

# *Driving Economic Success*



Workforce Investment Board  
OF TULARE COUNTY  
*Driving Economic Success*



## **Advanced Manufacturing Sector Industry Report**

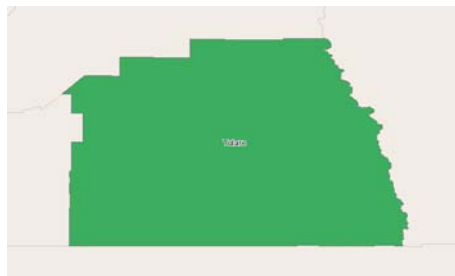
# Tulare County Workforce Investment Board

4025 W. Noble Ave, Suite A.

Visalia, California 93277

559.713.5200

## Advanced Manufacturing Industry Report



Economic Modeling Specialists, Inc. [www.economicmodeling.com](http://www.economicmodeling.com)

**EMSI**

## Region Info

Region: Tulare County MSA

County Areas: Tulare, California (6107)

## Executive Summary

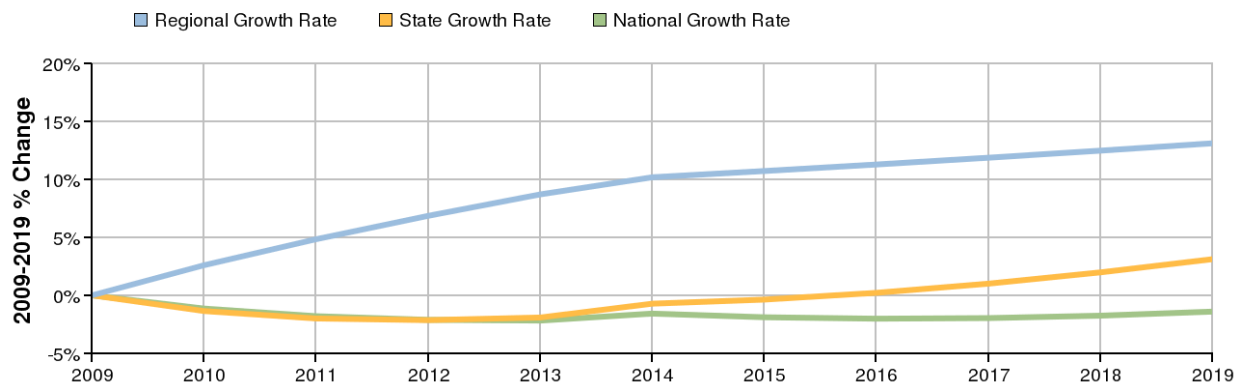
Selected Industries
Food manufacturing (NAICS 311)
Beverage and tobacco product manufacturing (NAICS 312)
Textile mills (NAICS 313)
Textile product mills (NAICS 314)
Apparel manufacturing (NAICS 315)
Wood product manufacturing (NAICS 321)
Paper manufacturing (NAICS 322)
Printing and related support activities (NAICS 323)
Chemical manufacturing (NAICS 325)
Plastics and rubber products manufacturing (NAICS 326)
Nonmetallic mineral product manufacturing (NAICS 327)
Primary metal manufacturing (NAICS 331)
Fabricated metal product manufacturing (NAICS 332)
Machinery manufacturing (NAICS 333)
Computer and electronic product manufacturing (NAICS 334)
Transportation equipment manufacturing (NAICS 336)
Furniture and related product manufacturing (NAICS 337)
Miscellaneous manufacturing (NAICS 339)

Basic Information	
2009 Industry Jobs	11,410
2019 Industry Jobs	12,905
Total Change	1,495
Total % Change	13.12%
Current Average Earnings per Worker	\$54,743

Economic Indicators	
2009 Location Quotient	0.86
2019 Location Quotient	0.99
Shift Share: Regional Competitiveness Effect	1,494
Shift Share: Industrial Mix Effect	-1,473
Shift Share: National Effect	1,475

