $\$ 1,017$ | $\$ 1,522$ | $\$ 1,170$ |
| SHELBY | $\$ 1,693$ | $\$ 1,689$ | $\$ 2,314$ | $\$ 1,468$ |
| WASHINGTON | $\$ 199$ | $\$ 324$ | $\$ 1,268$ | $\$ 1,038$ |
| WEAKLEY | $\$ 195$ | $\$ 1,112$ | $\$ 711$ | $\$ 0$ |
| WILLIAMSON | $\$ 1,666$ | $\$ 1,356$ | $\$ 2,730$ | $\$ 2,467$ |
| WILSON | $\$ 836$ | $\$ 737$ | $\$ 1,496$ | $\$ 1,459$ |

Source: Census Bureau, Local Government Finances

## H.3. Critical Assessment

Total expenditures in Williamson County increased substantially over time, mirroring developments on the revenue side. The substantial increase in capital outlays is the driving force for the increased expenditures. Notably, high pressure on community resources due to population growth is likely to continue.

The K-12 public education is a critical part of county government finances in Tennessee. A sizable portion of local capital and operating expenditures go directly to the education system. Although supporting the local education system requires a significant percentage of county resources, the quality of education in a county can be an amenity that affects the relocation decision of many businesses. This chapter looks briefly at the dynamics of the public education system in Williamson County. To do that, we first review the educational achievement variables and then consider educational spending in the county. It is important to note that we are covering only educational expenditures associated with county government. We do not include Franklin Special School District spending as part of county education spending.

## I.1. Educational Achievement

How does the county school system rank in terms of success factors? Before we specifically analyze student achievement indicators, we would like to emphasize and reiterate what we mentioned in the workforce dynamics discussion, highlighting the significant improvement the county has made in the area of human capital formation. In 1970, Williamson County's educational attainment level was similar to the other large counties' educational attainment levels: 9.8 percent of the population over 25 held a bachelor's degree or above. However, in the years that followed, the scenario changed dramatically. By 2016, the population with a bachelor's degree or above had jumped to nearly 57 percent. The gap between Williamson County and Davidson County, with the second-largest percentage of college degree holders in Tennessee, has grown to almost 19 percentage points. This is an important accomplishment for the county.

| Percent of Population over 25 with a Bachelor's Degree or Higher (1970-2016) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Name | 1970 | 1980 | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| DAVIDSON | 12.1 | 19.5 | 24.4 | 30.5 | 34.1 | 34.4 | 35.0 | 36.0 | 36.5 | 37.3 | 38.2 |
| HAMILTON | 10.2 | 15.5 | 19.7 | 23.9 | 27.0 | 27.4 | 27.8 | 27.2 | 28.1 | 28.7 | 29.6 |
| KNOX | 11.4 | 18.8 | 23.9 | 29.0 | 33.8 | 34.0 | 34.2 | 34.4 | 34.5 | 34.6 | 35.7 |
| MADISON | 4.0 | 7.2 | 7.7 | 10.6 | 11.5 | 11.2 | 13.2 | 13.1 | 13.2 | 13.5 | 14.1 |
| MONTGOMERY | 9.1 | 14.5 | 16.5 | 19.3 | 22.2 | 22.7 | 22.7 | 23.5 | 24.0 | 24.7 | 25.3 |
| RUTHERFORD | 9.9 | 14.8 | 18.7 | 22.9 | 26.3 | 27.0 | 27.9 | 28.3 | 28.9 | 30.1 | 30.2 |
| SHELBY | 9.9 | 15.9 | 20.8 | 25.3 | 27.8 | 28.3 | 28.7 | 29.0 | 29.8 | 30.3 | 30.2 |
| WASHINGTON | 9.4 | 15.0 | 18.9 | 22.9 | 27.9 | 28.2 | 28.9 | 29.4 | 30.8 | 30.6 | 30.9 |
| WEAKLEY | 5.9 | 9.8 | 10.3 | 15.3 | 18.4 | 17.8 | 20.5 | 20.2 | 19.5 | 20.4 | 21.1 |
| WILLIAMSON | 9.8 | 23.6 | 34.2 | 44.4 | 51.8 | 51.5 | 52.0 | 52.8 | 54.1 | 55.7 | 56.6 |
| WILSON | 5.6 | 11.7 | 15.6 | 19.6 | 24.0 | 24.7 | 25.9 | 26.0 | 26.7 | 28.3 | 28.9 |

Source: Census Bureau and BERC

One of the educational metrics widely used to measure the success of school systems is the average ACT score. The importance of this metric is that it is third-party-verified and can be used for comparison across school systems in the United States. Among average ACT scores for the selected Tennessee counties between 2012 and 2016, Williamson County outperforms any other county in Tennessee with an average composite ACT score of 25.2 in 2016.

A related metric to the average ACT composite score is the percent of college readiness by county. According to 2015 data, almost half of the graduating students in the Williamson County school system were college-ready. No other county in the study group comes close to attaining this figure. In fact, the county with the second-highest college readiness rate was Knox County in 2015, with a 24 percent college readiness rate, a 21 -percentage-point difference.

| Average ACT Scores |  |  |  |  |  |
| :--- | :---: | :---: | ---: | ---: | ---: |
| Counties | 2012 | 2013 | 2014 | 2015 | 2016 |
| DAVIDSON | 18.4 | 18.3 | 18.4 | 18.7 | 19.0 |
| HAMILTON | 18.8 | 18.9 | 19.0 | 18.9 | 19.9 |
| KNOX | 20.6 | 20.4 | 20.4 | 20.7 | 21.1 |
| MADISON | 17.7 | 17.8 | 17.8 | 17.3 | 17.9 |
| MONTGOMERY | 19.4 | 19.8 | 19.6 | 19.4 | 20.2 |
| RUTHERFORD | 19.8 | 19.9 | 20.1 | 19.9 | 20.8 |
| SHELBY | 20.8 | 20.9 | 17.7 | 16.9 | 17.8 |
| WASHINGTON | 19.9 | 19.7 | 20.2 | 20.2 | 20.6 |
| WEAKLEY | 20.1 | 20.1 | 20.3 | 19.7 | 21.3 |
| WILLIAMSON | 23.1 | 23.7 | 23.5 | 23.8 | 25.2 |
| WILSON | 19.9 | 20.2 | 19.7 | 20.0 | 21.0 |

Source: Tennessee Department of Education and BERC

| College Readiness Score |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Counties | 2012 | 2013 | 2014 | 2015 |
| DAVIDSON | $10.10 \%$ | $11.00 \%$ | $12.00 \%$ | $14.00 \%$ |
| HAMILTON | $11.70 \%$ | $13.00 \%$ | $14.00 \%$ | $15.00 \%$ |
| KNOX | $19.20 \%$ | $21.00 \%$ | $23.00 \%$ | $24.00 \%$ |
| MADISON | $6.60 \%$ | $6.00 \%$ | $8.00 \%$ | $9.00 \%$ |
| MONTGOMERY | $12.30 \%$ | $18.00 \%$ | $17.00 \%$ | $17.00 \%$ |
| RUTHERFORD | $15.30 \%$ | $18.00 \%$ | $19.00 \%$ | $19.00 \%$ |
| SHELBY | $20.40 \%$ | $0.00 \%$ | $11.00 \%$ | $7.00 \%$ |
| WASHINGTON | $12.30 \%$ | $17.00 \%$ | $15.00 \%$ | $14.00 \%$ |
| WEAKLEY | $17.50 \%$ | $12.00 \%$ | $20.00 \%$ | $17.00 \%$ |
| WILLIAMSON | $34.40 \%$ | $40.00 \%$ | $41.00 \%$ | $45.00 \%$ |
| WILSON | $12.90 \%$ | $18.00 \%$ | $16.00 \%$ | $19.00 \%$ |

Source: SCORE (tnScore.org), BERC, and TN Department of Education

A review of these externally validated metrics is quite revealing. Williamson County has a very successful K-12 education system. However, success often comes with an associated cost. How much does Williamson County spend on $\mathrm{K}-12$ education?

## I.2. Educational Spending

In 2016, nearly 37,000 students enrolled in Williamson County's $\mathrm{K}-12$ school system. If the current population growth rate holds, we expect this number to increase every year at least by 1,000 . What does it take to create a successful school system while accommodating a considerably high annual growth rate in student population?

In this section, we will review total educational spending (in 2009 dollars) and growth rate, per capita educational spending, the share of educational expenditure in total county spending, per capita state educational transfers, and percentage of state intergovernmental educational transfers in total educational spending. To present a consistent assessment of county educational expenditures, this study relies heavily on a single data source: the Census Bureau's
local government finances survey. Using a consistent government source will help us measure the variable of interest accurately over time and across reference points.

In 2015, Williamson County spent $\$ 315.32$ million (in 2009 dollars) for the $\mathrm{K}-12$ education system. As previously mentioned, this spending does not include spending for the Franklin Special District. Over 23 years (1992-2015), the county's spending on education increased by 298 percent, while in the same period, the county's population grew by 140 percent. For a comparative perspective on the growth dynamics involving several periods and counties, we can review the figures in the following table.

| Total Educational Expenditure (in 2009 dollars) |  | Educational Spending |  |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | $\begin{array}{r} \text { Growth } \\ (1992-2015) \end{array}$ | $\begin{array}{r} \text { Growth } \\ (2002-2015) \end{array}$ | $\begin{array}{r} \text { Growth } \\ (2007-2015) \end{array}$ | 2015 | $\begin{array}{\|r} \text { Growth } \\ (1992-2015) \end{array}$ | $\begin{array}{r} \text { Growth } \\ (2002-2015) \end{array}$ | $\begin{array}{r} \text { Growth } \\ (2007-2015) \end{array}$ |
| DAVIDSON COUNTY | \$379,182,869 | 139.6\% | 38.3\% | 28.6\% | \$908,547,602 | 29.2\% | 18.1\% | 12.1\% |
| HAMILTON COUNTY | \$133,607,016 | 180.8\% | 15.9\% | 7.3\% | \$375,227,665 | 21.5\% | 13.4\% | 8.9\% |
| KNOX COUNTY | \$269,292,528 | 83.9\% | 22.4\% | 9.1\% | \$495,259,452 | 29.0\% | 15.9\% | 7.7\% |
| MADISON COUNTY | \$98,949,562 | 5.5\% | -12.4\% | -9.1\% | \$104,343,219 | 20.2\% | 4.4\% | 0.6\% |
| MONTGOMERY COUNTY | \$81,371,863 | 205.9\% | 43.9\% | 24.5\% | \$248,897,982 | 79.0\% | 40.0\% | 20.3\% |
| RUTHERFORD COUNTY | \$110,438,638 | 194.0\% | 48.1\% | 21.6\% | \$324,692,869 | 129.9\% | 51.9\% | 22.3\% |
| SHELBY COUNTY | \$259,598,008 | 361.7\% | 97.9\% | 39.7\% | \$1,198,449,960 | 10.6\% | 3.7\% | 1.6\% |
| WASHINGTON COUNTY | \$37,431,113 | 74.4\% | 26.8\% | 5.4\% | \$65,290,781 | 32.5\% | 15.4\% | 7.2\% |
| WEAKLEY COUNTY | \$20,317,789 | 71.4\% | 13.7\% | 3.4\% | \$34,815,173 | 4.8\% | -1.8\% | -1.2\% |
| WILLIAMSON COUNTY | \$81,822,251 | 297.6\% | 62.1\% | 26.5\% | \$325,315,808 | 139.9\% | 54.6\% | 24.9\% |
| WILSON COUNTY | \$43,115,506 | 220.3\% | 62.0\% | 11.0\% | \$138,100,675 | 81.1\% | 38.4\% | 20.6\% |

Source: Census Bureau and BERC

In 2015, Williamson County's per capita educational expenditure was $\$ 1,537$ (in 2009 dollars), placing it first among the largest counties in Tennessee. On average, from 1992 to 2015, Williamson County ranked ahead of the other large counties in per capita educational spending.

| Per Capita Educational Expenditure (in 2009 |  |  |  |  |  |  |  |  | dollars) |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
| Counties |  |  |  |  |  |  |  |  |  |
| DAVIDSON COUNTY |  |  |  |  |  |  |  |  |  |
| HAMILTON COUNTY |  |  |  |  |  |  |  |  |  |

Source: Census Bureau and BERC

In Williamson County, the educational share of total county spending has remained around 50 percent since 1997. In 1992, the educational share was about 63 percent. The percentage of education spending in total county government spending significantly varies across counties. One reason for the wide variation is the inclusion of a variety of component units in government expenditures and revenues.

| Share of Educational Expenditure in Total County Expenditure |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| DAVIDSON COUNTY | 17.78\% | 20.30\% | 21.92\% | 20.28\% | 20.97\% | 21.87\% | 20.88\% | 21.28\% | 22.09\% | 22.81\% | 23.50\% |
| HAMILTON COUNTY | 21.83\% | 19.48\% | 34.87\% | 34.04\% | 31.88\% | 32.41\% | 32.96\% | 32.34\% | 31.31\% | 32.20\% | 31.95\% |
| KNOX COUNTY | 57.06\% | 65.05\% | 59.32\% | 57.46\% | 58.98\% | 59.10\% | 59.62\% | 61.84\% | 64.51\% | 62.90\% | 60.75\% |
| MADISON COUNTY | 29.98\% | 21.66\% | 20.79\% | 13.51\% | 14.87\% | 16.69\% | 20.32\% | 15.85\% | 15.58\% | 16.24\% | 14.17\% |
| MONTGOMERY COUNTY | 42.07\% | 51.87\% | 62.22\% | 67.28\% | 69.49\% | 70.18\% | 70.06\% | 71.62\% | 71.20\% | 67.40\% | 49.52\% |
| RUTHERFORD COUNTY | 66.46\% | 54.87\% | 66.16\% | 60.86\% | 63.02\% | 63.91\% | 64.34\% | 65.85\% | 63.34\% | 64.55\% | 63.30\% |
| SHELBY COUNTY | 22.05\% | 22.65\% | 30.82\% | 44.12\% | 43.39\% | 40.14\% | 41.90\% | 42.71\% | 41.07\% | 54.12\% | 50.17\% |
| WASHINGTON COUNTY | 54.71\% | 55.87\% | 48.02\% | 45.39\% | 48.64\% | 45.94\% | 46.77\% | 48.08\% | 46.13\% | 48.59\% | 48.67\% |
| WEAKLEY COUNTY | 30.80\% | 34.83\% | 34.67\% | 34.90\% | 32.05\% | 34.41\% | 32.89\% | 34.25\% | 33.45\% | 33.73\% | 34.60\% |
| WILLIAMSON COUNTY | 62.69\% | 47.41\% | 48.58\% | 48.62\% | 48.88\% | 51.47\% | 49.36\% | 48.38\% | 48.32\% | 47.69\% | 47.39\% |
| WILSON COUNTY | 60.15\% | 61.58\% | 61.41\% | 61.60\% | 63.75\% | 63.06\% | 64.16\% | 63.07\% | 70.72\% | 61.48\% | 61.84\% |

Source: Census Bureau and BERC

How much of this educational spending is a transfer from the state government? The following table presents the state transfer for education across the selected counties and over several periods. In 2015, total state transfer for education was $\$ 118.6$ million (in 2009 dollars). Regarding the per capita state transfer, in 2015 Williamson County received $\$ 560$, which ranks it sixth among the 11 counties on the list. The highest per capita state educational transfer recipients include Montgomery, Weakley, and Shelby counties with \$771, \$722, and $\$ 694$, respectively.

|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | State IGR Education (in 2009 dollars) |  |  |  |  |  | Growth |  |
| Counties | 1992 | 2002 | 2007 | 2012 | 2015 | $1992-2015$ | $2002-2015$ | $2007-2015$ |
| DAVIDSON | $\$ 153,133,130$ | $\$ 221,493,368$ | $\$ 265,513,584$ | $\$ 336,154,955$ | $\$ 346,711,302$ | $126.41 \%$ | $56.53 \%$ | $30.58 \%$ |
| HAMILTON | $\$ 44,353,372$ | $\$ 133,367,881$ | $\$ 146,009,351$ | $\$ 172,224,159$ | $\$ 171,550,315$ | $286.78 \%$ | $28.63 \%$ | $17.49 \%$ |
| KNOX | $\$ 114,237,558$ | $\$ 156,872,358$ | $\$ 175,559,721$ | $\$ 219,096,126$ | $\$ 219,312,027$ | $91.98 \%$ | $39.80 \%$ | $24.92 \%$ |
| MADISON | $\$ 33,467,144$ | $\$ 53,565,149$ | $\$ 57,810,344$ | $\$ 63,222,171$ | $\$ 59,806,724$ | $78.70 \%$ | $11.65 \%$ | $3.45 \%$ |
| MONTGOMERY | $\$ 39,165,524$ | $\$ 88,901,052$ | $\$ 117,895,615$ | $\$ 148,153,523$ | $\$ 148,950,046$ | $280.31 \%$ | $67.55 \%$ | $26.34 \%$ |
| RUTHERFORD | $\$ 38,085,713$ | $\$ 91,271,995$ | $\$ 131,423,658$ | $\$ 175,073,737$ | $\$ 181,843,425$ | $377.46 \%$ | $99.23 \%$ | $38.36 \%$ |
| SHELBY | $\$ 84,861,667$ | $\$ 152,694,095$ | $\$ 172,980,989$ | $\$ 211,758,276$ | $\$ 649,626,876$ | $665.51 \%$ | $325.44 \%$ | $275.55 \%$ |
| WASHINGTON | $\$ 15,145,327$ | $\$ 30,109,580$ | $\$ 34,592,490$ | $\$ 38,469,295$ | $\$ 35,637,234$ | $135.30 \%$ | $18.36 \%$ | $3.02 \%$ |
| WEAKLEY | $\$ 11,889,110$ | $\$ 20,861,039$ | $\$ 24,615,353$ | $\$ 26,976,753$ | $\$ 24,441,684$ | $105.58 \%$ | $17.16 \%$ | $-0.71 \%$ |
| WILLIAMSON | $\$ 23,863,541$ | $\$ 69,270,900$ | $\$ 89,436,881$ | $\$ 108,055,899$ | $\$ 118,610,535$ | $397.04 \%$ | $71.23 \%$ | $32.62 \%$ |
| WILSON | $\$ 19,847,819$ | $\$ 41,964,296$ | $\$ 53,712,591$ | $\$ 65,480,913$ | $\$ 68,572,629$ | $245.49 \%$ | $63.41 \%$ | $27.67 \%$ |

[^0]| Per Capita State IGR Education (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | Rank |
| DAVIDSON COUNTY | $\$ 292$ | $\$ 370$ | $\$ 386$ | $\$ 439$ | $\$ 463$ | $\$ 491$ | $\$ 537$ | $\$ 518$ | $\$ 517$ | $\$ 523$ | $\$ 511$ | 8 |
| HAMILTON COUNTY | $\$ 152$ | $\$ 213$ | $\$ 428$ | $\$ 450$ | $\$ 475$ | $\$ 484$ | $\$ 512$ | $\$ 498$ | $\$ 493$ | $\$ 500$ | $\$ 485$ | 10 |
| KNOX COUNTY | $\$ 327$ | $\$ 384$ | $\$ 403$ | $\$ 419$ | $\$ 431$ | $\$ 454$ | $\$ 424$ | $\$ 497$ | $\$ 497$ | $\$ 482$ | $\$ 486$ | 9 |
| MADISON COUNTY | $\$ 412$ | $\$ 531$ | $\$ 573$ | $\$ 596$ | $\$ 639$ | $\$ 669$ | $\$ 699$ | $\$ 642$ | $\$ 619$ | $\$ 617$ | $\$ 613$ | 4 |
| MONTGOMERY COUNTY | $\$ 363$ | $\$ 576$ | $\$ 644$ | $\$ 734$ | $\$ 805$ | $\$ 807$ | $\$ 839$ | $\$ 800$ | $\$ 777$ | $\$ 800$ | $\$ 771$ | 1 |
| RUTHERFORD COUNTY | $\$ 293$ | $\$ 453$ | $\$ 464$ | $\$ 539$ | $\$ 609$ | $\$ 630$ | $\$ 664$ | $\$ 638$ | $\$ 631$ | $\$ 643$ | $\$ 609$ | 5 |
| SHELBY COUNTY | $\$ 100$ | $\$ 154$ | $\$ 169$ | $\$ 188$ | $\$ 206$ | $\$ 221$ | $\$ 222$ | $\$ 226$ | $\$ 217$ | $\$ 825$ | $\$ 694$ | 3 |
| WASHINGTON COUNTY | $\$ 159$ | $\$ 259$ | $\$ 275$ | $\$ 294$ | $\$ 256$ | $\$ 251$ | $\$ 256$ | $\$ 308$ | $\$ 291$ | $\$ 291$ | $\$ 282$ | 11 |
| WEAKLEY COUNTY | $\$ 368$ | $\$ 544$ | $\$ 606$ | $\$ 719$ | $\$ 774$ | $\$ 799$ | $\$ 777$ | $\$ 780$ | $\$ 755$ | $\$ 744$ | $\$ 722$ | 2 |
| WILLIAMSON COUNTY | $\$ 270$ | $\$ 435$ | $\$ 506$ | $\$ 528$ | $\$ 567$ | $\$ 569$ | $\$ 793$ | $\$ 560$ | $\$ 555$ | $\$ 715$ | $\$ 560$ | 6 |
| WILSON COUNTY | $\$ 279$ | $\$ 439$ | $\$ 451$ | $\$ 503$ | $\$ 536$ | $\$ 554$ | $\$ 576$ | $\$ 550$ | $\$ 542$ | $\$ 541$ | $\$ 533$ | 7 |

Source: Census Bureau and BERC

What is the share of state intergovernmental revenue (IGR) educational transfers in total county educational spending? In 2015, about 37 percent of total county educational spending was through IGR educational transfer. Historically, Williamson County receives, on average, a little less than 40 percent of county educational spending through state IGR educational transfer. In 2015, Williamson County's state IGR education transfer share was the lowest among the 11 largest counties in Tennessee.

| Share of State IGR Education in Total County Educational Spending |  |  |  |  |  |  |  |  |  |  |  | Annual <br> Average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |  |
| DAVIDSON COUNTY | 40.39\% | 37.53\% | 33.72\% | 37.57\% | 37.32\% | 39.10\% | 42.75\% | 42.24\% | 43.29\% | 40.79\% | 38.16\% | 39.35\% |
| HAMILTON COUNTY | 33.20\% | 44.36\% | 41.18\% | 41.77\% | 43.20\% | 45.18\% | 48.16\% | 47.47\% | 46.93\% | 46.87\% | 45.72\% | 44.00\% |
| KNOX COUNTY | 42.42\% | 36.63\% | 38.78\% | 38.67\% | 40.90\% | 43.76\% | 41.91\% | 47.15\% | 45.18\% | 42.55\% | 44.28\% | 42.02\% |
| MADISON COUNTY | 33.82\% | 50.13\% | 44.99\% | 50.35\% | 54.28\% | 54.73\% | 46.87\% | 54.94\% | 54.33\% | 55.58\% | 57.32\% | 50.67\% |
| MONTGOMERY COUNTY | 48.13\% | 48.49\% | 51.41\% | 58.97\% | 48.53\% | 55.49\% | 60.78\% | 57.48\% | 55.04\% | 59.69\% | 59.84\% | 54.90\% |
| RUTHERFORD COUNTY | 34.49\% | 58.97\% | 41.63\% | 49.22\% | 52.08\% | 55.67\% | 60.58\% | 52.50\% | 58.68\% | 56.84\% | 56.00\% | 52.42\% |
| SHELBY COUNTY | 32.69\% | 47.64\% | 25.21\% | 20.16\% | 21.47\% | 27.41\% | 26.32\% | 26.28\% | 26.84\% | 58.16\% | 54.21\% | 33.31\% |
| WASHINGTON COUNTY | 40.46\% | 50.95\% | 58.45\% | 55.82\% | 37.54\% | 43.86\% | 46.54\% | 56.75\% | 55.04\% | 55.55\% | 54.58\% | 50.50\% |
| WEAKLEY COUNTY | 58.52\% | 67.53\% | 68.12\% | 73.08\% | 76.09\% | 78.97\% | 78.62\% | 76.85\% | 75.44\% | 75.82\% | 70.20\% | 72.66\% |
| WILLIAMSON COUNTY | 29.17\% | 39.89\% | 34.51\% | 34.78\% | 36.73\% | 36.57\% | 53.97\% | 39.95\% | 40.37\% | 51.38\% | 36.46\% | 39.43\% |
| WILSON COUNTY | 46.03\% | 58.04\% | 49.24\% | 43.18\% | 44.11\% | 49.39\% | 49.31\% | 46.05\% | 35.91\% | 55.60\% | 49.65\% | 47.86\% |

Source: Census Bureau and BERC

What is the relationship between educational spending and total property tax revenues in Williamson County? According to county finance data, in Williamson County, the share of educational expenditure in property tax revenues declined from 66.81 percent in 1992 to 47.26 percent in 2007. It increased to 64.65 percent in 2015 . If this trend continues, local officials will continue to feel pressure to reallocate resources or raise property tax rates to fund the educational system adequately.

| Educational Expenditure as Percent of Total Property Tax (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| DAVIDSON COUNTY | 97.13\% | 82.33\% | 104.43\% | 111.11\% | 100.54\% | 98.83\% | 94.07\% | 93.29\% | 105.52\% | 97.45\% | 93.38\% |
| HAMILTON COUNTY | 71.81\% | 96.05\% | 55.34\% | 59.59\% | 65.82\% | 66.78\% | 66.05\% | 66.51\% | 65.45\% | 61.90\% | 64.50\% |
| KNOX COUNTY | 46.85\% | 44.81\% | 59.48\% | 50.70\% | 52.84\% | 53.17\% | 55.35\% | 50.85\% | 49.05\% | 47.04\% | 48.71\% |
| MADISON COUNTY | 25.34\% | 35.28\% | 33.39\% | 35.60\% | 35.43\% | 35.12\% | 28.27\% | 40.90\% | 41.34\% | 41.29\% | 44.03\% |
| MONTGOMERY COUNTY | 40.13\% | 27.40\% | 32.34\% | 37.39\% | 27.75\% | 33.20\% | 34.47\% | 35.63\% | 35.52\% | 37.14\% | 38.74\% |
| RUTHERFORD COUNTY | 47.99\% | 53.07\% | 36.65\% | 39.00\% | 39.67\% | 44.32\% | 44.80\% | 39.10\% | 42.94\% | 41.28\% | 42.34\% |
| SHELBY COUNTY | 120.46\% | 123.66\% | 102.34\% | 80.84\% | 78.12\% | 96.74\% | 92.41\% | 85.54\% | 91.12\% | 54.08\% | 60.22\% |
| WASHINGTON COUNTY | 66.68\% | 50.62\% | 57.94\% | 57.20\% | 54.81\% | 65.64\% | 67.29\% | 66.76\% | 65.97\% | 64.28\% | 66.69\% |
| WEAKLEY COUNTY | 37.32\% | 29.39\% | 33.93\% | 28.17\% | 26.67\% | 26.74\% | 26.76\% | 25.91\% | 31.18\% | 30.90\% | 30.45\% |
| WILLIAMSON COUNTY | 66.81\% | 68.30\% | 57.03\% | 47.26\% | 52.12\% | 53.00\% | 54.63\% | 60.36\% | 59.83\% | 58.14\% | 64.65\% |
| WILSON COUNTY | 68.55\% | 47.19\% | 56.85\% | 42.81\% | 46.15\% | 50.21\% | 48.00\% | 45.84\% | 37.05\% | 55.17\% | 49.88\% |

Source: BERC and Census Bureau, Local Government Finances

## I.3. Critical Assessment

Williamson County achieved a crucial milestone regarding human capital formation. It takes decades for some counties to move one percentage point higher in college-level educational attainment. Williamson County is already enjoying one of the best possible outcomes in this area.

Regarding high school achievement rates and college readiness, Williamson County is unequaled among the reference Tennessee counties. However, sustaining this level of achievement comes at the cost of increased investment in the county education system. As pointed out in the population dynamics discussion, the county's school-age population is
growing by 1,000 annually. This growth puts pressure on county officials to allocate capital spending for more schools and teachers. The median building cost of a high school accommodating 600 students was about \$45 million in 2013.

In real dollars, educational spending has increased dramatically over the years in Williamson County. Between 1992 and 2015, educational spending grew by nearly 300 percent while the population growth rate during the same period was 140 percent. One of the best indicators for comparison in educational spending is per capita spending: Williamson County consistently ranks first among the 11 largest counties in Tennessee in per capita educational spending.

The share of state IGR education transfer has been around 40 percent of total education expenditure in Williamson County. In 2015, the Williamson County share percentage was the lowest among the 11 largest counties. Furthermore, some counties' state IGR education transfer shares have increased substantially in recent years. If this trend continues, Williamson County will likely have to rely on other sources to finance educational expenditures.

In fact, the share of educational expenditures in total property tax revenues increased dramatically to 65 percent in 2015. Considering the historical data, this seems to be a continuing trend for Williamson County.

