

Manufacturing



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KEY POINTS

- The manufacturing sector in the Central Valley is showing growth.
- The food manufacturing sector is leading the Central Valley in terms of employment.
- Organizations such as the San Joaquin Valley Manufacturing Alliance (SJVMA) are leading the charge to grow manufacturing in the area.
- Key areas of need include labor force training, exposure to career opportunities, and organizational training to improve performance of manufacturers.
- Small employers make up the majority of area manufacturing establishments.

Manufacturing in the Central Valley

This Central Valley report covers the six-county area of Fresno, Kern, Kings, Madera, Merced, and Tulare.

Manufacturing in the Central Valley is significant. According to the latest Economic Census of the United States, the 2012 total value of manufacturing shipments and receipts for services exceeded \$32 billion (Table 1). Although this number is large, it is only 6 percent of the manufacturing value created in California for the same time period.

For the six-county area of analysis, the number of manufacturing establishments¹ has grown 3.1 percent, from 1,529 in 2013 to 1,576 in 2016 (Table 2). This closely follows the statewide growth of 3.9 percent in manufacturing establishments for the same timeframe. The number of workers employed in manufacturing (Figure 1) has grown likewise, from 62,431 in 2013 to 66,219 in 2016 (6.1 percent growth). The growth in employment for the Central Valley manufacturing sector is higher than that for California as a whole (Table 3).

For the six-county area of analysis, the number of manufacturing establishments has grown 3.1 percent, from 1,529 in 2013 to 1,576 in 2016.



THE MANUFACTURING SECTOR is showing growth.



FOOD MANUFACTURING IS LEADING the Central Valley in terms of employment.



SMALL EMPLOYERS make up the majority of area manufacturing establishments.



Table 1
2012 Total Value of Manufacturing Sector (2012 NACIS 31-33)
Shipments and Receipts for Services

| Geographic Area Name | Total Value of Shipments and Receipts for Services (\$1,000) | Percent of Central Valley | Percent of California |
|---------------------------|--|---------------------------|-----------------------|
| Fresno County, California | \$8,658,325 | 26.5% | 1.7% |
| Kern County, California | \$6,890,714 | 21.1% | 1.3% |
| Kings County, California | \$2,904,014 | 8.9% | 0.6% |
| Madera County, California | \$1,441,125 | 4.4% | 0.3% |
| Merced County, California | \$4,435,633 | 13.6% | 0.9% |
| Tulare County, California | \$8,362,447 | 25.6% | 1.6% |
| Total Central Valley | \$32,692,258 | | 6.4% |
| Total California | \$512,303,164 | | |

Source: 2012 Economic Census of the United States, Manufacturing: Geographic Area Series

Table 2
Central Valley Manufacturing Establishments 2013-2016

| | 2013 | 2014 | 2015 | 2016 |
|-------------------|---------------|---------------|---------------|---------------|
| Fresno | 596 | 613 | 606 | 595 |
| Kern | 401 | 412 | 407 | 411 |
| Kings | 68 | 70 | 71 | 75 |
| Madera | 93 | 99 | 100 | 102 |
| Merced | 123 | 131 | 137 | 135 |
| Tulare | 248 | 255 | 258 | 258 |
| Total | 1,529 | 1,580 | 1,579 | 1,576 |
| California | 39,683 | 40,838 | 40,995 | 41,214 |

