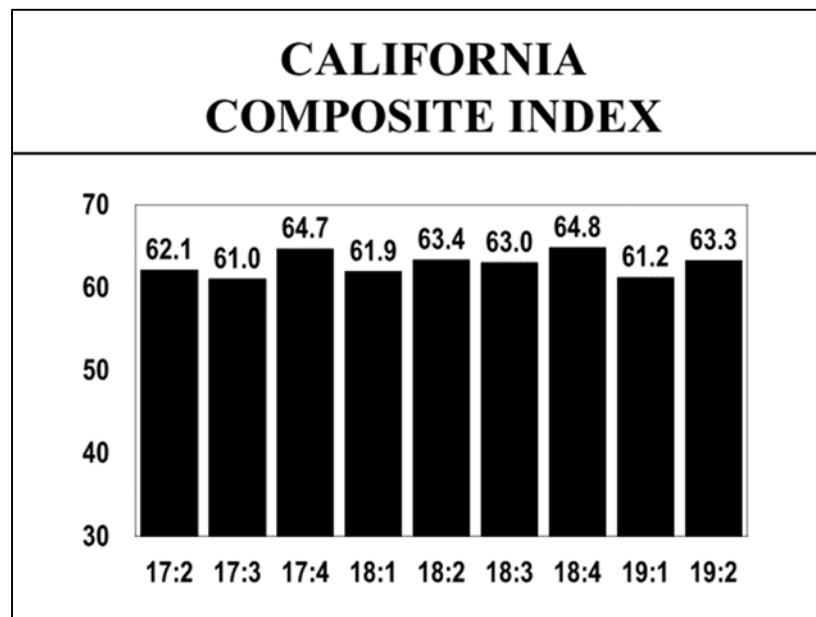


## PRESS RELEASE

### **STRONGER MANUFACTURING GROWTH EXPECTED IN THE SECOND QUARTER**

ORANGE, CA — According to a survey of purchasing managers, the California manufacturing economy is expected to expand at a higher rate in the second quarter of 2019 compared to the first quarter. “The California Composite Index, measuring overall manufacturing activity, increased from 61.2 in the first quarter to 63.3 in the second quarter, indicating a higher growth rate” said Dr. Raymond Sfeir, director of the purchasing managers’ survey. This is happening at the same time that the national economy added 541,000 jobs in the first quarter of 2019. Production, inventories of purchased materials, new orders and employment are expected to grow at a higher rate compared to the first quarter. Commodity prices are expected to rise at a slower rate for the fourth consecutive quarter. Supplier deliveries are expected to slow at a slower rate. Respondents commented on the increase in wages and the high cost of living in California which are leading firms to shift either some of their operations or the whole manufacturing plant to other states. The trade dispute with China remains a critical issue to many purchasing managers.



### California Manufacturing at a Glance

|                                    |      |                          |
|------------------------------------|------|--------------------------|
| Composite Index                    | 63.3 | Growing at a higher rate |
| Production                         | 67.3 | Growing at a higher rate |
| Inventories of purchased materials | 59.7 | Growing at a higher rate |
| Commodity prices                   | 68.8 | Rising at a slower rate  |
| Supplier deliveries                | 55.3 | Slowing at a slower rate |
| New orders                         | 66.5 | Growing at a higher rate |
| Employment                         | 59.9 | Growing at a higher rate |

### Performance by Industry Group

The index for the **non-durable goods industries** increased from 60.4 in the first quarter to 61.3 in the second quarter, indicating a higher rate of growth in the second quarter. Production, inventories of purchased materials, new orders and employment are expected to grow at a higher rate. Supplier deliveries are expected to slow at a slower rate.

The **high-tech industries** include the following: Computer & Electronic Products, and Aerospace Products & Parts. The high-tech industries currently employ about 361,600 employees, amounting to 27.4% of total manufacturing employment in the state. The index for the high-tech industries decreased from 64.2 in the first quarter to 63.5 in the second quarter, indicating a slightly lower rate of growth. Inventories of purchased materials and employment are expected to grow at a higher rate, while production and new orders are expected to grow at a lower rate.