## Chapter J. Does Population Growth Pay for Itself? An Assessment of 1,196 New Households in Williamson County

After a complete review of demographic, economic, and fiscal indicators from a historical and comparative perspective, this chapter focuses entirely on Williamson County. The goal of this chapter is to answer the question of whether population growth pays for itself. In order to assess that, this chapter is organized as follows: historical population trend and growth rates in Williamson County, historical income trend and growth rates Williamson County, historical government revenue trend and growth rates versus population growth rates, historical government expenditures and growth rates versus population growth rates, long-term outstanding growth rates versus population growth rates, and a county simulation assessing the fiscal impact of 1,196 new households (5-Year Average of Net Household Migrations) using the IMPLANpro model created for Williamson County.

## J.1. Population Dynamics

To assess population and fiscal dynamics, this study used 2015 as a benchmark date for various comparison and growth rates. In Williamson County, the total population grew by nearly 140 percent between 1992 and 2015. In the period between 2010 and 2015, growth was almost 15 percent. In the same periods, the number of households increased by 153 and 19 percent, respectively. Among the fastest-growing is population age 65 and over between 1992 and 2015. This segment of the population is also projected to grow significantly between 2015 and 2027, by 144 percent.

The chart below shows the trend in population dynamics. The chart is organized as follows: the 1992 value of each indicator is set to 100 . This will allow us to compare different indicators.


Source: Woods and Poole, Census Bureau, BERC

## J.2. Income Dynamics

Per capita personal income was about $\$ 80,000$ in 2015 , an increase of about 100 percent from 1992. In the same period, average household income increased about 91 percent, reaching $\$ 217,253$ in 2015 . The projections suggest that per capita income and household income will increase by about five percent between 2015 and 2027.

| Income Growth | 2015 | $\mathbf{1 9 9 2 - 2 0 1 5}$ | 2002-2015 | 2010-2015 | 2015-2027 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Personal Income (Per Capita) | $\$ 79,928$ | $100.84 \%$ | $57.53 \%$ | $24.54 \%$ | $4.88 \%$ |
| Average Household Income | $\$ 217,253$ | $90.73 \%$ | $53.69 \%$ | $20.48 \%$ | $4.47 \%$ |

Source: Woods and Poole, BERC

The chart below presents the trend: after 2010, personal income has grown faster than average household income.


Source: Woods and Poole, Census Bureau, BERC

## J.3. Williamson County Revenue Growth

Total revenues. Total revenues in Williamson County increased dramatically over the years, reaching an inflation-adjusted $\$ 664.3$ million in 2009 dollars. There was an increase of 430 percent between 1992 and 2015. In the same period, the population grew by 140 percent. Between 2010 and 2015, the growth in total revenues was about 28 percent.

| County Revenue Growth |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (in 2009 dollars) | 2015 | $1992-2015$ | $2002-2015$ | 2010-2015 |
| Total Revenues | $\$ 664,304,309$ | $430.34 \%$ | $68.32 \%$ | $27.72 \%$ |
| Total Revenues from Own Sources | $\$ 534,085,366$ | $472.60 \%$ | $69.45 \%$ | $32.01 \%$ |
| Total Taxes | $\$ 320,436,423$ | $289.44 \%$ | $74.39 \%$ | $37.87 \%$ |
| Total Property Taxes | $\$ 210,315,032$ | $284.75 \%$ | $83.73 \%$ | $38.56 \%$ |
| Total Intergovernmental Revenues | $\$ 130,218,942$ | $307.10 \%$ | $63.83 \%$ | $12.69 \%$ |
| Total Charges and Misc. Revenues | $\$ 213,648,944$ | $1843.58 \%$ | $62.55 \%$ | $24.10 \%$ |

Source: BERC, Woods and Poole, Census Bureau, Local Government Finances

The chart below shows the growth trajectories of total government revenues and population over the years. It is clear that total revenues have grown a lot faster than population.


[^1]Revenue from own sources. Local government revenues from own sources have grown faster than total revenues in the same period, suggesting the county is relying more and more on its own revenues rather than intergovernmental revenues. For example, revenues from own sources increased about 32 percent between 2010 and 2015, while total revenues increased only 28 percent. The chart below shows the spike in the 2015 in total revenues from own sources.

Total Revenues from Own Sources vs. Population Index (1992 Values = 100)


Source: Woods and Foole, Census Bureau Local Government Finances, BERC

Total taxes. Although total taxes have grown significantly faster than population, they did not grow as much as total revenues between 1992 and 2015. However, between 2010 and 2015, total taxes grew by 38 percent, significantly higher than both total revenues and total revenues from own sources.

Total Taxes vs. Population Index (1992 Values = 100)


Source: Woods and Poole, Census Bureau, BERC

Total property taxes. Property taxes increased more than any other revenue category, about 39 percent between 2010 and 2015.

Total Property Taxes vs. Population Index (1992 Values $=100$ )


Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

Intergovernmental revenues. Intergovernmental revenues grew the least in recent years.

## Total Intergovernmental Revenues vs. Population Index (1992 Values = 100)



Source: Woods and Poole, Census Bureau, Local Government Finances, and BERC

Total charges and miscellaneous revenues. This revenue category increased by 1,844 percent between 1992 and 2015. The most dramatic increase occurred between 1992 and 2009. Although the growth rate slowed between 2009 and 2014, it started increasing again in 2014.

Total Charges and Misc. Revenues vs. Population Index (1992 Values = 100)


Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

## J.4. Williamson County Expenditure Growth

Total expenditures. Similar to local government revenues, county expenditures increased significantly more than the population growth. Total expenditures were $\$ 686.5$ million in 2015, a growth of 426 percent from 1992. The chart below shows the growth trend in expenditures versus population growth. Between 2010 and 2015, local expenditures grew by 23 percent.

| County Expenditure Growth |  | $1992-$ | 2002- | 2010- |
| :--- | ---: | ---: | ---: | ---: |
| (in 2009 dollars) | 2015 | 2015 | 2015 | 2015 |
| Total Expenditures | $\$ 686,513,642$ | $426.01 \%$ | $66.18 \%$ | $23.38 \%$ |
| Total Capital Outlays | $\$ 120,333,209$ | $458.35 \%$ | $72.01 \%$ | $58.29 \%$ |
| Total Interest on Debt | $\$ 21,963,628$ | $157.51 \%$ | $28.13 \%$ | $7.99 \%$ |
| Total Salaries and Wages | $\$ 192,151,150$ | $298.12 \%$ | $58.72 \%$ | $-9.16 \%$ |
| Total Educational Expenditures | $\$ 325,315,808$ | $297.59 \%$ | $62.08 \%$ | $13.60 \%$ |
| Total Police Protection Expenditures | $\$ 21,612,883$ | $669.90 \%$ | $380.82 \%$ | $195.06 \%$ |

Source: Woods and Poole, Census Bureau, Local Government Finances, BERC


Source: Woods and Poole, Census Bureau, Local Government Finances, and BERC

Total capital outlays. An important category of expenditures is capital outlays, which grew 459 percent in real dollars between 1992 and 2015. Between 2010 and 2015, this expenditure category grew by 58 percent. The following chart presents the growth trajectory of capital outlays and population over time.

Total Capital Outlays vs. Population Index $(1992$ Values $=100)$


Source: Woods and Poole. Census Bureau. Local Government Finances. BERC

Total interest on the debt. This expenditure category increased 157 percent between 1992 and 2015 and 8 percent between 2010 and 2015.


Total salaries and wages. Total salaries and wages were $\$ 192$ million in 2015, an increase of about 298 percent from 1992. Although overall salaries and wages increased significantly over the study period, they actually declined by 9 percent between 2010 and 2015.

> Total Salaries and Wages vs. Population Index $$
(1992 \text { Values }=100)
$$



Sounce: Woods and Foole. Census Bureau, Local Govemment Finances, BERC

Total educational expenditures. This is by far the largest expenditure category in the county budget. Between 1992 and 2015, educational expenditures grew about 298 percent, reaching $\$ 325.3$ million in 2009 dollars. From 2010 to 2015, growth continued at a rate of almost 14 percent.

Total Educational Expenditures vs. Population Index
( 1992 Values $=100$ )


[^2]Police protection expenditure. Finally, we briefly examine police protection expenditures. Although the overall share of this category in total expenditures is low, it increased substantially over the years: 670 percent from 1992 to 2015, 381 percent from 2002 to 2015, and 195 percent from 2010 to 2015. The largest increase occurred between 2014 and 2015.

Total Police Protection Expenditures vs. Population Index
(1992 Values = 100)


Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

## J.5. Williamson County Outstanding Debt

Outstanding county debt grew to $\$ 522.3$ million in 2015, a growth rate of 255 percent from 1992. Total debt increased by 56 percent between 2002 and 2015. Finally, between 2010 and 2015, the county's inflation-adjusted outstanding debt increased about four percent.

| County Outstanding Debt |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Growth (in 2009 dollars) | 2015 | $1992-2015$ | $2002-2015$ | $2010-2015$ |
| Total Debt Outstanding | $\$ 522,286,972$ | $255.23 \%$ | $55.80 \%$ | $3.89 \%$ |

Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

Total Debt Outstanding vs. Population Index (1992 Values = 100)


Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

## J.6. Does Growth Pay for Itself in Williamson County: A Simulation

This section looks at a growth scenario and its fiscal impact in Williamson County. The scenario assumes that we increase the number of households in Williamson County by 1,196 (the 5-year average annual household migration). What kind of fiscal impact does this increase have on the county? To calculate, we used average household income in Williamson County in 2015, which was $\$ 217,253$ in 2009 dollars. Increasing the number of households by 1,196 generates an additional household income of $\$ 260$ million in 2009 dollars. Given total county expenditures in 2015, how much additional money does the county need to ensure these 1,196 additional households may be properly served? According to our calculations, 1,196 additional households may create an estimated $\$ 10.6$ million revenue pressure on the county. Of course, this may not fully capture any significant capital expenditure requirement associated with building a new school. The assumptions regarding this simulation are given below.

## Simulation: Revenue Implications of Increasing County Households by 1,196

| Number of New Households (5-Year Average Net Migration) | 1,196 |
| :--- | ---: |
| Average Household Income in 2015 (in 2009 dollars) | $\$ 217,253$ |
| Increase in Household Income in Williamson County (in 2009 dollars) | $\$ 259,834,588$ |
| Total Disposable Income Associated with 1,196 New Households | $\$ 225,173,095$ |
| Total Government Expenditures Per Household in 2015 (in 2009 \$) | $\$ 8,854$ |
| Expected Increase in Expenditures with 1,196 New Households | $\$ 10,589,537$ |

Source: IMPLANpro, BERC

What does the result tell us about the contributions of new households to local government finances? According to simulation results, local and state government revenues increase by nearly $\$ 20$ million in 2009 dollars. Top revenue categories are sales tax and property tax. Taking into account strictly local revenues and a portion of sales revenues thorough intergovernmental revenue, we can conclude these households pay more than the services associated with about $\$ 10.6$ million in local spending.

| Simulation: State and Local Tax Impact of Increasing County Households by 1,196 |  |
| :---: | :---: |
|  | Total Taxes by Individuals, |
| Description | Households and Corporations |
| TOPI: Sales Tax | \$10,631,077 |
| TOPI: Property Tax | \$4,342,273 |
| TOPI: Motor Vehicle License | \$180,297 |
| TOPI: Severance Tax | \$4,440 |
| TOPI: Other Taxes | \$2,456,137 |
| TOPI: S/L NonTaxes | \$23,727 |
| Corporate Profits Tax | \$1,242,465 |
| Personal Tax: Income Tax | \$169,126 |
| Personal Tax: NonTaxes (Fines- Fees) | \$153,765 |
| Personal Tax: Motor Vehicle License | \$139,731 |
| Personal Tax: Property Taxes | \$30,944 |
| Personal Tax: Other Tax (Fish/Hunt) | \$98,864 |
| Total State and Local Tax | \$19,501.063 |

[^3]These households create a sizable amount of additional federal revenue, about $\$ 35$ million in 2009 dollars.

| Simulation: Federal Tax Impact of Increasing County Households by <br> Description <br> Total Federal Taxes |  |
| :--- | ---: |
| Social Ins Tax- Employee Contribution | $\$ 8,994,356$ |
| Social Ins Tax- Employer Contribution | $\$ 6,009,028$ |
| TOPI: Excise Taxes | $\$ 1,675,118$ |
| TOPI: Custom Duty | $\$ 632,008$ |
| TOPI: Fed NonTaxes | $\$ 79,708$ |
| Corporate Profits Tax | $\$ 4,839,703$ |
| Personal Tax: Income Tax | $\$ 12,431,572$ |
| Total Federal Tax | $\$ 34,661,493$ |

Source: IMPLANpro, BERC

Conclusion. To conclude, the county population grew dramatically over the 23 years, nearly 140 percent. However, in the same period, county revenues and expenditures increased over 430 percent, showing revenues and expenditures are outperforming population growth. The ultimate question of this study was whether growth pays for itself. According to a fiscal impact scenario this study designed, adding 1,196 households to the county increases local and state revenues by about $\$ 20$ million and federal taxes by $\$ 35$ million. On the other side of the equation, this increase in households requires a total additional government expenditure of $\$ 10.6$ million. On balance, household growth pays for itself in the county.

In this section, we analyze more formally the interaction of Williamson County population growth, economic growth, and county expenditures. We do this by first comparing the county to a set of similar national counties, and second by statistically modeling the interaction for Williamson County itself.

Our chief findings are that Williamson County is among the most successful counties in the U.S. along the dimensions of economic growth, while its expenditures remain relatively low. Further, in the short run, its expenditures are mostly driven by economic growth, but in the longer term, population growth is a significant factor in the expansion of the county's spending.

## K.1. Comparison Counties

It is difficult to reach conclusions about growth or expenditure without some benchmark against which to compare. Thus, we begin by establishing such a benchmark: those national counties most similar to Williamson. We define similarity in economic terms. Williamson County is the highest-income county in the Nashville metro area. As discussed earlier in this report, its per capita income is far above neighboring counties. We screened counties in all U.S. metropolitan statistical areas (MSAs) to find those with average incomes at least 25 percent higher than their MSA average per capita income. Somewhat surprisingly, this yielded only 13 counties (including Williamson). The list of those counties and their basic economic details are shown in the table below.

## Comparison Counties

| County | MSA | Population | GRP | Expenditure | Expend/GRP |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Boone | Indianapolis | 63,400 | $\$ 47,888$ | $\$ 1,641$ | $3.75 \%$ |
| Bristol | Providence | 49,265 | $\$ 29,198$ | $\$ 880$ | $3.30 \%$ |
| Delaware | Columbus | 192,884 | $\$ 56,060$ | $\$ 929$ | $1.81 \%$ |
| Geauga | Cleveland | 94,095 | $\$ 42,015$ | $\$ 1,228$ | $3.44 \%$ |
| Goochland | Richmond | 22,315 | $\$ 131,226$ | $\$ 2,445$ | $2.04 \%$ |
| Hamilton | Indianapolis | 309,172 | $\$ 60,659$ | $\$ 1,531$ | $2.76 \%$ |
| Howard | Baltimore | 312,711 | $\$ 82,197$ | $\$ 2,741$ | $3.65 \%$ |
| Kendall | San Antonio | 35,766 | $\$ 56,452$ | $\$ 615$ | $1.23 \%$ |
| Oakland | Detroit | $1,240,301$ | $\$ 77,522$ | $\$ 918$ | $1.30 \%$ |
| Palm Beach | Miami | $1,421,843$ | $\$ 53,137$ | $\$ 1,410$ | $2.90 \%$ |
| St. Johns | Jacksonville | 226,658 | $\$ 27,238$ | $\$ 1,351$ | $5.43 \%$ |
| Summit | Salt Lake City | 39,481 | $\$ 65,893$ | $\$ 1,349$ | $2.24 \%$ |
| Williamson | Nashville | 211,674 | $\$ 85,678$ | $\$ 1,689$ | $2.16 \%$ |

Gross Regional Product and County Expenditures are per capita.

This table includes county population, gross regional product (GRP) per capita, county expenditure per capita, and a ratio of the county's expenditures to GRP. ${ }^{1}$ Note that expenditures

[^4]do not include those for education. Unfortunately, educational support regimens are simply too different across states to make comparison possible.

## K.2. Where Does Williamson Fit?

We graph Williamson County against these benchmark counties to establish ultimately whether the county's expenditures are typical. We begin by looking at an index of per capital GRP growth. (All indices set 1990 at 100.) We see that Williamson County's growth is remarkable even by the standards of some of America's strongest counties.

## Comparing County Economic Growth



Next, we turn to a per capita income index. This also shows Williamson County's economic situation is, in national terms, extremely robust.

## Comparing County Mean Incomes



The next graph shows an index of the growth of per capita county expenditures. Here Williamson County appears in the middle of the mix. However, this includes a section of years in the 1990s when the county had very contained expenditures. If we re-centered this chart to begin in the late ' 90 s, the county would appear at the upper end in terms of expenditure growth. Again, educational expenditures are excluded, since state education tax regimens are so different.

Comparing County Expenditure Levels


Last, we look at county expenditures divided by gross regional product. Here we see that Williamson County is actually on the low end of expenditures when we take the size of its economy into account. The ratio of expenditures to economic activity is also falling over time. (We will revisit this issue when including educational expenditures below.)

## Comparing County Expenditure Ratios



This brief comparison is largely favorable for Williamson County. The county is growing faster, whether in economic activity or personal income, than its peers, while its expenditures are in
the middle of the pack. Absolute expenditures are rising, but when adjusted for the size of the county's economic activity, they are not.

## K.3. Modeling County Growth and Expenditures

We next developed a statistical model of county growth and expenditures. We used this model to assess Williamson County against its peers and to compare the county's actual performance against what would be predicted from the model. We used two modeling techniques. First, we ran a panel vector autoregression estimation for our 13 counties. ${ }^{2}$ We report that model here. We used county gross regional product, county population, and county revenues to predict county expenditures, net of educational expenditures. ${ }^{3}$ We used the MSA gross regional product and population only as controls, since county performance is obviously intertwined with its larger metro area. (However, our estimation indicates that these controls are not particularly powerful influences on county patterns.)

Our estimated model explains about 90 percent of the movement in county expenditures across time and location. We see that all three variables, population, gross regional product, and revenues, were found to be significant in explaining expenditure growth.

## Modeling County Expenditures

| Dependent Variable: County <br> Expenditures (excl. Education) <br> Coefficient |  |  |  |
| :--- | ---: | :---: | :---: |
| Variable | 0.520 | 7.150 |  |
| TRP | 0.380 | 3.060 | 0.000 |
| Population | 0.148 | 2.380 | 0.002 |
| County Revenue | 0.768 | 3.170 | 0.018 |
| Metro Population | 0.176 | 1.080 | 0.002 |
| Metro GRP |  |  | 0.279 |

Variables are in natural logs. All variables are significant at $0.05 \%$ except Metro GRP.
$\mathrm{F}=782.9$ R-Square $=.9028$

[^5]However, the effect of each is rather modest. As an illustration, if we took a county with a population of 100,000 and county expenditures of $\$ 100$ million, this model suggests that adding 1,000 people to the population would lead to an increase in expenditures of $\$ 377,000$. While not trivial, this does not suggest that population growth forces an explosion in county expenditures.

A second way to observe the impact of population or economic growth on county expenditures is to perform tests of Granger causality. We can use them to see if one factor helps us to predict the growth or change of a second factor. For example, if the population increases, does county expenditure increase (holding constant other factors)? We say one variable Granger causes another if knowing that first variable enables us to better predict the second. In this case, does knowing changes in population or GRP help us to predict changes in the pattern of county expenditures?

## Granger Causality

| [total] | Granger Causality? |
| :--- | :--- |
| GRP $\rightarrow$ Expenditures | no |
| Population $\rightarrow$ Expenditures | no |
| Revenue $\rightarrow$ Expenditures | no |

In this case, the answer is no. We could, however, look again, this time using per capita expenditures rather than total expenditures.

## Granger Causality Using Per Capita Figures

| [per capita] | Granger Causality? |
| :--- | :--- |
| GRP $\rightarrow$ Expenditures | yes |
| Population $\rightarrow$ Expenditures | yes |
| Revenue $\rightarrow$ Expenditures | no |

Here we see that economic growth and population growth per capita help us predict county expenditures. These differing results may seem odd, but they suggest that the impact of population growth and general economic growth on county expenditures depends on the size
of the county. When size is removed (by using per capita figures), we see evidence that population and economic growth do indeed drive increased spending in our sample of counties.

Finally, we use the models developed to assess Williamson County. Does it expend more or less than other similar counties when we account for their varying sizes? Chart K7 shows actual (noneducational) spending in Williamson County compared to what our model would predict. The chart shows that Williamson has, in fact, lower expenditures than we would predict based on the experiences of comparable counties around the U.S. We notice, though, that the gap between the two appears to be slowly closing. Though still lower than predicted, Williamson's expenditures appear to be rising to the level that would be expected based on the experiences of other counties. We conclude here that Williamson County, by most measures, does not spend as much as its peers, whether overall or on a per capita basis

## Williamson County Expenditures: Actual vs. Predicted



## K.4. Williamson County Expenditure Patterns

We move from comparison counties to Williamson counties. Comparatively, its expenditures are rather low, but they are growing. Why? To answer this, we use two techniques. First, similar to our analysis of comparison counties, we estimate a vector autoregression (VAR) to model Williamson's expenditures, and we then extract Granger causality. This time we add impulse/response functions to our analysis. These functions show the impact of a change in one factor on another over set periods of time. VAR models are best suited to discover shorter-term relationships, less than a decade in our analysis. Thus, we also employ a second technique that may better capture longer-term influences. This is a vector error correction model, which we will use to establish the existence of long-term relationships (or the lack thereof) between county expenditures, economic growth, and population growth. Because we are now looking at one specific county, we are able to include all expenditures, including education, in our models.

Let's begin by looking at Granger Causality as found through our VAR.

Granger causality for Williamson County

| [total] | Granger Causality? |
| :--- | :--- |
| GRP $\rightarrow$ Expenditures | yes |
| Population $\rightarrow$ Expenditures | no |
| Revenue $\rightarrow$ Expenditures | no |

## Granger causality for Williamson County using per capita figures

| [per capita] | Granger Causality? |
| :--- | :--- |
| GRP $\rightarrow$ Expenditures | yes |
| Population $\rightarrow$ Expenditures | no |
| Revenue $\rightarrow$ Expenditures | no |

Economic growth clearly leads to higher expenditures. Population and revenue do not directly do so. What our Granger tests seem to be saying is that county expenditures are being directly driven by economic growth. Population is important to the extent that it is implicated with growth, but it is not a direct driver of higher spending.

We examine this graphically using impulse-response functions. These display the impact of the impulse over a set period. The shaded areas in these charts give the confidence intervals. If these areas cross the red line (which indicates there is no response), we cannot conclude that our impulse is actually producing the indicated response.

## Impulse Response Functions for Williamson County (Expenditures)



Let's interpret these charts, which show the impact on Williamson County expenditure over an eight-year time horizon of a "shock" (i.e., an increase) in either economic or population
growth. ${ }^{4}$ The upper right-hand corner shows the effect of a shock to expenditures itself. When county expenditures rise, the increased spending persists for between two and four years before reverting to its former level. (But note this presumes no additional shocks occur over this period. If they did, the level of county expenditures would obviously not return to the preshock level.) Economic growth, measured by GRP, raises county expenditures. The increased expenditures peak at around one-and-a-half to two years and then slowly die out over the following two years. A population shock, however, does not show any significant impact on expenditures.

We repeat this analysis by switching to GRP growth.

## Impulse Response Functions for Williamson County (GRP)



[^6]This time, the impact of economic growth on continued economic growth is shown in the upper left-hand corner. We see that a shock to economic growth persists for about four years. A shock to expenditures actually drives growth down, having maximum impact at about two years. However, here we should be careful, because the confidence interval quickly crosses the zero line. If we examine population growth, it again has the weakest effect. It is associated with a very modest increase in economic growth. What is interesting, though, is how long this small impact lasts-apparently, longer than eight years.

We conclude from these charts that the major drivers of both expenditure and county growth are long-term trajectories. That is to say, both are on established paths; they grow at rates largely determined by their growth in previous years. At the margins, however, shocks to either economic growth or county government expenditures will impact the other and will persist for a number of years. Population, on the other hand, has a little independent impact on shorterterm growth or expenditure patterns.

The lack of a strong, direct shorter-term relationship between population growth and county expenditures seems odd. In particular, educational spending ought to be driven by population growth. Perhaps this is because the relationship between population and expenditures is one that operates on a longer term. In other words, year-to-year population growth is not a significant driver of county spending, but over a longer term, it may be. To answer this, we turn to a complementary analysis using a vector error correction estimation (VECM). VECMs attempt to locate longer-term relationships between factors.

Indeed, our estimation found two long-run relationships. One is between population growth and economic growth. The other is between county expenses and economic growth. These findings are the same as we established with the VAR, but what we can now do in the VECM format is manipulate the two relationships to solve mathematically whether there is a longterm indirect relationship between population and expenditures.

Adjustment Rates between Expenditures, Population, and GRP (per capita)

| Variable | Adjustment |
| :--- | :--- |
| Expenditures | $(-.621)$ GRP |
| Population | $(-.075)$ GRP |

The table above shows the rate at which expenditures, population, and GRP adjust over the long run. A larger absolute number means a more rapid adjustment. When GRP and expenditure growth diverge, the long-term response is for a relatively quick change on the expenditure side. It falls to match the change in the economy. When population growth and GRP diverge, the long-term response is a relatively slow change in population growth.

But what interests us is the relationship between population and expenditures. As we have noted, in fact, this relationship operates primarily through economic growth. We wish to obtain what amounts to a reading of the pass-through rate of population growth on county expenditures by removing the mediator of GRP. When we do this, we obtain an equation of

## EQUATION. The Long-Term Relationship between Williamson County Population Growth and County Expenditures

County Expenditures $=.73 \times$ Population Growth

This indicates that population growth increases county expenditures, albeit disguised by the accompanying economic growth. (Because these figures are in natural logs, they are not linear. We would have to be given a particular level of expenditure or population to estimate the exact increase of the latter due to the former.)

So we have answered our question. Yes, expenditures in Williamson County are sensitive to population growth. And the relationship is not linear; population growth produces larger expenditure growth.

Our final chart shows the relationship of the impacts of economic growth and population growth on county expenditures over a 15-year horizon. We see that economic growth produces an almost immediate spending response that peaks after two to three years and then gradually recedes, but never back to the level of expenditures before the growth shock. The population impact, however, though slower, is also more determined. It does not recede but continues to produce higher expenditures per capita for at least 15 years.


Our analysis has several key conclusions:

- Williamson County expenditures are below what is expected from comparing it to other similar counties across the U.S.
- In the short run, county expenditures are mostly driven by economic activity.
- In the longer run, population growth has a very significant role in the increase of Williamson County expenditures.


## Chapter L. Conclusion

Growth dynamics in Williamson County do not show any similarity to other counties in Tennessee. Even at the national level, this study had difficulty in identifying counties that have similarities in terms of economic growth and size, population growth and size, and driver role in their respective Metropolitan Statistical Areas. The study captures the growth dynamics from various perspectives. Based on the analysis, we draw the following major conclusions.

- Over the years, the population in Williamson County has grown dramatically. Both school-age and old-age population recorded significant growth rates.
- Along with its population growth, Williamson County's economy is a top-performer nationally. Both employment and income figures have grown more than in any other large counties in Tennessee.
- A detailed assessment of economic growth dynamics indicates that the source of economic growth is within the county rather than due to national or regional industrial factors.
- Over the years, the county has invested in human capital and created one of the best educational systems in the state. In terms of human capital formation, its success rate cannot be matched by any large counties in Tennessee in the years to come.
- The county's educational achievement has created a virtuous cycle of attracting businesses and high-paying employment opportunities.
- Of course, the business growth and associated developments have further fueled the real estate market.
- The end result of these developments is a significant growth in local government revenues and expenditures. A significant portion of the county government expenditure goes to local education. As the county grows, the pressure for more schools and other infrastructure spending increases over the time. In Williamson County, the increase in local government revenues and spending has far exceeded the growth in population.
- Furthermore, over the years, the shift in transfer revenues to the county started gradually pushing the county to look for revenues from own sources, such as taxes and charges.
- As a result, some local citizens started questioning the merit of more population growth in the county. The ultimate question is whether population growth pays for itself.
- Using a panel data analysis of similar counties across the nation, our study shows that the long-run relationship between economic growth and county expenditures is quite stable. Similarly, economic and population growth tend to move together. But here the adjustment is much slower: population responds, but rather slowly, to economic growth. Combining these two direct relationships reveals an indirect relationship between population and expenditures. The increased population stemming from economic growth "shocks" leads to expenditure increases that persist far longer than the economic growth. As a result, population tends to have a structural impact on the county, leading to expenditure increases that do not die out even over relatively long time horizons.
- Using nationally recognized software, this study constructed a model for Williamson County and tested the impact of adding 1,196 additional households to the county. The study results suggest that 1,196 additional households generate about $\$ 20$ million in state and local revenues, create about a $\$ 10.6$ million additional burden on the county government, and pay over $\$ 34$ million in federal taxes.
- Overall, the conclusion from these results is that the population growth in Williamson County pays for itself.


