



Global Commerce

Tennessee and the International Economy

COUNTY-LEVEL ACTIVITY

PERFORMANCE TRENDS AND CHANGES

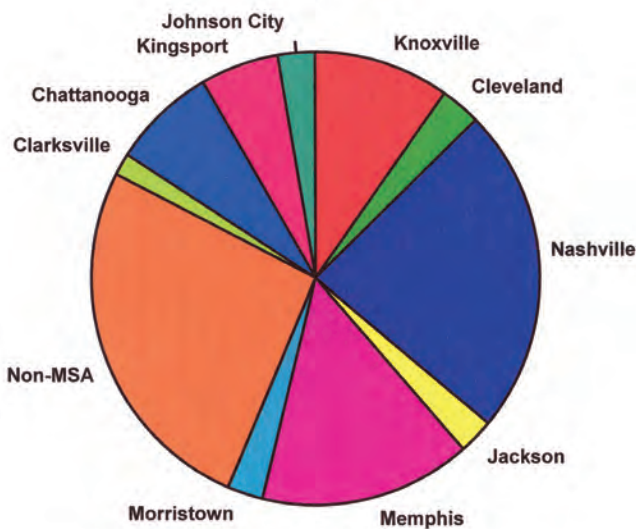
by Steven G. Livingston

The export performance of Tennessee's counties is of perennial interest. Two new estimations of county exports are available, and over the next several issues we will examine trends and changes in the state's county-level export activity.¹ In this issue we will focus on current performance, but we will later turn to longer-term patterns. Readers may wish to compare this analysis to that of county-level exporting establishments in the summer issue of Global Commerce. Together, the two reveal much about the state's export performance at the local level.

Billion-Dollar Counties: Counties with 2010 Exports > \$1 Billion	
	Billions
Shelby	\$4.29
Davidson	\$2.69
Hamilton	\$2.11
Rutherford	\$1.80
Sullivan	\$1.43
Knox	\$1.42

Exports per Capita: Top Counties	
Dyer	\$11,147
Bedford	\$11,044
Sullivan	\$9,106
Hamblen	\$8,989
Bradley	\$8,513
Anderson	\$8,087
Marshall	\$7,815
Humphreys	\$7,688
Obion	\$7,411
Madison	\$7,345

Exports by MSA*



* Tennessee counties only

Overview

In 2010, Tennessee is estimated to have exported about \$30 billion in goods and services.² As we might expect, the bulk of this activity was located in the state's major metro areas. Six counties each exported more than \$1 billion. Combined, they accounted for almost a third of Tennessee's exports. All are metro counties. The pie chart at left shows the dominance of MSA activity in the state's export profile. Is this just due to size, or are metro counties more export-oriented than their less-urban counterparts? If we adjust counties for population size, we in fact see a greater mix of counties that might be termed "export intensive." Only Sullivan County makes both lists. It is an unusually successful exporter whether measured by raw numbers or by adjusting for population. Dyer County, not in an MSA, has the state's highest ratio of exports per resident, though Bedford is a very close second. It is not surprising that the counties that host the state's major export industries, automotive, chemicals, and cotton, tend to do well.

continued on page 2

1. The Brookings Institution's "Export Nation" project has produced county data available at <http://www.brookings.edu/research/reports/2012/03/08-exports>. The MTSU Business and Economic Research Center has also estimated county exports using a method that makes them comparable to earlier estimates made by Raman Vishwanathan in a TVA Rural Studies staff paper. All estimates are based on county production patterns. Brook-

ings relies more on BLS estimates, while the latter studies use IMPLAN. In this issue we primarily use the Brookings projections.

2. Based on shippers' declaration forms, the state exported just under \$26 billion in goods for that year. The discrepancy is revealing as to the true competitive position of the state, and we will return to it in another issue.

COUNTY-LEVEL ACTIVITY

continued from page 1

That said, recent history shows a decided trend toward metro counties. In 2005, the state's non-metro counties out-exported urban areas by a small amount on a per-capita basis. Five years later the situation was reversed, with metro counties exporting over \$800 more per capita than more rural counties.