Central Valley Growth 2013-2016

3.1%

California Growth 2013-2016

3.9%

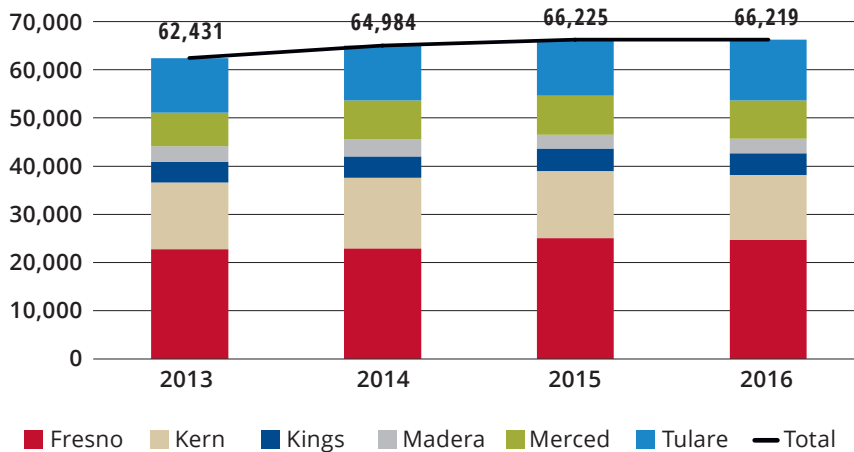
Data Source: Bureau of Labor Statistics-Quarterly Census of Employment and Wages

Manufacturing

Food, fabricated metal product, and machinery manufacturing are leading the area in both number of establishments and employment levels.



Figure 1
Average Annual Employees in NACIS 31-33 Manufacturing Sectors by County



Data Source: Bureau of Labor Statistics-Quarterly Census of Employment and Wages

Table 3
Central Valley Average Annual Employees in Manufacturing 2013-2016

| | 2013 | 2014 | 2015 | 2016 |
|--|------------------|------------------|------------------|------------------|
| Fresno | 22,755 | 22,938 | 25,071 | 24,773 |
| Kern | 13,839 | 14,664 | 13,958 | 13,401 |
| Kings | 4,258 | 4,389 | 4,598 | 4,522 |
| Madera | 3,277 | 3,610 | 2,862 | 3,031 |
| Merced | 6,968 | 8,019 | 8,139 | 7,935 |
| Tulare | 11,334 | 11,364 | 11,597 | 12,557 |
| Total for Central Valley | 62,431 | 64,984 | 66,225 | 66,219 |
| Total for California | 1,246,300 | 1,264,116 | 1,284,298 | 1,294,766 |
| Central Valley Growth 2013-2016 | | | | 6.1% |
| California Growth 2013-2016 | | | | 3.9% |

Data Source: Bureau of Labor Statistics-Quarterly Census of Employment and Wages

PETROLEUM AND COAL MANUFACTURING have the highest salaries.



For the six-county area, certain categories of manufacturing are more prevalent. Food (transformation of livestock or agricultural products), fabricated metal product, and machinery manufacturing are leading the area in both the number of establishments and employment levels. With regard to weekly pay rates, however, petroleum and coal manufacturing have the highest salaries (Table 4).

Each county in our examination has a significant amount of their manufacturing workforce related to the manufacturing of food products (Table 5). There are counties that showed some diversity outside of those two manufacturing sectors however. These sectors include non-metallic mineral products (sand, gravel, clay, etc.), machinery manufacturing, and plastic/rubber manufacturing.

Table 4
Top 4 Manufacturing Sectors for Six-County Area

| Number of Establishments | | | | |
|---|---------|---------|---------|---------|
| Manufacturing Category | 2013 | 2014 | 2015 | 2016 |
| NAICS 311 Food manufacturing | 339 | 354 | 360 | 367 |
| NAICS 332 Fabricated metal product manufacturing | 225 | 226 | 233 | 240 |
| NAICS 333 Machinery manufacturing | 149 | 157 | 144 | 142 |
| NAICS 323 Printing and related support activities | 99 | 105 | 105 | 104 |
| Number of Employees | | | | |
| Manufacturing Category | 2013 | 2014 | 2015 | 2016 |
| NAICS 311 Food manufacturing | 34,644 | 35,988 | 36,973 | 37,160 |
| NAICS 333 Machinery manufacturing | 4,595 | 5,102 | 4,586 | 4,216 |
| NAICS 332 Fabricated metal product manufacturing | 3,957 | 4,351 | 4,542 | 4,394 |
| NAICS 327 Nonmetallic mineral product manufacturing | 2,136 | 2,187 | 2,488 | 2,596 |
| Average Weekly Pay | | | | |
| Manufacturing Category | 2013 | 2014 | 2015 | 2016 |
| NAICS 324 Petroleum and coal products manufacturing | \$1,188 | \$778 | \$1,196 | \$1,185 |
| NAICS 327 Nonmetallic mineral product manufacturing | \$989 | \$1,050 | \$1,099 | \$1,111 |
| NAICS 333 Machinery manufacturing | \$946 | \$992 | \$1,031 | \$1,026 |
| NAICS 334 Computer and electronic product manufacturing | \$758 | \$889 | \$807 | \$1,039 |