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## Appendix Price Index

| PERSONAL CONSUMPTION EXPENDITURE PRICE INDEX $(2009=100)$ |  |  |  |  | Example |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Index | Conversion Rate to 2009 | Conversion rate formula | Sales Volume <br> (Nominal) | Sales Volume (in 2009 dollars): <br> (Nominal Sales Volume X <br> Conversion Rate) |
| 1992 | 71.494 | 1.398718774 | =Index2009/Index92 | \$567 | \$793.07 |
| 1993 | 73.279 | 1.364647443 | =Index2009/Index93 | \$800 | \$1,091.72 |
| 1994 | 74.803 | 1.336844779 | =Index2009/Index94 | \$765 | \$1,022.69 |
| 1995 | 76.356 | 1.309654775 | =Index2009/Index95 | \$800 | \$1,047.72 |
| 1996 | 77.981 | 1.282363653 | =Index2009/Index96 | \$950 | \$1,218.25 |
| 1997 | 79.327 | 1.260604838 | =Index2009/Index97 | \$798 | \$1,005.96 |
| 1998 | 79.936 | 1.251000801 | =Index2009/Index98 | \$1,000 | \$1,251.00 |
| 1999 | 81.11 | 1.232893601 | =Index2009/Index99 | \$1,023 | \$1,261.07 |
| 2000 | 83.131 | 1.202920691 | =Index2009/Index00 | \$1,076 | \$1,294.00 |
| 2001 | 84.736 | 1.180135952 | =Index2009/Index01 | \$1,129 | \$1,331.87 |
| 2002 | 85.873 | 1.164510382 | =Index2009/Index02 | \$1,181 | \$1,375.79 |
| 2003 | 87.572 | 1.141917508 | =Index2009/Index03 | \$1,234 | \$1,409.45 |
| 2004 | 89.703 | 1.114789918 | =Index2009/Index04 | \$1,287 | \$1,434.89 |
| 2005 | 92.261 | 1.083881597 | =Index2009/Index05 | \$1,340 | \$1,452.40 |
| 2006 | 94.729 | 1.055642939 | =Index2009/Index06 | \$1,393 | \$1,470.36 |
| 2007 | 97.102 | 1.029844905 | =Index2009/Index07 | \$1,446 | \$1,488.86 |
| 2008 | 100.065 | 0.999350422 | =Index2009/Index08 | \$1,499 | \$1,497.60 |
| 2009 | 100 | $1$ | =Index2009/Index09 | \$1,551 | \$1,551.43 |
| 2010 | 101.653 | 0.983738798 | =Index2009/Index 10 | \$1,604 | \$1,578.20 |
| 2011 | 104.149 | 0.960162844 | =Index2009/Index 11 | \$1,657 | \$1,591.13 |
| 2012 | 106.121 | 0.942320559 | =Index2009/Index 12 | \$1,710 | \$1,611.37 |
| 2013 | 107.532 | 0.929955734 | =Index2009/Index 13 | \$1,763 | \$1,639.38 |
| 2014 | 109.157 | 0.916111656 | =Index2009/Index 14 | \$1,816 | \$1,663.40 |
| 2015 | 109.481 | 0.913400499 | =Index2009/Index 15 | \$1,869 | \$1,706.75 |
| 2016 | 110.789 | 0.902616686 | =Index2009/Index 16 | \$1,921 | \$1,734.31 |

Note: Chain-type price index; historical data, 1969-2016, from U.S. Dept. of Commerce.

## Appendix Chapters C-I

Appendix Chapter C. Population Dynamics in Williamson County

| Percent of Population Under 18 Years Old (1992-2027) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| ANDERSON, TN | 23.74\% | 23.40\% | 22.80\% | 22.37\% | 21.30\% | 21.00\% | 20.86\% | 20.74\% | 20.54\% | 20.52\% |
| BLOUNT, TN | 22.96\% | 22.89\% | 22.92\% | 22.73\% | 21.63\% | 20.90\% | 20.63\% | 20.34\% | 19.57\% | 19.48\% |
| BRADLEY, TN | 24.63\% | 23.85\% | 23.41\% | 23.37\% | 22.60\% | 22.39\% | 22.14\% | 21.99\% | 21.72\% | 21.96\% |
| CUMBERLAND, TN | 22.97\% | 21.88\% | 20.90\% | 19.75\% | 18.57\% | 18.15\% | 18.01\% | 17.81\% | 17.94\% | 18.25\% |
| DAVIDSON, TN | 22.81\% | 22.38\% | 22.11\% | 22.00\% | 21.69\% | 21.46\% | 21.33\% | 21.64\% | 23.24\% | 24.21\% |
| DICKSON, TN | 27.20\% | 26.88\% | 26.43\% | 25.85\% | 24.13\% | 23.50\% | 23.36\% | 23.19\% | 23.01\% | 22.97\% |
| GREENE, TN | 22.77\% | 22.37\% | 22.05\% | 21.76\% | 20.61\% | 19.96\% | 19.67\% | 19.51\% | 19.21\% | 19.10\% |
| HAMBLEN, TN | 23.86\% | 23.50\% | 23.14\% | 23.58\% | 23.42\% | 23.36\% | 23.23\% | 23.05\% | 22.54\% | 22.36\% |
| HAMILTON, TN | 24.07\% | 23.52\% | 22.82\% | 22.03\% | 21.29\% | 21.11\% | 21.03\% | 21.09\% | 21.63\% | 21.97\% |
| HENRY, TN | 22.78\% | 22.43\% | 22.00\% | 22.02\% | 21.32\% | 20.83\% | 20.67\% | 20.63\% | 20.94\% | 21.05\% |
| KNOX, TN | 22.45\% | 22.38\% | 22.11\% | 21.97\% | 21.59\% | 21.30\% | 21.22\% | 21.17\% | 21.38\% | 21.84\% |
| MADISON, TN | 26.16\% | 25.97\% | 25.39\% | 24.81\% | 23.38\% | 22.95\% | 22.85\% | 22.73\% | 22.87\% | 23.24\% |
| MAURY, TN | 26.29\% | 26.33\% | 25.78\% | 24.54\% | 23.85\% | 23.57\% | 23.42\% | 23.61\% | 24.81\% | 25.71\% |
| MONTGOMERY, TN | 27.22\% | 28.17\% | 28.33\% | 27.88\% | 27.42\% | 27.01\% | 26.88\% | 27.07\% | 28.20\% | 28.85\% |
| PUTNAM, TN | 21.85\% | 22.22\% | 21.99\% | 21.84\% | 21.32\% | 21.13\% | 21.11\% | 21.00\% | 21.20\% | 21.88\% |
| ROBERTSON, TN | 27.47\% | 27.10\% | 26.73\% | 26.20\% | 25.33\% | 24.81\% | 24.54\% | 24.30\% | 23.63\% | 23.27\% |
| RUTHERFORD, TN | 26.78\% | 26.62\% | 26.34\% | 26.42\% | 25.60\% | 25.00\% | 24.90\% | 24.64\% | 23.78\% | 23.41\% |
| SEVIER, TN | 23.76\% | 23.21\% | 22.84\% | 22.51\% | 21.64\% | 21.09\% | 20.97\% | 20.81\% | 20.35\% | 20.42\% |
| SHELBY, TN | 27.78\% | 28.16\% | 28.04\% | 27.25\% | 25.76\% | 25.38\% | 25.23\% | 25.22\% | 25.55\% | 25.74\% |
| SULLIVAN, TN | 22.36\% | 22.02\% | 21.73\% | 21.22\% | 20.14\% | 19.73\% | 19.65\% | 19.58\% | 19.76\% | 19.99\% |
| SUMNER, TN | 27.27\% | 26.64\% | 25.86\% | 25.56\% | 24.62\% | 24.16\% | 24.00\% | 23.80\% | 23.17\% | 22.91\% |
| WASHINGTON, TN | 21.72\% | 21.47\% | 21.04\% | 20.68\% | 19.87\% | 19.59\% | 19.37\% | 19.31\% | 19.20\% | 19.54\% |
| WEAKLEY, TN | 21.79\% | 21.70\% | 21.51\% | 20.16\% | 19.74\% | 19.62\% | 19.56\% | 19.63\% | 20.17\% | 21.16\% |
| WILLIAMSON, TN | 29.17\% | 29.29\% | 29.11\% | 29.20\% | 28.60\% | 27.93\% | 27.63\% | 27.12\% | 24.49\% | 22.43\% |
| WILSON, TN | 27.19\% | 26.51\% | 26.16\% | 25.49\% | 24.45\% | 23.99\% | 23.95\% | 23.77\% | 23.04\% | 22.70\% |
| TENNESSEE | 24.94\% | 24.71\% | 24.41\% | 24.01\% | 23.11\% | 22.71\% | 22.58\% | 22.49\% | 22.43\% | 22.49\% |
| UNITED STATES | 25.93\% | 26.01\% | 25.36\% | 24.57\% | 23.47\% | 22.94\% | 22.79\% | 22.67\% | 22.47\% | 22.39\% |

[^7]| Population Under 18 Years Old (1992-2027) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| ANDERSON, TN | 16,739 | 16,783 | 16,303 | 16,460 | 16,048 | 15,896 | 15,839 | 15,822 | 16,084 | 16,483 |
| BLOUNT, TN | 20,825 | 23,107 | 25,104 | 27,270 | 26,841 | 26,568 | 26,542 | 26,450 | 26,958 | 28,393 |
| BRADLEY, TN | 18,793 | 20,194 | 20,998 | 22,511 | 22,850 | 23,266 | 23,133 | 23,146 | 23,760 | 24,907 |
| CUMBERLAND, TN | 8,467 | 9,565 | 10,223 | 10,773 | 10,601 | 10,575 | 10,562 | 10,585 | 11,435 | 12,441 |
| DAVIDSON, TN | 119,814 | 126,424 | 126,976 | 133,099 | 140,772 | 145,569 | 145,977 | 149,419 | 168,170 | 183,157 |
| DICKSON, TN | 9,885 | 10,932 | 11,786 | 12,484 | 12,109 | 12,092 | 12,189 | 12,212 | 12,719 | 13,298 |
| GREENE, TN | 13,041 | 13,469 | 14,125 | 14,765 | 14,153 | 13,682 | 13,498 | 13,442 | 13,555 | 13,785 |
| HAMBLEN, TN | 12,448 | 13,264 | 13,487 | 14,525 | 14,687 | 14,814 | 14,815 | 14,818 | 15,112 | 15,617 |
| HAMILTON, TN | 70,021 | 71,703 | 71,170 | 71,551 | 73,629 | 74,652 | 75,244 | 75,823 | 79,823 | 83,087 |
| HENRY, TN | 6,501 | 6,809 | 6,894 | 7,011 | 6,901 | 6,708 | 6,678 | 6,679 | 6,874 | 6,989 |
| KNOX, TN | 78,535 | 84,313 | 86,122 | 92,085 | 95,147 | 96,169 | 96,791 | 97,509 | 103,865 | 111,720 |
| MADISON, TN | 21,254 | 22,844 | 23,745 | 24,070 | 23,034 | 22,398 | 22,320 | 22,290 | 22,968 | 23,847 |
| MAURY, TN | 15,599 | 17,702 | 18,194 | 19,108 | 19,546 | 20,682 | 21,075 | 21,463 | 23,808 | 25,970 |
| MONTGOMERY, TN | 29,384 | 35,704 | 39,122 | 44,794 | 50,795 | 52,215 | 52,623 | 54,034 | 62,248 | 70,270 |
| PUTNAM, TN | 11,737 | 13,328 | 14,075 | 15,174 | 15,664 | 15,843 | 16,030 | 16,105 | 17,150 | 18,616 |
| ROBERTSON, TN | 11,935 | 13,742 | 15,182 | 16,541 | 16,906 | 16,986 | 16,972 | 17,066 | 17,951 | 19,080 |
| RUTHERFORD, TN | 34,757 | 43,728 | 51,761 | 64,447 | 70,231 | 74,607 | 76,749 | 77,597 | 83,494 | 91,417 |
| SEVIER, TN | 13,130 | 15,175 | 17,141 | 19,420 | 19,972 | 20,175 | 20,273 | 20,444 | 21,723 | 23,658 |
| SHELBY, TN | 235,076 | 248,052 | 253,109 | 251,042 | 241,855 | 237,563 | 235,800 | 236,631 | 244,982 | 251,698 |
| SULLIVAN, TN | 32,883 | 33,571 | 33,276 | 32,962 | 31,535 | 30,905 | 30,785 | 30,743 | 31,510 | 32,322 |
| SUMNER, TN | 29,507 | 32,945 | 35,190 | 39,097 | 40,887 | 42,481 | 43,217 | 43,590 | 46,361 | 49,971 |
| WASHINGTON, TN | 20,712 | 22,347 | 23,046 | 24,364 | 24,823 | 24,754 | 24,688 | 24,837 | 25,983 | 27,771 |
| WEAKLEY, TN | 7,031 | 7,409 | 7,408 | 6,907 | 6,829 | 6,636 | 6,553 | 6,583 | 6,819 | 7.193 |
| WILLIAMSON, TN | 25,747 | 32,444 | 39,864 | 49,502 | 55,230 | 59,110 | 60,548 | 61,415 | 65,542 | 70,761 |
| WILSON, TN | 19,332 | 21,756 | 24,339 | 27,209 | 29,121 | 30,892 | 31,801 | 32,372 | 35,675 | 39,893 |
| TENNESSEE | 1,259,458 | 1,359,030 | 1,414,857 | 1,482,747 | 1,491,695 | 1,497,808 | 1,501,795 | 1,510,087 | 1,584,886 | 1,670,995 |
| UNITED STATES | 66,508,036 | 70,917,567 | 72,936,450 | 74,019,396 | 73,707,343 | 73,617,277 | 73,643,778 | 73,885,333 | 76,690,265 | 80,017,208 |

Source: Woods \& Poole, Census Bureau (www.census.gov), BERC


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| ＇O¢t＇ | L＇Lz8＇ $1+8$ | 671 ＇888＇sz8 | ¢ | ＇868＇078 | L81＇899818 | ＇to | 8 \＆18＇866＇si¢ | 067＇ | 8ヶ\％ | 8 ャ6†＇ILL＇908 | I\＆z | zsI＇cz9＇28 | 8L8＇969＇zL | cz | v |
| IzG＇OSt＇L | 506＇990＇ | ャて9＇tLL＇9 | ＋61＇ts9＇9 | 9so＇s6s＇9 | 899＇ゅゅ¢＇9 | 1z8＇t6t＇9 | 908＇tst＇9 | ＋89＇268＇9 | 129＇9s8＇9 | 610＇908＇9 | LzL＇slıI＇9 | 6＇962＇s | $886^{66}$＇s | 2ャL＇6ヶ0＇s | gassannal |
| 80L＇SLI | ¢98＇ts | zL＇981 | 18L＇z81 | zLL＇871 | ャロキ＇sz1 | キ10 $\mathrm{zz1}$ | 601＇611 | 08L＇911 | 129＇tıI | osq＇zII | LSL＇901 | 880＇86 | ャ¢o＇z8 | 280＇14 | INAOO NOSTIM |
| czessie | ¢19\％9\％ | ＜8t＇9zz | 201＇612 | ＋29＇1IZ | 418 Soz | z80＇661 | ¢60＇661 | 7ヶ¢＇881 | ¢t1＇tsl | z88081 | ＋8s＇691 | ¢¢698ı | OLL＇OII | zsz＇88 | InNos noswvitilm |
| ャ66¢8 | 608 ＇s | ¢tG＇$¢$ | Los＇s8 | 188＇¢8 | 100＇t\％ | 981 ＇t¢ | เ6¢＇ts | 206＇t 8 | Lzo＇s 8 | z¢L＇t¢ | 9sz＇t¢ | ¢ヶも゙t¢ | Sti＇ts | ャレて＇̇¢ | x．innoo латуvza |
| 8 sc ＇z＋1 | 108＇s8I | 979871 | ゅ＇Lzı | Ls8971 | $666 \mathrm{Gz1}$ | 91g＇szi | L06＇tz1 | 0z6＇zz1 | ¢ $\downarrow$ ¢＇¢z1 | ${ }^{6} 69^{\prime} \mathrm{IzI}$ | 888＇LII | $979^{\prime} 601$ | OLO＇tor | ＇c6 | NnOo NOL．bNIHSVM |
| 860 ＇81z | $61^{\prime} 002$ | 881881 | 890＇081 | 998＇S 21 | 06L＇zLI | 011＇691 | 101＇991 | 788＇991 | 6 6て＇191 | 618895 | 666＇zsi | 260＇981 | 689 ＇8z | t81801 | xinnoo yanwnis |
| ${ }^{869} 191$ | $88 \downarrow$＇6¢ | $980^{\circ} \mathrm{Cs} 1$ | L9999ı | 199＇991 | t8L＇991 | z9s 9 s I | L 4 ＇99 ${ }^{\text {¢ }}$ | z6＇9sı | 0z8＇9sı | 199＇991 | L9\％＇ss | I＇\＆s | ＇zs | $0^{\prime} \angle \mathrm{t}$ | nnoo nvattins |
| OsL＇LL6 | 886＇856 | 612886 | 809＇t\％6 | 181＇986 | 291＇286 | 160 ＇886 | ¢96＇886 | 110＇886 | z99886 | เヶ¢＇zz6 | 61＇176 | ＋¢9706 | 798＇088 | z¢¢＇9r8 |  |
| ¢ャ8＇sı | 972＇901 | $97 z 86$ | 8 2996 | $199^{9} \mathrm{~s} 6$ | 969＇ヶ6 | 9s8＇¢6 | 667 ＇z6 | ¢z1＇t6 | 22668 | 960＇68 | ャ87＇98 | sso＇s 2 | 62859 | osz＇ss | H1／3S |
| ${ }^{18 t} 068$ | 680＇198 | $6988^{\prime 2} 18$ | ISz＇808 | ¢zて＇86z | ¢60＇687 | $688{ }^{\prime} 187$ | 988＇ャLz | 981697 | 9LL＇89z | 820＇6gz | ¢¢6\％¢ヶて | 819961 | 8セて＇91 | 508＇671 |  |
| 866＇18 | zL6＇sL | $97 \%$ \％ | ¢91＇${ }^{1} 9$ | 7sヶ¢89 | 8z629 | ゅ⿰でく9 | ¢ $\downarrow$ L＇99 | 869＇99 | $168{ }^{\prime} 99$ | 162＇s9 | ¢t1＇¢9 | ¢6L＇9s | solios | くゅt＇¢t |  |
| 260＇s8 | 888＇08 | 802＇92 | 186＇s $L^{\text {c }}$ | ャL6＇ャレ | 828＇72 | z66\％$\%$ | L8t＇\＆ 2 | 186＇zL | 08s 72 | 6LS＇TL | 897＇69 | \＆10＇t9 | 886＇6s | 8zL＇ss | X．innoo wvilind |
| ISc＇stz | ¢¢L＇Ozz | ${ }^{819661}$ | ¢ ¢ L ¢ 61 | ャ67＇ 861 | ¢c9\％${ }^{\text {c }}$ | L89＇\％81 | ¢zz＇ss1 | ¢c9＇921 | $81 z^{\prime}$ ¢ 21 | 998＇891 | 7t9＇091 | 860＇881 | 992＇971 | L96 201 | nnoz ayawobinow |
| Stiotiol | tot＇s6 | O1606 | 18668 | 98L＇L8 | Its＇s8 | ${ }^{119 \% 8}$ | $696{ }^{\prime} 18$ | Stゅ＇18 | 881 ＇18 | 98908 | Ls8＇LL | tLSOL | $988<9$ | ＋t¢＇6s | ג．nnoo aynvw |
| 1z9＇zor | Ltwool | 080＇86 | 899＇26 | 60926 | 08I＇86 | ¢1L＇86 | 8z＇s6 | zzo＇s6 | $88 z 86$ | LzL＇L6 | 170＇L6 | Eos＇¢6 | 22628 | s8z＇18 | nnoo nosiavw |
| 8testis | 169 c8t | ¢ $29.09{ }^{\circ}$ | z81＇9¢ヶ | t＋ゅ＇19t | ¢z18tt |  | 8620tt | ISç9\％t | 9¢0＇s¢t | ¢Lさ＇6zt | 960＇61t | ¢tt＇688 | L92＇928 | 7886 ¢ ${ }^{\text {\％}}$ | X．INAOO XONX |
| 607 ＇ 8 | 888＇z | 88878 | 018＇\％8 | soz＇z8 | ¢1\＆\％\％ | ¢czz\％ |  | $628 \% \%$ | ャ๐t＇zs | ャ¢ \％$¢ 8$ | 888＇18 | ¢ ¢ ¢ ¢ 18 | 8cs 08 | tts＇sz | ．．．nnoo xуnat |
| ${ }^{991} 888$ | 680＇698 | 20t＇698 | 88L2cs | to9＇8c8 | ¢tsose | ¢c88858 | 88L＇Sts | 6860 ¢8 | 78¢ $28 \varepsilon$ | ${ }_{699} 988$ | ャ8L＇もて¢ | 068＇1IE | 606＇\％08 | †7606z | ג．INกOo NOLITIWV |
| 988.69 | ＋80＇29 | 08z＇ヶ9 | ¢82＇¢9 | †1ヵ¢9 | zzo＇s9 | 780＇89 | z1L＇z9 | 918 ＇z9 | oss 79 | 088 79 | Z6¢＇ 19 | ¢878s | cst＇9s | 1817 zs | NกOว natawv |
| 191＇zL | セts＇ol | 『6889 | ¢19＇89 | ISS＇89 | 91t＇89 | zLZ＇89 | t¢9＇89 | 96689 | 98889 | けセ＜＇89 | －+8 ＇ 29 | 020＇t9 | 1 1z＇09 | LLZ＇Ls | 2．．nกoo anazy |
| －68＇ 2 s | ¢ $£ 2 z^{\prime} \mathrm{sc}$ | 8s9\％s | 02izs | 19t＇ts | 609\％s | ${ }_{\text {Hzeos }}$ | $\angle L$＇os | 9666 | 102＇6t | 088＇6t | L87＇8t | 98S＇ゅt | 0290t | －t¢98 | ．nnoo nosyoia |
| OL＇9＇9 2 | L69＇8z 2 | 86 t＇069 | O1t＇t89 | ¢88＇829 | 669899 | 066899 | ＋00＇669 | 80＇scs | L20＇879 | 800＇179 | 180＇s09 | ¢IZ＇t 2 S | too＇s9s | 8LI＇gzs | A．snoo nosaiava |
| 291＇89 | ＋ 81 ＇$¢ 9$ | Lゅゅ＇6s | ¢s98s | 8Lz＇8s | 8s62s | ¢IS＇Ls | 8LO＇Ls | 9＇9s | olz＇9s | zL9＇ss | เร¢＇ヶ¢ | 16 ＇8t | ¢12＇st | 9s8＇98 | nnoz anvidaswno |
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| ゅせん＇stl | ＋¢L281 | ${ }^{690} 081$ | 029＇871 | Zti＇LZI | 760971 | ¢86＇tて1 | 690＇tzI | tol＇sz1 | 1ヶで¢z1 | 689 zzI | Os6＇61 | ¢IS＇601 | 8s6＇001 | 812＇06 | X．INกOO INSOTS |
| \＄88．08 | ゅて¢＇82 | 98792 | 986＇SL | 869＇s ${ }^{\text {c }}$ | $\angle \pm \varepsilon^{\prime} \mathrm{S}^{\prime}$ | 07t＇s 2 | $978 \varepsilon^{\prime}$ ¢ 2 | 62 I ＇SL | 9zi＇ş | 180＇s 2 | 089＇8L | sıs＇tL | 98L＇TL | 609＇02 | d．innoo nosyatiny |
| $\underline{270 \%}$ | z70z | －102 | $910 z$ | sioz | H10z | \＆10z | z10z | ${ }^{1} 10 z$ | 010z | 6007 | 200z | z00z | 2661 | z661 | sэ甲unos |
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| Percent of Population over 65 Years Old |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| ANDERSON, TN | 15.92\% | 16.24\% | 16.59\% | 16.88\% | 18.10\% | 19.25\% | 19.72\% | 20.22\% | 22.99\% | 25.58\% |
| BLOUNT, TN | 14.43\% | 14.24\% | 14.11\% | 15.01\% | 17.36\% | 18.93\% | 19.38\% | 19.88\% | 22.39\% | 24.71\% |
| BRADLEY, TN | 11.34\% | 11.60\% | 12.06\% | 13.26\% | 14.92\% | 16.08\% | 16.46\% | 16.69\% | 18.07\% | 19.53\% |
| CUMBERLAND, TN | 18.44\% | 20.11\% | 21.42\% | 24.10\% | 27.79\% | 29.37\% | 29.67\% | 30.18\% | 32.21\% | 33.86\% |
| DAVIDSON, TN | 11.62\% | 11.28\% | 10.94\% | 10.44\% | 10.68\% | 11.25\% | 11.45\% | 11.63\% | 12.61\% | 13.11\% |
| DICKSON, TN | 12.46\% | 11.84\% | 11.88\% | 12.32\% | 14.10\% | 15.38\% | 15.64\% | 15.98\% | 17.67\% | 19.35\% |
| GREENE, TN | 14.13\% | 14.68\% | 15.26\% | 16.21\% | 18.68\% | 20.47\% | 20.91\% | 21.31\% | 23.25\% | 24.96\% |
| HAMBLEN, TN | 12.35\% | 13.19\% | 13.83\% | 14.83\% | 16.89\% | 17.98\% | 18.20\% | 18.40\% | 19.73\% | 21.36\% |
| HAMILTON, TN | 13.60\% | 13.80\% | 13.81\% | 14.18\% | 15.23\% | 16.39\% | 16.71\% | 17.07\% | 19.10\% | 20.60\% |
| HENRY, TN | 19.41\% | 18.49\% | 18.03\% | 18.60\% | 20.52\% | 22.21\% | 22.52\% | 22.85\% | 24.09\% | 25.38\% |
| KNOX, TN | 12.68\% | 12.67\% | 12.57\% | 12.64\% | 13.72\% | 14.80\% | 15.15\% | 15.45\% | 17.09\% | 18.50\% |
| MADISON, TN | 13.42\% | 12.80\% | 12.16\% | 12.46\% | 13.97\% | 15.50\% | 16.09\% | 16.39\% | 18.37\% | 19.87\% |
| MAURY, TN | 12.74\% | 12.27\% | 12.03\% | 12.37\% | 14.02\% | 15.23\% | 15.49\% | 15.90\% | 18.23\% | 19.71\% |
| MONTGOMERY, TN | 7.61\% | 7.61\% | 7.99\% | 7.97\% | 8.11\% | 8.80\% | 9.06\% | 9.14\% | 9.84\% | 10.56\% |
| PUTNAM, TN | 13.00\% | 13.33\% | 13.20\% | 13.81\% | 15.31\% | 16.27\% | 16.47\% | 16.70\% | 17.90\% | 18.72\% |
| ROBERTSON, TN | 11.80\% | 11.11\% | 10.82\% | 11.38\% | 12.66\% | 13.91\% | 14.20\% | 14.55\% | 16.72\% | 18.74\% |
| RUTHERFORD, TN | 8.25\% | 7.74\% | 7.49\% | 7.85\% | 8.94\% | 9.82\% | 10.09\% | 10.36\% | 11.81\% | 12.98\% |
| SEVIER, TN | 12.56\% | 12.81\% | 12.88\% | 14.26\% | 16.58\% | 18.30\% | 18.88\% | 19.43\% | 21.98\% | 24.05\% |
| SHELBY, TN | 10.51\% | 10.23\% | 9.82\% | 9.87\% | 10.78\% | 12.09\% | 12.53\% | 12.81\% | 14.41\% | 15.52\% |
| SULLIVAN, TN | 14.63\% | 15.41\% | 16.26\% | 17.46\% | 19.58\% | 20.72\% | 21.06\% | 21.54\% | 23.71\% | 25.51\% |
| SUMNER, TN | 10.42\% | 10.70\% | 10.91\% | 11.81\% | 13.78\% | 15.07\% | 15.43\% | 15.85\% | 17.95\% | 19.77\% |
| WASHINGTON, TN | 14.08\% | 13.90\% | 13.95\% | 14.48\% | 15.99\% | 17.37\% | 17.64\% | 17.96\% | 19.40\% | 20.76\% |
| WEAKLEY, TN | 16.06\% | 15.21\% | 14.27\% | 14.82\% | 16.23\% | 17.57\% | 17.87\% | 18.12\% | 19.25\% | 20.37\% |
| WILLIAMSON, TN | 8.22\% | 8.12\% | 8.01\% | 9.00\% | 10.64\% | 12.07\% | 12.47\% | 13.09\% | 16.47\% | 19.79\% |
| WILSON, TN | 9.82\% | 9.82\% | 9.87\% | 11.04\% | 13.47\% | 14.92\% | 15.20\% | 15.70\% | 17.89\% | 19.92\% |
| TENNESSEE | 12.71\% | 12.51\% | 12.38\% | 12.84\% | 14.23\% | 15.41\% | 15.74\% | 16.09\% | 17.88\% | 19.38\% |
| UNITED STATES | 12.61\% | 12.62\% | 12.35\% | 12.56\% | 13.74\% | 14.88\% | 15.24\% | 15.61\% | 17.54\% | 19.30\% |