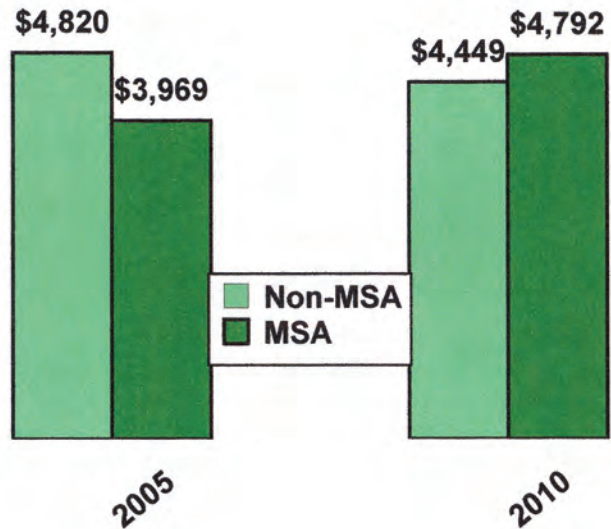
State Patterns

The average American county exported \$5,819 in goods and services per resident. If we use this as a benchmark, 27 of Tennessee's 95 counties met or exceeded that level. A look at the first map shows they are clustered among the cotton regions of West Tennessee, the automotive belt south of Nashville, the chemical producing areas in the northeastern part of the state, and the varied industrial region around Chattanooga. There are only a few exceptions (such as Oak Ridge's Anderson County).

Bledsoe County is the only county that exports less than \$1,000 per capita. It joins eight others that export less than \$1,500 per person (several counties just make it over that bar!). These are almost all Cumberland Plateau counties.

If we examine counties by recent past performance (2005 to 2010), a period during which Tennessee exports grew

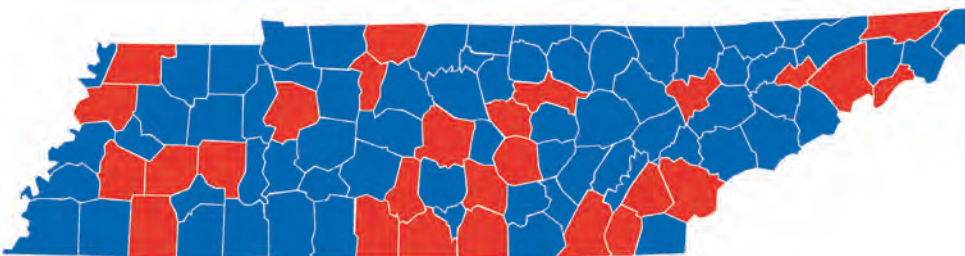
Changing Fortunes: Exports per Capita



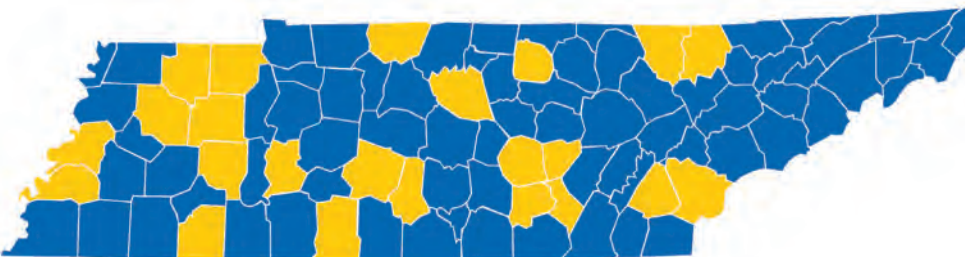
by \$4.8 billion, we find that 23 counties actually lost exports. Maury (-\$296 million) and Warren (-\$191 million) stand in terms of the size of their losses, in these two cases generated by plant closures. A map of counties with declining exports exhibits some patterns, albeit less pronounced than the previous map. The rural areas north of Jackson and the counties outlying the Nashville MSA stand out as problem areas. Nine counties, on the other hand, gained more than \$100 million in exports over this period, led by Shelby (+\$1.379 billion), Hamilton (+\$644 million), and Davidson (+\$592 million). Together, these three counties account for more than half of the state's export gains over these years.

We might also judge export success by those counties that were able to increase their percentage of state exports over this period. Forty counties accomplished this feat, led by Moore and Fayette counties. (The obvious weakness of this statistic is that some of these "gainers" started from very low levels.) The most interesting pattern here is the relative strength of the Chattanooga

Exports per Capita At or Above National Average



Counties Where Exports Declined 2005 - 2010



continued on page 7

2nd Quarter 2012



Tennessee's Largest Export Sectors

	Value of Exports	Change from Last Year	Change from Last Quarter
Medical Equipment & Supplies	\$816,270,646	4.4%	3.8%
Motor Vehicle Parts	\$743,100,645	6.4%	6.8%
Computer Equipment	\$569,415,026	17.8%	-3.1%
Basic Chemicals	\$553,039,733	3.4%	-6.7%
Resins, Synthetic Rubber, & Fibers	\$453,161,650	0.4%	7.8%
Motor Vehicles	\$414,407,477	146.8%	1.3%

