



INTERNATIONAL  
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## **Jobs Supported by State Exports 2014**

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# Jobs Supported by State Exports 2014

## Executive Summary

In 2014, exports of goods and services directly and indirectly supported an estimated 11.7 million U.S. jobs. Nationally, goods exports consisting of manufactured products, agricultural products, natural resources and used/second-hand products supported 7.1 million jobs, of which 6.2 million jobs were supported by exports of manufactured products. The export of services accounted for the remaining 4.6 million jobs supported.

In this report, we present estimates of jobs supported by exports of goods at the state level. We find that goods exports from the states of Texas, California, Washington, New York and Illinois supported an estimated 3.0 million jobs in 2014. This figure represents 42 percent of all U.S. jobs supported by goods exports in 2014. The same five states also accounted for 43 percent of all U.S. jobs supported by manufactured exports.

Since 2009, we estimate that the number of jobs supported by the export of goods nationally has grown by 1.0 million. Goods exports from the states of Texas, Washington, California, Louisiana and Michigan supported over 50 percent of the total change in jobs supported over this time period.

## Introduction

This paper presents estimates of jobs supported by goods exports from the 50 states.<sup>1</sup> Because data on exports of services by state is unavailable, the breakout is limited to jobs supported by the export of goods.<sup>2</sup> The complete set of results for jobs supported by goods exports from all 50 states and the District of Columbia for the years 2000-2014 can be found at <http://trade.gov/mas/ian/employment/index.asp>.

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<sup>1</sup> For the national figures see Rasmussen & Johnson, February 24, 2014, "Jobs Supported by Exports 2014: An Update." U.S. Department of Commerce, International Trade Administration, Washington, DC.

<http://www.trade.gov/mas/ian/employment/index.asp>

<sup>2</sup> Goods exports consist of manufactured exports (NAICS 31-33), agricultural and natural resource and mining exports (NAICS 11 and NAICS 21) and scrap/second hand goods.

## State Export Data

The state goods export data employed in the breakout here is taken from two sources. For all products other than agriculture we use the Origin of Movement (OM) series produced by the United States Census Bureau. The OM series generally provides export data based on the state from which the good began its journey to the port of export. However, in some cases, the origin of movement data does not reflect the state from which the export was initially transported. For example, when shipments are consolidated, the OM data will reflect the consolidation point of the shipment as opposed to the transportation origin. The effect of consolidation on the data is particularly noticeable for agricultural exports that are shipped down the Mississippi River to New Orleans. For these products, Louisiana is identified as the state of origin in the data rather than the states where the commodities were produced and originally shipped.<sup>3</sup>

A similar problem can arise when looking at exports of other non-manufactured goods when those goods are stored and then exported by central offices or intermediaries: exports from the state in which the consolidation occurs will be overstated.<sup>4</sup>

Therefore, for agricultural exports, we use state export data from the Economic Research Service (ERS) of the United States Department of Agriculture (USDA), which attempts to trace agricultural exports back to the states where their production originated. The ERS estimates of state agricultural exports use a measure of state-level farm cash receipts from USDA farm survey data. Each state's export value is then derived using the state's share of cash receipts by sub-industry. These shares are applied to U.S. national export values to create state export values.<sup>5</sup>

## Methodology

The first step of the state-level estimates for years prior to 2014, takes a states' share of exports of a commodity for that year and applies it to the number of jobs supported nationally by the export of that commodity for the same year. For 2014, we assume that the commodity shares of total jobs supported are unchanged from 2013. The state results are then summed across commodities to obtain the total number of jobs supported by goods exports for each state.

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<sup>3</sup> For a discussion of the OM data series see the Foreign Trade Division's State Data series page located at <https://www.census.gov/foreign-trade/aip/elom.html>.

<sup>4</sup> Ibid.