Data Source: Bureau of Labor Statistics-Quarterly Census of Employment and Wages

Table 5
Top 3 Manufacturing Sectors by Employment Level

| County | 2017 Q1 Establishments | 2017 Q1 Employees |
|--|------------------------|-------------------|
| Fresno (Total) | 595 | 24,238 |
| NAICS 311 Food manufacturing | 137 | 12,180 |
| NAICS 333 Machinery manufacturing | 53 | 1,898 |
| NAICS 332 Fabricated metal product manufacturing | 86 | 1,770 |
| Kern (Total) | 407 | 12,935 |
| NAICS 311 Food manufacturing | 50 | 5,643 |
| NAICS 332 Fabricated metal product manufacturing | 81 | 1,177 |
| NAICS 336 Transportation equipment manufacturing | 25 | 878 |
| Kings (Total) | 75 | 3,908 |
| NAICS 311 Food manufacturing | 27 | 3,627 |
| NAICS 333 Machinery manufacturing | 6 | 79 |
| NAICS 327 Nonmetallic mineral product manufacturing | 3 | 70 |
| Madera (Total) | 101 | 2,777 |
| NAICS 327 Nonmetallic mineral product manufacturing | 10 | 782 |
| NAICS 333 Machinery manufacturing | 9 | 630 |
| NAICS 311 Food manufacturing | 17 | 554 |
| Merced (Total) | 133 | 7,170 |
| NAICS 311 Food manufacturing | 65 | 5,817 |
| NAICS 332 Fabricated metal product manufacturing | 15 | 418 |
| NAICS 336 Transportation equipment manufacturing | 6 | 330 |
| Tulare (Total) | 259 | 12,428 |
| NAICS 311 Food manufacturing | 69 | 6,908 |
| NAICS 326 Plastics and rubber products manufacturing | 12 | 947 |
| NAICS 322 Paper manufacturing | 9 | 941 |

Data Source: Bureau of Labor Statistics-Quarterly Census of Employment and Wages

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More work needs to be done to expose new entrants and current members of the workforce to the career opportunities available in the manufacturing sector.

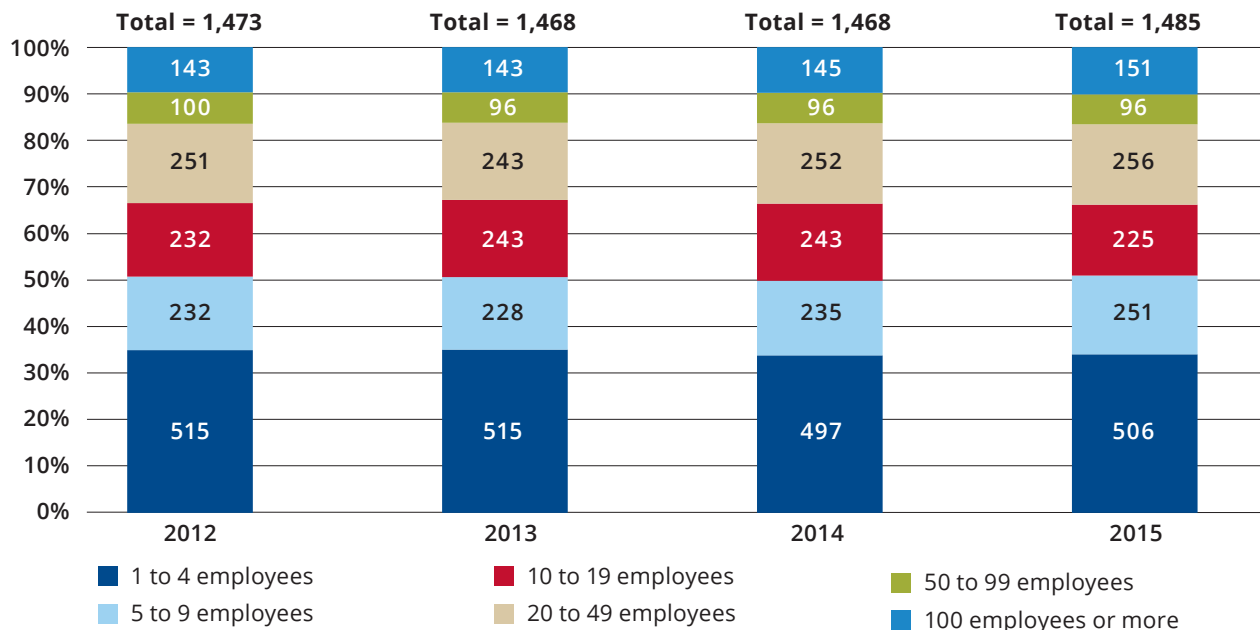
Manufacturing has become a focal area of investment for the Central Valley. Led by the San Joaquin Valley Manufacturing Alliance (SJVMA), efforts are being made to develop the area into a globally competitive resource that will attract companies. According to the SJVMA, there are some key challenges that must