2nd Quarter 2012



What's Hot and What's Not*

	Value of Exports	Growth	Decline
SECTORS WITH THE GREATEST GROWTH			
Diesel Cars with 1,500 - 2,500 cc Engines	\$39,225,100	11,459.5%	
Ash Containing Precious Metals	\$12,729,887	536.5%	
Computer Parts	\$86,993,342	253.4%	
Miscellaneous Computer Accessories	\$29,731,265	237.8%	
Cars with Engines over 3,000 cc	\$175,165,373	215.1%	
SECTORS WITH THE GREATEST DECLINE			
Computer Systems	\$5,145,972		-75.8%
Mobile Phones	\$11,434,890		-66.3%
Bulldozers	\$6,580,522		-57.2%
Self-Propelled Front-End Shovel Loaders	\$7,893,390		-50.9%
Motor Vehicle Body Parts	\$65,840,334		-50.4%

*Among Tennessee's top 100 exported goods.

2nd Quarter 2012

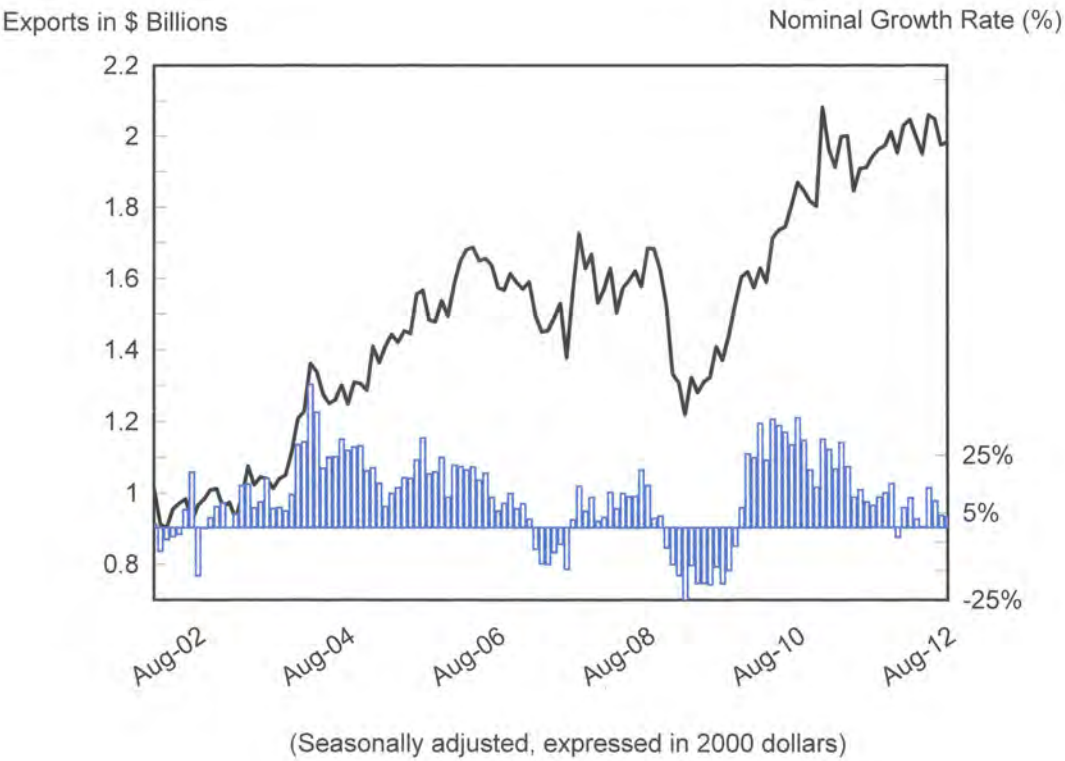


Fastest-Changing Export Destinations

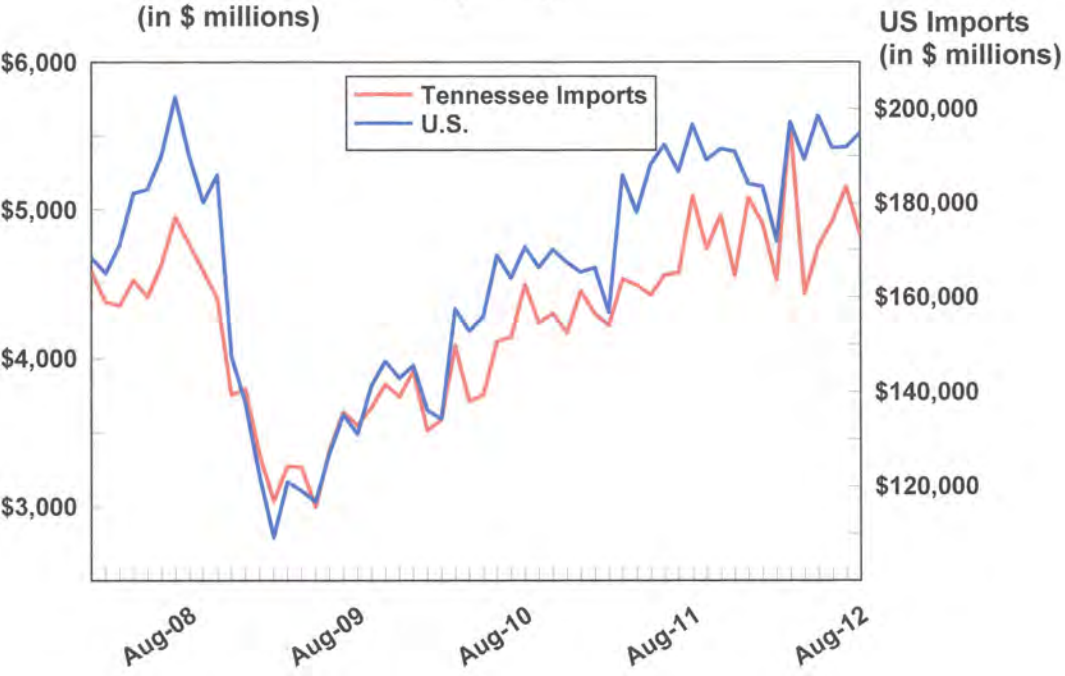
	Value of Exports	Gain	Decline
COUNTRIES WITH THE GREATEST GROWTH			
Oman	\$26,906,707	367.9%	
Bahrain	\$15,036,465	204.1%	
United Arab Emirates	\$147,857,300	179.1%	
Hungary	\$13,422,540	166.0%	
Qatar	\$19,106,383	105.0%	
COUNTRIES WITH THE GREATEST DECLINE			
Afghanistan	\$633,317		-96.4%
Morocco	\$5,631,543		-52.8%
Thailand	\$40,996,576		-47.0%
El Salvador	\$10,960,345		-45.9%
Philippines	\$36,868,884		-45.6%

(Among countries averaging more than \$5 million in sales per quarter)