Source: Woods \& Poole, Census Bureau (www.census.gov), BERC

| Population over 65 Years Old |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 | 2022 | 2027 |
| ANDERSON, TN | 11,225 | 11,652 | 11,865 | 12,417 | 13,634 | 14,572 | 14,972 | 15,427 | 18,007 | 20,551 |
| BLOUNT, TN | 13,090 | 14,374 | 15,452 | 18,002 | 21,543 | 24,070 | 24,938 | 25,856 | 30,838 | 36,016 |
| BRADLEY, TN | 8,653 | 9,825 | 10,817 | 12,778 | 15,085 | 16,709 | 17,198 | 17,563 | 19,766 | 22,160 |
| CUMBERLAND, TN | 6,796 | 8,791 | 10,480 | 13,140 | 15,862 | 17,118 | 17,405 | 17,939 | 20,531 | 23,084 |
| DAVIDSON, TN | 61,008 | 63,719 | 62,834 | 63,179 | 69,310 | 76,295 | 78,389 | 80,290 | 91,261 | 99,205 |
| DICKSON, TN | 4,529 | 4,814 | 5,298 | 5,947 | 7,073 | 7,917 | 8,160 | 8,413 | 9,765 | 11,203 |
| GREENE, TN | 8,094 | 8,837 | 9,777 | 10,999 | 12,825 | 14,030 | 14,344 | 14,684 | 16,404 | 18,014 |
| HAMBLEN, TN | 6,446 | 7,442 | 8,060 | 9,133 | 10,589 | 11,403 | 11,608 | 11,830 | 13,228 | 14,915 |
| HAMILTON, TN | 39,555 | 42,070 | 43,083 | 46,062 | 52,667 | 57,944 | 59,776 | 61,356 | 70,503 | 77,899 |
| HENRY, TN | 5,541 | 5,613 | 5,652 | 5,921 | 6,642 | 7,154 | 7,277 | 7,399 | 7,908 | 8,429 |
| KNOX, TN | 44,345 | 47,728 | 48,944 | 52,955 | 60,474 | 66,796 | 69,105 | 71,175 | 83,024 | 94,617 |
| MADISON, TN | 10,903 | 11,261 | 11,367 | 12,092 | 13,766 | 15,133 | 15,713 | 16,080 | 18,452 | 20,391 |
| MAURY, TN | 7,561 | 8,249 | 8,487 | 9,629 | 11,496 | 13,365 | 13,942 | 14,454 | 17,488 | 19,912 |
| MONTGOMERY, TN | 8,218 | 9,653 | 11,035 | 12,797 | 15,014 | 17,001 | 17,730 | 18,237 | 21,731 | 25,713 |
| PUTNAM, TN | 6,984 | 7,994 | 8,452 | 9,593 | 11,253 | 12,198 | 12,508 | 12,811 | 14,477 | 15,931 |
| ROBERTSON, TN | 5,126 | 5,632 | 6,148 | 7,188 | 8,453 | 9,519 | 9,818 | 10,216 | 12,704 | 15,367 |
| RUTHERFORD, TN | 10,706 | 12,708 | 14,713 | 19,156 | 24,524 | 29,308 | 31,111 | 32,631 | 41,463 | 50,694 |
| SEVIER, TN | 6,941 | 8,373 | 9,668 | 12,308 | 15,304 | 17,505 | 18,250 | 19,085 | 23,463 | 27,863 |
| SHELBY, TN | 88,989 | 90,101 | 88,670 | 90,932 | 101,232 | 113,216 | 117,102 | 120,181 | 138,139 | 151,778 |
| SULLIVAN, TN | 21,513 | 23,491 | 24,911 | 27,131 | 30,645 | 32,461 | 32,987 | 33,827 | 37,793 | 41,248 |
| SUMNER, TN | 11,270 | 13,240 | 14,843 | 18,056 | 22,893 | 26,511 | 27,778 | 29,031 | 35,921 | 43,121 |
| WASHINGTON, TN | 13,431 | 14,464 | 15,284 | 17,061 | 19,975 | 21,943 | 22,481 | 23,105 | 26,246 | 29,514 |
| WEAKLEY, TN | 5,182 | 5,194 | 4,914 | 5,076 | 5,613 | 5,943 | 5,988 | 6,079 | 6,508 | 6,926 |
| WILLIAMSON, TN | 7,250 | 8,990 | 10,964 | 15,255 | 20,549 | 25,557 | 27,316 | 29,642 | 44,082 | 62,453 |
| WILSON, TN | 6,981 | 8,061 | 9,182 | 11,791 | 16,043 | 19,210 | 20,180 | 21,375 | 27,712 | 34,992 |
| TENNESSEE | 641,852 | 688,153 | 717,537 | 792,742 | 918,581 | 1,016,458 | 1,047,052 | 1,080,067 | 1,263,626 | 1,439,668 |
| UNITED STATES | 32,357,455 | 4,405,222 | 5,522,203 | 7,825,706 | 3,157,564 | 47,734,279 | 49,244,306 | 50,857,393 | 59,874,251 | 69,000,340 |

Source: Woods \& Poole, Census Bureau (www.census.gov), BERC


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| $000^{\prime} 76 \mathrm{~S}^{\prime} 88 \$^{-}$ | 000＇009＇̇Z ${ }^{-}$ | 000＇889＇8\＄ | 000＇セEz＇si\＄ |  |
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|  | 000＇6SZ＇IE\＄ | 000＇898＇61\＄ | 000＇G08＇91\＄ | A．LNกOכ ©NVTצagwno |
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## Appendix Chapter D. Workforce Dynamics in Williamson County

| Unemployment Rate (1990-2017) (In Percent) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Name | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 | 2017 |
| Anderson | 5.4 | 5.4 | 4.7 | 4.2 | 7.9 | 6.8 | 5.8 | 4.9 | 3.9 |
| Blount | 5.9 | 4.3 | 4.2 | 3.9 | 7.1 | 6.0 | 5.2 | 4.4 | 3.5 |
| Bradley | 6.8 | 5.3 | 4.8 | 4.5 | 7.4 | 6.1 | 5.2 | 4.4 | 3.7 |
| Cumberland | 9.1 | 6.8 | 6.1 | 5.5 | 9.0 | 7.9 | 7.1 | 5.9 | 4.6 |
| Davidson | 4.8 | 3.3 | 4.3 | 3.8 | 6.2 | 5.0 | 4.4 | 3.6 | 2.7 |
| Dickson | 6.3 | 4.7 | 4.8 | 4.2 | 8.3 | 6.3 | 5.4 | 4.3 | 3.3 |
| Greene | 12.0 | 9.2 | 6.6 | 6.9 | 10.2 | 8.1 | 6.4 | 5.4 | 4.5 |
| Hamblen | 7.9 | 5.7 | 5.8 | 4.7 | 9.4 | 7.4 | 6.2 | 5.1 | 4.0 |
| Hamilton | 5.6 | 4.8 | 4.3 | 3.9 | 6.9 | 6.2 | 5.3 | 4.6 | 3.6 |
| Henry | 7.4 | 7.2 | 6.5 | 6.2 | 9.4 | 8.1 | 6.5 | 5.9 | 4.5 |
| Knox | 4.6 | 3.5 | 3.6 | 3.4 | 6.1 | 5.4 | 4.7 | 4.0 | 3.2 |
| Madison | 6.0 | 4.7 | 5.2 | 7.5 | 9.4 | 6.3 | 5.6 | 4.6 | 3.3 |
| Maury | 8.5 | 7.9 | 6.4 | 6.0 | 10.3 | 10.6 | 8.5 | 7.0 | 5.6 |
| Montgomery | 6.2 | 4.5 | 5.1 | 4.7 | 7.6 | 6.6 | 5.8 | 5.1 | 4.1 |
| Putnam | 7.0 | 5.7 | 5.4 | 4.5 | 8.0 | 6.9 | 5.8 | 4.9 | 3.7 |
| Robertson | 6.5 | 4.6 | 4.9 | 4.4 | 7.0 | 5.7 | 4.9 | 4.1 | 3.4 |
| Rutherford | 4.8 | 3.7 | 4.1 | 3.7 | 6.5 | 5.2 | 4.5 | 3.7 | 2.9 |
| Sevier | 9.5 | 8.2 | 5.9 | 5.0 | 8.7 | 7.1 | 6.0 | 4.9 | 4.0 |
| Shelby | 5.8 | 4.6 | 5.2 | 5.1 | 8.6 | 7.6 | 6.4 | 5.3 | 4.3 |
| Sullivan | 5.1 | 3.9 | 5.1 | 4.0 | 7.5 | 6.6 | 5.8 | 5.2 | 4.0 |
| Sumner | 6.4 | 3.7 | 4.5 | 4.1 | 6.5 | 5.3 | 4.6 | 3.9 | 3.0 |
| Washington | 5.4 | 4.1 | 5.3 | 4.0 | 7.1 | 6.3 | 5.6 | 4.8 | 3.8 |
| Weakley | 4.5 | 5.9 | 6.2 | 6.5 | 10.9 | 8.5 | 6.8 | 5.8 | 4.9 |
| Williamson | 3.8 | 2.1 | 3.4 | 3.7 | 5.0 | 4.5 | 4.0 | 3.4 | 2.7 |
| Wilson | 5.2 | 3.8 | 4.2 | 4.0 | 6.4 | 5.3 | 4.6 | 3.8 | 2.9 |
| Tennessee | 6.5 | 5.3 | 5.2 | 4.7 | 7.8 | 6.6 | 5.6 | 4.7 | 3.7 |
| United States | 7.5 | 4.9 | 5.8 | 4.6 | 8.1 | 6.2 | 5.3 | 4.9 | 4.4 |

Source: BERC, and BLS
Source: BERC, Woods and Poole, and BLS

 $\begin{array}{lllllllllllll}\text { WILLIAMSON COUNTY } & 88,210 & 89,060 & 89,680 & 94,500 & 97,410 & 99,010 & 101,340 & 103,820 & 107,710 & 111,590\end{array}$ KLNOOO Xativam WASHINGTON COUNT
 SULLIVAN COUNTY XILNOOO xqTAHS SEVIER COUNTY RUTHERFORD COUNTY ROBERTSON COUNTY MONTGOMERY COUNTY
PUTNAM COUNTY MAURY COUNTY MADISON COUNTY HENRY COUNTY
KNOX COUNTY HAMILTON COUNTY HAMBLEN COUNTY GREENE COUNTY DAVIDSON COUNTY

DICKSON COUNTY CUMBERLAND COUNTY $\quad 23,210$ XLINOOD xatavyg $\begin{array}{ll}\text { ANDERSON COUNTY } & 35,890 \\ \text { BLOUNT COUNTY } & 62,910\end{array}$ sэ!̣unoว Civilian Labor Force (2007-2016) | $N$ |
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| Percent of Population over 25 with a Bachelor's Degree or Higher (1970-2016) |  |  |  |  |  |  |  |  |  |  |  |
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| County |  |  |  |  |  |  |  |  |  |  |  |
| Name | 1970 | 1980 | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| Anderson | 14.5 | 18.2 | 18.6 | 20.8 | 22.1 | 21.4 | 23.0 | 23.5 | 23.6 | 23.9 | 23.9 |
| Blount | 7.9 | 11.3 | 14.3 | 17.9 | 20.6 | 20.5 | 20.9 | 20.8 | 21.7 | 22.8 | 23.1 |
| Bradley | 5.4 | 10.5 | 11.9 | 15.9 | 19.2 | 18.4 | 17.9 | 18.5 | 19.3 | 19.9 | 20.9 |
| Cumberland | 4.6 | 8.6 | 10.2 | 13.7 | 15.6 | 16.0 | 16.8 | 17.4 | 17.8 | 18.2 | 18.8 |
| Davidson | 12.1 | 19.5 | 24.4 | 30.5 | 34.1 | 34.4 | 35.0 | 36.0 | 36.5 | 37.3 | 38.2 |
| Dickson | 3.3 | 7.5 | 9.2 | 11.3 | 14.9 | 15.5 | 14.9 | 14.1 | 13.5 | 14.5 | 14.2 |
| Greene | 5.5 | 8.9 | 10.3 | 12.8 | 14.0 | 14.8 | 15.7 | 15.5 | 15.5 | 15.0 | 14.7 |
| Hamblen | 6.4 | 9.2 | 11.2 | 13.3 | 15.6 | 15.7 | 16.1 | 16.0 | 16.1 | 15.5 | 15.9 |
| Hamilton | 10.2 | 15.5 | 19.7 | 23.9 | 27.0 | 27.4 | 27.8 | 27.2 | 28.1 | 28.7 | 29.6 |
| Henry | 4.6 | 6.9 | 8.5 | 12.1 | 14.9 | 15.0 | 15.7 | 16.0 | 16.2 | 15.5 | 14.7 |
| Knox | 11.4 | 18.8 | 23.9 | 29.0 | 33.8 | 34.0 | 34.2 | 34.4 | 34.5 | 34.6 | 35.7 |
| Madison | 4.0 | 7.2 | 7.7 | 10.6 | 11.5 | 11.2 | 13.2 | 13.1 | 13.2 | 13.5 | 14.1 |
| Maury | 3.2 | 5.0 | 5.2 | 8.8 | 10.9 | 11.8 | 10.6 | 11.6 | 11.4 | 11.4 | 11.0 |
| Montgomery | 9.1 | 14.5 | 16.5 | 19.3 | 22.2 | 22.7 | 22.7 | 23.5 | 24.0 | 24.7 | 25.3 |
| Putnam | 8.0 | 14.1 | 16.8 | 20.2 | 21.7 | 21.8 | 21.7 | 22.9 | 22.8 | 23.3 | 24.4 |
| Robertson | 4.2 | 6.8 | 9.6 | 11.9 | 14.1 | 15.2 | 16.4 | 17.0 | 16.9 | 17.7 | 18.1 |
| Rutherford | 9.9 | 14.8 | 18.7 | 22.9 | 26.3 | 27.0 | 27.9 | 28.3 | 28.9 | 30.1 | 30.2 |
| Sevier | 4.7 | 9.3 | 10.8 | 13.5 | 15.2 | 14.9 | 14.6 | 14.9 | 15.4 | 16.4 | 17.6 |
| Shelby | 9.9 | 15.9 | 20.8 | 25.3 | 27.8 | 28.3 | 28.7 | 29.0 | 29.8 | 30.3 | 30.2 |
| Sullivan | 9.1 | 13.2 | 15.6 | 18.1 | 20.0 | 20.4 | 20.6 | 20.5 | 21.2 | 21.9 | 21.4 |
| Sumner | 6.7 | 11.8 | 14.4 | 18.6 | 23.0 | 23.0 | 23.6 | 23.7 | 24.0 | 24.6 | 25.6 |
| Washington | 9.4 | 15.0 | 18.9 | 22.9 | 27.9 | 28.2 | 28.9 | 29.4 | 30.8 | 30.6 | 30.9 |
| Weakley | 5.9 | 9.8 | 10.3 | 15.3 | 18.4 | 17.8 | 20.5 | 20.2 | 19.5 | 20.4 | 21.1 |
| Williamson | 9.8 | 23.6 | 34.2 | 44.4 | 51.8 | 51.5 | 52.0 | 52.8 | 54.1 | 55.7 | 56.6 |
| Wilson | 5.6 | 11.7 | 15.6 | 19.6 | 24.0 | 24.7 | 25.9 | 26.0 | 26.7 | 28.3 | 28.9 |
| Source: Census Bureau and BERC |  |  |  |  |  |  |  |  |  |  |  |

## Appendix Chapter E. Overall Economic Growth


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 MONTGOMERY COUNTY | MONTCOMERY COUNTY $\quad 37,466$ |
| :--- | :--- | $\begin{array}{ll}\text { MUUP COUNTY } & 35.385\end{array}$ $\begin{array}{lr}\text { KNOX COUNTY } & 223,246 \\ \text { MADISON COUNTY } & 52,374\end{array}$ HENRY COUNTY 14，758 HAMILTON COUNTY 5

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## Appendix Chapter F. Real Estate Market

| Homeownership Rate |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| ANDERSON | 74.91 | 74.38 | 73.129 | 70.835 | 69.475 | 70.007 | 68.502 | 67.41 |
| BLOUNT | 77.959 | 76.77 | 75.422 | 74.337 | 73.498 | 73.53 | 74.018 | 75.006 |
| BRADLEY | 70.081 | 69.466 | 69.089 | 68.681 | 68.84 | 69.082 | 67.486 | 67.507 |
| CUMBERLAND | 80.948 | 79.475 | 79.232 | 78.369 | 78.211 | 78.424 | 78.572 | 78.019 |
| DAVIDSON | 61.517 | 59.997 | 59.148 | 57.878 | 56.716 | 55.737 | 55.597 | 55.59 |
| DICKSON | 75.461 | 75.099 | 74.312 | 73.465 | 73.999 | 73.144 | 72.845 | 73.227 |
| GREENE | 74.838 | 74.717 | 73.766 | 72.977 | 72.885 | 71.359 | 72.6 | 73.767 |
| HAMBLEN | 69.978 | 70.487 | 69.754 | 70.447 | 68.522 | 67.573 | 65.103 | 65.627 |
| HAMILTON | 69.851 | 68.293 | 68.057 | 67.359 | 66.511 | 65.882 | 66.031 | 66.157 |
| HENRY | 77.883 | 77.863 | 76.98 | 74.255 | 73.535 | 73.636 | 73.868 | 73.656 |
| KNOX | 71.385 | 71.565 | 70.852 | 69.954 | 69.223 | 67.966 | 66.986 | 66.531 |
| MADISON | 69.058 | 68.39 | 67.18 | 67.756 | 66.562 | 65.02 | 64.239 | 63.354 |
| MAURY | 73.796 | 73.714 | 73.412 | 72.126 | 71.815 | 70.699 | 69.532 | 68.789 |
| MONTGOMERY | 66.804 | 66.6 | 65.246 | 64.566 | 62.836 | 62.306 | 61.057 | 61.097 |
| PUTNAM | 65.357 | 65.665 | 66.636 | 66.028 | 65.475 | 65.045 | 65.37 | 64.427 |
| ROBERTSON | 76.157 | 77.563 | 77.09 | 77.258 | 76.567 | 75.518 | 74.472 | 73.864 |
| RUTHERFORD | 71.813 | 71.106 | 70.775 | 69.703 | 69.578 | 68.422 | 67.983 | 66.805 |
| SEVIER | 71.524 | 70.229 | 69.276 | 66.996 | 66.128 | 65.331 | 65.901 | 66.698 |
| SHELBY | 63.553 | 62.986 | 62.105 | 61.033 | 59.931 | 58.631 | 57.843 | 56.472 |
| SULLIVAN | 76.839 | 77.695 | 76.428 | 76.429 | 75.623 | 75.425 | 75.166 | 74.51 |
| SUMNER | 76.975 | 76.705 | 75.163 | 74.896 | 74.83 | 74.087 | 73.901 | 74.575 |
| WASHINGTON | 71.504 | 70.247 | 68.982 | 69.471 | 68.702 | 69.452 | 69.048 | 68.387 |
| WEAKLY | 69.102 | 66.904 | 66.602 | 66.038 | 66.9 | 67.235 | 69.764 | 68.982 |
| WILLIAMSON | 85.799 | 85.512 | 84.83 | 84.347 | 83.998 | 83.762 | 84.116 | 83.356 |
| WILSON | 83.326 | 83.455 | 82.556 | 81.1 | 80.556 | 79.521 | 79.141 | 78.223 |
| TENNESSEE | 71.1 | 71 | 69.3 | 67.9 | 66.8 | 66.7 | 66.5 | 66.4 |


| Housing Permits by Year and County |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 | 2017 |
| Anderson | 378 | 221 | 260 | 258 | 70 | 107 | 120 | 125 | 141 |
| Blount | 174 | 180 | 243 | 705 | 251 | 368 | 429 | 571 | 887 |
| Bradley | 425 | 560 | 497 | 476 | 250 | 319 | 315 | 326 | 455 |
| Cumberland | 47 | 91 | 53 | 111 | 171 | 209 | 261 | 247 | 285 |
| Davidson | 1,899 | 2,320 | 2,979 | 3,373 | 1,384 | 2,669 | 3,896 | 3,924 | 6,410 |
| Dickson | 199 | 288 | 261 | 306 | 104 | 146 | 205 | 260 | 320 |
| Greene | 146 | 316 | 286 | 284 | 89 | 90 | 105 | 124 | 132 |
| Hamblen | 55 | 388 | 157 | 250 | 75 | 53 | 79 | 93 | 133 |
| Hamilton | 1,241 | 1,437 | 1,545 | 1,435 | 972 | 983 | 1,219 | 1,351 | 2,133 |
| Henry | 35 | 51 | 23 | 26 | 13 | 12 | 13 | 15 | 18 |
| Knox | 2,683 | 2,417 | 2,619 | 2,661 | 928 | 1,246 | 1,488 | 1,597 | 2,798 |
| Madison | 19 | 27 | 18 | 24 | 17 | 9 | 3 | 5 | 6 |
| Maury | 168 | 142 | 161 | 127 | 57 | 74 | 87 | 117 | 129 |
| Montgomery | 1,396 | 1,194 | 1,278 | 1,507 | 1,373 | 1,266 | 1,116 | 1,307 | 1,716 |
| Putnam | 165 | 113 | 350 | 441 | 252 | 308 | 276 | 426 | 543 |
| Robertson | 302 | 545 | 648 | 526 | 132 | 236 | 270 | 370 | 718 |
| Rutherford | 1,673 | 2,214 | 2,958 | 2,844 | 1,317 | 1,803 | 2,099 | 2,448 | 3,569 |
| Sevier | 127 | 181 | 346 | 279 | 76 | 57 | 317 | 466 | 801 |
| Shelby | 4,601 | 3,844 | 4,184 | 2,355 | 1,220 | 946 | 1,003 | 1,109 | 1,692 |
| Sullivan | 660 | 679 | 605 | 633 | 210 | 231 | 260 | 232 | 571 |
| Sumner | 752 | 1,159 | 1,186 | 1,349 | 590 | 867 | 1,002 | 1,203 | 2,368 |
| Washington | 294 | 401 | 646 | 691 | 305 | 416 | 458 | 310 | 574 |
| Weakley | 50 | 140 | 106 | 75 | 36 | 33 | 23 | 37 | 41 |
| Williamson | 1,083 | 1,608 | 1,554 | 1,039 | 1,060 | 1,585 | 1,965 | 2,004 | 2,859 |
| Wilson | 527 | 912 | 926 | 1,246 | 747 | 959 | 962 | 1,209 | 2,236 |



MTSU BERC A Case Study for Williamson County Appendix Page|138

| All Home Sales: Median Price (1992-2016) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| County Name | 1992 | 1997 | 2002 | 2007 | 2012 | 2014 | 2015 | 2016 |
| Anderson | \$87,420 | \$98,327 | \$104,689 | \$122,552 | \$117,741 | \$119,095 | \$118,742 | \$126,321 |
| Blount | \$91,791 | \$112,824 | \$137,994 | \$168,895 | \$156,425 | \$154,823 | \$155,278 | \$162,381 |
| Bradley | \$76,790 | 7,224 | \$111,793 | \$133,880 | \$132,867 | \$132,745 | \$137,010 | \$140,808 |
| Cumberland | \$73,433 | \$89,440 | \$106,902 | \$154,477 | \$131,925 | \$128,256 | \$130,616 | \$133,587 |
| Davidson | \$111,898 | \$131,103 | \$153,599 | \$177,648 | \$171,502 | \$187,212 | \$202,775 | \$224,075 |
| Dickson | \$85,322 | \$102,424 | \$122,274 | \$137,381 | \$122,502 | \$128,164 | \$132,443 | \$144,328 |
| Greene | \$62,942 | \$88,242 | \$96,800 | \$116,777 | \$108,367 | \$105,307 | \$100,702 | \$105,606 |
| Hamblen | \$69,936 | \$102,487 | \$110,628 | \$131,640 | \$18,732 | \$117,262 | \$117,829 | \$120,003 |
| Hamilton | \$100,008 | \$107,782 | \$130,425 | \$142,634 | \$163,964 | \$160,823 | \$166,239 | \$171,497 |
| Henry | \$53,851 | \$70,909 | \$83,845 | \$82,388 | \$80,097 | \$91,588 | \$91,340 | \$88,975 |
| Knox | \$100,708 | \$122,279 | \$128,160 | \$192,478 | \$164,906 | \$160,228 | \$155,278 | \$162,562 |
| Madison | \$70,329 | \$102,109 | \$108,882 | \$129,194 | \$117,790 | \$109,933 | \$114,084 | \$117,340 |
| Maury | \$100,708 | \$114,715 | \$126,291 | \$164,672 | \$141,819 | \$146,486 | \$159,845 | \$171,407 |
| Montgomery | \$89,973 | \$100,722 | \$109,784 | \$139,029 | \$150,771 | \$144,746 | \$153,451 | \$157,507 |
| Putnam | \$83,650 | \$103,307 | \$114,704 | \$133,365 | \$124,386 | \$124,591 | \$126,643 | \$134,039 |
| Robertson | \$94,903 | \$118,371 | \$142,070 | \$155,507 | \$140,406 | \$151,158 | \$150,620 | \$166,011 |
| Rutherford | \$102,631 | \$123,413 | \$138,577 | \$156,536 | \$153,127 | \$149,326 | \$166,467 | \$179,621 |
| Sevier | \$89,343 | \$129,212 | \$145,564 | \$177,133 | \$142,196 | \$137,417 | \$141,577 | \$156,153 |
| Shelby | \$110,794 | \$122,279 | \$142,070 | \$163,642 | \$159,516 | \$157,837 | \$163,499 | \$169,241 |
| Sullivan | \$79,727 | \$99,399 | \$104,631 | \$128,731 | \$122,502 | \$120,927 | \$120,569 | \$120,951 |
| Sumner | \$106,163 | \$146,439 | \$159,538 | \$189,491 | \$172,680 | \$186,887 | \$195,906 | \$209,768 |
| Washington | \$88,119 | \$110,870 | \$124,603 | \$148,298 | \$149,829 | \$143,097 | \$143,404 | \$147,307 |
| Weakley | \$46,158 | \$69,333 | \$72,200 | \$77,238 | \$81,888 | \$80,618 | \$74,670 | \$80,333 |
| Williamson | \$187,428 | \$232,081 | \$256,076 | \$347,405 | \$315,582 | \$339,161 | \$356,226 | \$378,196 |
| Wilson | \$118,158 | \$156,315 | \$164,545 | \$215,753 | \$194,118 | \$214,370 | \$220,130 | \$230,122 |
| Tennessee | \$94,959 | \$113,328 | \$132,754 | \$153,447 | \$150,771 | \$152,075 | \$159,845 | \$166,984 |
| Source: THDA | C, and | mptroll | Office, TN |  |  |  |  |  |


| Industrial and Commercial Real Estate Assessment Value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 2002 | 2007 | 2012 | 2015 | 2016 | 2017 |
| ANDERSON COUNTY | 4,784 | 5,144 | 5,714 | 5,728 | 5,928 | 5,909 |
| BLOUNT COUNTY | 4,059 | 4,422 | 4,642 | 5,507 | 5,595 | 5,597 |
| BRADLEY COUNTY | 4,575 | 5,192 | 5,539 | 5,071 | 5,091 | 5,774 |
| CUMBERLAND COUNTY | 3,569 | 4,012 | 4,364 | 4,387 | 4,436 | 4,742 |
| DAVIDSON COUNTY | 11,813 | 11,053 | 11,008 | 11,782 | 11,947 | 18,795 |
| DICKSON COUNTY | 4,419 | 5,077 | 4,559 | 4,548 | 4,459 | 4,360 |
| GREENE COUNTY | 3,115 | 3,382 | 3,743 | 3,475 | 3,466 | 3,401 |
| HAMBLEN COUNTY | 5,879 | 5,918 | 6,573 | 6,213 | 6,232 | 6,196 |
| HAMILTON COUNTY | 7,016 | 7,543 | 7,668 | 7,837 | 7,827 | 8,913 |
| HENRY COUNTY | 3,077 | 3,205 | 3,294 | 3,484 | 3,416 | 3,382 |
| KNOX COUNTY | 6,136 | 6,201 | 7,118 | 7,496 | 7,440 | 8,351 |
| MADISON COUNTY | 5,700 | 6,125 | 6,929 | 7,143 | 7,110 | 7,141 |
| MAURY COUNTY | 4,081 | 4,586 | 4,626 | 4,439 | 4,516 | 4,649 |
| MONTGOMERY COUNTY | 3,845 | 4,684 | 5,055 | 5,070 | 5,055 | 4,995 |
| PUTNAM COUNTY | 5,122 | 5,463 | 5,426 | 5,537 | 6,035 | 6,071 |
| ROBERTSON COUNTY | 3,005 | 4,170 | 3,513 | 3,548 | 3,586 | 3,489 |
| RUTHERFORD COUNTY | 5,710 | 5,815 | 6,421 | 6,856 | 6,867 | 6,959 |
| SEVIER COUNTY | 12,736 | 12,625 | 11,146 | 10,697 | 11,655 | 11,385 |
| SHELBY COUNTY | 6,716 | 6,114 | 5,581 | 5,543 | 5,547 | 6,271 |
| SULLIVAN COUNTY | 4,645 | 5,154 | 6,254 | 6,416 | 6,460 | 6,524 |
| SUMNER COUNTY | 3,612 | 4,724 | 5,605 | 5,133 | 5,088 | 4,995 |
| WASHINGTON COUNTY | 5,079 | 5,510 | 6,447 | 6,326 | 6,331 | 6,409 |
| WEAKLEY COUNTY | 2,913 | 2,825 | 2,957 | 3,165 | 3,185 | 3,157 |
| WILLIAMSON COUNTY | 9,252 | 9,526 | 11,070 | 10,939 | 13,982 | 13,770 |
| WILSON COUNTY | 4,349 | 5,658 | 6,407 | 6,111 | 6,939 | 7,041 |
| Tennessee | 5,426 | 5,567 | 5,838 | 5,996 | 6,167 | 7,110 |

