

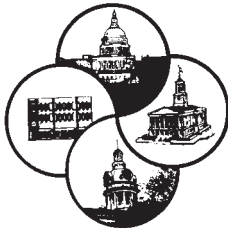
# The Recession and Employment in the US and Tennessee

**A Long Road Back to Normal?**



Staff Report to Members of the  
Tennessee Advisory Commission on Intergovernmental Relations

[www.tn.gov/tacir](http://www.tn.gov/tacir)



# TACIR Publication Policy

---

Reports approved by vote of the Tennessee Advisory Commission on Intergovernmental Relations are labeled as such on their covers with the following banner at the top: *Report of the Tennessee Advisory Commission on Intergovernmental Relations*. All other reports by Commission staff are prepared to inform members of the Commission and the public and do not necessarily reflect the views of the Commission. They are labeled *Staff Report to Members of the Tennessee Advisory Commission on Intergovernmental Relations* on their covers. *TACIR Fast Facts* are short publications prepared by Commission staff to inform members and the public.

# The Recession and Employment in the US and Tennessee: A Long Road Back to Normal?

## **Principal Authors:**

Stan Chervin, Ph.D.  
Senior Research Consultant



Cliff Lippard, Ph.D.  
Deputy Executive Director



Lynnise Roehrich-Patrick, J.D.  
Executive Director

## **Other Contributing Staff:**

Reuben Kyle, Ph.D.  
Research Consultant



Teresa Gibson  
Web Development & Publications Manager

Staff Report to Members of the  
Tennessee Advisory Commission on Intergovernmental Relations

May 2013



Tennessee Advisory Commission on Intergovernmental Relations. This document was produced as an Internet publication.

## Contents

Introduction.....	3
A Changing Employment Environment.....	3
Job Outlook.....	4
Recession and Recovery, Nationally and in Tennessee.....	5
Recession and Recovery by Economic Sector.....	6
Job Creation by Sector Across the State.....	9
Appendix.....	13



## Introduction

The recession that began in December 2007 was the worst general economic decline that most Americans have ever experienced. It began in the construction sector, spread to the financial sector, and eventually rippled throughout the economy, causing significant collateral damage in most other areas. Overall employment in the United States eventually fell by 8.7 million, with employment in Tennessee dropping by 220,000. However, a few job sectors—most notably education and health services—were insulated from much of the damage. Some, like the state and local government sector, were able to at least postpone some of the recession’s effects. By 2013, almost six years after the recession began, employment has yet to fully recover. Job growth during the recovery also varied by sector, as well as between Tennessee and the US and by region within Tennessee. Based on recent employment forecasts, several sectors of both the US and the Tennessee economies may not reach pre-recession peaks for another ten years or more.

## A Changing Employment Environment

Experts now believe that the housing construction and finance bubbles that precipitated the last recession concealed or obscured underlying structural changes in the labor market that were occurring during the 2000s. Many pre-recession jobs existed only because of excesses occurring in the construction and finance sectors of the economy. Had these sectors grown more moderately between 2000 and 2007, structural problems that were developing with the labor market may have been identified earlier. The recession itself—along with the federal stimulus program that helped moderate the recession—also contributed to a delay in recognizing that structural changes were occurring.

Economists note that estimates of economic trends, including employment, are heavily influenced by historical relationships, such as those among employment, capital investments, and technology. With the recent acceleration of new technologies in many industries and the growing importance of higher levels of education for employment in those industries, forecasting future employment has become even more difficult than it was in the past.

The recession that began in December 2007 was the worst general economic decline that most Americans have ever experienced. Almost six years after it began, employment has yet to fully recover.

## Job Outlook

When should we expect employment to fully recover? Recent estimates by the University of Tennessee’s Center for Business and Economic Research (CBER) show total employment in both the US and Tennessee regaining or exceeding their previous peaks by 2015. As shown in table 1, the expectation for recovery in some sectors in Tennessee, however, remains dismal. The retail trade, wholesale trade, financial activities, and information sectors are not expected to return to their peak employment levels until after 2022. Manufacturing may never return to its peak.