The index for the **durable goods industries other than high-tech** increased from 60.0 in the first quarter to 65.5 in the second quarter, indicating a higher rate of growth in the second quarter. Production, inventories of purchased materials, new orders and employment are expected to increase at a higher rate in the second quarter. Commodity prices are expected to rise at a lower rate.

### Comments by the Purchasing Managers

The local economy is strong and unemployment rates are exceptionally low. Getting harder to find enough qualified employees which will make this year a challenge. (Food)

Plastic prices, specifically PET have come down this last quarter. (Beverage & Tobacco)

China tariffs need to be worked out. Cost of doing business in California makes it hard to compete. (Textile Mill Products)

The company has officially purchased a property in Henderson, NV and will be moving out of California within the year (after 30 years in CA), largely due to the high costs to operate in this state. Minimum wage in Nevada is a big plus, at less than \$8/hr compared to the current \$14.25 in our city, which will help with operational costs. (Wood Products)

Paper supplies are tight as mills are reducing capacity and truck capacity is limited. (Paper)

Due to changes in our market, labor cost and material cost, the next quarter will be very challenging. (Printing & Related Support Activities)

Margins are compressed. Working to lower overhead and catch up with cost increases due to tariffs and general operating costs. Freight is up. (Chemicals)

Cost of doing business in CA continues to rise and has made the ROI for automation that much quicker. We have plans to accelerate our automation initiatives which will lead to near term workforce reductions. (Plastics & Rubber Products)

This winter has negatively impacted volumes on a level unseen for many years. Plants have been closed more often than not and budget targets are woefully short. The nature of this business is that a huge backlog has been created; the main concern now is that there are still enough resources, mainly time and man-hours, to recover by year's end. This will probably have to come with higher costs of overtime hours for night and weekend work. (Nonmetallic Mineral Products)

Due to weather related issues, construction sites were not able to complete work needed to receive our steel. As a result, delays have reduced the anticipated work and have pushed deliveries into the 2nd quarter and beyond. As a result, some of the responses above are skewed. (Primary Metals)

As a metal fabricator we are still suffering under the high price of aluminum and steel. We are clearly hoping for relief on that front. (Fabricated Metal Products)

Domestic sales are expected to increase in the second quarter. The international market looks "soft" in the second quarter. Overall sales will show a small increase in the second quarter. (Machinery)

We see continued (>10%/yr) growth in our medical and biotech markets and slowing (down 15%) demand for semiconductor packaging services. (Computer & Electronic Products)

China trade concerns have settled down, so we're at a more steady-state; business is down in that region year-over-year, though. We've seen an uptick in UK business as customers have been planning for Brexit and getting orders into us far in advance of their installation dates. (Electrical Equipment, Appliance & Components)

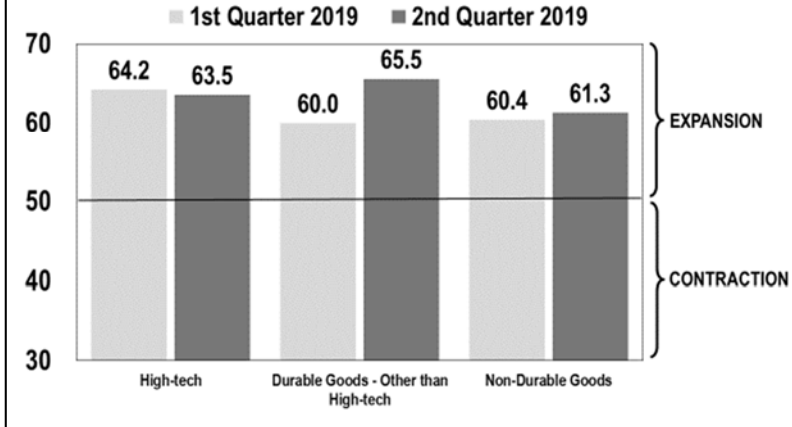
Our Transportation business is doing better and expected to grow more. Tariffs are effecting costs. Moving jobs to India and Mexico. (Transportation Equipment)