Source: EMSI Complete Employment - 3rd Quarter 2009

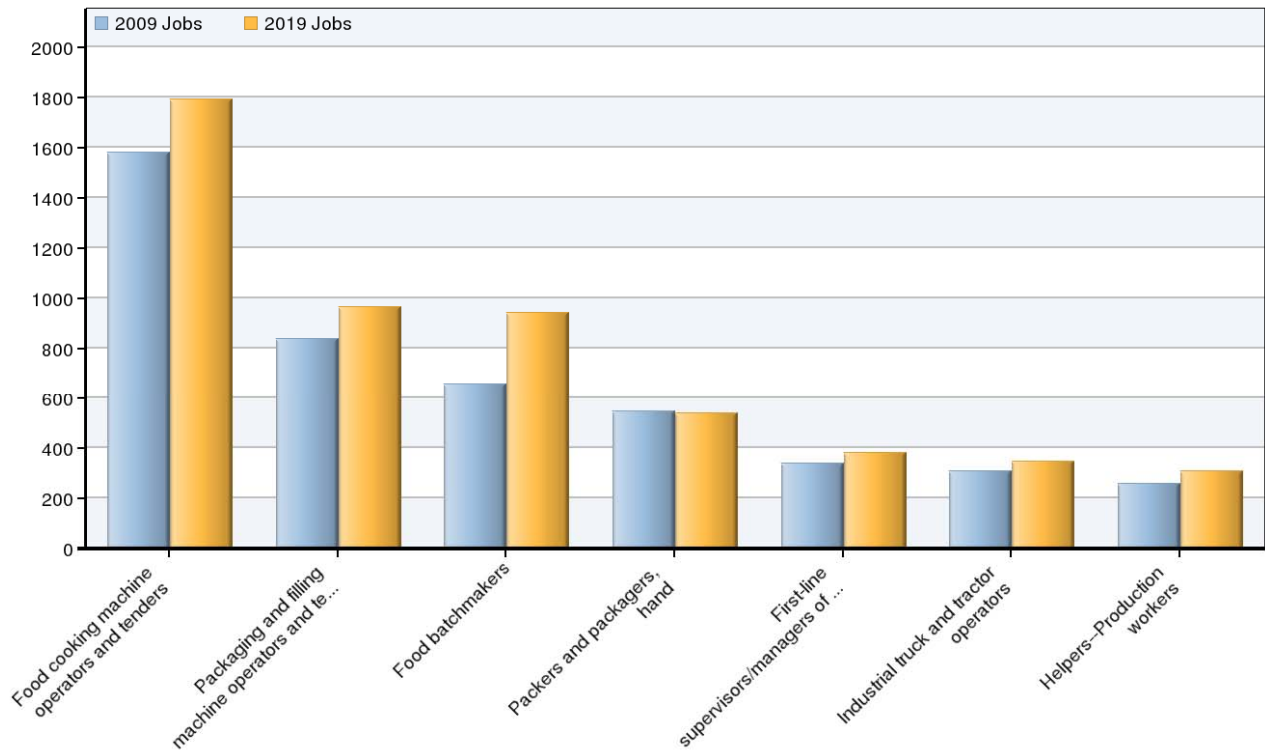
## Industry Change Summary



Description	2009 Jobs	2019 Jobs	Change	% Change	Current EPW	2008 Establishments
Regional Total	11,410	12,905	1,495	13%	\$54,743	306
State Total	1,352,641	1,394,800	42,159	3%	\$84,081	48,002
National Total	12,149,385	11,978,864	-170,521	-1%	\$69,422	366,333