Table 1. Expected Date for Full Recovery to Previous Peak Tennessee Employment

Sector	Year	Note
Total Nonfarm	2015	
Government (State and Local Only)	NA	(Note 1)
Education and Health Services	NA	Never Declined
Professional and Business Services	2012	
Retail Trade	>2022	
Manufacturing (Note 2)	NA	Possibly Never
Leisure and Hospitality	2014	
Transportation and Utilities	2022	
Financial Activities	>2022	
Wholesale Trade	>2022	
Mining, Logging, and Construction (Note 3)	2019	
Other Services	2015	
Information	>2022	

Source: *An Economic Report to the Governor of the State of Tennessee, 2013*. Center for Business and Economic Research. Appendix A, Table 5.

Note 1. The forecast does not reflect the decline in state and local employment because most of it occurred after the forecast was made.

Note 2. Manufacturing employment declined during almost all of the period analyzed having peaked in 1979.

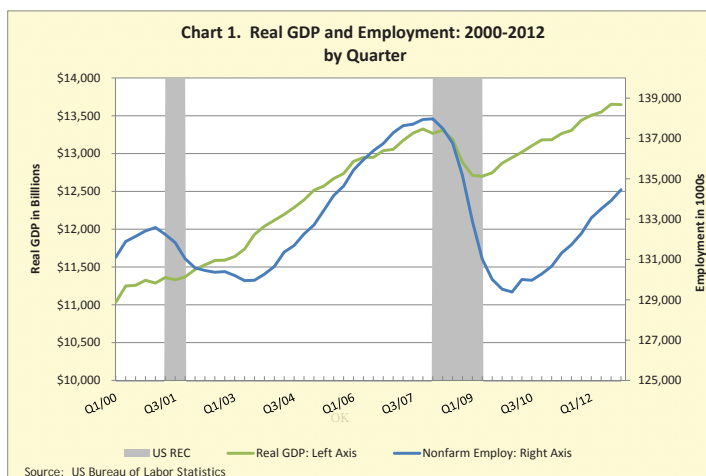
Note 3. Construction employment was about 92% of this category at the previous peak and has fallen to 87%.

NA: There was no discernible peak; employment did not decline during the recession.

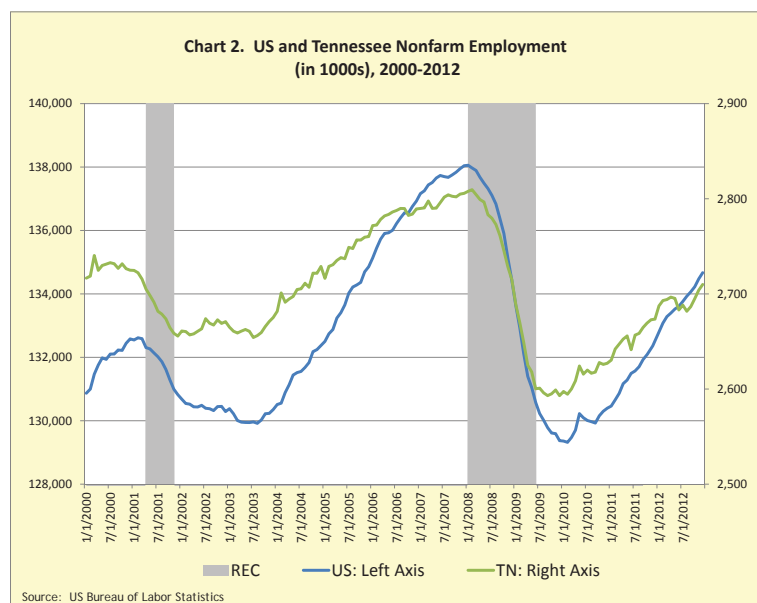


## Recession and Recovery, Nationally and in Tennessee

While national real gross domestic product (GDP) regained its pre-recession peak in the fourth quarter of 2011, total nonfarm employment for the last quarter of 2012 (134.5 million) was still 3.5 million less than its previous peak almost five years earlier. Real GDP bottomed out in the second quarter of 2009, as employment continued to decline until the end of 2009 and has yet to regain its previous peak.<sup>1</sup> See chart 1.