<sup>5</sup> For a discuss of the ERS methodology employed in their state export data see: <http://www.ers.usda.gov/data-products/state-export-data/documentation.aspx>

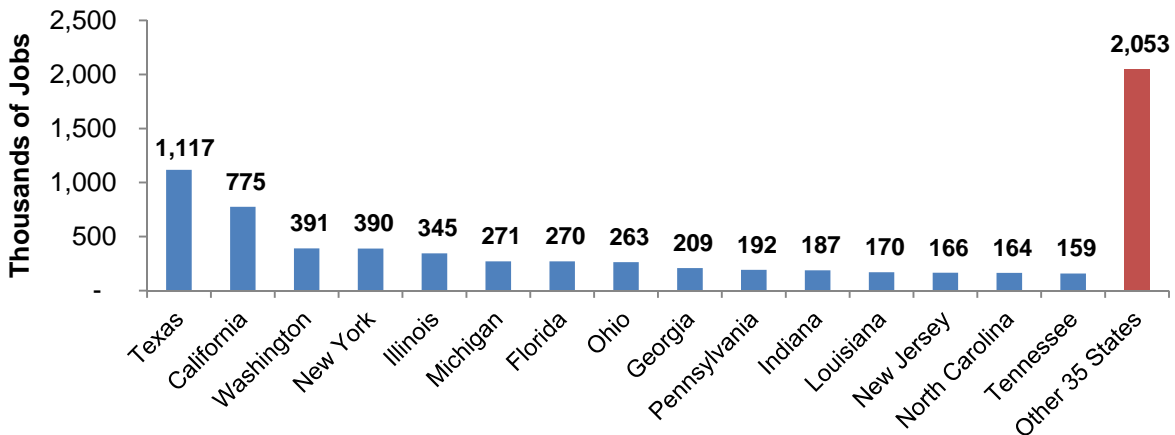
## Interpretation of the Results

Given the data used to estimate job supported by state-level exports, care should be taken in the interpretation of the results. The figures presented in this paper should be best be thought of as representing the number of jobs supported by the exports *from* a state as opposed to the number of jobs supported by exports *within* a state. As calculated, exports from a particular state are not necessarily produced in that state and, therefore, not all the labor embodied in the production of the export will be located in the state.

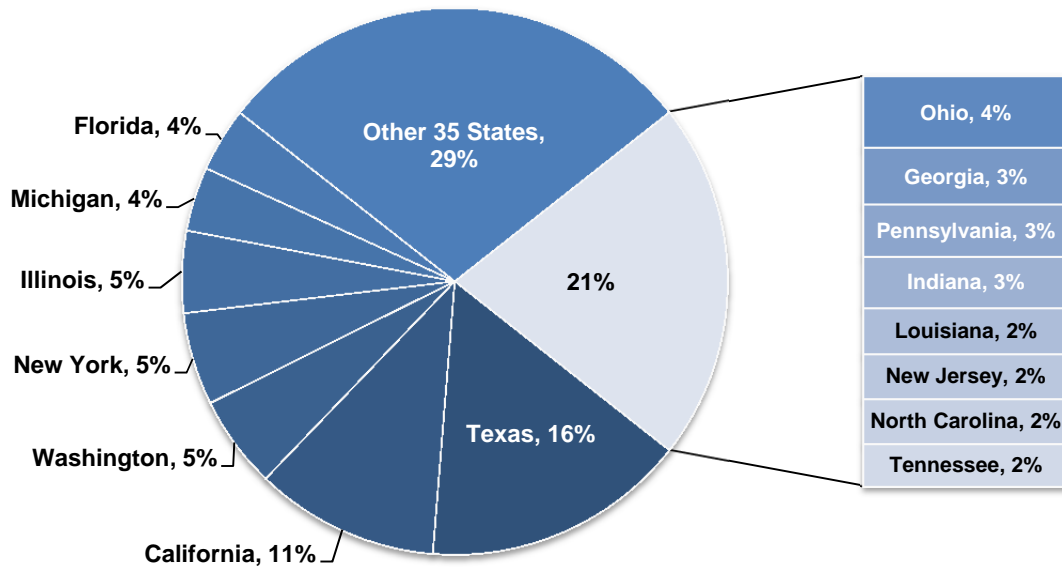
## Jobs Supported by Goods Exports from Individual States 2014

The state-level estimates of jobs supported by goods exports are presented in Figure 1 and Chart 1. Goods exports from the fifteen states whose exports supported the most jobs accounted for almost 5.1 million jobs supported (71 percent of total jobs supported by goods exports) with exports from the states of Texas and California supporting one out of every four jobs. Exports from the remaining 35 states accounted for approximately 29 percent of all jobs supported by goods exports.