Source: EMSI Complete Employment - 3rd Quarter 2009

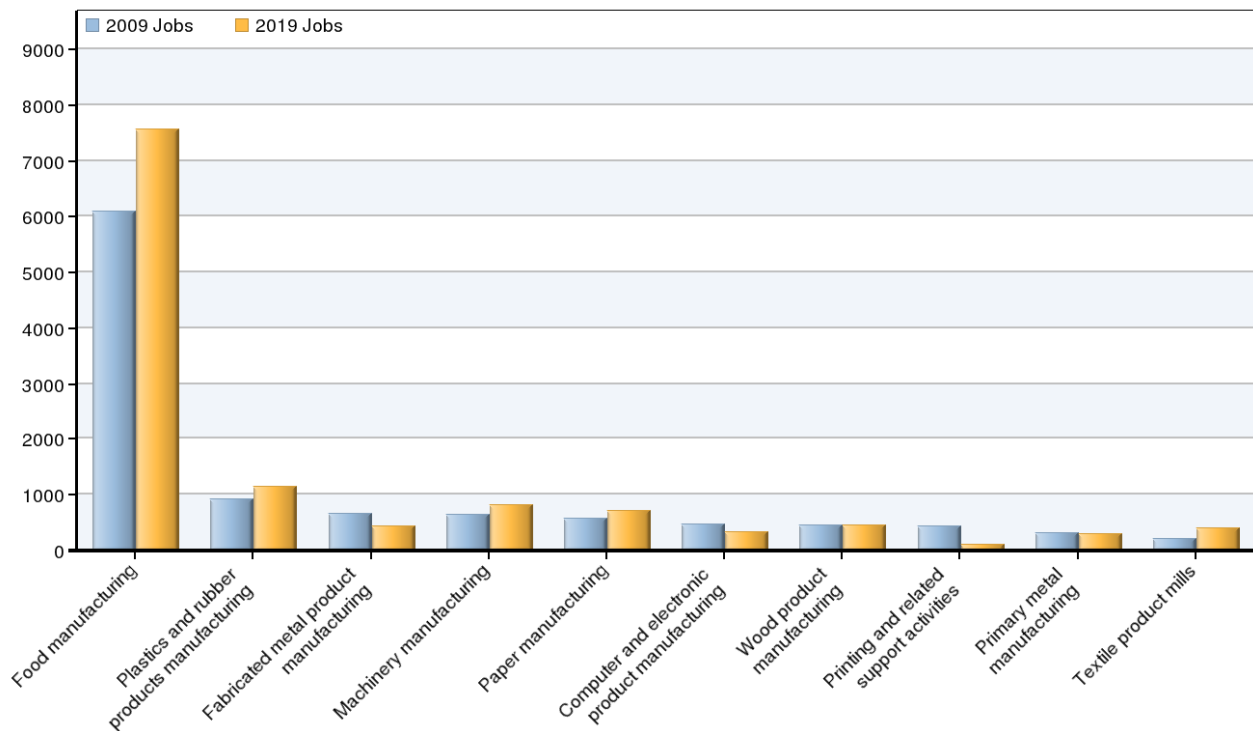
## Top Occupations In Selected Industries



SOC Code	Name	2009 Jobs	2019 Jobs	Change	% Change
51-3093	Food cooking machine operators and tenders	1,581	1,792	211	13%
51-9111	Packaging and filling machine operators and tenders	840	965	125	15%
51-3092	Food batchmakers	658	943	285	43%
53-7064	Packers and packagers, hand	546	539	-7	-1%
51-1011	First-line supervisors/managers of production and operating workers	339	382	43	13%
53-7051	Industrial truck and tractor operators	308	345	37	12%
51-9198	Helpers--Production workers	257	309	52	20%