Each month back to 1944 had greater nonfarm employment than five years earlier—in other words, employment in March 1950 was greater than in March 1945, employment in April 2009 was greater than April in 2004, etc. This trend ended in 2009, with nonfarm employment lower in May 2009 than in May 2004. Worse still, employment in every month from May through December 2012 was also lower than in all five prior years. These contrasts are a sobering reminder of the severity of the recession.



According to the US Bureau of Labor Statistics, there were only slight differences in timing between the recession's effect on US employment and its effect on employment in Tennessee. Employment peaked in the US in January 2008 and one month later in Tennessee. Employment continued to fall nationally through February 2010 before beginning a slow recovery. The decline ended much earlier in Tennessee bottoming out in mid-2009 but continued to bump along the bottom for close to a year before starting a consistent recovery in April 2010, two months later than the national recovery began. But by December 2012, five years

after the recession began, US employment was still 2.4% less than its previous peak; Tennessee employment was 2.5% less. Between December 2012 and February 2013 the nation added 480,000

<sup>1</sup> Quarterly data for this chart downloaded from Federal Reserve Economic Data (FRED) website at <http://research.stlouisfed.org>.

jobs and the 2.4% fell to 2.0%, while Tennessee added nearly 19,000 jobs and its 2.5% difference fell to 1.8%.

## Recession and Recovery by Economic Sector

The construction industry felt the full brunt of the 2007 downturn both nationally and in Tennessee. And most sectors have yet to reach their pre-recession peaks, though the education and health services sector was relatively unaffected. Employment in several sectors—including manufacturing, information, retail trade, wholesale trade, transportation and utilities, and leisure and hospitality—was hit worse in Tennessee than nationally. Tennessee employment suffered less when it came to construction, financial activities, government, professional and business services, and other services sectors. Employment in both the professional and business services sector and the so-called other services sector, a catchall category for services that don't fit neatly into established sectors, has fully or almost fully recovered to pre-recession peaks nationally and in Tennessee. See tables 2 and 3.

Employment in several sectors was hit worse in Tennessee than nationally.

Table 2. Change in US Employment Between Previous Peak and December 2012

Sector	Employment (in thousands)		
	Previous Peak	December 2012	Percent Change
Total Nonfarm	138,056	134,691	-2.4%
Government (state & local only; Note 1)	19,801	19,075	-3.7%
Education and Health Services	NA	20,496	NA
Professional and Business Services	18,051	18,152	0.6%
Retail Trade	15,576	15,004	-3.7%
Manufacturing (Note 2)	14,226	11,951	-16.0%
Leisure and Hospitality	13,550	13,901	2.6%
Transportation and Utilities	5,118	5,049	-1.3%
Financial Activities	8,394	7,831	-6.7%
Wholesale Trade	6,042	5,715	-5.4%
Mining, Logging, and Construction (Note 3)	8,431	6,571	-22.1%
Other Services	5,540	5,470	-1.3%
Information	3,040	2,676	-12.0%

Source: Bureau of Labor Statistics, downloaded 3/25/2013. Seasonally adjusted data.

Note 1. Federal data is excluded because it is skewed by temporary census employees in 2009-2010.

Note 2. Manufacturing employment declined during almost all of the period analyzed having peaked in 1979.

Note 3. Construction employment was about 92% of this category at the previous peak and has fallen to 87%.