**Figure 1: The 15 States Whose Goods Exports Supported the Most Jobs in 2014**



**Chart 1: Share of Jobs Supported by Total Goods Exports in 2014, State Breakout**

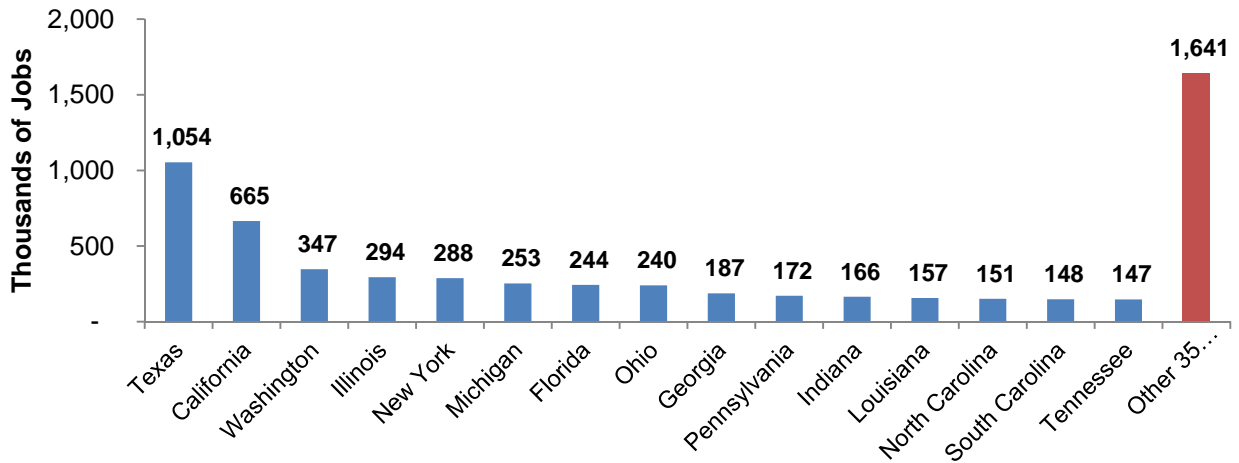


### **Jobs Supported by Manufactured Exports from Individual States in 2014**

Since manufacturing plays a large role in the economies of individual states, we also estimate jobs supported by manufactured exports at the state-level. Manufactured products account for 86 percent of all jobs supported by the export of goods and almost 53 percent of all jobs supported by both goods and services exports. Nationally we estimate that exports of manufactured products supported approximately 6.2 million jobs in 2014. Jobs supported by manufactured exports broken down by state are presented in Figure 2.

Reflecting the predominance of manufactured products in the composition of all goods exports, 14 of the states whose exports of manufactured goods supported the greatest number of jobs are also among the 15 states whose total goods exports supported the greatest number of jobs. New Jersey, whose goods exports supported the 13<sup>th</sup> most jobs, is not among the top 15 states whose manufactured exports supported the most jobs. Conversely, manufactured exports from South Carolina supported the 14<sup>th</sup> most jobs while goods exports from South Carolina supported the 16<sup>th</sup> most jobs.