Source: BERC and Comptroller's Office, TN

| Counties | Assessed Value of Residential property |  |  |  | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2002 | 2007 | 2012 | 2015 |  |  |
| ANDERSON COUNTY | 8,444 | 10,158 | 11,524 | 10,382 | 10,313 | 10,199 |
| BLOUNT COUNTY | 11,510 | 14,608 | 15,243 | 14,287 | 14,183 | 14,082 |
| BRADLEY COUNTY | 8,923 | 9,479 | 9,926 | 9,414 | 9,386 | 10,042 |
| CUMBERLAND COUNTY | 11,870 | 15,541 | 14,026 | 13,925 | 13,883 | 13,584 |
| DAVIDSON COUNTY | 11,716 | 13,436 | 14,001 | 13,348 | 13,379 | 18,010 |
| DICKSON COUNTY | 8,556 | 9,749 | 9,299 | 8,567 | 9,600 | 9,544 |
| GREENE COUNTY | 6,697 | 7,766 | 10,147 | 8,794 | 8,743 | 8,648 |
| HAMBLEN COUNTY | 8,632 | 9,438 | 10,731 | 9,390 | 9,281 | 9,106 |
| HAMILTON COUNTY | 10,069 | 11,957 | 12,783 | 12,419 | 12,343 | 13,336 |
| HENRY COUNTY | 7,012 | 7,331 | 8,061 | 8,455 | 8,395 | 8,318 |
| KNOX COUNTY | 10,780 | 12,421 | 13,481 | 13,125 | 13,055 | 14,005 |
| MADISON COUNTY | 7,718 | 8,452 | 8,612 | 8,367 | 8,337 | 8,266 |
| MAURY COUNTY | 8,917 | 10,313 | 10,196 | 9,528 | 9,443 | 9,628 |
| MONTGOMERY COUNTY | 6,771 | 8,717 | 9,395 | 10,009 | 10,090 | 9,998 |
| PUTNAM COUNTY | 8,545 | 9,190 | 9,243 | 9,158 | 9,520 | 9,577 |
| ROBERTSON COUNTY | 9,942 | 11,847 | 11,223 | 10,544 | 10,508 | 10,407 |
| RUTHERFORD COUNTY | 10,028 | 11,728 | 11,122 | 10,706 | 10,677 | 10,694 |
| SEVIER COUNTY | 17,426 | 24,303 | 22,045 | 20,593 | 19,787 | 18,546 |
| SHELBY COUNTY | 9,799 | 11,022 | 10,394 | 9,173 | 9,142 | 9,863 |
| SULLIVAN COUNTY | 9,368 | 9,636 | 11,045 | 10,828 | 10,792 | 11,158 |
| SUMNER COUNTY | 11,107 | 14,633 | 15,138 | 14,096 | 14,016 | 13,993 |
| WASHINGTON COUNTY | 9,512 | 11,052 | 13,392 | 12,473 | 12,328 | 12,046 |
| WEAKLEY COUNTY | 5,115 | 5,069 | 5,484 | 5,465 | 5,507 | 5,484 |
| WILLIAMSON COUNTY | 20,516 | 26,249 | 25,788 | 25,494 | 30,339 | 30,317 |
| WILSON COUNTY | 11,824 | 14,467 | 14,421 | 13,994 | 16,187 | 16,073 |
| TENNESSEE | 9,396 | 11,227 | 11,742 | 11,229 | 11,428 | 12,131 |

## Appendix Chapter G. Local Government Revenues

| Per Capita | 2009 d | ) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | \$406 | \$457 | \$523 | \$502 | \$546 | \$560 | \$585 | \$533 | \$530 | \$526 | \$522 |
| BLOUNT COUNTY | \$303 | \$410 | \$493 | \$491 | \$505 | \$510 | \$506 | \$515 | \$479 | \$482 | \$479 |
| BRADLEY COUNTY | \$413 | \$518 | \$529 | \$595 | \$555 | \$587 | \$570 | \$609 | \$602 | \$621 | \$587 |
| CUMBERLAND COUNTY | \$482 | \$665 | \$672 | \$710 | \$743 | \$775 | \$787 | \$803 | \$769 | \$755 | \$748 |
| DAVIDSON COUNTY | \$652 | \$586 | \$702 | \$785 | \$787 | \$799 | \$839 | \$857 | \$786 | \$750 | \$739 |
| DICKSON COUNTY | \$538 | \$778 | \$824 | \$873 | \$935 | \$955 | \$965 | \$937 | \$919 | \$938 | \$898 |
| GREENE COUNTY | \$452 | \$503 | \$553 | \$608 | \$636 | \$672 | \$633 | \$661 | \$652 | \$649 | \$654 |
| HAMBLEN COUNTY | \$443 | \$614 | \$636 | \$721 | \$810 | \$864 | \$866 | \$865 | \$870 | \$888 | \$862 |
| HAMILTON COUNTY | \$232 | \$458 | \$498 | \$533 | \$692 | \$613 | \$611 | \$610 | \$625 | \$956 | \$1,021 |
| HENRY COUNTY | \$422 | \$690 | \$685 | \$1,000 | \$1,025 | \$738 | \$779 | \$802 | \$788 | \$784 | \$740 |
| KNOX COUNTY | \$398 | \$448 | \$469 | \$51 | \$514 | \$542 | \$504 | \$583 | \$584 | \$560 | \$560 |
| MADISON COUNTY | \$520 | \$663 | \$724 | \$701 | \$745 | \$803 | \$832 | \$741 | \$717 | \$712 | \$700 |
| MAURY COUNTY | \$424 | \$737 | \$734 | \$757 | \$759 | \$776 | \$798 | \$783 | \$765 | \$770 | \$754 |
| MONTGOMERY COUNTY | \$470 | \$705 | \$708 | \$840 | \$862 | \$862 | \$907 | \$862 | \$837 | \$848 | \$1,032 |
| PUTNAM COUNTY | \$450 | \$609 | \$641 | \$718 | \$778 | \$815 | \$787 | \$808 | \$824 | \$817 | \$831 |
| ROBERTSON COUNTY | \$450 | \$733 | \$780 | \$828 | \$881 | \$902 | \$994 | \$938 | \$939 | \$957 | \$939 |
| RUTHERFORD COUNTY | \$360 | \$514 | \$519 | \$593 | \$655 | \$668 | \$705 | \$682 | \$674 | \$690 | \$651 |
| SEVIER COUNTY | \$466 | \$599 | \$612 | \$644 | \$633 | \$648 | \$650 | \$646 | \$617 | \$595 | \$592 |
| SHELBY COUNTY | \$237 | \$292 | \$328 | \$361 | \$375 | \$364 | \$373 | \$372 | \$441 | \$1,043 | \$926 |
| SULLIVAN COUNTY | \$346 | \$361 | \$368 | \$348 | \$403 | \$401 | \$404 | \$404 | \$370 | \$353 | \$354 |
| SUMNER COUNTY | \$474 | \$652 | \$715 | \$776 | \$832 | \$857 | \$895 | \$829 | \$866 | \$847 | \$823 |
| WASHINGTON COUNTY | \$205 | \$324 | \$347 | \$404 | \$313 | \$325 | \$309 | \$359 | \$347 | \$345 | \$337 |
| WEAKLEY COUNTY | \$479 | \$747 | \$840 | \$840 | \$895 | \$931 | \$903 | \$920 | \$902 | \$887 | \$869 |
| WILLIAMSON COUNTY | \$354 | \$530 | \$571 | \$592 | \$634 | \$620 | \$846 | \$631 | \$612 | \$775 | \$604 |
| WILSON COUNTY | \$353 | \$500 | \$509 | \$568 | \$597 | \$616 | \$636 | \$612 | \$618 | \$610 | \$589 |

Source: BERC and Census Bureau, Local Government Finances

| Per Capita Total Charges and Misc. Revenues (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | \$212 | \$161 | \$226 | \$210 | \$208 | \$234 | \$195 | \$235 | \$219 | \$278 | \$193 |
| BLOUNT COUNTY | \$890 | \$1,081 | \$1,561 | \$2,220 | \$2,451 | \$2,431 | \$2,613 | \$2,038 | \$1,896 | \$2,055 | \$2,010 |
| BRADLEY COUNTY | \$1,063 | \$1,070 | \$1,097 | \$319 | \$271 | \$260 | \$262 | \$300 | \$308 | \$207 | \$213 |
| CUMBERLAND COUNTY | \$66 | \$191 | \$195 | \$173 | \$162 | \$167 | \$129 | \$164 | \$163 | \$141 | \$152 |
| DAVIDSON COUNTY | \$673 | \$834 | \$872 | \$841 | \$708 | \$731 | \$756 | \$583 | \$566 | \$552 | \$703 |
| DICKSON COUNTY | \$140 | \$251 | \$301 | \$223 | \$202 | \$187 | \$181 | \$299 | \$304 | \$205 | \$218 |
| GREENE COUNTY | \$123 | \$154 | \$197 | \$199 | \$137 | \$153 | \$149 | \$178 | \$179 | \$129 | \$136 |
| HAMBLEN COUNTY | \$105 | \$255 | \$199 | \$237 | \$184 | \$168 | \$119 | \$263 | \$186 | \$147 | \$159 |
| HAMILTON COUNTY | \$1,427 | \$1,506 | \$1,823 | \$2,220 | \$1,801 | \$1,834 | \$1,846 | \$1,843 | \$1,853 | \$1,510 | \$1,650 |
| HENRY COUNTY | \$921 | \$1,310 | \$1,941 | \$2,251 | \$2,210 | \$2,159 | \$2,125 | \$2,245 | \$2,158 | \$2,278 | \$2,391 |
| KNOX COUNTY | \$126 | \$100 | \$144 | \$185 | \$119 | \$126 | \$130 | \$190 | \$217 | \$197 | \$198 |
| MADISON COUNTY | \$2,427 | \$2,966 | \$4,686 | \$5,815 | \$5,795 | \$5,940 | \$6,141 | \$5,754 | \$5,853 | \$6,166 | \$6,277 |
| MAURY COUNTY | \$1,813 | \$2,241 | \$2,914 | \$2,815 | \$3,324 | \$3,354 | \$3,395 | \$3,505 | \$3,421 | \$3,393 | \$3,388 |
| MONTGOMERY COUNTY | \$801 | \$864 | \$250 | \$318 | \$200 | \$172 | \$163 | \$220 | \$190 | \$219 | \$359 |
| PUTNAM COUNTY | \$74 | \$183 | \$224 | \$263 | \$212 | \$201 | \$203 | \$222 | \$227 | \$202 | \$213 |
| ROBERTSON COUNTY | \$104 | \$201 | \$159 | \$187 | \$138 | \$142 | \$126 | \$185 | \$192 | \$141 | \$145 |
| RUTHERFORD COUNTY | \$132 | \$258 | \$231 | \$251 | \$176 | \$191 | \$185 | \$234 | \$230 | \$244 | \$233 |
| SEVIER COUNTY | \$119 | \$444 | \$252 | \$896 | \$779 | \$1,122 | \$754 | \$528 | \$464 | \$476 | \$429 |
| SHELBY COUNTY | \$491 | \$437 | \$489 | \$485 | \$473 | \$460 | \$519 | \$527 | \$346 | \$440 | \$483 |
| SULLIVAN COUNTY | \$98 | \$160 | \$166 | \$159 | \$149 | \$138 | \$136 | \$162 | \$145 | \$127 | \$153 |
| SUMNER COUNTY | \$499 | \$241 | \$110 | \$312 | \$178 | \$156 | \$143 | \$219 | \$205 | \$192 | \$232 |
| WASHINGTON COUNTY | \$57 | \$83 | \$108 | \$129 | \$96 | \$95 | \$97 | \$102 | \$105 | \$85 | \$90 |
| WEAKLEY COUNTY | \$59 | \$240 | \$216 | \$404 | \$376 | \$335 | \$333 | \$375 | \$383 | \$274 | \$293 |
| WILLIAMSON COUNTY | \$125 | \$812 | \$960 | \$897 | \$972 | \$935 | \$920 | \$966 | \$968 | \$929 | \$1,009 |
| WILSON COUNTY | \$112 | \$180 | \$293 | \$239 | \$170 | \$155 | \$174 | \$187 | \$194 | \$179 | \$172 |

Source: BERC and Census Bureau, Local Government Finances

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| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | \$409 | \$492 | \$564 | \$553 | \$595 | \$609 | \$630 | \$590 | \$580 | \$575 | \$563 |
| BLOUNT COUNTY | \$316 | \$420 | \$528 | \$523 | \$560 | \$537 | \$542 | \$564 | \$530 | \$536 | \$532 |
| BRADLEY COUNTY | \$428 | \$538 | \$535 | \$638 | \$605 | \$615 | \$597 | \$639 | \$626 | \$640 | \$615 |
| CUMBERLAND COUNTY | \$485 | \$696 | \$686 | \$723 | \$754 | \$786 | \$806 | \$824 | \$787 | \$772 | \$766 |
| DAVIDSON COUNTY | \$688 | \$610 | \$1,214 | \$800 | \$806 | \$827 | \$856 | \$883 | \$807 | \$787 | \$777 |
| DICKSON COUNTY | \$549 | \$797 | \$853 | \$883 | \$943 | \$962 | \$976 | \$957 | \$938 | \$956 | \$918 |
| GREENE COUNTY | \$452 | \$518 | \$582 | \$636 | \$667 | \$695 | \$655 | \$693 | \$682 | \$676 | \$684 |
| HAMBLEN COUNTY | \$449 | \$632 | \$639 | \$724 | \$815 | \$869 | \$870 | \$878 | \$882 | \$899 | \$875 |
| HAMILTON COUNTY | \$309 | \$508 | \$619 | \$631 | \$758 | \$693 | \$692 | \$671 | \$800 | \$1,103 | \$1,043 |
| HENRY COUNTY | \$424 | \$705 | \$688 | \$1,012 | \$1,033 | \$748 | \$791 | \$822 | \$814 | \$809 | \$765 |
| KNOX COUNTY | \$425 | \$484 | \$501 | \$530 | \$561 | \$592 | \$566 | \$609 | \$612 | \$607 | \$591 |
| MADISON COUNTY | \$547 | \$698 | \$770 | \$836 | \$782 | \$858 | \$897 | \$816 | \$790 | \$773 | \$739 |
| MAURY COUNTY | \$429 | \$747 | \$798 | \$812 | \$765 | \$785 | \$808 | \$796 | \$780 | \$813 | \$794 |
| MONTGOMERY COUNTY | \$489 | \$733 | \$748 | \$1,029 | \$908 | \$905 | \$958 | \$914 | \$885 | \$897 | \$1,097 |
| PUTNAM COUNTY | \$452 | \$630 | \$650 | \$748 | \$787 | \$831 | \$800 | \$819 | \$841 | \$828 | \$843 |
| ROBERTSON COUNTY | \$450 | \$736 | \$785 | \$830 | \$884 | \$903 | \$997 | \$955 | \$957 | \$974 | \$958 |
| RUTHERFORD COUNTY | \$364 | \$527 | \$528 | \$600 | \$662 | \$676 | \$711 | \$693 | \$682 | \$706 | \$666 |
| SEVIER COUNTY | \$479 | \$614 | \$637 | \$661 | \$644 | \$665 | \$668 | \$667 | \$638 | \$615 | \$614 |
| SHELBY COUNTY | \$278 | \$335 | \$372 | \$416 | \$443 | \$429 | \$442 | \$411 | \$488 | \$1,094 | \$987 |
| SULLIVAN COUNTY | \$357 | \$368 | \$376 | \$369 | \$420 | \$418 | \$420 | \$420 | \$385 | \$363 | \$366 |
| SUMNER COUNTY | \$482 | \$656 | \$722 | \$791 | \$840 | \$869 | \$902 | \$843 | \$878 | \$858 | \$835 |
| WASHINGTON COUNTY | \$243 | \$336 | \$378 | \$427 | \$387 | \$445 | \$394 | \$388 | \$371 | \$364 | \$358 |
| WEAKLEY COUNTY | \$493 | \$760 | \$864 | \$888 | \$923 | \$968 | \$934 | \$935 | \$917 | \$902 | \$885 |
| WILLIAMSON COUNTY | \$362 | \$542 | \$580 | \$602 | \$639 | \$628 | \$857 | \$643 | \$624 | \$786 | \$615 |
| WILSON COUNTY | \$355 | \$503 | \$510 | \$582 | \$602 | \$626 | \$652 | \$654 | \$634 | \$641 | \$619 |

Source: BERC and Census Bureau, Local Government Finances

| Share of Intergovernemtal Revenues in Total Revenues |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 20 | 10 | 2011 | 2012 | 2013 |

[^8]

| Per Capita Property Tax (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | \$308 | \$299 | \$521 | \$507 | \$362 | \$354 | \$352 | \$371 | \$370 | \$359 | \$373 |
| BLOUNT COUNTY | \$332 | \$301 | \$349 | \$413 | \$418 | \$418 | \$408 | \$421 | \$413 | \$392 | \$413 |
| BRADLEY COUNTY | \$318 | \$253 | \$313 | \$318 | \$322 | \$322 | \$318 | \$307 | \$307 | \$294 | \$299 |
| CUMBERLAND COUNTY | \$311 | \$253 | \$279 | \$295 | \$301 | \$322 | \$343 | \$336 | \$341 | \$327 | \$335 |
| DAVIDSON COUNTY | \$701 | \$811 | \$1,195 | \$1,298 | \$1,249 | \$1,242 | \$1,182 | \$1,144 | \$1,259 | \$1,249 | \$1,251 |
| DICKSON COUNTY | \$358 | \$348 | \$507 | \$523 | \$516 | \$542 | \$537 | \$531 | \$534 | \$513 | \$518 |
| GREENE COUNTY | \$245 | \$226 | \$228 | \$252 | \$248 | \$239 | \$245 | \$241 | \$244 | \$236 | \$242 |
| HAMBLEN COUNTY | \$303 | \$346 | \$357 | \$387 | \$388 | \$387 | \$384 | \$380 | \$374 | \$369 | \$377 |
| HAMILTON COUNTY | \$330 | \$461 | \$575 | \$641 | \$724 | \$716 | \$703 | \$698 | \$687 | \$661 | \$684 |
| HENRY COUNTY | \$330 | \$299 | \$280 | \$273 | \$279 | \$271 | \$266 | \$278 | \$278 | \$288 | \$297 |
| KNOX COUNTY | \$361 | \$470 | \$618 | \$549 | \$557 | \$552 | \$560 | \$536 | \$540 | \$533 | \$534 |
| MADISON COUNTY | \$309 | \$374 | \$425 | \$421 | \$417 | \$429 | \$421 | \$478 | \$471 | \$458 | \$471 |
| MAURY COUNTY | \$316 | \$335 | \$421 | \$463 | \$452 | \$502 | \$500 | \$497 | \$522 | \$509 | \$506 |
| MONTGOMERY COUNTY | \$302 | \$325 | \$405 | \$465 | \$460 | \$483 | \$476 | \$496 | \$502 | \$498 | \$499 |
| PUTNAM COUNTY | \$242 | \$305 | \$394 | \$432 | \$470 | \$478 | \$469 | \$467 | \$497 | \$475 | \$488 |
| ROBERTSON COUNTY | \$336 | \$353 | \$424 | \$428 | \$504 | \$503 | \$503 | \$541 | \$541 | \$518 | \$528 |
| RUTHERFORD COUNTY | \$408 | \$407 | \$409 | \$427 | \$464 | \$502 | \$491 | \$475 | \$462 | \$467 | \$461 |
| SEVIER COUNTY | \$273 | \$322 | \$396 | \$515 | \$598 | \$613 | \$601 | \$774 | \$773 | \$774 | \$816 |
| SHELBY COUNTY | \$369 | \$399 | \$687 | \$753 | \$751 | \$780 | \$779 | \$734 | \$735 | \$767 | \$771 |
| SULLIVAN COUNTY | \$565 | \$417 | \$310 | \$339 | \$337 | \$331 | \$327 | \$318 | \$342 | \$344 | \$343 |
| SUMNER COUNTY | \$421 | \$380 | \$432 | \$517 | \$493 | \$489 | \$478 | \$467 | \$458 | \$448 | \$530 |
| WASHINGTON COUNTY | \$262 | \$257 | \$272 | \$301 | \$374 | \$375 | \$370 | \$362 | \$349 | \$336 | \$345 |
| WEAKLEY COUNTY | \$235 | \$237 | \$302 | \$277 | \$271 | \$271 | \$264 | \$263 | \$312 | \$303 | \$313 |
| WILLIAMSON COUNTY | \$619 | \$744 | \$836 | \$717 | \$805 | \$824 | \$803 | \$845 | \$822 | \$809 | \$994 |
| WILSON COUNTY | \$416 | \$357 | \$521 | \$499 | \$561 | \$564 | \$561 | \$547 | \$559 | \$537 | \$535 |

Source: BERC and Census Bureau, Local Government Finances

| Share of Property Tax in Total Revenues |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 20 | 10 | 2011 | 2012 | 2013 |

Source: BERC and Census Bureau, Local Government Finances

| Per Capita Total Taxes (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | \$574 | \$402 | \$796 | \$856 | \$714 | \$637 | \$637 | \$652 | \$635 | \$613 | \$640 |
| BLOUNT COUNTY | \$577 | \$591 | \$494 | \$597 | \$668 | \$651 | \$650 | \$668 | \$645 | \$623 | \$665 |
| BRADLEY COUNTY | \$541 | \$499 | \$462 | \$472 | \$547 | \$562 | \$563 | \$573 | \$573 | \$548 | \$558 |
| CUMBERLAND COUNTY | \$566 | \$437 | \$493 | \$521 | \$629 | \$634 | \$658 | \$659 | \$662 | \$634 | \$648 |
| DAVIDSON COUNTY | \$1,275 | \$1,541 | \$1,385 | \$1,977 | \$1,880 | \$1,833 | \$1,762 | \$1,771 | \$1,932 | \$1,944 | \$1,991 |
| DICKSON COUNTY | \$601 | \$586 | \$806 | \$966 | \$917 | \$922 | \$934 | \$919 | \$924 | \$887 | \$896 |
| GREENE COUNTY | \$469 | \$483 | \$381 | \$520 | \$493 | \$474 | \$483 | \$481 | \$486 | \$469 | \$481 |
| HAMBLEN COUNTY | \$624 | \$607 | \$585 | \$786 | \$752 | \$755 | \$759 | \$770 | \$764 | \$746 | \$763 |
| HAMILTON COUNTY | \$506 | \$662 | \$779 | \$900 | \$958 | \$946 | \$935 | \$909 | \$896 | \$862 | \$899 |
| HENRY COUNTY | \$573 | \$572 | \$594 | \$578 | \$578 | \$536 | \$526 | \$543 | \$543 | \$523 | \$540 |
| KNOX COUNTY | \$650 | \$892 | \$1,065 | \$1,054 | \$1,012 | \$988 | \$1,003 | \$996 | \$990 | \$976 | \$998 |
| MADISON COUNTY | \$708 | \$755 | \$1,038 | \$825 | \$913 | \$912 | \$919 | \$979 | \$975 | \$948 | \$996 |
| MAURY COUNTY | \$569 | \$544 | \$748 | \$684 | \$765 | \$798 | \$802 | \$799 | \$823 | \$819 | \$827 |
| MONTGOMERY COUNTY | \$563 | \$628 | \$731 | \$754 | \$792 | \$821 | \$809 | \$855 | \$843 | \$827 | \$838 |
| PUTNAM COUNTY | \$519 | \$535 | \$680 | \$919 | \$920 | \$916 | \$910 | \$906 | \$939 | \$896 | \$919 |
| ROBERTSON COUNTY | \$508 | \$601 | \$710 | \$747 | \$857 | \$840 | \$833 | \$871 | \$869 | \$832 | \$849 |
| RUTHERFORD COUNTY | \$660 | \$722 | \$657 | \$847 | \$846 | \$860 | \$852 | \$847 | \$840 | \$859 | \$864 |
| SEVIER COUNTY | \$842 | \$1,023 | \$1,237 | \$1,391 | \$1,441 | \$1,476 | \$1,479 | \$1,672 | \$1,668 | \$1,699 | \$1,802 |
| SHELBY COUNTY | \$689 | \$788 | \$1,159 | \$1,123 | \$1,159 | \$1,187 | \$1,170 | \$1,124 | \$1,141 | \$1,160 | \$1,158 |
| SULLIVAN COUNTY | \$851 | \$734 | \$569 | \$679 | \$588 | \$567 | \$562 | \$561 | \$582 | \$574 | \$587 |
| SUMNER COUNTY | \$619 | \$610 | \$678 | \$701 | \$760 | \$743 | \$732 | \$728 | \$728 | \$731 | \$833 |
| WASHINGTON COUNTY | \$526 | \$530 | \$576 | \$613 | \$671 | \$660 | \$659 | \$635 | \$639 | \$616 | \$631 |
| WEAKLEY COUNTY | \$407 | \$417 | \$559 | \$426 | \$493 | \$484 | \$479 | \$483 | \$530 | \$513 | \$530 |
| WILLIAMSON COUNTY | \$932 | \$1,155 | \$1,342 | \$1,191 | \$1,260 | \$1,262 | \$1,269 | \$1,336 | \$1,331 | \$1,317 | \$1,514 |
| WILSON COUNTY | \$525 | \$575 | \$798 | \$853 | \$866 | \$866 | \$874 | \$869 | \$892 | \$895 | \$903 |