NA: There was no discernible peak; employment did not decline during the recession.

Table 3. Change in TN Employment Between Previous Peak and December 2012

Sector	Employment (in thousands)		
	Previous Peak	December 2012	Percent Change
Total Nonfarm	2,810	2,740	-2.5%
Government (state & local only; Note 1)	383	370	-3.3%
Education and Health Services	NA	398	NA
Professional and Business Services	327	342	4.4%
Retail Trade	333	318	-4.7%
Manufacturing (Note 2)	412	319	-22.7%
Leisure and Hospitality	278	282	1.4%
Transportation and Utilities	148	143	-3.4%
Financial Activities	146	138	-5.6%
Wholesale Trade	134	122	-8.9%
Mining, Logging, and Construction (Note 3)	139	110	-21.3%
Other Services	106	105	-0.7%
Information	51	42	-17.3%

Source: Bureau of Labor Statistics, downloaded 3/25/2013.

Note 1. Federal data is excluded because it is skewed by temporary census employees in 2009-2010.

Note 2. Manufacturing employment declined during almost all of the period analyzed.

Note 3. Construction employment represents more than 90% of this category.

NA: There was no discernible peak since employment did not decline during the recession.

## Construction

Employment in the construction sector declined slightly less in Tennessee than in the rest of the country. Construction employment peaked in Tennessee early in 2008 and did not bottom out until almost two years later. While construction has shown some recent improvement, it is not expected to return to its previous peak for four or five more years. Unlike past recoveries, the slow recovery in this sector is one of the major reasons for the overall slow recovery. Growth in housing construction has typically been a strong catalyst for overall growth, helping pull the entire economy out of recession. Things are very different this time.

## Manufacturing

US manufacturing employment, which peaked at 19.6 million in late 1979, has declined greatly since then with some periods of stabilization and modest gain leading to a continuous decline that ended in early 2010. The turnaround in 2010 has been welcome but still leaves national manufacturing employment at about the same level as in 1946 (about 12 million). Changes in Tennessee's

“Housing typically leads the US economy out of recession. Even though it took longer this time, the eventual rebound of the housing market observed in 2012 may be the ultimate sign that the worst is behind us.”

*An Economic Report to the Governor of the State of Tennessee, The State's Economic Outlook January 2013.* Center for Business and Economic Research, University of Tennessee.

The housing and housing-related securities market excesses of the 2000s produced significant employment damage to an industry that has historically been insulated from recession.

manufacturing employment mirrored changes at the national level, peaking in mid-1978 at 533,000, then falling, but recovering somewhat in 1995 to 530,000 only to fall continuously until February 2010 when it reached 296,800. Manufacturing employment in Tennessee rebounded slightly in December 2012 to 319,000.

### ***Information***

Employment in the information sector began falling precipitously as far back as the recession of 2001, holding somewhat flat from 2003 through 2007 until the recession of 2007 sent it further into decline. Employment in this sector declined 17.3% in Tennessee from an early-2008 peak, compared with 12% nationally. Information is a diverse sector that includes publishing industries, software publishing, motion picture and sound recording industries, broadcasting and telecommunications industries, as well as information services and data processing industries. While categories such as Internet publishing and broadcasting enjoyed healthy growth, much of the information sector experienced declining employment. Nationally, employment in the non-Internet publishing category declined 30% since the 2001 recession, while data processing and hosting services declined 22%. Telecommunications declined 42% as well. Many of these falloffs were because of improvements in technology, leading to higher productivity, displacement of old technologies, and consolidation.

### ***Trade***

Retail and wholesale sector employment declines in Tennessee exceeded those for the US, with Tennessee retail employment down 4.7% versus a decline of only 3.7% nationally; and Tennessee wholesale employment went down 8.9% versus a national decline of only 5.4%. Similarly, transportation and utilities employment declined 3.4% compared to a nationwide decline of 1.3%. While leisure and hospitality employment increased (1.4%), the growth was smaller than that of the US as a whole (2.6%).