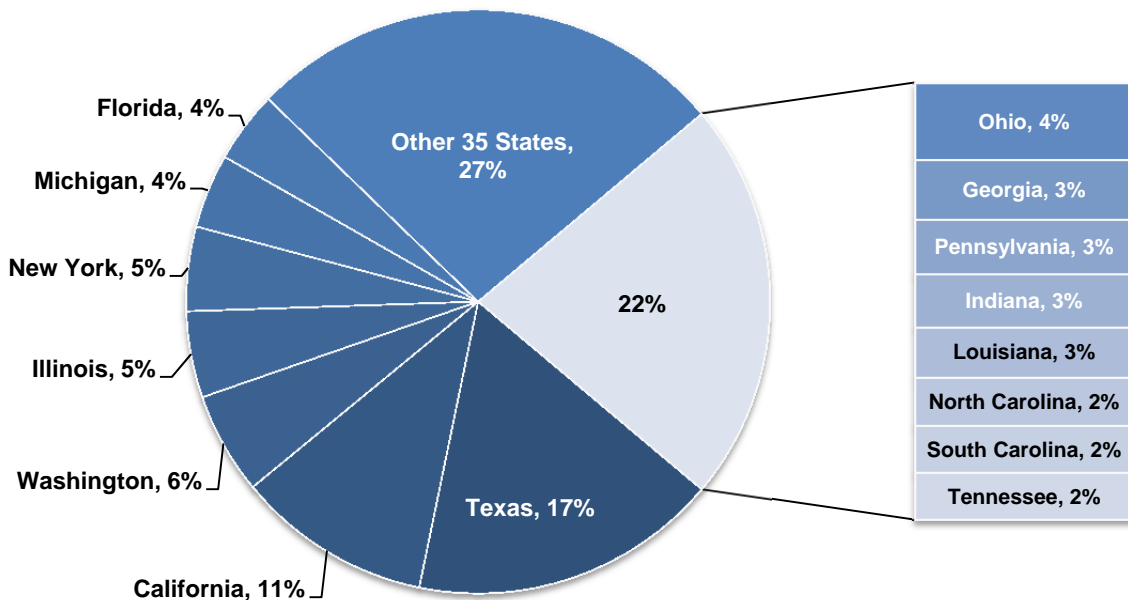
**Figure 2: The 15 States Whose Manufactured Exports Supported the Most Jobs in 2014**



This change is reflective of the relatively high national share of non-manufactured exports credited to New Jersey versus South Carolina: non-manufactured exports from New Jersey supported the 9<sup>th</sup> most jobs in 2014 while non-manufactured exports from South Carolina supported the 39<sup>th</sup> most jobs.

Chart 2 reports the shares of jobs supported by manufactured goods exports from the individual states very similar to the shares for all goods exports. Overall, the 15 states whose manufactured exports supported the most jobs accounted for 73 percent of jobs supported by the export of manufactured products.

**Chart 2: Shares of Jobs Supported by Manufactured Exports 2014, State Breakout**



### Changes in Jobs Supported by Goods Exports from Individual States 2009-2014

The export of goods supported 1.0 million additional jobs in 2014 as compared to the low level during the end of the recession in 2009. In Table 1 we report the complete results for jobs supported by exports from all 50 states for the years 2009 through 2014.

The change in jobs supported by the export of goods from individual states between 2009 and 2014 is presented in Figure 3. Exports from the 15 states whose exports supported the most additional jobs supported 900,000 more jobs in 2014 as opposed to 2009; exports from the remaining 35 states accounted for the remaining 100,000 additional jobs supported.