Tennessee Monthly Exports

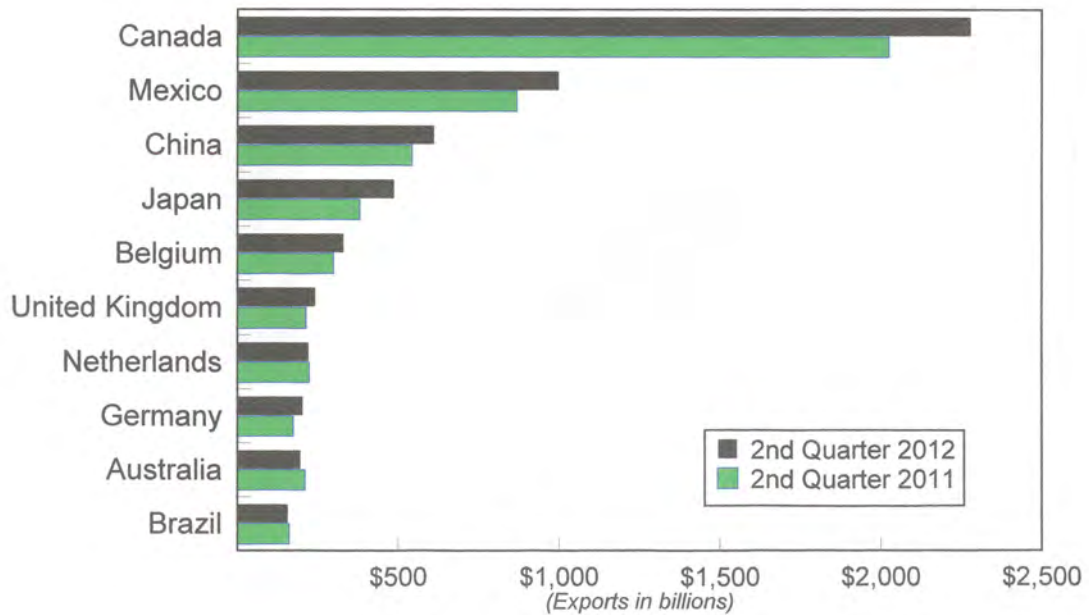


Tennessee Monthly Imports





Tennessee's Leading Trade Partners



Tennessee Trade-Weighted Dollar Index





TENNESSEE POSTED A \$567 MILLION INCREASE IN EXPORTS FOR THE SECOND QUARTER.

Tennessee's exports climbed to \$7.903 billion in the second quarter of this year. Though not as robust a gain as we have seen in recent quarters, the state's 7.7% growth exceeded that of the nation (5.6%) and ranked 17th among America's 50 states. Imports grew even faster. Thanks to substantial production increases in Tennessee's automotive and computer sectors, both of which have sizable foreign supply chains, the state's imports increased 10.3% for the quarter. This compares to total American import growth of 3.8% over this period.

Though it was a solid performance, the weakening global economy certainly made itself felt. Trade gains were far narrower, whether considered geographically or in terms of products. Two regions of the world, NAFTA and the Middle East Gulf States, accounted for virtually all of the state's net export increase. The rest of the world was essentially flat. As this suggests, the automotive sector accounted for a large part of the increase in exports (the Gulf States buy very little else from Tennessee other than autos and auto parts). Half of the state's gains were in that one industry. Computers, medical equipment, pharmaceuticals, and several transportation-related industries (such as tires) made up most of the rest of the export growth. Several exported goods, notably cotton (off \$56 million), aircraft (down \$85 million), aluminum (off \$27 million), and food oils (losing \$40), had rough quarters.

Though the NAFTA market gains were primarily due to automotive products, this was the one region of the world where most state export industries were able to continue recent growth even if at a slower pace. Mexico became the first country other than Canada to import more than \$1 billion in Tennessee products in one quarter. Exports to the rest of the Americas, however, sharply decelerated. Shipments to Latin America inched up 3.3% but only due to a terrific \$26 million gain in Chile. Without Chile, exports to the continent fell modestly in the second quarter. Brazil, by far the largest market in the region, was virtually unchanged. Only Ecuador joined Chile with strong positive numbers for the quarter.

Asia was a mixed bag. Large cotton shipments led to a \$76 million gain (14%) in China, and increased medical equip-

ment and cotton-based pulp sales produced an even larger \$111 million (29%) increase in Japan. Unfortunately, a good portion of that cotton was redirected from the South-east Asian market. That shift, combined with a sizable drop in aircraft exports to Singapore and the Philippines, produced a net drop of more than \$100 billion in exports to the ASEAN nations. Sales to Korea fell 10% as well. Even exports to Australia slipped, from \$212 million to \$199 million for the quarter.

Seen in context, the performance of the European market doesn't look so bad. Tennessee was basically trading water in the second quarter, with exports to the euro zone essentially unchanged (from \$1 billion last year to \$1.02 billion this time around). Shipments to the U.K. were surprisingly strong, gaining \$34 million (to \$245 million) thanks to increases in aircraft, computer parts, and medications. This was counterbalanced by a \$19 million loss in the Nordic states and a \$28 million loss in Turkey (the latter due to a large fall in cotton sales). Within the euro zone, only Germany and (oddly) Ireland posted strong numbers. The 16% growth in exports to Germany was by far the best showing on the European continent. It was matched by significant losses in France and Italy. The combined \$43 million loss in these two markets more than exceeded Germany's \$28 million gain.

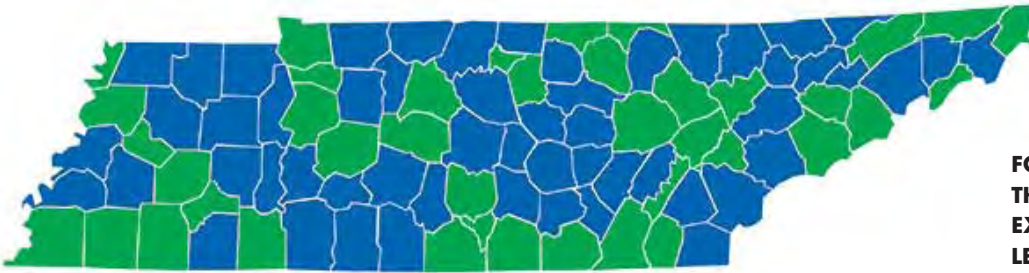


MEXICO BECAME THE FIRST COUNTRY OTHER THAN CANADA TO IMPORT MORE THAN \$1 BILLION IN TENNESSEE PRODUCTS IN ONE QUARTER.