### ***Finance***

The US financial sector took a major hit during the current recession, with employment declining 6.7% between a peak in December 2006 and a trough in February 2011. In contrast, it suffered almost

no discernible effects during the back-to-back recessions of 1980 and 1981 and the 2001 recession and only a minor decline of 1.7% during the 1990-91 recession. Tennessee's financial sector, on the other hand, experienced a slightly smaller decline of 5.6% during the current recession. Clearly, the role played by some members of the financial sector in the housing and housing-related securities market excesses of the 2000s produced significant employment damage to an industry that has historically been insulated from recession.

### **Government**

As in other states, Tennessee's government sector (excluding federal employment) declined only recently as federal stimulus funds finally ran out. Tennessee's decline of 3.3% was slightly less than the 3.7% nationwide decrease. Tennessee and its local governments did not immediately feel the full brunt of the recession because of the delayed effect of falling property values on taxable assessments and the federal economic stimulus in the American Recovery and Reinvestment Act. The Act injected over \$800 billion into the economy beginning in 2009 to help reduce the effect of the recession. Part of the stimulus spending went directly to state governments to help stabilize state revenues and state and local spending. However, falling revenues and the end of stimulus funds finally took hold, resulting in a decline in state and local government employment just as the overall economy began slowly recovering. Tennessee's drop in the government sector began in September 2010 and continued through December 2012. Federal employment, by contrast, changed little during the recession when adjusted for part-time Census workers.

### **Job Creation by Sector Across the State**

The strength of the recovery varies considerably across the state as well as by sector. Looking at data for the most recent 12 months, it's apparent that the sector hit hardest by the recession—mining, logging, and construction—has been recovering, but not in three of the four big regions: Nashville, Knoxville, and Chattanooga. Memphis is the only one of the four with growth in that sector. Clarksville and Kingsport have also declined. A similar story emerges for the financial sector, which is not looking good in Memphis, Nashville,

Tennessee and its local governments did not immediately feel the full brunt of the recession because of the delayed effect of falling property values on taxable assessments and the federal economic stimulus in the American Recovery and Reinvestment Act.

Seasonally adjusted nonfarm employment for Tennessee dipped 6,600 jobs in March, the first monthly decline since July 2012. Growth over the year remains positive, with employment up 45,000.

The highest over-the-year growth rates are in Cleveland MSA (5.5%) and Nashville MSA (2.8%).

Tracking Tennessee's Economic Recovery, BEREC, 2013.

Chattanooga, Kingsport-Bristol, and Johnson City. See table 4, which includes data for the state's ten metropolitan statistical areas (MSAs).<sup>2</sup> Counties included in each of these ten regions are listed in the appendix.

Memphis's strength lies in the education and health services sector, which contributed more than 2,000 jobs to the area's overall increase of 3,800 jobs. Nashville has also been strong in that sector, with 3,600 new jobs, and in manufacturing as well, which is up 4,400 jobs. More than half the statewide increase in both of those sectors has been in the Nashville region, contributing to an overall growth rate there of 2.8%, which translates into a total of 21,500 new jobs. Its strongest growth, however, has been in the professional and business services sector, which is up a remarkable 8,600 jobs, nearly two-thirds of the state's entire increase.

Knoxville's strongest growth has been in the two major services sectors, with a total of 4,000 new jobs split between the professional and business services sector and the education and health services sector. All told, the Knoxville area added 6,000 jobs. Chattanooga's recovery has been a bit weaker and concentrated mainly in three sectors: professional and business services (800 jobs), wholesale trade (600 jobs), and leisure and hospitality (600 jobs). On net, the area added only 700 jobs for an overall growth rate of only 0.3%

Relatively speaking, the Cleveland area's recovery has been the strongest over the last year with job growth there of 5.6% compared with 1.4% statewide. The area lost around one hundred jobs in three sectors (the wholesale and retail trade sectors and the other services sector) but gained 2,300 overall, mostly in the professional and business services sector. The Jackson area lost jobs in only one sector, 200 in transportation and utilities, but gained ground in every other sector, matching the Knoxville area's overall growth rate of 1.8% with an increase of 1,100 jobs. Of course, in Knoxville that 1.8% increase equates to 6,000 new jobs because of its much larger size.