**Figure 3: Change in Jobs Supported by Goods Exports, 2009-2014**

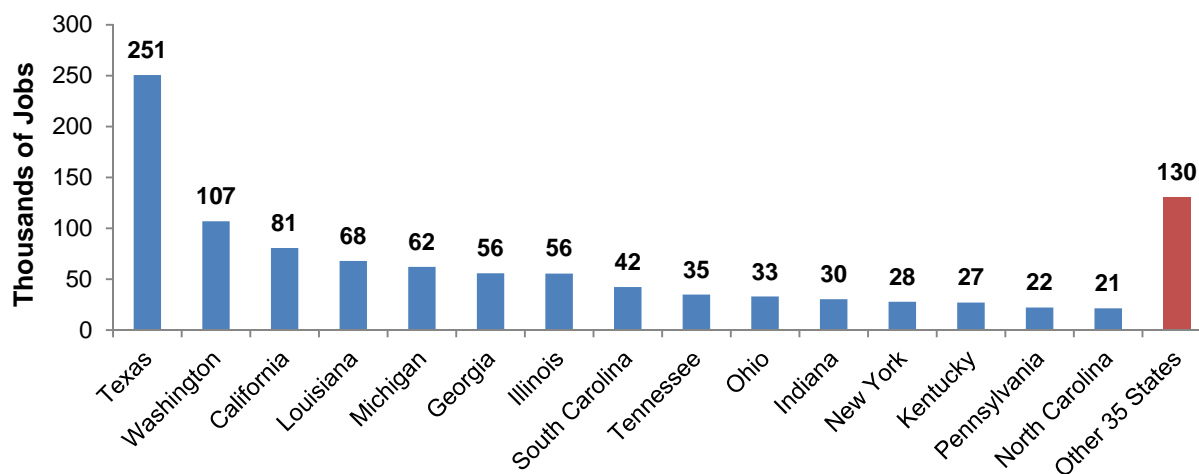
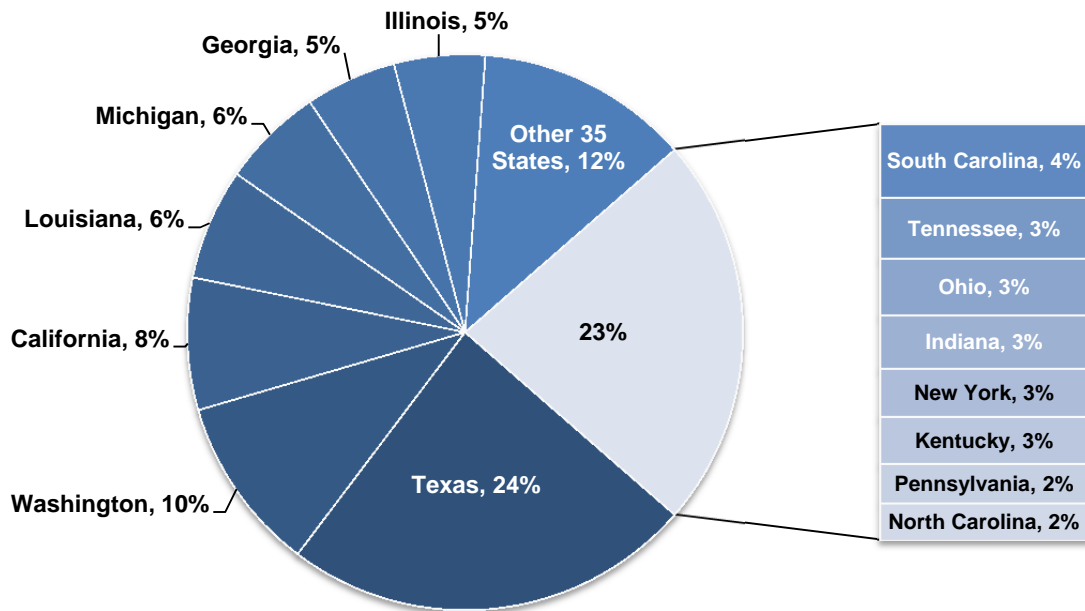


Chart 3 presents the shares of the change in jobs supported from 2009 to 2014. The change in jobs supported by exports from the 15 states whose exports supported the most additional jobs over the time period accounted for 88 percent of the total change over the time period. Exports from the states of Texas, Washington, California, Louisiana and Michigan supported almost one-half of the additional jobs over the time period; exports from Texas by itself accounted for almost one-quarter the growth in jobs supported.

**Chart 3: Share of Increase in Jobs Supported by Goods Exports, by State, 2009-2014**



### Conclusion

In 2014, goods exports from the states of Texas, California, Washington, Illinois and New York supported an estimated 3.0 million or 42 percent of all U.S. jobs supported by the export of goods. Manufactured exports from the same five states supported 2.6 million U.S. jobs.