Source: EMSI Complete Employment - 3rd Quarter 2009

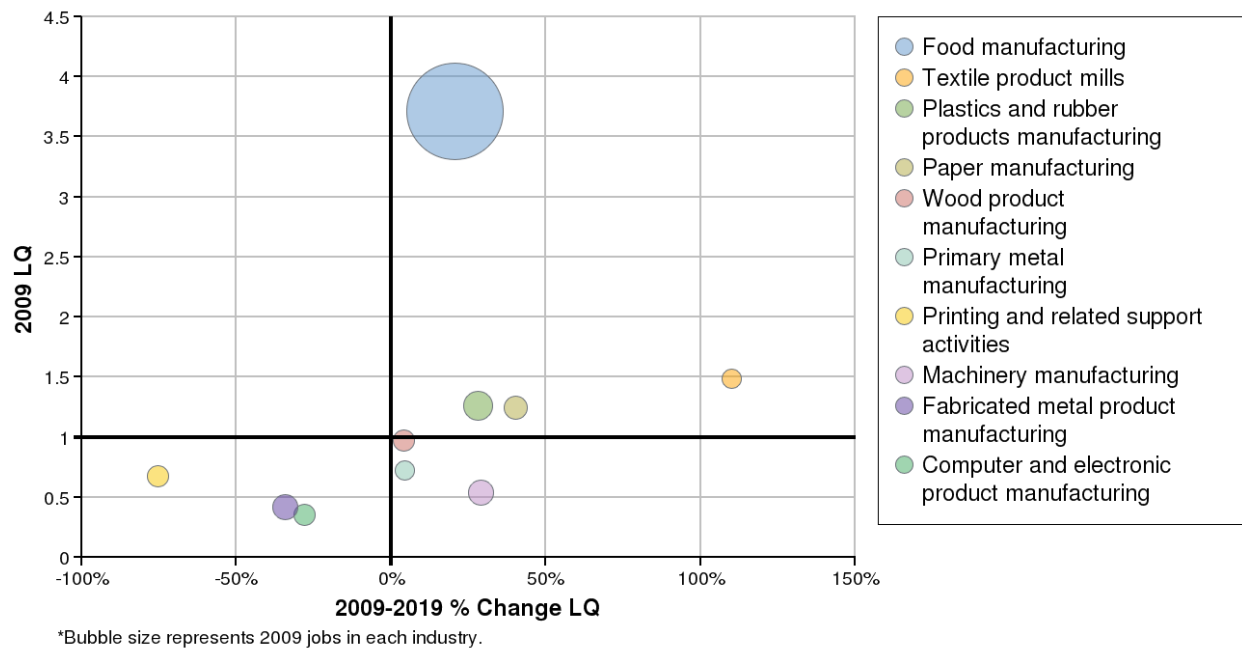
## Industry Breakdown



NAICS Code	Description	2009 Jobs	2019 Jobs	Current EPW	2008 Establishments
311	Food manufacturing	6,100	7,563	\$57,048	86
326	Plastics and rubber products manufacturing	918	1,146	\$54,969	16
332	Fabricated metal product manufacturing	654	427	\$51,120	42
333	Machinery manufacturing	643	816	\$56,504	30
322	Paper manufacturing	565	716	\$57,526	12
334	Computer and electronic product manufacturing	463	323	\$54,659	6
321	Wood product manufacturing	446	458	\$36,568	15
323	Printing and related support activities	432	96	\$53,065	16
331	Primary metal manufacturing	307	292	\$53,485	7
314	Textile product mills	206	390	\$38,315	7
327	Nonmetallic mineral product manufacturing	162	136	\$55,254	14
325	Chemical manufacturing	143	166	\$79,820	13
339	Miscellaneous manufacturing	108	160	\$35,372	12
337	Furniture and related product manufacturing	82	71	\$43,366	14
336	Transportation equipment manufacturing	69	38	\$50,324	7
312	Beverage and tobacco product manufacturing	62	46	\$48,199	6
313	Textile mills	25	26	\$19,157	1
315	Apparel manufacturing	24	36	\$13,405	0
	<b>Total</b>	<b>11,410</b>	<b>12,905</b>	<b>\$54,743</b>	<b>306</b>