be addressed in order for the manufacturing sector in the area to continue growing.

The first challenge is developing a qualified labor pool. More work needs to be done to expose new entrants and current members of the workforce to the career

opportunities available in the local manufacturing sector. Partnerships must also be created between educational institutions, employers, and communities to understand skills gaps that exist in the labor pool. Programs will then need to be tailored to equip future workers with the technical

Figure 2
Central Valley Manufacturing Establishments by Size



Data Source: U.S. Census Bureau – Geography Area Series: County Business Patterns by Employment Class Size (2012-2015 Business Patterns)



training, technological knowledge, and soft skills needed to be successful in today's fast-paced manufacturing environments.

Another challenge is ensuring local manufacturing organizations have the tools and knowledge to be successful. This challenge is particularly important because of the number of small manufacturing organizations in the local area. As shown in Figure 2, over 80 percent of the local manufacturing establishments have fewer than 50 employees. Smaller organizations may not have the capital, technical, or knowledge resources to incorporate needed best practices or other business processes that can improve performance and grow their businesses.

**THE FUTURE OF
MANUFACTURING
in the local area
looks to be one of
GROWTH.**



Work has already started on addressing these challenges through SJVMA-sponsored manufacturing summits. These summits are designed to build relationships between local

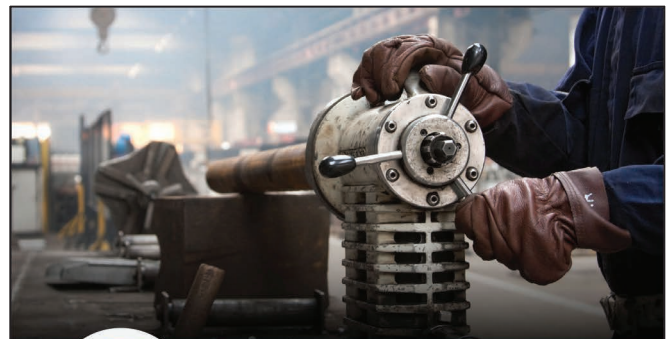
organizations, community business developers, policy makers, and educators. The future of manufacturing in the local area looks to be one of growth, particularly in those subsectors related to the agricultural industry.

Endnotes

- 1 An establishment is generally a single, physical location at which economic activity occurs (e.g., store, factory, farm, etc.).
- 2 Slight difference in number of establishments due to use of NAICS 2012 classifications vs. NAICS 2017 classifications

Thank you to the San Joaquin Valley Manufacturing Alliance and Fresno State's Office of Community & Economic Development for their assistance with this report.

MANUFACTURING



**SAN JOAQUIN VALLEY
MANUFACTURING ALLIANCE**

**Industry can lead the way
to a stronger workforce and
regional economy.**

**Let's keep the momentum building.
Join Us!**

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