[^9]

| LZT＇tEz＇9tis | 966＇60z＇zIIS | 850＇898＇80T\＄ | S／8＇T8t＇EOT＇ | 699＇950＇z0IS | T9z＇8cz＇66\＄ | 000＇8tE＇ 6 ¢ | toc＇eLo＇t6s |  | T50＇89I＇Lts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | t80＇9zt＇0Lて\＄ | ع60＇で8＇tgrs | ャTL＇z¢6＇LSてS | โع8＇L60＇6¢て\＄ | でて＇โIt＇てをてら | $000{ }^{\prime}$ ¢とて＇LZZ\＄ | st6＇t68＇tozs | ع60＇8tL＇88T\＄ | 906＇286＇ĽT\＄ | 1と0＇t87＇285 | noj NOSWVITIIM |
| T60＇6T6＇LT\＄ | 0t6＇6てt＇LI\＄ | LE8＇ЪてT＇8T\＄ | S0E＇tてL | LS6＇LZL＇9T\＄ | 265＇¢96＇9T\＄ | 000＇sti＇LI\＄ | てZ0＇L6S＇ちT\＄ | sto＇tsz＇6T\＄ | S60＇9tて＇ti\＄ | LLS＇SZT＇¢T\＄ |  |
| TLT＇LtL＇6LS | EOS＇tLS＇LLS | toc＇tzz＇08\＄ | 861＇t87＇6L\＄ | ¢96＇t¢9＇t8\＄ | Lヵて＇とLて＇t8\＄ | 000＇949＇t8\＄ | \＆50＇tzz＇zL\＄ | 9LZ＇LE0＇モ9\＄ | t06＇tut＇ss\＄ | 08t＇tE＇0¢\＄ | UOO NOLכNIHSVM |
| 896＇tzs＇9tI\＄ | 8z6＇E¢て＇9zI\＄ | 6LZ＇tてT＇EZI\＄ | t65＇E86＇007\＄ | 6St＇tz6＇6II\＄ | ＜S＇LLL＇6LI\＄ | 000＇sLL＇OZT\＄ | عとて＇s8z＇LOT\＄ | 8EL＇01を＇Z6\＄ | 907＇8tt＇sL\＄ | 090＇596＇99\＄ | גLNOOO צ⿴囗NWのS |
| عL6＇026＇t6\＄ | stz＇900＇06\＄ | 88t＇rot＇t6\＄ | ع09＇T58＇L8\＄ | 288＇9tz＇88\＄ | 8E9＇068＇88\＄ | 000＇sso＇z6\＄ | 98¢ $0<$ d＇sots $^{\prime}$ | 098＇00＇L8\＄ | 558＇698 | T\＄ | LNกOO NVAITİS |
| 090＇98I＇t80＇t\＄ | 097＇t79＇980＇t\＄ | 09t＇86L＇0L0＇t\＄ | S0S＇097＇sso＇ts | 679＇0¢0＇z60＇t\＄ | ¢¢8 | 000＇ |  | 288＇0zて＇9to＇ts | tLL＇6IE＇t69\＄ | SLZ＇90t＇£85\＄ | XLNกOJ＜atahs |
| 268＇tIt＇てLIS | T98＇688＇09t\＄ | LIE＇tદL＇sst\＄ | ITS＇Ste＇ts | 618＇£8L＇をET\＄ | LI6＇£6L＇zદI\＄ | 000＇SLE＇8zT\＄ | stz＇zzo＇ozt\＄ | 8 tT ＇608＇26\＄ | LT6＇t58＇99\＄ | S9t＇sts＇9ts | S |
| S6t＇$¢ L$ L＇LSて | †L6＇દૃદ＇8九て\＄ | t9L＇t9z＇9®て\＄ | 650＇0ts＇zEz\＄ | 6てt＇8Lป＇6てZ\＄ | 298＇LI＜＇9zて\＄ | 000＇950＇6IZ\＄ | L90＇tzs＇907s | 076＇s0z＇6zT\＄ | 88t＇995＇8tI\＄ | L9t＇tをL＇s8＇ |  |
| 8ET＇880＇8S\＄ | 8Et＇86t＇9s | 6zと＇9zて＇8s\＄ | †てО＇ธt⿺＇8¢\＄ | Lti＇s8s＇ss\＄ | عL9＇9EL＇SS\＄ | 000＇¢98＇9¢\＄ | 956＇89t＇Lt\＄ | 86T＇L0E＇Ot\＄ | Let＇てSt＇o¢\＄ | เ6t＇650＇zて＇s | LNOOJ NOSLy\＃gou |
| てママ＇દと6＇89\＄ | ع6L＇t50＇L9\＄ | ع0s＇88t＇69\＄ | tL8＇809＇99\＄ | 8L6＇LLE＇99\＄ | 250＇28t＇99\＄ | 000＇¢88＇¢9\＄ | 8てL＇Lz8＇¢9\＄ | tzz＇sç＇\＆t\＄ | 6てt＇9ti＇zを\＄ | Sc9＇L88＇LZ\＄ | גLNOOJ WVNL＾d |
| SZC＇9LO＇t9I\＄ | S69＇668＇9St | Itg＇099＇ss | $02 L ' E 6 \varepsilon^{\prime} 8$ S | 6Et＇ST6＇てtI\＄ | 865＇6zI＇てtI\＄ | $000{ }^{\prime} 088^{\prime} \varepsilon$ ¢ ${ }^{\text {a }}$ | ＇¢90＇tてT\＄ | عร8＇6L6＇00T\＄ | LIE＇TS9＇6L\＄ | \＄ | OOD 入¢ |
| tet＇દモs＇zLS | เ68＇t50＇0＜ | t59＇＜t8＇89\＄ | 980＇8Lt＇59\＄ | LEz＇tİ＇¢9\＄ | 6 tS ＇888＇t9\＄ | 000＇20＜＇t9\＄ | ع89＇zとて＇\＆S\＄ | LZ6＇t8L＇zs\＄ | 6t0＇sss＇9¢\＄ | 96t＇8¢L＇を¢\＄ |  |
| 99L＇SLT＇L6\＄ | 068＇8z0＇\＆6\＄ | T66＇roz＇9 | Sot＇\＆St＇96\＄ |  | T98＇દ¢9＇68\＄ | 000＇t02＇68\＄ | L6s＇SL0＇08\＄ | ¢6t＇vio＇L6\＄ | 200＇6tt＇99\＄ | Tss＇LLt＇Ls | LNOOJ NOSICVW |
| 9zL＇LLS＇0st\＄ | 86S＇LZs＇LEt\＄ | L98＇LL6＇6¢t | SLt＇S00＇6Ets | Ts8＇980＇8をt\＄ | عてS＇LI6＇LZて\＄ |  | szz＇s6L＇ttos | ャع6＇9t9＇ttts | SOS＇668＇s¢ ${ }^{\text {¢ }}$ | 609＇tos＇Lzz\＄ | XINNOO XONY |
| 888 | SOS＇0t6＇9T\＄ | L00＇86＇ | T6＇¢9 | 0¢t＇LEO＇LT\＄ | I\＄ | 00066898 ¢\＄ | 2t＇968＇8T\＄ | 19＇8z9＇8T\＄ | S68＇ $2 \varepsilon^{\prime}$ LL\＄ | 978 | XLNOOJ XXNAH |
| 608＇tL6＇LIE\＄ | st＜＇tzt＇zo\＆\＄ | 8t9＇tet＇てte\＄ | 959＇tsz＇t｜દ | 291＇LL8＇8t\＆\＄ | ¢¢9＇LET＇6t¢\＄ | 000＇st9＇8t\＆\＄ | 088＇「9¢＇と67\＄ | 0zL＇s80＇\＆LZ\＄ | L06＇068＇t07\＄ | カto＇とtr＇＜tIs | גLNกOJ NOLTIWVH |
| 60S＇tse＇8ts | S00＇s¢ | $96 t$ | 82 | － | ts | ＇288＇9t\＄ | £67＇88E＇8t\＄ | ＇80＇tt¢\＄ | 矿＇tLて＇t\＆\＄ | て6I＇tts＇z¢\％ | LNOOJ NG79WVH |
| 987＇686＇て¢\＄ | 6¢5＇680＇て¢\＄ | 9＇$\varepsilon$ | て89＇zzo＇દ¢\＄ | 696＇608＇દ¢\＄ | て¢9＇6 | $000 \times$＇tz＇$£ ¢ \$$ | L68＇6Lて＇S¢\＄ | 986＇668＇tて\＄ | ع68＇080＇6z\＄ | 581＇そL8＇92\＄ | גLNOOJ gn |
| てI8＇sti＇9t§ | ＜ť＇698＇tt\＄ | 187＇866＇9t\＄ | ZLO | เE0＇T99 | tOS＇Ez8＇Sts | 000 | จ60＇959＇90\％ | ても6＇tt6＇s¢\＄ | ＇LZ8＇EZS | z\＄ | LNOOJ NOSẎİ |
| 6ST＇＇Ls＇OS¢＇T\＄ | 760＇968＇66て＇ | てT9＇t6t＇\＆Lて＇T\＄ | Tt9＇ $00<66 \mathrm{tc}$＇T\＄ | 28t＇¢88＇6It＇t\＄ | St9＇tgr＇TST＇t\＄ | 000＇669＇L99＇t\＄ | 900＇808＇961＇t\＄ | S6t＇zદz＇S6L\＄ | 0切＇60s＇008\＄ | Szo＇tz9＇699\＄ | גLNOOJ NOSGI＾VG |
| 868＇t8L＇L¢\＄ | L9S＇z̧L＇9¢\＄ | 8t6＇t90＇88\＄ | 868＇s88＇L¢\＄ | $6 \varepsilon \chi^{\prime} 95 z^{\prime} \angle \varepsilon \$$ | £9て＇9t9＇s¢\＄ | 000 ＇000＇s¢§ | 2sI＇tot＇sz＇ |  | 886＇90才＇6т\＄ | $8 \angle 8{ }^{\prime} \leq 18^{\prime} 0$ z＇ | NกOJ anvty anno |
| £¢8＇zz0＇8s\＄ | عとL＇Ott＇9¢\＄ | 288＇598＇8 | 9 9t＇LS6＇LS\＄ | ILt＇961＇9¢\＄ | T9T＇L0＜＇ss\＄ | 000＇89＜＇Es\＄ | 68 ＇$_{\text {＇Lで＇St }}$ | 8てt＇szて＇tt\＄ | 6 6I＇toて＇で\＄ | 609＇9sz＇tt\＄ | XLNกOJ＜̇า |
| S98＇てt9＇t8\＄ | TLO＇29s＇8L\＄ | t99＇08s＇08\＄ | 6S6＇tI6＇28\＄ | L88＇80t＇08\＄ | 928＇88＇08\＄ | 000＇0to＇z8\＄ | เ\＆s＇6t9＇t＜ | てLL＇szt＇ts\＄ | ع09＇S59＇65\＄ | 8LZ＇9tを＇¢S | ＜LNOOJ LNกOTG |
| 8L0＇SLt＇8t\＄ | zsて＇Etz＇9t\＄ |  | 2IT＇sLO＇6t\＄ | 96s＇z58＇Lt\＄ | 8tて＇688＇LT\＄ | 000 ＇zLs＇\＆¢\＄ | 986＇とL6＇z9\＄ | 976＇SZ6＇9S\＄ | 9¢ع＇9¢8＇8z\＄ | L6t＇sos＇0ts | גLNกOJ NOSyHanv |
| ¢ ¢0Z | †LOZ | \＆า0z | zLOz | LLOZ | 0 OOZ | 6002 | L00z | z00z | L66I | Z661 |  |


| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | 47.4\% | 37.4\% | 49.4\% | 52.1\% | 46.7\% | 43.0\% | 43.5\% | 44.1\% | 44.3\% | 41.9\% | 45.9\% |
| BLOUNT COUNTY | 32.4\% | 28.3\% | 19.1\% | 17.9\% | 18.2\% | 18.0\% | 17.1\% | 20.4\% | 21.0\% | 19.4\% | 20.7\% |
| BRADLEY COUNTY | 26.6\% | 23.7\% | 22.1\% | 33.0\% | 38.4\% | 39.1\% | 39.6\% | 37.9\% | 38.0\% | 39.3\% | 40.3\% |
| CUMBERLAND COUNTY | 50.7\% | 33.0\% | 35.9\% | 36.7\% | 40.7\% | 39.9\% | 41.3\% | 40.0\% | 41.1\% | 41.0\% | 41.4\% |
| DAVIDSON COUNTY | 29.3\% | 31.6\% | 27.9\% | 32.1\% | 40.2\% | 31.8\% | 29.2\% | 33.7\% | 34.2\% | 33.4\% | 36.3\% |
| DICKSON COUN | 46.6\% | 35.9\% | 41.1\% | 46.6\% | 44.5\% | 44.5\% | 44.7\% | 42.3\% | 42.7\% | 43.3\% | 44.1\% |
| GREENE COUNTY | 44.9\% | 41.8\% | 32.8\% | 38.4\% | 38.0\% | 35.9\% | 37.5\% | 35.6\% | 36.1\% | 36.8\% | 37.0\% |
| HAMBLEN COUNTY | 52.9\% | 40.6\% | 41.1\% | 45.0\% | 42.9\% | 42.1\% | 43.4\% | 40.3\% | 41.7\% | 41.6\% | 42.4\% |
| HAMILTON COUNTY | 22.5\% | 24.7\% | 24.2\% | 24.0\% | 27.2\% | 27.2\% | 26.9\% | 26.5\% | 25.2\% | 24.8\% | 25.0\% |
| HENRY COUNTY | 29.9\% | 22.1\% | 18.4\% | 15.0\% | 15.1\% | 15.6\% | 15.3\% | 15.0\% | 15.4\% | 14.5\% | 14.6\% |
| KNOX COUNTY | 54.1\% | 60.4\% | 62.3\% | 59.6\% | 59.8\% | 57.9\% | 59.1\% | 55.5\% | 54.4\% | 54.8\% | 54.8\% |
| MADISON COUNTY | 19.2\% | 17.1\% | 16.0\% | 11.0\% | 12.2\% | 11.8\% | 11.5\% | 13.0\% | 12.8\% | 12.0\% | 12.3\% |
| MAURY COUNTY | 20.1\% | 15.4\% | 16.6\% | 15.7\% | 15.6\% | 16.0\% | 15.9\% | 15.5\% | 16.2\% | 16.2\% | 16.4\% |
| MONTGOMERY COUNTY | 30.4\% | 28.2\% | 42.3\% | 35.9\% | 41.7\% | 43.3\% | 41.9\% | 43.0\% | 44.0\% | 42.6\% | 36.5\% |
| PUTNAM COUNTY | 49.7\% | 39.7\% | 43.7\% | 47.6\% | 48.0\% | 47.0\% | 47.6\% | 46.5\% | 46.8\% | 46.5\% | 46.6\% |
| ROBERTSON COUNTY | 47.8\% | 39.1\% | 42.9\% | 42.4\% | 45.6\% | 44.5\% | 42.6\% | 43.3\% | 43.1\% | 42.7\% | 43.5\% |
| RUTHERFORD COUNTY | 57.1\% | 47.9\% | 46.4\% | 49.9\% | 50.2\% | 49.8\% | 48.7\% | 47.8\% | 47.9\% | 47.5\% | 49.0\% |
| SEVIER COUNTY | 58.5\% | 49.2\% | 58.2\% | 47.2\% | 50.3\% | 45.2\% | 51.0\% | 58.3\% | 60.2\% | 60.8\% | 63.2\% |
| SHELBY COUNTY | 45.5\% | 47.7\% | 57.9\% | 50.5\% | 62.4\% | 53.7\% | 50.0\% | 55.1\% | 54.3\% | 40.5\% | 43.7\% |
| SULLIVAN COUNTY | 65.1\% | 58.2\% | 51.2\% | 56.2\% | 50.8\% | 50.5\% | 50.3\% | 49.1\% | 52.3\% | 53.9\% | 53.1\% |
| SUMNER COUNTY | 38.7\% | 40.5\% | 44.9\% | 38.9\% | 42.8\% | 42.0\% | 41.2\% | 40.7\% | 40.2\% | 41.0\% | 43.9\% |
| WASHINGTON COUNTY | 63.7\% | 55.8\% | 54.2\% | 52.5\% | 58.2\% | 55.0\% | 57.3\% | 56.4\% | 57.3\% | 57.8\% | 58.5\% |
| WEAKLEY COUNTY | 20.2\% | 17.2\% | 20.9\% | 15.0\% | 16.0\% | 16.4\% | 15.8\% | 16.1\% | 17.3\% | 17.7\% | 18.1\% |
| WILLIAMSON COUNTY | 65.7\% | 46.0\% | 46.6\% | 44.3\% | 43.9\% | 44.7\% | 41.7\% | 45.4\% | 45.5\% | 43.4\% | 48.2\% |
| WILSON COUNTY | 52.9\% | 45.7\% | 49.8\% | 51.0\% | 52.8\% | 52.6\% | 51.4\% | 50.8\% | 51.9\% | 52.2\% | 53.3\% |

[^10]
## Appendix Chapter H. Local Government Expenditures

| Total Expendituer: Police Protection (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| RSON COUNTY | \$1,800,151 | \$2,738,034 | \$2,912,440 | \$2,963,894 | \$5,150,000 | \$5,025,922 | \$5,076,381 | \$7,596,988 | \$4,587,472 | \$4,377,181 | \$5,277,628 |
| BLOUNT COUNTY | \$3,446,443 | \$5,334,880 | \$7,197,839 | \$8,962,740 | \$9,552,000 | \$9,596,372 | \$12,998,685 | \$9,624,862 | \$10,102,109 | \$9,701,622 | \$9,918,616 |
| BRADLEY COUNTY | \$1,849,106 | \$3,154,033 | ,647,561 | \$8,278,923 | \$8,379,000 | \$8,561,479 | 7,137,851 | \$7,270,945 | 7,264,814 | 6,880,915 | ,980,207 |
| CUMBERLAND COUNTY | \$660,195 | \$1,148,411 | \$1,645,453 | \$3,219,295 | \$2,798,000 | \$2,601,005 | \$2,533,870 | \$2,760,057 | \$2,805,676 | \$2,530,300 | \$2,564,829 |
| DAVIDSON COUNTY | \$88,999,077 | 7,813 | \$136,137,086 | \$177,614,261 | ,0,60,00 | 3,283,622 | 182,388,693 | 2,725,380 | 2,22,22 | 201,384,24 | 37 |
| DICKSON COUNTY | \$1,505,021 | \$1,935,028 | \$2,809,964 | \$4,296,513 | \$5,515,000 | \$5,498,116 | \$4,499,323 | \$4,554,235 | \$4,536,324 | \$4,260,835 | 4,293,896 |
| GREENE COUNTY | \$1,559,571 | 2,100,168 | ,3,035,879 | ,782,620 | 4,314,000 | 4,440,597 | 4,494,522 | 4,322,424 | , 318,714 | 4,089,522 | ,248 |
| HAMBLEN COUNTY | \$1,078,412 | \$1,619,877 | \$2,233,531 | \$3,080,266 | \$3,152,000 | \$2,504,599 | \$2,599,161 | \$2,536,727 | \$2,535,059 | \$2,412,122 | \$2,447,000 |
| AMILTON COUNTY | \$13,447,282 | \$18,258,600 | \$24,954,293 | \$27,215,711 | \$12,995,000 | \$15,631,610 | \$16,195,067 | \$16,767,652 | \$16,675,036 | \$15,594,969 | \$17,782,081 |
| HENRY COUNTY | \$1,261,644 | \$2,111,513 | \$2,065,841 | \$1,899,034 | \$1,965,000 | \$2,013,713 | \$2,059,549 | \$2,154,145 | \$2,182,606 | \$2,163,856 | \$2,188,50 |
| KNOX COU | \$12,142,278 | \$18,823,351 | \$22,951,335 | \$38,306,111 | \$38,845,000 | \$41,381,956 | \$40,670,578 | \$40,948,540 | \$42,472,008 | \$62,005,185 | \$62,698,550 |
| MADISON COUNT | \$2,295,298 | \$3,045,621 | \$4,120,038 | \$4,330,498 | \$6,277,000 | \$6,310,684 | \$6,222,815 | \$6,992,961 | \$6,990,477 | \$6,496,148 | \$7,383,016 |
| MAURY COUNTY | \$1,359,555 | \$1,715,683 | ,724,104 | 6,622,933 | 6,196,000 | \$5,699,783 | \$5,650,558 | \$5,979,024 | 6,760,778 | \$6,423,775 | 55,925,229 |
| MONTGOMERY COU | \$2,702,325 | \$3,612,893 | \$4,716,267 | \$6,419,023 | \$8,327,000 | \$8,704,121 | \$9,426,879 | \$8,489,366 | \$8,849,459 | \$11,693,249 | \$10,340,607 |
| PUTNAM COUNTY | \$1,594,539 | \$2,136,725 | \$2,639,945 | \$3,920,620 | \$4,633,000 | \$4,568,483 | \$4,664,471 | \$4,942,471 | \$4,825,540 | \$4,382,678 | 4,444,607 |
| ROBERTSON COUNTY | \$1,537,192 | \$9,448,233 | \$4,869,982 | \$6,612,634 | \$8,184,000 | \$7,937,788 | \$8,241,078 | \$8,029,513 | \$8,022,728 | \$7,616,552 | \$7,726,455 |
| RUTHERFORD COUNTY | \$3,432,456 | \$19,720,902 | \$11,025,584 | \$25,239,439 | \$18,881,000 | \$17,763,371 | \$17,785,096 | \$19,601,210 | \$18,475,431 | \$23,520,251 | \$21,812,004 |
| SEVIER COUNTY | \$1,643,495 | \$2,759,464 | \$3,473,734 | \$5,009,166 | \$5,281,000 | \$5,309,238 | \$5,842,591 | \$5,872,542 | \$5,869,881 | \$7,249,192 | \$6,224,824 |
| SH | \$28,013,540 | \$42,579,450 | \$73,210,43 | 89, | 151,853, | ,359,0 | 42,492,00 | 38,790,62 | 46,471,74 | 44,610,97 | 46,776,153 |
| SU | \$4,601,785 | \$5,140,747 | \$6,446,729 | \$8,560,071 | \$9,343,000 | \$9,095,649 | \$8,593,457 | \$8,809,755 | \$8,415,169 | \$8,205,612 | \$8,992,428 |
| SUMNER COUNTY | \$2,903,740 | \$3,133,864 | \$4,154,973 | \$4,749,645 | \$5,601,000 | \$7,494,122 | \$7,895,419 | \$7,718,548 | \$7,731,652 | \$8,556,483 | \$14,292,891 |
| WASHINGTON COUNTY | \$1,713,430 | \$3,085,961 | \$4,588,171 | \$4,808,346 | \$4,957,000 | \$6,115,904 | \$6,441,733 | \$6,640,533 | \$6,509,690 | \$6,060,995 | \$6,147,185 |
| WEAKLEY COUNTY | \$639,214 | \$879,902 | \$1,329,871 | \$1,717,781 | \$1,838,000 | \$1,866,152 | \$1,849,274 | \$1,768,736 | \$1,898,970 | \$1,769,928 | \$1,795,745 |
| WILLIAMSON COUNTY | \$2,807,229 | \$3,862,493 | \$4,495,010 | \$6,228,502 | \$7,620,000 | \$7,324,919 | \$7,470,067 | \$6,596,244 | \$8,209,649 | \$8,118,581 | \$21,612,883 |
| WILSON COUNTY | \$2,661,762 | \$3,663,318 | \$5,405,657 | \$14,568,186 | \$10,637,000 | \$9,720,323 | \$7,892,539 | \$7,971,090 | \$8,410,520 | \$8,100,259 | \$8,883,733 |

Source: BERC and Census Bureau, Local Government Finances

Total Salaries and Wages (in 2009 dollars)

| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

ANDERSON COUNTY \$28,010,742 \$38,385,417 \$44,797,550 \$47,364,627 \$51,217,000 \$54,747,032 \$55,037,494 \$54,214,529 \$55,109,177 $\quad \mathbf{\$ 3 5 , 6 2 8 , 4 9 8 ~ \$ 4 7 , 1 0 0 , 4 1 0}$ BLOUNT COUNTY $\$ 63,757,798 \quad \$ 87,091,406 \$ 110,783,366 \quad \$ 94,970,237 \$ 160,003,000 \$ 184,502,179$ \$181,365,160 \$103,512,029 \$176,095,488 \$96,210,962 \$174,946,338 BRADLEY COUNTY $\$ 73,583,797 \quad \$ 77,474,252 \quad \$ 94,803,955 \quad \$ 53,283,146 \quad \$ 60,559,000 \quad \$ 61,265,285 \quad \$ 60,954,978 \quad \$ 60,043,724 \quad \$ 61,537,031 \quad \$ 44,015,501 \quad \$ 44,332,807$ CUMBERLAND COUNTY $\$ 18,938,652 \quad \$ 26,966,859 \quad \$ 35,181,023 \quad \$ 36,759,284 \quad \$ 41,756,000 \quad \$ 42,333,232 \quad \$ 41,621,139 \quad \$ 41,265,160 \quad \$ 41,238,887 \quad \$ 30,316,883 \quad \$ 30,788,904$ DAVIDSON COUNTY $\$ 648,970,543$ \$654,382,493 \$669,967,277 \$483,276,348 \$542,820,000 \$508,265,374 \$505,555,502 \$474,399,035 \$471,800,952 \$894,239,490 \$952,226,414 DICKSON COUNTY $\$ 22,483,006 \quad \$ 28,705,233 \quad \$ 44,936,127 \quad \$ 53,852,650 \quad \$ 50,076,000 \quad \$ 50,702,881 \quad \$ 49,615,455 \quad \$ 50,640,307 \quad \$ 51,899,900 \quad \$ 36,550,107 \quad \$ 36,813,694$ GREENE COUNTY $\$ 24,842,644 \quad \$ 29,417,474 \quad \$ 37,809,323 \quad \$ 42,024,881 \quad \$ 44,152,000 \quad \$ 43,623,897 \quad \$ 48,531,431 \quad \$ 47,805,807 \quad \$ 48,994,718 \quad \$ 30,550,492 \quad \$ 30,770,636$ HAMBLEN COUNTY $\$ 33,984,670 \quad \$ 47,510,936 \quad \$ 46,055,221 \quad \$ 47,093,778 \quad \$ 63,705,000 \quad \$ 50,148,053 \quad \$ 49,682,666 \quad \$ 48,940,361 \quad \$ 50,157,163 \quad \$ 44,026,494 \quad \$ 44,343,767$ HAMILTON COUNTY $\$ 274,123,703 \$ 283,762,149 \$ 486,337,964 \$ 262,665,033 \$ 520,947,000 \$ 526,132,038 \$ 544,414,253$ \$545,606,431 \$558,361,232 \$205,724,782 \$523,694,522 HENRY COUNTY $\$ 22,421,462 \quad \$ 44,122,430 \quad \$ 42,030,673 \quad \$ 19,958,394 \quad \$ 49,635,000 \quad \$ 49,476,159 \quad \$ 49,635,618 \quad \$ 20,737,649 \quad \$ 20,937,023 \quad \$ 27,006,972 \quad \$ 27,201,067$ KNOX COUNTY $\$ 215,626,486 \$ 275,642,593 \$ 325,282,685 \$ 348,942,349 \$ 366,072,000 \$ 364,272,574 \$ 352,429,692 \$ 350,201,186$ \$359,612,952 \$368,394,148 \$373,267,508 MADISON COUNTY $\$ 135,209,948 \$ 152,502,931 \$ 259,911,730 \$ 312,440,526 \$ 337,419,000 \$ 324,697,746 \$ 330,178,878$ \$325,243,826 \$333,330,543 \$82,603,040 \$329,479,088 MAURY COU $\$ 60,093,155 \$ 103,021,670 \$ 159,399,346 \$ 165,594,941 \$ 217,733,000 \$ 215,806,715 \$ 221,321,376 \$ 225,896,854 \$ 236,659,785 \$ 152,696,575 \$ 153,486,906$ MONTGOMERY COUNTY \$79,862,646 \$110,601,687 \$113,100,742 \$141,678,853 \$157,832,000 \$165,830,817 \$164,063,985 \$162,510,719 \$166,793,141 \$142,758,595 \$149,207,625 PUTNAM COUNTY $\$ 28,759,057 \quad \$ 42,697,946 \quad \$ 53,435,888 \quad \$ 57,946,283 \quad \$ 64,898,000 \quad \$ 62,324,772 \quad \$ 63,864,271 \quad \$ 64,557,439 \quad \$ 66,796,860 \quad \$ 48,304,735 \quad \$ 50,240,681$ ROBERTSON COUNTY $\$ 26,006,378 \quad \$ 36,541,152 \quad \$ 45,879,380 \quad \$ 49,578,793 \quad \$ 58,085,000 \quad \$ 58,168,475 \quad \$ 57,292,917 \quad \$ 58,144,948 \quad \$ 59,590,633 \quad \$ 47,766,062 \quad \$ 48,109,718$ RUTHERFORD COUNTY $\$ 68,672,896 \$ 89,418,483 \$ 137,239,878 \$ 159,626,990 \$ 196,357,000 \$ 200,329,553 \$ 193,024,417 \$ 183,290,772 \$ 208,011,569 \$ 184,794,379 \$ 219,701,135$ SEVIER COUNTY $\$ 31,655,803 \quad \$ 44,912,829 \quad \$ 73,085,836 \quad \$ 84,009,598 \quad \$ 97,637,000 \quad \$ 96,087,671 \quad \$ 96,511,728 \quad \$ 97,559,390 \quad \$ 99,985,121 \quad \$ 74,803,265 \quad \$ 75,341,840$ SHELBY COUNTY $\$ 425,051,053 \$ 388,432,690 \$ 415,972,425 \$ 270,400,198 \$ 376,250,000 \$ 337,451,920 \$ 343,914,968$ \$335,202,269 \$345,342,782\$791,898,825\$631,094,893 SULLIVAN COUNTY $\$ 69,187,624 \quad \$ 75,074,061 \quad \$ 83,939,073 \quad \$ 81,682,149 \quad \$ 84,825,000 \quad \$ 81,557,849 \quad \$ 79,165,426 \quad \$ 80,025,631 \quad \$ 81,344,158 \quad \$ 47,275,026 \quad \$ 47,615,568$ SUMNER COUNTY $\$ 76,423,196$ \$96,141,289 \$114,059,134 \$128,097,259 \$146,143,000 \$148,119,583 \$149,807,487 \$145,105,116 \$147,497,489 \$122,226,701 \$127,048,529 WASHINGTON COUNTY $\$ 30,135,396 \quad \$ 39,881,755 \quad \$ 47,386,256 \quad \$ 58,138,864 \quad \$ 54,831,000 \quad \$ 54,924,105 \quad \$ 51,868,957 \quad \$ 53,430,518 \quad \$ 54,311,275 \quad \$ 36,753,484 \quad \$ 37,018,295$ WEAKLEY COUNTY $\$ 20,684,253 \quad \$ 24,862,909 \quad \$ 27,709,525 \quad \$ 24,985,067 \quad \$ 26,092,000 \quad \$ 25,589,014 \quad \$ 25,741,006 \quad \$ 25,411,559 \quad \$ 25,611,911 \quad \$ 18,985,498 \quad \$ 19,122,039$ WILLIAMSON COUNTY $\$ 48,264,190 \quad \$ 79,484,917 \$ 121,061,335 \$ 154,660,048 \$ 217,523,000 \$ 211,523,516 \$ 229,518,286$ \$232,009,687 \$231,950,489 \$182,932,840 \$192,151,150 WILSON COUNTY \$28,672,336 \$42,250,432 \$53,770,102 \$83,385,512 \$84,656,000 \$85,798,747 \$89,149,200 \$90,116,942 \$86,085,072 $\$ \mathbf{\$ 6 7 , 4 3 5 , 8 9 5 ~ \$ 6 8 , 8 9 6 , 8 8 6}$ Source: BERC and Census Bureau, Local Government Finances