Source: EMSI Complete Employment - 3rd Quarter 2009

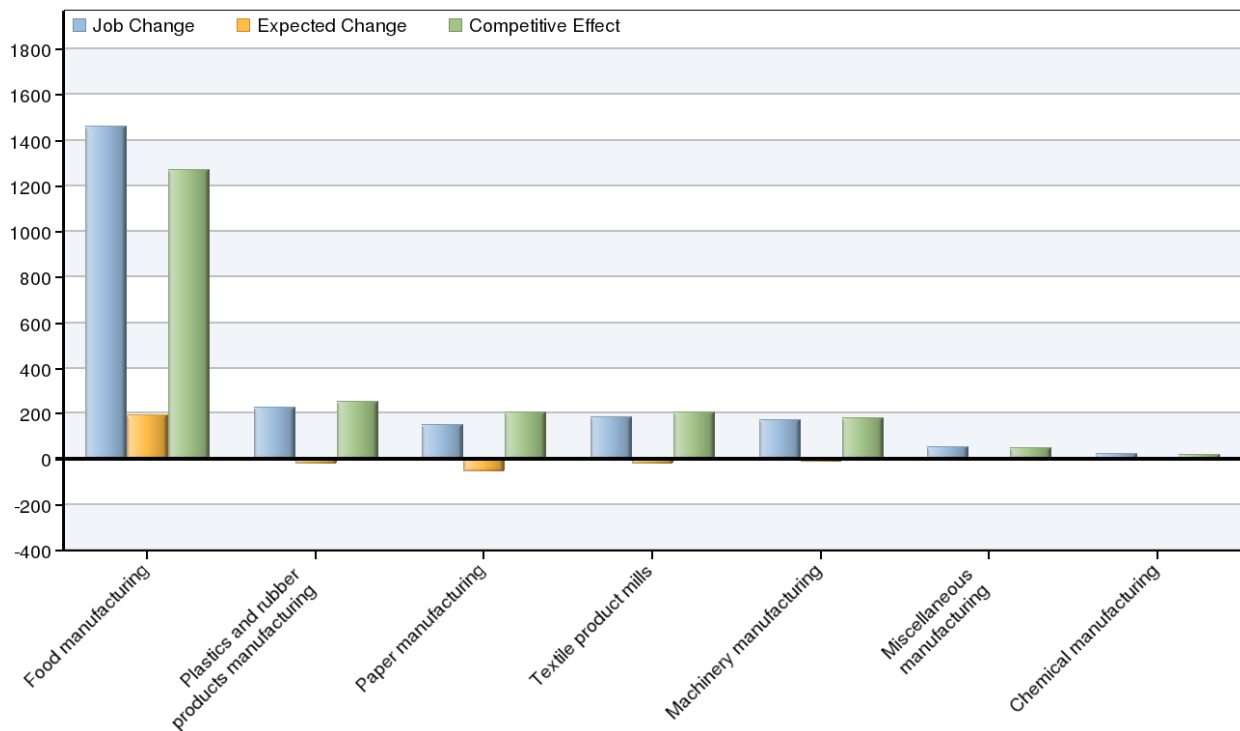
## Location Quotient Breakdown



NAICS Code	Description	2009 Jobs	2009 LQ	2019 LQ
311	Food manufacturing	6,100	3.71	4.47
312	Beverage and tobacco product manufacturing	62	0.29	0.20
313	Textile mills	25	0.17	0.21
314	Textile product mills	206	1.49	3.13
315	Apparel manufacturing	24	0.11	0.18
321	Wood product manufacturing	446	0.97	1.01
322	Paper manufacturing	565	1.25	1.75
323	Printing and related support activities	432	0.68	0.17
325	Chemical manufacturing	143	0.16	0.18
326	Plastics and rubber products manufacturing	918	1.27	1.62
327	Nonmetallic mineral product manufacturing	162	0.34	0.29
331	Primary metal manufacturing	307	0.72	0.75
332	Fabricated metal product manufacturing	654	0.42	0.28
333	Machinery manufacturing	643	0.54	0.69
334	Computer and electronic product manufacturing	463	0.35	0.26
336	Transportation equipment manufacturing	69	0.05	0.03
337	Furniture and related product manufacturing	82	0.18	0.16
339	Miscellaneous manufacturing	108	0.14	0.21
	Total	11,410	0.86	0.99

Source: EMSI Complete Employment - 3rd Quarter 2009

## Shift Share Breakdown



NAICS Code	Description	Job Change	Ind Mix Effect	Nat Growth Effect	Expected Change	Competitive Effect
311	Food manufacturing	1,463	-597	788	192	1,271
312	Beverage and tobacco product manufacturing	-16	-5	8	3	-20
313	Textile mills	1	-7	3	-3	4
314	Textile product mills	184	-47	27	-20	204
315	Apparel manufacturing	12	-6	3	-3	15
321	Wood product manufacturing	12	-63	58	-5	17
322	Paper manufacturing	151	-126	73	-53	204
323	Printing and related support activities	-336	-98	56	-42	-293
325	Chemical manufacturing	23	-16	18	2	21
326	Plastics and rubber products manufacturing	228	-140	119	-21	250
327	Nonmetallic mineral product manufacturing	-26	-18	21	3	-29
331	Primary metal manufacturing	-15	-66	40	-26	12
332	Fabricated metal product manufacturing	-227	-87	85	-2	-225
333	Machinery manufacturing	173	-92	83	-9	181
334	Computer and electronic product manufacturing	-140	-73	60	-13	-127
336	Transportation equipment manufacturing	-31	-9	9	0	-31
337	Furniture and related product manufacturing	-11	-15	11	-4	-8
339	Miscellaneous manufacturing	52	-10	14	4	49
	Total	1,497	-1,473	1,475	2	1,494

Source: EMSI Complete Employment - 3rd Quarter 2009

## **Data Sources and Calculations**

### **Industry Data**

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

### **Occupation Data**

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

### **Location Quotient**

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

### **Shift Share**

Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors.

### **State Data Sources**

This report uses state data from the following agencies: California Labor Market Information Department.