<sup>2</sup> The US Office of Management and Budget revised the MSA delineations in 2013, adding several additional counties to the state's MSAs. The MTSU BEREC data used for this report used the delineation in effect for Tennessee from 2003-2009.

The job recovery in four of the state's ten MSAs—Chattanooga, Clarksville, Kingsport-Bristol, and Memphis—has been slower than statewide, and two regions have continued to decline: Morristown and Johnson City. The Morristown area lost a hundred jobs or more in five sectors, including a loss of 300 jobs in the leisure and hospitality sector, and gained ground only in the wholesale trade, professional and business services, and government sectors. Johnson City lost a hundred jobs or more in six sectors, including 300 in the education and health services sector and 500 in the government sector. The area gained jobs in only two sectors: retail trade and other services, 100 jobs each.

It's important to note that by not showing the 57 non-MSA counties, table 4 obscures some other likely patterns in job growth and loss. For example, total job growth in those counties exceeded the job growth in all but the three largest MSAs (Memphis, Nashville, and Knoxville) and the sum of all job growth in the five MSAs with the least growth. The big job-growth sectors outside the MSAs were retail trade with 3,700 new jobs, leisure and hospitality with 2,500 new jobs, financial activities with 2,200 new jobs, and manufacturing with a surprising 2,000 jobs added. Another 800 jobs were added outside the MSAs in the mining, logging, and construction sector. The downside was led by a loss of 4,500 state and local government jobs and 1,400 jobs in the education and health services sector. The information sector also lost 600 jobs, and the professional and business services sector lost 500.

Table 4. Employment By Industry Sector by Tennessee Metropolitan Statistical Area  
March 2012 and March 2013 (1,000s)