An oddity for the quarter was the state's excellent showing in Iran. Though one might think that trade was totally embargoed, Tennessee exported more than \$1 million to Iran in the second quarter. It was medical equipment (PET scanners) and presumably not on the embargo list!

In sum, the half-full read is that Tennessee posted a \$567 million increase in exports for the second quarter. If not as high as the \$billion+ performances of the second quarters of 2011 and 2010, in the face of a struggling world economy this is nothing to sneeze at. The half-empty read is that we should be concerned about the narrowing sources of continued export growth in the quarters ahead. A few sneezes we can live with. The worry is not to catch anything more serious. ■

Counties That Increased Their Percent of State Exports 2005 - 2010



FORTY COUNTIES INCREASED THEIR PERCENT OF STATE EXPORTS OVER THIS PERIOD, LED BY MOORE AND FAYETTE.

COUNTY-LEVEL ACTIVITY

continued from page 2

region and the Chattanooga-Knoxville corridor. These areas join that of the counties just west of the Nashville MSA in the strength of their export performance.

Service Exports

State-level service exports were estimated at \$8.3 billion for 2010. Since many expect America's export growth to be concentrated in services, we might end by taking a moment to look at the pattern of the state's county-level service exports. Service exports are far more concentrated than those of goods. Six counties account for more than half of Tennessee service exports. Twenty-two counties had service exports of more than \$1,000 per resident in 2010.

They were led by Davidson County (\$2,417). Williamson (\$2,194) was right behind, with Anderson County nearly hitting the \$2,000 benchmark (at \$1,987). The state pattern here is obvious, with the major metro counties being joined by the service-intensive economies of Oak Ridge and Williamson County, counties with a strong educational presence (Putnam, notably), and the tourist-centered counties of East Tennessee, led by Sevier. (Tourism is considered a service, and money spent by foreign tourists is considered a "service export"!)

This brief survey shows quite varied county export performances across the state. However, we see patterns linked to industry location and metro status. We will further examine them in our next issues by looking at county exports in the context of their total economic activity and over longer periods of time. ■

Counties Gaining Share of State Exports

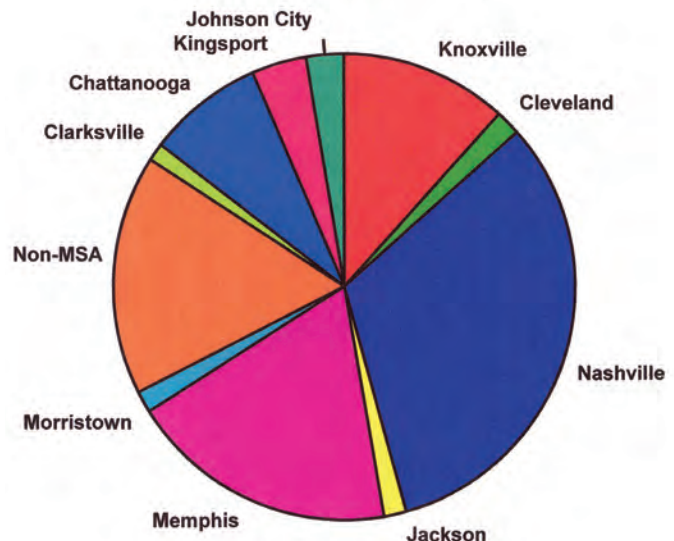
	% 2005	% 2012	% Increase
Moore	0.03%	0.08%	167.97%
Fayette	0.27%	0.52%	97.71%
Lake	0.02%	0.03%	44.99%
Meigs	0.09%	0.13%	49.44%
Morgan	0.06%	0.09%	43.09%
Marion	0.27%	0.36%	31.61%

Top Service Exporters

Davidson	\$1,536
Shelby	\$1,503
Knox	\$653
Williamson	\$402
Rutherford	\$348
Sullivan	\$282

SIX COUNTIES ACCOUNT FOR MORE THAN HALF OF TENNESSEE SERVICE EXPORTS.

Service Exports by MSA*



* Tennessee counties only