| Total Interest on Debt Per Capita (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 199 | 1997 | 2002 | 20 | 2009 | 2010 | 201 | 2012 | 20 |  | 2015 |
| ANDERSON COUNTY | \$56 | \$74 | \$52 | \$22 | \$20 | \$19 | \$16 | 21 | \$22 | 21 | \$29 |
| BLOUNT COUNTY | \$40 | \$46 | \$44 | \$582 | \$845 | \$788 | \$442 | \$389 | \$320 | \$339 | \$269 |
| BRADLEY COUNTY | \$46 | \$35 | \$51 | \$40 | \$25 | \$27 | \$21 | \$20 | \$19 | \$17 | \$16 |
| CUMBERLAND COUNTY | \$32 | \$23 | \$19 | \$42 | \$47 | \$38 | \$37 | \$33 | \$33 | \$30 | \$28 |
| DAVIDSON COUNTY | \$423 | \$370 | \$424 | \$302 | \$304 | \$273 | \$308 | \$274 | \$240 | \$325 | \$292 |
| DICKSON COUNT | \$38 | \$23 | \$98 | \$7 | \$63 | \$62 | \$62 | \$55 | \$53 | \$49 | 45 |
| GREENE COUNTY | \$13 | \$8 | \$25 | \$26 | \$24 | \$23 | \$24 | \$22 | \$21 | \$19 | \$18 |
| HAMBLEN COUNTY | \$26 | \$54 | \$42 | \$56 | \$57 | \$41 | \$29 | \$26 | \$25 | \$23 | \$22 |
| HAMILTON COUNTY | \$164 | \$146 | \$103 | \$21 | \$87 | \$83 | \$81 | \$75 | \$51 | 7 | \$63 |
| HENRY COUNTY | \$1 | \$39 | \$4 | \$49 | \$2 | \$22 | \$24 | \$23 | \$5 | 5 | 3 |
| KNOX COUNTY | \$39 | \$38 | \$56 | \$62 | \$68 | \$51 | \$56 | \$55 | \$52 | \$48 | \$46 |
| MADISON COUNTY | \$95 | \$124 | \$127 | \$109 | \$121 | \$200 | \$208 | 205 | \$197 | \$183 | \$172 |
| MAURY COUNTY | \$147 | \$199 | \$164 | \$55 | \$69 | 104 | \$87 | \$70 | \$4 | 8 | 1 |
| MONTGOMERY COUN | \$72 | \$54 | \$55 | \$160 | \$135 | \$116 | \$114 | \$7 | \$9 |  | \$649 |
| PUTNAM COUNTY | \$4 | \$57 | \$71 | \$57 | \$96 | \$89 | \$84 | \$80 | \$75 | \$69 | \$65 |
| ROBERTSON COUNTY | \$61 | \$53 | \$40 | \$46 | \$88 | \$117 | \$99 | \$92 | \$88 | \$80 | \$75 |
| RUTHERFORD COUNTY | \$69 | \$65 | \$84 | \$78 | \$66 | \$73 | \$57 | \$57 | \$48 | \$45 | \$42 |
| SEVIER COUNTY | \$43 | \$46 | \$43 | \$679 | \$628 | \$942 | \$624 | \$345 | \$329 | \$282 | \$275 |
| SHELBY COUNTY | \$138 | \$135 | \$151 | \$91 | \$94 | \$95 | \$76 | \$78 | \$83 | \$80 | \$89 |
| SULLIVAN COUNTY | \$15 | \$34 | \$52 | \$9 | \$17 | \$16 | \$17 | \$29 | \$28 | \$13 | \$13 |
| SUMNER COUNTY | \$58 | \$32 | \$26 | \$28 | \$51 | \$42 | \$38 | \$34 | \$29 | \$29 | \$28 |
| WASHINGTON COUNTY | \$10 | \$17 | \$25 | \$37 | \$62 | \$59 | \$57 | \$52 | \$51 | \$47 | \$44 |
| WEAKLEY COUNTY | \$12 | \$75 | \$62 | \$44 | \$26 | \$18 | \$15 | \$12 | \$23 | \$22 | \$21 |
| WILLIAMSON COUNTY | \$97 | \$92 | \$125 | \$105 | \$115 | \$110 | \$119 | \$112 | \$111 | \$101 | \$104 |
| WILSON COUNTY |  | \$55 | \$44 | \$63 | \$56 | \$47 | \$64 | \$59 | \$57 | \$62 | \$58 | Source: BERC and Census Bureau, Local Government Finances



 | ANDERSON COUNTY | $5.7 \%$ |
| :--- | ---: |
| BLOUNT COUNTY | $2.6 \%$ |
| BRADLEY COUNTY | $2.2 \%$ |
| CUMBERLAND COUNTY | $2.9 \%$ |
| DAVIDSON COUNTY | $10.4 \%$ |
| DICKSON COUNTY | $3.1 \%$ |
| GREENE COUNTY | $1.6 \%$ |
| HAMBLEN COUNTY | $2.4 \%$ |
| HAMILTON COUNTY | $7.8 \%$ |
| HENRY COUNTY | $1.0 \%$ |范

 | MONTGOMERY COUNTY | $5.0 \%$ |
| :--- | :--- |
| PUTNAM COUNTY | $0.0 \%$ | MADISON COUNTY

MAURY COUNTY KNOX COUNTY Counties 19921997 Share of Total Interest on Debt in Total Expenditure $\begin{array}{ll}\text { RUTHERFORD COUNTY } & 5.4 \% \\ \text { SEVIER COUNTY } & 3.1 \%\end{array}$ ROBERTSON COUNTY $5.7 \%$号 응 은 N SUMNER COUNTY 3．4\％ SULLIVAN COUNTY $\quad 1.3 \%$ SHELBY COUNTY $\quad 9.9 \%$ PUTNAM COUNTY ．9\％ | WILLIAMSON COUNTY | $6.5 \%$ | $4.0 \%$ |
| :--- | :--- | :--- |
| WILSON COUNTY | $6.0 \%$ | $4.5 \%$ | WEAKLEY COUNTY WASHINGTON COUNTY 0．6\％ $\%{ }^{\circ}$＇$\varepsilon$




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Source: BERC and Census Bureau, Local Government Finances

| Total Capital Outlays Per Capita (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 19972002 | 2007 | 2009 | 20 | 20 | 20 | 2013 |  | 5 |
| ANDERSON COUNTY | \$176 | \$113 \$55 | \$55 | \$6 | \$58 | \$55 | \$101 | \$186 | \$71 | 2 |
| BLOUNT COUNTY | \$75 | \$135 \$186 | \$169 | \$148 | \$123 | \$146 | \$94 | \$182 | \$119 | 0 |
| BRADLEY COUNTY | \$276 | \$63 \$170 | \$122 | 65 | \$153 | 09 | \$60 | \$58 | \$48 | 2 |
| CUMBERLAND COU | 119 | \$107 \$176 | \$158 | \$29 |  | \$128 | 12 | \$14 | \$180 | \$227 |
| DAVIDSON COUNTY | \$325 | \$719 \$355 | \$615 | \$425 | \$440 | \$449 | 452 | \$379 | \$568 | 810 |
| DICKSON COUNTY | \$67 | \$173 \$457 | \$62 | \$204 | \$150 | \$76 | \$70 | \$4 | \$68 | 5 |
| G | \$124 | \$239 \$165 | \$71 | \$76 | \$76 | \$112 | 2 | 5 | \$120 | 7 |
| HAMBLEN COUN | \$7 | \$90 \$ | \$110 | \$50 | \$97 | \$163 | \$164 | \$116 | \$140 | 9 |
| HAMILTON COUNTY | \$108 | \$127 \$103 | \$33 | \$286 | \$152 | \$128 | \$115 | \$102 | \$58 | 1 |
| HENRY COUNTY | \$103 | \$490 \$461 | \$120 | \$182 | \$218 | \$242 | \$290 | \$365 | \$224 | 148 |
| KNOX COUNTY | \$214 | \$267 \$147 | \$179 | 88 | \$105 | \$90 | 92 | \$126 | 130 | \$104 |
| M | \$815 | \# \$642 | \#\# | \#\# | \$5 | \$461 | \$429 | \$427 | \$200 | 7 |
| MAURY COUNTY | \$39 | \$429 \$495 | \$525 | \$479 | \$291 | \$32 | \$311 | \$230 | \$137 | \$204 |
| MONTGOMERY CO | 168 | \$327 \$484 | \$127 | \$620 | \$266 | \$16 | 21 | \$196 | 3 | \$225 |
| PUTNAM COUNTY | \$154 | 88 \$319 | \$153 |  |  | \$232 | 0 |  | 277 | 516 |
| ROBERTSON COUNTY | \$14 | \$200 \$61 | \$128 | \$879 |  | \$168 | \$45 | \$41 | \$63 | \$72 |
| RUTHERFORD CO | \$198 | \$184 \$293 | \$238 | \$302 | \$183 |  | 203 | \$70 | \$9 | \$85 |
| SEVIER COUNTY | \$131 | \$157 \$155 | \$109 | \$193 | \$278 | \$173 | 222 | \$204 | \$87 | \$105 |
| SHELBY COUNTY | \$115 | \$58 \$304 | \$93 | \$91 | \$43 | \$11 | \$105 | \$80 | \$111 | \$92 |
| SULLIVAN COUNTY | \$29 | \$44 \$171 | \$50 | \$34 | \$41 | \$56 | \$135 | \$33 | \$26 | \$8 |
| SUMNER COUNTY | \$180 | \$27 \$67 | \$80 | \$473 | \$80 | \$55 | \$43 | \$8 | \$52 | \$64 |
| WASHINGTON COUNTY | \$31 | \$101 \$25 | \$39 | \$198 | \$58 | \$19 | \$15 | \$23 | \$15 | \$18 |
| WEAKLEY COUNTY | \$129 | \$136 \$203 | \$163 | \$237 | \$178 | \$114 | \$96 | \$117 | \$119 | \$176 |
| WILLIAMSON COUNTY | \$244 | \$260 \$511 | \$434 | \$317 | \$413 | \$356 | \$193 | \$166 | \$275 | \$568 |
| WILSON COUNTY | \$86 | \$75 \$131 | \$378 | \$275 | \$258 | \$231 | \$262 | \$592 | \$46 | \$145 | Source: BERC and Census Bureau, Local Government Finances

Source: BERC and Census Bureau, Local Government Finances

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |



| Total Expenditures Per Capita (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | \$1,360 | \$1,388 | \$1,457 | \$1,663 | \$1,573 | \$1,466 | \$1,391 | \$1,364 | \$1,494 | \$1,898 | \$1,321 |
| BLOUNT COUNTY | \$2,211 | \$2,398 | \$2,803 | \$3,313 | \$3,681 | \$3,527 | \$3,051 | \$2,880 | \$2,977 | \$2,887 | \$2,884 |
| BRADLEY COUNTY | \$2,937 | \$2,617 | \$2,378 | \$1,572 | \$1,436 | \$1,526 | \$1,427 | \$1,353 | \$1,329 | \$1,263 | \$1,218 |
| CUMBERLAND COUNTY | \$1,530 | \$1,619 | \$1,609 | \$1,517 | \$1,819 | \$1,660 | \$1,556 | \$1,539 | \$1,490 | \$1,497 | \$1,554 |
| DAVIDSON COUNTY | \$5,681 | \$6,115 | \$6,077 | \$5,930 | \$5,922 | \$5,651 | \$5,779 | \$5,430 | \$5,024 | \$5,147 | \$5,206 |
| DICKSON COUNTY | \$1,724 | \$2,032 | \$2,652 | \$2,038 | \$2,222 | \$2,082 | \$1,985 | \$1,974 | \$1,911 | \$1,827 | \$1,773 |
| GREENE COUNTY | \$1,190 | \$1,496 | \$1,472 | \$1,389 | \$1,372 | \$1,352 | \$1,356 | \$1,347 | \$1,315 | \$1,287 | \$1,301 |
| HAMBLEN COUNTY | \$1,565 | \$2,116 | \$1,858 | \$1,780 | \$1,694 | \$1,731 | \$1,701 | \$1,706 | \$1,656 | \$1,614 | \$1,645 |
| HAMILTON COUNTY | \$2,942 | \$3,109 | \$3,467 | \$3,256 | \$3,449 | \$3,254 | \$3,099 | \$3,057 | \$3,117 | \$3,039 | \$3,034 |
| HENRY COUNTY | \$2,569 | \$3,243 | \$3,756 | \$3,585 | \$3,641 | \$3,507 | \$3,337 | \$3,421 | \$3,475 | \$3,227 | \$3,166 |
| KNOX COUNTY | \$1,887 | \$2,031 | \$2,039 | \$1,942 | \$1,789 | \$1,728 | \$1,629 | \$1,606 | \$1,586 | \$1,651 | \$1,650 |
| MADISON COUNTY | \$5,684 | \$6,161 | \$7,132 | \$9,019 | \$7,921 | \$7,204 | \$7,046 | \$6,943 | \$6,799 | \$6,257 | \$6,893 |
| MAURY COUNTY | \$4,128 | \$4,831 | \$5,314 | \$4,445 | \$5,292 | \$4,825 | \$4,791 | \$4,704 | \$4,542 | \$4,337 | \$4,332 |
| MONTGOMERY COUNTY | \$2,506 | \$2,885 | \$2,344 | \$1,905 | \$2,387 | \$2,040 | \$1,892 | \$1,831 | \$1,844 | \$1,823 | \$2,375 |
| PUTNAM COUNTY | \$1,518 | \$1,759 | \$1,994 | \$1,987 | \$2,294 | \$2,160 | \$1,946 | \$1,876 | \$1,852 | \$1,883 | \$2,117 |
| ROBERTSON COUNTY | \$1,489 | \$2,059 | \$1,748 | \$1,822 | \$2,695 | \$2,273 | \$1,938 | \$1,797 | \$1,784 | \$1,719 | \$1,694 |
| RUTHERFORD COUNTY | \$1,791 | \$1,764 | \$1,964 | \$1,852 | \$1,855 | \$1,742 | \$1,636 | \$1,739 | \$1,580 | \$1,606 | \$1,570 |
| SEVIER COUNTY | \$1,946 | \$2,314 | \$2,507 | \$3,057 | \$3,031 | \$3,319 | \$2,850 | \$2,610 | \$2,549 | \$2,358 | \$2,396 |
| SHELBY COUNTY | \$1,946 | \$1,797 | \$2,535 | \$2,174 | \$2,217 | \$1,977 | \$1,931 | \$1,893 | \$1,827 | \$2,402 | \$2,331 |
| SULLIVAN COUNTY | \$1,615 | \$1,368 | \$1,609 | \$1,227 | \$1,175 | \$1,145 | \$1,120 | \$1,184 | \$1,046 | \$952 | \$1,029 |
| SUMNER COUNTY | \$2,407 | \$1,696 | \$1,745 | \$1,689 | \$2,205 | \$1,737 | \$1,672 | \$1,639 | \$1,625 | \$1,562 | \$1,632 |
| WASHINGTON COUNTY | \$1,004 | \$1,148 | \$1,141 | \$1,193 | \$1,404 | \$1,224 | \$1,128 | \$1,064 | \$1,066 | \$986 | \$970 |
| WEAKLEY COUNTY | \$2,859 | \$2,913 | \$2,987 | \$2,901 | \$3,175 | \$2,892 | \$2,885 | \$2,792 | \$2,782 | \$2,667 | \$2,717 |
| WILLIAMSON COUNTY | \$2,069 | \$2,897 | \$3,513 | \$3,213 | \$3,158 | \$2,972 | \$2,860 | \$2,728 | \$2,644 | \$2,672 | \$2,962 |
| WILSON COUNTY | \$1,410 | \$1,549 | \$1,737 | \$1,948 | \$1,907 | \$1,751 | \$1,749 | \$1,784 | \$1,984 | \$1,449 | \$1,584 |
| Source: BERC and Census Bureau, Local Government Finances |  |  |  |  |  |  |  |  |  |  |  |

## Appendix Chapter I. Educational Dynamics and Economic Growth

| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | 68.22\% | 42.77\% | 69.39\% | 62.41\% | 44.51\% | 42.19\% | 43.85\% | 49.67\% | 46.18\% | 40.81\% | 46.36\% |
| BLOUNT COUNTY | 60.72\% | 50.06\% | 50.14\% | 57.27\% | 54.84\% | 56.52\% | 57.86\% | 58.19\% | 57.68\% | 55.95\% | 59.58\% |
| BRADLEY COUNTY | 58.96\% | 45.41\% | 44.06\% | 41.87\% | 44.01\% | 39.40\% | 40.96\% | 39.80\% | 39.61\% | 37.26\% | 39.94\% |
| CUMBERLAND COUNTY | 50.76\% | 32.43\% | 30.62\% | 29.85\% | 32.15\% | 34.31\% | 33.97\% | 34.76\% | 35.70\% | 34.56\% | 34.48\% |
| DAVIDSON COUNTY | 97.13\% | 82.33\% | 104.43\% | 111.11\% | 100.54\% | 98.83\% | 94.07\% | 93.29\% | 105.52\% | 97.45\% | 93.38\% |
| DICKSON COUNT | 49.29\% | 32.85\% | 33.48\% | 41.54\% | 41.17\% | 43.51\% | 42.99\% | 40.40\% | 41.69\% | 40.08\% | 41.85\% |
| GREENE COUNTY | 50.13\% | 34.34\% | 29.63\% | 33.88\% | 32.81\% | 31.05\% | 31.81\% | 30.69\% | 31.62\% | 30.02\% | 30.88\% |
| HAMBLEN COUNTY | 37.06\% | 34.89\% | 29.87\% | 32.78\% | 34.21\% | 32.39\% | 30.44\% | 29.74\% | 29.79\% | 29.03\% | 28.88\% |
| HAMILTON COUNTY | $71.81 \%$ | 96.05\% | 55.34\% | 59.59\% | 65.82\% | 66.78\% | 66.05\% | 66.51\% | 65.45\% | 61.90\% | 64.50\% |
| HENRY COUNTY | 55.35\% | 37.14\% | 26.04\% | 33.78\% | 35.44\% | 31.39\% | 30.05\% | 33.68\% | 32.32\% | 32.36\% | 37.01\% |
| KNOX COUNTY | 46.85\% | 44.81\% | 59.48\% | 50.70\% | 52.84\% | 53.17\% | 55.35\% | 50.85\% | 49.05\% | 47.04\% | 48.71\% |
| MADISON COUNTY | 25.34\% | 35.28\% | 33.39\% | 35.60\% | 35.43\% | 35.12\% | 28.27\% | 40.90\% | 41.34\% | 41.29\% | 44.03\% |
| MAURY COUNTY | 33.59\% | 35.14\% | 34.82\% | 40.81\% | 32.51\% | 40.29\% | 39.99\% | 44.30\% | 47.45\% | 47.98\% | 46.35\% |
| MONTGOMERY COUNTY | 40.13\% | 27.40\% | 32.34\% | 37.39\% | 27.75\% | 33.20\% | 34.47\% | 35.63\% | 35.52\% | 37.14\% | 38.74\% |
| PUTNAM COUNTY | 39.37\% | 31.05\% | 31.99\% | 38.68\% | 34.78\% | 33.99\% | 36.87\% | 39.03\% | 41.27\% | 36.11\% | 31.22\% |
| ROBERTSON COUNTY | 47.97\% | 35.02\% | 41.06\% | 38.30\% | 27.72\% | 33.17\% | 38.45\% | 43.03\% | 42.21\% | 40.72\% | 42.41\% |
| RUTHERFORD COUNTY | 47.99\% | 53.07\% | 36.65\% | 39.00\% | 39.67\% | 44.32\% | 44.80\% | 39.10\% | 42.94\% | 41.28\% | 42.34\% |
| SEVIER COUNTY | 35.66\% | 29.70\% | 32.45\% | 39.00\% | 43.71\% | 46.07\% | 43.61\% | 55.84\% | 55.46\% | 57.39\% | 62.22\% |
| SHELBY COUNTY | 120.46\% | 123.66\% | 102.34\% | 80.84\% | 78.12\% | 96.74\% | 92.41\% | 85.54\% | 91.12\% | 54.08\% | 60.22\% |
| SULLIVAN COUNTY | 81.24\% | 64.92\% | 36.54\% | 55.32\% | 56.86\% | 55.60\% | 53.54\% | 45.95\% | 58.90\% | 63.57\% | 64.36\% |
| SUMNER COUNTY | 46.22\% | 38.15\% | 38.72\% | 42.63\% | 29.60\% | 37.97\% | 37.88\% | 37.11\% | 36.92\% | 36.48\% | 41.52\% |
| WASHINGTON COUNTY | 66.68\% | 50.62\% | 57.94\% | 57.20\% | 54.81\% | 65.64\% | 67.29\% | 66.76\% | 65.97\% | 64.28\% | 66.69\% |
| WEAKLEY COUNTY | 37.32\% | 29.39\% | 33.93\% | 28.17\% | 26.67\% | 26.74\% | 26.76\% | 25.91\% | 31.18\% | 30.90\% | 30.45\% |
| WILLIAMSON COUNTY | 66.81\% | 68.30\% | 57.03\% | 47.26\% | 52.12\% | 53.00\% | 54.63\% | 60.36\% | 59.83\% | 58.14\% | 64.65\% |
| WILSON COUNTY | 68.55\% | 47.19\% | 56.85\% | 42.81\% | 46.15\% | 50.21\% | 48.00\% | 45.84\% | 37.05\% | 55.17\% | 49.88\% |

[^11]| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | 75.22\% | 56.33\% | 59.33\% | 54.28\% | 60.03\% | 59.82\% | 65.05\% | 63.09\% | 57.66\% | 52.47\% | 56.53\% |
| BLOUNT COUNTY | 44.46\% | 57.07\% | 56.95\% | 59.76\% | 59.02\% | 61.61\% | 62.96\% | 62.03\% | 58.29\% | 60.49\% | 59.77\% |
| BRADLEY COUNTY | 47.28\% | 63.24\% | 52.90\% | 56.22\% | 65.63\% | 63.19\% | 64.69\% | 64.38\% | 63.39\% | 65.35\% | 64.12\% |
| CUMBERLAND COUNTY | 63.49\% | 70.26\% | 61.30\% | 62.28\% | 67.94\% | 72.40\% | 67.93\% | 68.49\% | 64.80\% | 64.48\% | 62.07\% |
| DAVIDSON COUNTY | 40.39\% | 37.53\% | 33.72\% | 37.57\% | 37.32\% | 39.10\% | 42.75\% | 42.24\% | 43.29\% | 40.79\% | 38.16\% |
| DICKSON COUNTY | 58.40\% | 63.44\% | 47.05\% | 61.56\% | 66.87\% | 68.43\% | 69.67\% | 64.10\% | 64.35\% | 66.30\% | 65.21\% |
| GREENE COUNTY | 72.75\% | 61.82\% | 59.97\% | 68.87\% | 72.08\% | 75.93\% | 72.38\% | 71.87\% | 71.97\% | 70.86\% | 71.54\% |
| HAMBLEN COUNTY | 49.71\% | 53.90\% | 47.82\% | 54.71\% | 64.67\% | 65.68\% | 62.05\% | 61.23\% | 62.63\% | 63.51\% | 59.80\% |
| HAMILTON COUNTY | 33.20\% | 44.36\% | 41.18\% | 41.77\% | 43.20\% | 45.18\% | 48.16\% | 47.47\% | 46.93\% | 46.87\% | 45.72\% |
| HENRY COUNTY | 46.17\% | 55.75\% | 47.06\% | 66.88\% | 74.74\% | 70.08\% | 71.50\% | 74.64\% | 70.53\% | 72.94\% | 75.01\% |
| KNOX COUNTY | 42.42\% | 36.63\% | 38.78\% | 38.67\% | 40.90\% | 43.76\% | 41.91\% | 47.15\% | 45.18\% | 42.55\% | 44.28\% |
| MADISON COUNTY | 33.82\% | 50.13\% | 44.99\% | 50.35\% | 54.28\% | 54.73\% | 46.87\% | 54.94\% | 54.33\% | 55.58\% | 57.32\% |
| MAURY COUNTY | 36.75\% | 67.08\% | 53.82\% | 59.85\% | 49.29\% | 56.15\% | 56.77\% | 61.58\% | 60.13\% | 62.90\% | 60.17\% |
| MONTGOMERY COUNTY | 48.13\% | 48.49\% | 51.41\% | 58.97\% | 48.53\% | 55.49\% | 60.78\% | 57.48\% | 55.04\% | 59.69\% | 59.84\% |
| PUTNAM COUNTY | 60.52\% | 51.87\% | 45.35\% | 57.27\% | 50.78\% | 50.94\% | 54.81\% | 60.81\% | 60.84\% | 55.56\% | 47.57\% |
| ROBERTSON COUNTY | 54.37\% | 66.84\% | 67.55\% | 67.23\% | 44.63\% | 54.22\% | 67.12\% | 66.82\% | 65.72\% | 67.97\% | 67.89\% |
| RUTHERFORD COUNTY | 34.49\% | 58.97\% | 41.63\% | 49.22\% | 52.08\% | 55.67\% | 60.58\% | 52.50\% | 58.68\% | 56.84\% | 56.00\% |
| SEVIER COUNTY | 47.69\% | 46.70\% | 44.39\% | 43.77\% | 40.90\% | 43.15\% | 41.64\% | 40.72\% | 38.45\% | 39.24\% | 38.54\% |
| SHELBY COUNTY | 32.69\% | 47.64\% | 25.21\% | 20.16\% | 21.47\% | 27.41\% | 26.32\% | 26.28\% | 26.84\% | 58.16\% | 54.21\% |
| SULLIVAN COUNTY | 37.97\% | 46.70\% | 37.09\% | 50.57\% | 57.12\% | 57.28\% | 56.12\% | 49.25\% | 53.45\% | 56.44\% | 55.48\% |
| SUMNER COUNTY | 43.16\% | 60.27\% | 58.57\% | 59.69\% | 46.60\% | 61.83\% | 65.74\% | 60.40\% | 62.00\% | 62.82\% | 59.17\% |
| WASHINGTON COUNTY | 40.46\% | 50.95\% | 58.45\% | 55.82\% | 37.54\% | 43.86\% | 46.54\% | 56.75\% | 55.04\% | 55.55\% | 54.58\% |
| WEAKLEY COUNTY | 58.52\% | 67.53\% | 68.12\% | 73.08\% | 76.09\% | 78.97\% | 78.62\% | 76.85\% | 75.44\% | 75.82\% | 70.20\% |
| WILLIAMSON COUNTY | 29.17\% | 39.89\% | 34.51\% | 34.78\% | 36.73\% | 36.57\% | 53.97\% | 39.95\% | 40.37\% | 51.38\% | 36.46\% |
| WILSON COUNTY | 46.03\% | 58.04\% | 49.24\% | 43.18\% | 44.11\% | 49.39\% | 49.31\% | 46.05\% | 35.91\% | 55.60\% | 49.65\% |
| Source: Census Bureau and |  |  |  |  |  |  |  |  |  |  |  |


| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | \$339 | \$393 | \$445 | \$441 | \$488 | \$501 | \$522 | \$472 | \$462 | \$461 | \$455 |
| BLOUNT COUNTY | \$243 | \$343 | \$396 | \$431 | \$450 | \$456 | \$443 | \$448 | \$417 | \$424 | \$414 |
| BRADLEY COUNTY | \$255 | \$352 | \$376 | \$426 | \$481 | \$516 | \$503 | \$497 | \$492 | \$516 | \$481 |
| CUMBERLAND COUNTY | \$389 | \$548 | \$559 | \$616 | \$637 | \$679 | \$686 | \$662 | \$619 | \$611 | \$603 |
| DAVIDSON COUNTY | \$292 | \$370 | \$386 | \$439 | \$463 | \$491 | \$537 | \$518 | \$517 | \$523 | \$511 |
| DICKSON COUNTY | \$425 | \$672 | \$712 | \$774 | \$838 | \$853 | \$871 | \$842 | \$825 | \$848 | \$808 |
| GREENE COUNTY | \$355 | \$408 | \$461 | \$512 | \$545 | \$584 | \$557 | \$565 | \$556 | \$556 | \$560 |
| HAMBLEN COUNTY | \$406 | \$535 | \$572 | \$646 | \$733 | \$786 | \$783 | \$781 | \$787 | \$808 | \$781 |
| HAMILTON COUNTY | \$152 | \$213 | \$428 | \$450 | \$475 | \$484 | \$512 | \$498 | \$493 | \$500 | \$485 |
| HENRY COUNTY | \$275 | \$449 | \$507 | \$540 | \$588 | \$605 | \$633 | \$617 | \$607 | \$649 | \$602 |
| KNOX COUNTY | \$327 | \$384 | \$403 | \$419 | \$431 | \$454 | \$424 | \$497 | \$497 | \$482 | \$486 |
| MADISON COUNTY | \$412 | \$531 | \$573 | \$596 | \$639 | \$669 | \$699 | \$642 | \$619 | \$617 | \$613 |
| MAURY COUNTY | \$345 | \$640 | \$650 | \$679 | \$686 | \$699 | \$710 | \$690 | \$662 | \$668 | \$656 |
| MONTGOMERY COUNTY | \$363 | \$576 | \$644 | \$734 | \$805 | \$807 | \$839 | \$800 | \$777 | \$800 | \$771 |
| PUTNAM COUNTY | \$372 | \$510 | \$559 | \$639 | \$686 | \$717 | \$697 | \$728 | \$733 | \$731 | \$744 |
| ROBERTSON COUNTY | \$380 | \$675 | \$697 | \$751 | \$812 | \$822 | \$878 | \$840 | \$842 | \$864 | \$845 |
| RUTHERFORD COUNTY | \$293 | \$453 | \$464 | \$539 | \$609 | \$630 | \$664 | \$638 | \$631 | \$643 | \$609 |
| SEVIER COUNTY | \$365 | \$506 | \$542 | \$578 | \$560 | \$574 | \$574 | \$564 | \$536 | \$529 | \$506 |
| SHELBY COUNTY | \$100 | \$154 | \$169 | \$188 | \$206 | \$221 | \$222 | \$226 | \$217 | \$825 | \$694 |
| SULLIVAN COUNTY | \$264 | \$300 | \$314 | \$310 | \$339 | \$341 | \$343 | \$341 | \$311 | \$305 | \$295 |
| SUMNER COUNTY | \$393 | \$600 | \$653 | \$723 | \$776 | \$797 | \$830 | \$760 | \$769 | \$772 | \$756 |
| WASHINGTON COUNTY | \$159 | \$259 | \$275 | \$294 | \$256 | \$251 | \$256 | \$308 | \$291 | \$291 | \$282 |
| WEAKLEY COUNTY | \$368 | \$544 | \$606 | \$719 | \$774 | \$799 | \$777 | \$780 | \$755 | \$744 | \$722 |
| WILLIAMSON COUNTY | \$270 | \$435 | \$506 | \$528 | \$567 | \$569 | \$793 | \$560 | \$555 | \$715 | \$560 |
| WILSON COUNTY | \$279 | \$439 | \$451 | \$503 | \$536 | \$554 | \$576 | \$550 | \$542 | \$541 | \$533 |
| Source: Census Bureau and |  |  |  |  |  |  |  |  |  |  |  |