Sector	Tennessee		Chattanooga		Clarksville		Cleveland		Jackson		Morristown	
	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13
Total nonfarm	2697.7	2736.4	236	236.7	87.2	88.1	41.4	43.7	61	62.1	45.3	45.2
Mining, Logging, and Construction	107.7	108	8.5	8.4	3.4	3.3	1.6	1.8	2.6	2.7	1.9	1.9
Manufacturing	309.6	317.4	31	30.8	10.6	10	8.3	8.5	8.6	8.7	10.7	10.6
Wholesale Trade	119.6	118.4	15.5	16.1	NA	NA	0.9	0.8	3.2	3.2	1.9	2
Retail Trade	309.2	315.3	24.5	24.4	11.4	11.4	4.8	4.7	7.1	7.2	5.8	5.7
Transportation and Utilities	139.2	141.9	15.9	16.1	2.2	2.3	2.3	2.4	1.9	1.7	2.3	2.3
Information	42.9	41.9	2.8	2.7	1.1	1	0.3	0.3	0.5	0.5	0.4	0.4
Financial Activities	137	138.9	17.3	17.1	2.9	3.1	1.4	1.4	1.6	1.7	1.2	1.2
Professional and Business Services	330.4	343.7	24.3	25.1	7.8	8.1	3.7	5	5.6	5.8	3.2	3.4
Education and Health Services	392.8	399.8	33.2	33.3	11.1	11.2	6.1	6.4	9.7	9.9	5.6	5.5
Leisure and Hospitality	269.6	277.3	23.5	24.1	9.9	10.7	4	4.4	5.5	5.8	3.6	3.3
Other Services	103.9	105.3	9.6	9.9	3.2	3.1	2.3	2.2	2.1	2.2	1.2	1.1
Government	435.8	428.5	37.4	36.8	21.5	21.7	5.7	5.8	12.6	12.7	7.5	7.8
	Johnson City		Kingsport-Bristol		Knoxville		Memphis		Nashville			
Sector	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13	Mar-12	Mar-13		
Total nonfarm	80.4	79.3	118.8	119.7	329.5	335.5	597	600.8	777.9	799.4		
Mining, Logging, and Construction	2.6	2.6	7	6.7	15.1	14.2	20	21	32.5	32.1		
Manufacturing	7.9	7.7	21.7	22	31.7	32.8	44	44.8	65.2	69.6		
Wholesale Trade	2	2	4.8	4.8	16.1	16.2	33.3	33.6	38.1	38.5		
Retail Trade	9.8	9.9	15	14.8	40.8	42	62.5	62.1	85.6	87.5		
Transportation and Utilities	1	0.9	4.3	4.4	11.1	10.9	64	64.8	31.5	33.3		
Information	1.5	1.4	1.5	1.4	5.4	5.3	6.1	5.9	19.9	20.2		
Financial Activities	3.7	3.6	3.8	3.8	17.2	17.4	27.4	27	48	47.9		
Professional and Business Services	8.6	8.6	9.5	9.7	48.5	50.5	81.7	81.9	112	120.6		
Education and Health Services	13.9	13.6	18.8	19.2	45.7	47.7	84.8	86.9	124.4	128		
Leisure and Hospitality	8.5	8.5	11.6	11.9	35.4	36.4	61.7	61.6	81.5	83.7		
Other Services	2.3	2.4	4.3	4.5	13.3	13.4	23.9	24	31.7	32		
Government	18.6	18.1	16.5	16.5	49.2	48.7	87.6	87.2	107.5	106		

■ Gain of 500 or more jobs     ■ Loss of 500 or more jobs  
■ Gain of up to 500 jobs     ■ Loss of up to 500 jobs

Source: Middle Tennessee State University's Business and Economic Research Center (BERC) <http://capone.mtsu.edu/berc>



## Appendix

### Tennessee Metropolitan Statistical Areas, 2003-2009



#### Chattanooga, TN-GA

Hamilton County, TN  
Marion County, TN  
Sequatchie County, TN  
Catoosa County, GA  
Dade County, GA  
Walker County, GA

#### Clarksville, TN-KY

Montgomery County, TN  
Stewart County, TN  
Christian County, KY  
Trigg County, KY

#### Cleveland, TN

Bradley County  
Polk County

#### Jackson, TN

Chester County  
Madison County

#### Johnson City, TN

Carter County  
Unicoi County  
Washington County

#### Kingsport-Bristol-Bristol, TN-VA

Hawkins County, TN  
Sullivan County, TN  
Washington County, VA  
Scott County, VA  
City of Bristol, VA

#### Knoxville, TN

Anderson County  
Blount County  
Knox County  
Loudon County  
Union County

#### Memphis, TN-MS-AR

Fayette County, TN  
Shelby County, TN  
Tipton County, TN  
Crittenden County, AR  
DeSoto County, MS  
Marshall County, MS  
Tate County, MS  
Tunica County, MS

#### Morristown, TN

Grainger County  
Hamblen County  
Jefferson County

#### Nashville-Davidson

#### Murfreesboro/Franklin, TN

Cannon County  
Cheatham County  
Davidson County  
Dickson County  
Hickman County  
Macon County  
Robertson County  
Rutherford County  
Smith County  
Sumner County  
Trousdale County  
Williamson County  
Wilson County

Source: U.S. Census Bureau, Population Division; Office of Management and Budget, 2003 delineations.

Note: The US Office of Management and Budget revised the MSA delineations in 2013, adding several additional counties to the state's MSAs. The MTSU BERC data used for this report used the delineation in effect for Tennessee from 2003-2009.