**Table 1 – Jobs Supported by Goods Exports from Individual States 2009-2014**

State	Number of Jobs Supported					
	2009	2010	2011	2012	2013 (R)	2014 (P)
Alabama	78,402	82,307	89,907	94,896	92,254	95,258
Alaska	29,984	33,371	41,202	36,323	36,662	39,540
Arizona	79,684	77,691	85,706	84,575	86,875	93,354
Arkansas	49,586	44,595	45,076	55,752	51,641	50,490
California	694,634	727,533	761,965	735,199	749,816	775,320
Colorado	36,832	39,589	42,116	43,896	43,845	43,615
Connecticut	78,344	80,495	79,099	78,390	80,336	75,292
Delaware	23,292	23,710	24,155	22,394	22,834	23,278
Florida	295,696	312,851	305,138	303,095	273,960	270,473
Georgia	153,278	171,286	195,699	193,142	198,439	209,071
Hawaii	3,743	4,144	5,217	4,280	3,497	6,198
Idaho	22,573	26,684	29,742	29,410	27,405	26,017
Illinois	289,446	314,971	362,466	374,162	340,609	345,050
Indiana	156,922	169,235	175,819	183,522	176,251	187,309
Iowa	101,686	106,064	115,032	118,102	103,920	107,366
Kansas	71,286	73,434	73,426	68,578	69,852	70,889
Kentucky	110,032	105,924	104,065	111,783	127,242	137,138
Louisiana	102,225	115,386	138,047	155,829	168,301	170,200
Maine	16,190	19,447	19,965	18,454	16,746	17,120
Maryland	55,848	54,710	53,450	57,650	57,148	59,650
Massachusetts	133,018	133,500	133,762	119,623	120,955	124,016
Michigan	208,855	241,349	252,801	274,230	277,450	270,927
Minnesota	120,471	128,507	130,333	132,089	125,032	128,863
Mississippi	40,324	43,086	49,740	53,563	53,586	51,892
Missouri	77,727	88,435	89,314	85,993	80,327	86,602
Montana	10,394	12,255	15,373	12,094	13,012	13,319
Nebraska	56,048	59,144	66,430	61,237	60,052	62,214
Nevada	28,373	26,147	29,760	36,410	31,217	30,319
New Hampshire	18,423	23,759	22,686	17,847	18,771	20,048
New Jersey	157,350	166,373	177,158	161,516	163,693	165,695
New Mexico	7,986	8,696	10,787	13,092	12,197	16,546
New York	362,038	373,057	410,539	383,864	382,658	389,957
North Carolina	142,585	145,857	152,071	156,285	153,621	164,023
North Dakota	27,801	30,207	32,389	36,750	31,266	32,332
Ohio	230,346	243,612	250,425	254,665	256,345	263,356
Oklahoma	31,394	33,733	34,045	36,865	37,680	36,401
Oregon	74,423	79,135	79,955	77,812	78,333	86,157
Pennsylvania	169,517	184,229	198,013	187,582	192,762	191,779
Rhode Island	11,282	12,759	14,066	14,035	12,947	13,459
South Carolina	111,468	117,395	132,793	130,081	133,763	153,816

State	Number of Jobs Supported					
	2009	2010	2011	2012	2013 (R)	2014 (P)
<b>South Dakota</b>	24,203	23,334	26,460	25,200	23,868	24,407
<b>Tennessee</b>	124,044	135,133	146,145	149,365	152,636	158,913
<b>Texas</b>	866,594	936,646	1,008,021	1,053,872	1,085,376	1,117,318
<b>Utah</b>	52,224	60,598	66,878	66,576	57,698	50,578
<b>Vermont</b>	16,337	18,796	18,198	16,992	16,033	14,728
<b>Virginia</b>	86,909	90,829	91,426	90,432	85,362	90,788
<b>Washington</b>	283,666	264,011	300,761	337,925	371,853	390,690
<b>West Virginia</b>	26,624	31,195	39,209	49,866	37,205	35,822
<b>Wisconsin</b>	111,741	116,939	124,872	127,859	123,176	124,913
<b>Wyoming</b>	4,928	4,641	5,528	6,286	5,885	6,489

Note: Values for 2013 are revised. Values for 2014 are preliminary.

Source: ITA calculations from USDA and BEA data.