әжяg pue neang snsuəว 'әoxnos  WILLIAMSON COUNTY WEAKLEY COUNTY WASHINGTON COUNTY SUMNER COUNTY SULLIVAN COUNTY
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| Total Educational Expenditure (in 2009 dollars) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| ANDERSON COUNTY | 46.43\% | 63.41\% | 59.97\% | 50.29\% | 51.70\% | 56.22\% | 55.34\% | 51.68\% | 49.93\% | 42.40\% | 55.68\% |
| BLOUNT COUNTY | 34.58\% | 31.62\% | 28.91\% | 22.40\% | 20.73\% | 20.64\% | 22.17\% | 23.65\% | 22.36\% | 22.23\% | 21.93\% |
| BRADLEY COUNTY | 25.65\% | 26.81\% | 34.78\% | 49.71\% | 50.99\% | 52.69\% | 52.30\% | 53.79\% | 54.25\% | 57.24\% | 56.21\% |
| CUMBERLAND COUNTY | 56.04\% | 60.75\% | 66.01\% | 67.17\% | 51.56\% | 55.59\% | 62.27\% | 59.22\% | 59.64\% | 57.99\% | 57.07\% |
| DAVIDSON COUNTY | 17.78\% | 20.30\% | 21.92\% | 20.28\% | 20.97\% | 21.87\% | 20.88\% | 21.28\% | 22.09\% | 22.81\% | 23.50\% |
| DICKSON COUNTY | 58.98\% | 65.70\% | 66.41\% | 63.56\% | 56.40\% | 58.88\% | 60.44\% | 62.75\% | 62.36\% | 64.14\% | 63.79\% |
| GREENE COUNTY | 57.44\% | 55.58\% | 60.86\% | 55.12\% | 55.13\% | 55.97\% | 54.47\% | 54.95\% | 54.60\% | 55.89\% | 54.94\% |
| HAMBLEN COUNTY | 73.04\% | 59.17\% | 74.94\% | 68.37\% | 66.93\% | 67.97\% | 71.27\% | 70.50\% | 70.59\% | 72.19\% | 72.54\% |
| HAMILTON COUNTY | 21.83\% | 19.48\% | 34.87\% | 34.04\% | 31.88\% | 32.41\% | 32.96\% | 32.34\% | 31.31\% | 32.20\% | 31.95\% |
| HENRY COUNTY | 32.45\% | 31.29\% | 33.38\% | 23.21\% | 21.62\% | 24.22\% | 25.46\% | 22.76\% | 23.05\% | 25.26\% | 23.16\% |
| KNOX COUNTY | 57.06\% | 65.05\% | 59.32\% | 57.46\% | 58.98\% | 59.10\% | 59.62\% | 61.84\% | 64.51\% | 62.90\% | 60.75\% |
| MADISON COUNTY | 29.98\% | 21.66\% | 20.79\% | 13.51\% | 14.87\% | 16.69\% | 20.32\% | 15.85\% | 15.58\% | 16.24\% | 14.17\% |
| MAURY COUNTY | 31.83\% | 24.91\% | 26.47\% | 26.30\% | 26.29\% | 25.38\% | 25.07\% | 22.45\% | 22.54\% | 22.41\% | 23.00\% |
| MONTGOMERY COUNTY | 42.07\% | 51.87\% | 62.22\% | 67.28\% | 69.49\% | 70.18\% | 70.06\% | 71.62\% | 71.20\% | 67.40\% | 49.52\% |
| PUTNAM COUNTY | 56.62\% | 70.45\% | 72.02\% | 57.82\% | 58.90\% | 64.09\% | 62.79\% | 60.16\% | 60.51\% | 64.04\% | 67.45\% |
| ROBERTSON COUNTY | 65.68\% | 61.80\% | 68.71\% | 63.12\% | 67.52\% | 65.61\% | 64.82\% | 65.90\% | 66.76\% | 67.71\% | 67.14\% |
| RUTHERFORD COUNTY | 66.46\% | 54.87\% | 66.16\% | 60.86\% | 63.02\% | 63.91\% | 64.34\% | 65.85\% | 63.34\% | 64.55\% | 63.30\% |
| SEVIER COUNTY | 55.00\% | 59.04\% | 56.67\% | 44.48\% | 45.15\% | 39.45\% | 46.44\% | 50.02\% | 50.87\% | 52.37\% | 50.01\% |
| SHELBY COUNTY | 22.05\% | 22.65\% | 30.82\% | 44.12\% | 43.39\% | 40.14\% | 41.90\% | 42.71\% | 41.07\% | 54.12\% | 50.17\% |
| SULLIVAN COUNTY | 60.22\% | 59.25\% | 61.36\% | 51.44\% | 50.47\% | 51.21\% | 52.39\% | 55.16\% | 51.66\% | 51.99\% | 47.24\% |
| SUMNER COUNTY | 52.89\% | 74.05\% | 74.44\% | 73.87\% | 75.50\% | 72.97\% | 72.53\% | 72.38\% | 70.96\% | 72.08\% | 71.49\% |
| WASHINGTON COUNTY | 54.71\% | 55.87\% | 48.02\% | 45.39\% | 48.64\% | 45.94\% | 46.77\% | 48.08\% | 46.13\% | 48.59\% | 48.67\% |
| WEAKLEY COUNTY | 30.80\% | 34.83\% | 34.67\% | 34.90\% | 32.05\% | 34.41\% | 32.89\% | 34.25\% | 33.45\% | 33.73\% | 34.60\% |
| WILLIAMSON COUNTY | 62.69\% | 47.41\% | 48.58\% | 48.62\% | 48.88\% | 51.47\% | 49.36\% | 48.38\% | 48.32\% | 47.69\% | 47.39\% |
| WILSON COUNTY | 60.15\% | 61.58\% | 61.41\% | 61.60\% | 63.75\% | 63.06\% | 64.16\% | 63.07\% | 70.72\% | 61.48\% | 61.84\% |
| Source: Census Bureau and |  |  |  |  |  |  |  |  |  |  |  |

Source: Census Bureau and BERC

| Counties | 1992 | 1997 | 2002 | 2007 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ANDERSON COUNTY | \$451 | \$698 | \$750 | \$812 | \$813 | \$838 | \$802 | \$748 | \$802 | \$879 | \$805 |
| BLOUNT COUNTY | \$547 | \$602 | \$696 | \$721 | \$763 | \$740 | \$704 | \$723 | \$716 | \$701 | \$692 |
| BRADLEY COUNTY | \$539 | \$557 | \$710 | \$759 | \$732 | \$817 | \$777 | \$772 | \$775 | \$789 | \$750 |
| CUMBERLAND COUNTY | \$613 | \$780 | \$912 | \$989 | \$938 | \$938 | \$1,009 | \$967 | \$956 | \$948 | \$971 |
| DAVIDSON COUNTY | \$722 | \$985 | \$1,144 | \$1,168 | \$1,242 | \$1,257 | \$1,256 | \$1,226 | \$1,194 | \$1,282 | \$1,339 |
| DICKSON COUNTY | \$727 | \$1,059 | \$1,513 | \$1,258 | \$1,253 | \$1,246 | \$1,250 | \$1,314 | \$1,282 | \$1,279 | \$1,238 |
| GREENE COUNTY | \$489 | \$659 | \$769 | \$743 | \$756 | \$769 | \$769 | \$786 | \$772 | \$785 | \$783 |
| HAMBLEN COUNTY | \$817 | \$993 | \$1,196 | \$1,181 | \$1,134 | \$1,196 | \$1,262 | \$1,276 | \$1,257 | \$1,272 | \$1,306 |
| HAMILTON COUNTY | \$459 | \$480 | \$1,038 | \$1,076 | \$1,099 | \$1,072 | \$1,064 | \$1,049 | \$1,050 | \$1,068 | \$1,061 |
| HENRY COUNTY | \$596 | \$805 | \$1,077 | \$808 | \$787 | \$864 | \$885 | \$826 | \$861 | \$890 | \$803 |
| KNOX COUNTY | \$770 | \$1,048 | \$1,039 | \$1,083 | \$1,055 | \$1,038 | \$1,011 | \$1,054 | \$1,100 | \$1,133 | \$1,097 |
| MADISON COUNTY | \$1,218 | \$1,059 | \$1,273 | \$1,184 | \$1,178 | \$1,222 | \$1,491 | \$1,168 | \$1,139 | \$1,109 | \$1,069 |
| MAURY COUNTY | \$940 | \$955 | \$1,208 | \$1,135 | \$1,391 | \$1,245 | \$1,251 | \$1,121 | \$1,101 | \$1,061 | \$1,091 |
| MONTGOMERY COUNTY | \$754 | \$1,187 | \$1,252 | \$1,245 | \$1,659 | \$1,455 | \$1,381 | \$1,391 | \$1,412 | \$1,341 | \$1,288 |
| PUTNAM COUNTY | \$615 | \$983 | \$1,233 | \$1,116 | \$1,351 | \$1,407 | \$1,272 | \$1,198 | \$1,205 | \$1,316 | \$1,563 |
| ROBERTSON COUNTY | \$699 | \$1,009 | \$1,032 | \$1,117 | \$1,819 | \$1,516 | \$1,308 | \$1,257 | \$1,281 | \$1,271 | \$1,245 |
| RUTHERFORD COUNTY | \$851 | \$768 | \$1,116 | \$1,095 | \$1,169 | \$1,132 | \$1,096 | \$1,215 | \$1,076 | \$1,132 | \$1,088 |
| SEVIER COUNTY | \$765 | \$1,084 | \$1,220 | \$1,320 | \$1,368 | \$1,331 | \$1,378 | \$1,385 | \$1,394 | \$1,348 | \$1,312 |
| SHELBY COUNTY | \$307 | \$323 | \$671 | \$931 | \$962 | \$807 | \$843 | \$858 | \$807 | \$1,419 | \$1,280 |
| SULLIVAN COUNTY | \$695 | \$643 | \$848 | \$613 | \$593 | \$596 | \$611 | \$693 | \$581 | \$541 | \$532 |
| SUMNER COUNTY | \$910 | \$996 | \$1,115 | \$1,212 | \$1,664 | \$1,289 | \$1,263 | \$1,259 | \$1,240 | \$1,229 | \$1,277 |
| WASHINGTON COUNTY | \$393 | \$509 | \$470 | \$526 | \$683 | \$571 | \$550 | \$543 | \$529 | \$523 | \$517 |
| WEAKLEY COUNTY | \$630 | \$805 | \$889 | \$983 | \$1,018 | \$1,012 | \$988 | \$1,015 | \$1,001 | \$982 | \$1,029 |
| WILLIAMSON COUNTY | \$927 | \$1,090 | \$1,466 | \$1,517 | \$1,544 | \$1,555 | \$1,470 | \$1,401 | \$1,374 | \$1,391 | \$1,537 |
| WILSON COUNTY | \$607 | \$757 | \$916 | \$1,165 | \$1,216 | \$1,123 | \$1,169 | \$1,194 | \$1,509 | \$973 | \$1,072 |
| Source: Census Bureau and |  |  |  |  |  |  |  |  |  |  |  |


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| S29＇001＇881\＄ | Iセザ $2966^{\prime}$ IZIS | 809＇t20＇tsis | 086＇z8i＇ztis | 978＇02＇98i\＄ | sto＇scı＇szis | 000 ＇sz9＇98ı\＄ | 899＇ヶ88＇ャzI\＄ | L98＇szz＇s8\＄ | 900＇180＇z9\＄ | 90s＇stists | K．innoo nostim |
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| 182＇06z＇s9\＄ | 620＇t68＇s9\＄ | 00才＇168＇99\＄ | zLL＇98L＇L9 | 12＇61＇898 | ci＇6zs＇ols | 00＇01＇s8s | 200＇t26＇198 | zs60IStics | L62＇z86＇zs\＄ |  | NחOO NOL．¢NIHSVM |
| ¢S96889＇ャzz\＄ | 0ャ6＇0ヵをどてIz | 166＇889＇6078 | ¢t9＇sol＇607s | ¢90＇886＇907\＄ | 097＇88L＇L07s |  | z8E＇¢1と＇s8I\＄ | 06L＇8Ll＇icis | ILI＇00z＇\＆zI\＄ | 8z0＇9ャぇ＇86s | XINกOO \％ANWกS |
| 206＇60†＇¢88 | I＇Zャレ＇t8\＄ | coo＇t6\＄ | サ＇TLさ＇80I\＄ | 879＇288＇¢6\＄ | ＇SLよ＇ 66 S | 0＇t 28 ＇76 | ＇¢¢z＇c6s | ＇0ヶ8＇6zı | 1＇866＇L6\＄ | 991＇tzz＇zoIs | tTก |
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| $6988^{\prime} 669^{\prime}$＇z8\＄ | 9sc＇zri＇Lzes | \＆z8＇t99＇zoss | 8L0＇06t＇sEs | ¢8z＇coo＇s6zs | 809＇ıİ＇86zs | 000＇188＇708\＄ | 988＇8zo＇L97s | 1ャ0＇0ヶて＇6ız | 866＇0zt＇9zI\＄ | 889＇88t＇01 IS |  |
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| ゅL6＇ıs8＇sz\＄ | 080＇8sL＇88\＄ | 886＇tLL＇LZS | 18t＇29L＇97\＄ | 1ヵ6＇899＇87\＄ | O¢ぇ＇786＇Lz\＄ | 0＇LLe＇szs | 997＇ $8 z 1$＇$¢$ zs | 781＇¢ャ2＇¢¢\＄ | \＆ro＇s\＆ritzs | 618＇600＇LIS | NaH |
| ¢999 $27 z^{\prime}$ ¢ $¢ 8 \$$ | 062＇6t¢＇t $\llcorner 8 \$$ | 168＇sti＇998s | I8S＇162＇z98s | 8120zı＇z98\＄ | 196＇802＇198s | 000069＇s98\＄ | 9cz＇09G＇6tss | 981＇zø8＇¢z8s |  | 910＇209＇88I\＄ | X．LNnOO NOLTILVVH |
| 620＇648＇z8s | gze＇ticios | L8Z＇1LZ＇62\＄ | t08＇zzo＇08s | 676＇267＇628 | zzz＇0z8＇ャレs | 00＇1 29002 \＄ | ISL＇s9L＇zLS | ＜19＇869＇69 \＄ | 16t＇900＇99 ${ }^{\text {a }}$ | 676 ＇sc9\％trs | Innoo natawvh |
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| 08L＇6zL＇g9 | z＇t\＆2＇t9\＄ | 8＇098＇t9s | 0¢9＇そซ6＇s9\＄ | L＇20が＇z9 | 608＇6z6＇19\＄ | ＇6L8＇198 | zsz＇otios | L9s | 590＇8t\＄ | ＇97\＄ | vosyıIa |
| z09＇Lt¢＇806s | 8IS＇tco＇zs8 | Z1ヵ＇cos＇98L\＄ | 690＇888＇c6 ${ }^{\text {S }}$ | z19＇81t＇862 | 008＇\＆tz＇68LS | $000 \cdot \mathrm{~s} z^{\prime}$ ILLS | L16＇999＇902s | 8St＇8069999 | 801＇9ta＇9css | 698＇z81＇628s | Xunnoo nosainva |
| ャL0＇98s＇9s\％ | L68＇st6＇ts\＄ | EtS＇tLe＇ts | 8LL＇061＇cs\＄ | zL6＇9rI＇2s\＄ | s¢8＇z8L＇zs\＄ | 000＇60z＇zs | ¢St＇6t6＇¢s | ゅ $\downarrow$ て＇t09＇ゅts | 88t＇サII＇ts | 660＇66s＇zzs | ג．innos anvtyagwno |
| 10ヶ＇888＇L2 | 281＇00z＇tis | 621＇L00＇62 ${ }^{\text {d }}$ | 682＇620＇8LS | 06z＇099\％2 | 092＇810＇18\＄ | 000＇t to＇zas | キマ8＇8LO＇\＆2\％ | 9L8＇802＇89\＄ | zL6＇8712ts | tsc＇ 860 ＇tis | x．ınnoo xatavyg |
| 8St＇t80＇88\＄ | 668＇L8E＇88\＄ | 760＇29ヵ＇68 | 178＇2L9＇688 | 91て＇tてI＇く88 | 809＇t6I＇t6s | 000＇079＇\＆6s | 117＇9ャゅ＇98\＄ | 888＇L07＇92 | 6si＇z8L＇09s | ¢ $4106 \mathrm{~S}^{\prime} 6 \mathrm{t}$ \＄ | xinnoo innota |
| 916＇99609\＄ | 8Lt＇90z＇99\＄ | 027＇86t＇09\＄ | z69＇scs＇9s\＄ | † ¢8＇¢87＇09\＄ |  | 000＇sio＇t9 | zStr9tL＇6s | I¢9＇¢c9＇¢s | t68＇160＇0s\＄ | 850＇sz8＇18\＄ | Xunnoo nosyadiv |
| sioz | ${ }^{\text {tioz }}$ | 810z | z10z | H0Z | OLOz | $600 z$ | L00z | z00z | 2661 | ${ }^{2} 661$ | seppuno |
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| County Name | 1970 | 1980 | 1990 | 2000 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anderson | 14.5 | 18.2 | 18.6 | 20.8 | 22.1 | 21.4 | 23.0 | 23.5 | 23.6 | 23.9 | 23.9 |
| Blount | 7.9 | 11.3 | 14.3 | 17.9 | 20.6 | 20.5 | 20.9 | 20.8 | 21.7 | 22.8 | 23.1 |
| Bradley | 5.4 | 10.5 | 11.9 | 15.9 | 19.2 | 18.4 | 17.9 | 18.5 | 19.3 | 19.9 | 20.9 |
| Cumberland | 4.6 | 8.6 | 10.2 | 13.7 | 15.6 | 16.0 | 16.8 | 17.4 | 17.8 | 18.2 | 18.8 |
| Davidson | 12.1 | 19.5 | 24.4 | 30.5 | 34.1 | 34.4 | 35.0 | 36.0 | 36.5 | 37.3 | 38.2 |
| Dickson | 3.3 | 7.5 | 9.2 | 11.3 | 14.9 | 15.5 | 14.9 | 14.1 | 13.5 | 14.5 | 14.2 |
| Greene | 5.5 | 8.9 | 10.3 | 12.8 | 14.0 | 14.8 | 15.7 | 15.5 | 15.5 | 15.0 | 14.7 |
| Hamblen | 6.4 | 9.2 | 11.2 | 13.3 | 15.6 | 15.7 | 16.1 | 16.0 | 16.1 | 15.5 | 15.9 |
| Hamilton | 10.2 | 15.5 | 19.7 | 23.9 | 27.0 | 27.4 | 27.8 | 27.2 | 28.1 | 28.7 | 29.6 |
| Henry | 4.6 | 6.9 | 8.5 | 12.1 | 14.9 | 15.0 | 15.7 | 16.0 | 16.2 | 15.5 | 14.7 |
| Knox | 11.4 | 18.8 | 23.9 | 29.0 | 33.8 | 34.0 | 34.2 | 34.4 | 34.5 | 34.6 | 35.7 |
| Madison | 4.0 | 7.2 | 7.7 | 10.6 | 11.5 | 11.2 | 13.2 | 13.1 | 13.2 | 13.5 | 14.1 |
| Maury | 3.2 | 5.0 | 5.2 | 8.8 | 10.9 | 11.8 | 10.6 | 11.6 | 11.4 | 11.4 | 11.0 |
| Montgomery | 9.1 | 14.5 | 16.5 | 19.3 | 22.2 | 22.7 | 22.7 | 23.5 | 24.0 | 24.7 | 25.3 |
| Putnam | 8.0 | 14.1 | 16.8 | 20.2 | 21.7 | 21.8 | 21.7 | 22.9 | 22.8 | 23.3 | 24.4 |
| Robertson | 4.2 | 6.8 | 9.6 | 11.9 | 14.1 | 15.2 | 16.4 | 17.0 | 16.9 | 17.7 | 18.1 |
| Rutherford | 9.9 | 14.8 | 18.7 | 22.9 | 26.3 | 27.0 | 27.9 | 28.3 | 28.9 | 30.1 | 30.2 |
| Sevier | 4.7 | 9.3 | 10.8 | 13.5 | 15.2 | 14.9 | 14.6 | 14.9 | 15.4 | 16.4 | 17.6 |
| Shelby | 9.9 | 15.9 | 20.8 | 25.3 | 27.8 | 28.3 | 28.7 | 29.0 | 29.8 | 30.3 | 30.2 |
| Sullivan | 9.1 | 13.2 | 15.6 | 18.1 | 20.0 | 20.4 | 20.6 | 20.5 | 21.2 | 21.9 | 21.4 |
| Sumner | 6.7 | 11.8 | 14.4 | 18.6 | 23.0 | 23.0 | 23.6 | 23.7 | 24.0 | 24.6 | 25.6 |
| Washington | 9.4 | 15.0 | 18.9 | 22.9 | 27.9 | 28.2 | 28.9 | 29.4 | 30.8 | 30.6 | 30.9 |
| Weakley | 5.9 | 9.8 | 10.3 | 15.3 | 18.4 | 17.8 | 20.5 | 20.2 | 19.5 | 20.4 | 21.1 |
| Williamson | 9.8 | 23.6 | 34.2 | 44.4 | 51.8 | 51.5 | 52.0 | 52.8 | 54.1 | 55.7 | 56.6 |
| Wilson | 5.6 | 11.7 | 15.6 | 19.6 | 24.0 | 24.7 | 25.9 | 26.0 | 26.7 | 28.3 | 28.9 |

Source: Census Bureau and BERC


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| $\begin{aligned} & \text { N } \\ & \text { is } \end{aligned}$ | $\stackrel{N}{\substack{0 \\ \text { V }}}$ | N |
| $\underset{\sim}{6}$ | $\begin{aligned} & N \\ & \text { N } \\ & \text { in } \end{aligned}$ | $\begin{aligned} & N \\ & \text { N } \end{aligned}$ |
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| $\stackrel{N}{\sim}$ | $\begin{aligned} & \text { N } \\ & \text { iv } \end{aligned}$ | $\stackrel{N}{\mathrm{~N}}$ | 9．OZ Z．OZ Z．OZ L．6I 6．6I XLNOOO NOL⿹NIHSVM SUMNER COUNTY




 $\begin{array}{llllllll}\text { ROBERTSON COUNTY } & 18.9 & 18.6 & 18.9 & 19.4 & 19.9\end{array}$ $\begin{array}{llll}\text { PUTNAM COUNTY } & 20.3 & 20.1 & 19.8\end{array}$

 MADISON COUNTY KNOX COUNTY


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 CUMBERLAND COUNTY BRADLEY COUNTY BLOUNT COUNTY


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$i$ $\begin{array}{cc}\overrightarrow{6} & \stackrel{\infty}{6} \\ \dot{\operatorname{con}} & \\ 6\end{array}$ $\begin{array}{ll}\overrightarrow{0} & 0 \\ -1 & 0\end{array}$ $\stackrel{N}{0}$
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 \％006I \％009I \％008I \％06ZI XLNOOO NOSTIM
 $\begin{array}{llllll}\text { WEAKLEY COUNTY } & 17.50 \% & 12.00 \% & 20.00 \% & 17.00 \%\end{array}$ \％00ゅL \％00＇GI \％00 LI \％O\＆ZL XLNOOO NOLYNIHSVM \％00 LZ \％00 8I \％00 LI \％009I XLINOOO yヨNWAS $\begin{array}{llllll}\text { SULLIVAN COUNTY } & 15.50 \% & 18.00 \% & 21.00 \% & 18.00 \%\end{array}$ $\begin{array}{lllll}\text { SHELBY COUNTY } & 20.40 \% & 0.00 \% & 11.00 \% & 7.00 \%\end{array}$ $\begin{array}{lllll}\text { SEVIER COUNTY } & 16.70 \% & 16.00 \% & 20.00 \% & 22.00 \%\end{array}$
 $\begin{array}{lllll}\text { ROBERTSON COUNTY } & 6.90 \% & 10.00 \% & 13.00 \% & 15.00 \%\end{array}$ \％006I \％006I \％006I \％OFLL XLLNOOO WVNLIOd
 \％0081 \％00ZI \％00ZI \％080I ALNOOつ スyกVW
 KNOX COUNTY $19.20 \% \quad 21.00 \% \quad 23.00 \% ~ 24.00 \%$ $\begin{array}{llllll}\text { HENRY COUNTY } & 11.60 \% & 13.00 \% & 18.00 \% & 17.00 \%\end{array}$
 \％00 IZ \％00 LI \％00 IZ \％06．9I XLLNOOO NaTGWVH $\begin{array}{lllll}\text { GREENE COUNTY } & 11.10 \% & 11.00 \% & 15.00 \% & 13.00 \%\end{array}$ $\begin{array}{lllll}\text { DICKSON COUNTY } & 10.80 \% & 14.00 \% & 12.00 \% & 21.00 \%\end{array}$ \％00ゅI \％00 ZI \％00＇LI \％OIOL XLNOOO NOSGIAVG CUMBERLAND COUNTY $10.50 \% ~ 13.00 \% ~ 15.00 \% ~ 19.00 \%$ $\begin{array}{lrrrr}\text { BRADLEY COUNTY } & 9.50 \% & 9.00 \% & 13.00 \% & 13.00 \%\end{array}$ $\begin{array}{lllll}\text { BLOUNT COUNTY } & 11.10 \% & 18.00 \% & 16.00 \% & 19.00 \%\end{array}$
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[^0]:    Source: Census Bureau and BERC

[^1]:    Source: Woods and Poole, Census Bureau Local Government Finances, BERC

[^2]:    Source: Woods and Poole, Census Bureau, Local Government Finances, BERC

[^3]:    Source: IMPLANpro, BERC

[^4]:    ${ }^{1}$ Gross regional product is analogous to the national gross domestic product, is the value of all goods and services produced by the county.
    MTSU BERC
    A Case Study for Williamson County
    Page | 104

[^5]:    ${ }^{2}$ Statistical tests indicated the superiority of a panel VAR with fixed effects.
    ${ }^{3}$ We use the natural logs of the variables to stabilize variances. This is typical in econometric work.
    MTSU BERC A Case Study for Williamson County Page | 109

[^6]:    ${ }^{4}$ As per usual, the estimation used the natural logs of the variables.
    MTSU BERC
    A Case Study for Williamson County
    Page | 114

[^7]:    Source: Woods \& Poole, Census Bureau (www.census.gov), BERC

[^8]:    Source: BERC and Census Bureau, Local Government Finances

[^9]:    Source: BERC and Census Bureau, Local Government Finances

[^10]:    Source: BERC and Census Bureau, Local Government Finances

[^11]:    Source: BERC and Census Bureau, Local Government Finances