Business conditions are somewhat slow over the uncertainty of increased Tariffs, Brexit terms, slowing confidence in the US/ World economy. (Furniture & Related Products)

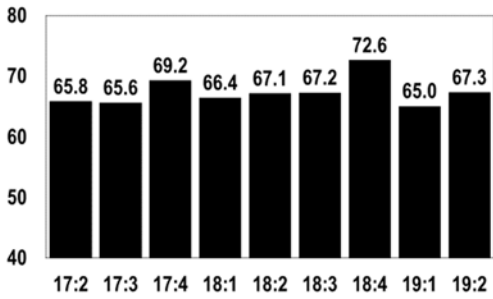
Faster than expected growth. (Miscellaneous)

Commercial helicopter market is depressed right now. Strong dollars hurts as 75% of our sales is normally overseas. (Aerospace Products & Parts)

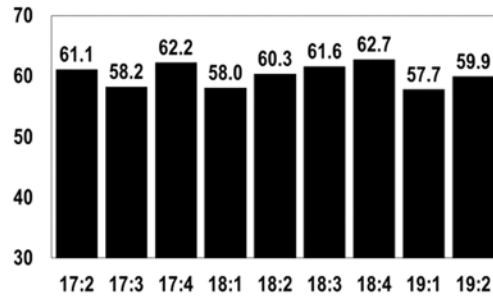
## INDICES FOR INDUSTRY GROUPS



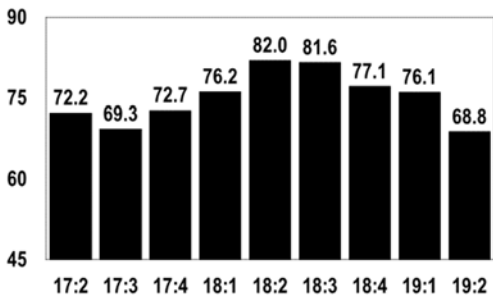
### PRODUCTION INDEX



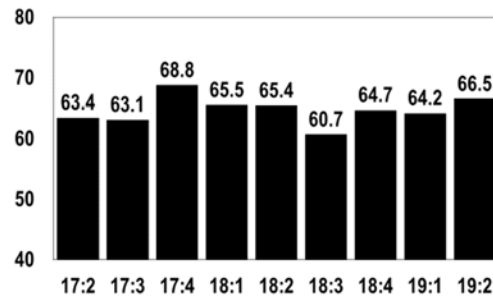
### EMPLOYMENT INDEX



### COMMODITY PRICE INDEX



### NEW ORDERS INDEX



## **Background and Methodology**

The Institute for Supply Management (ISM) conducts a monthly national survey of purchasing managers and publishes the survey results in its *Report on Business*. Such a survey is not available for the state of California. Given the size of our state, and the major role its manufacturing sector plays in the national economy, the A. Gary Anderson Center for Economic Research at Chapman University launched a quarterly survey of California purchasing managers starting in the third quarter of 2002. Similar to the ISM survey, our survey tracks changes in production, employment, new orders, inventories of purchased materials, commodity prices and supplier deliveries. A seasonally adjusted index is computed for each variable except for commodity prices for which no seasonal adjustment is made. Unlike the national survey that tracks the performance of the manufacturing sector in the previous month, the Anderson Center's survey asks the participants to evaluate the expected performance in the coming quarter.

In order to have one single indicator for the performance of the state manufacturing sector, the Anderson Center has developed a Composite Index that is a weighted average of the underlying indices. A value of 50 for the Composite Index shows a general expansion of the manufacturing economy of the state and a value below 50 shows a decline. The industries are classified according to the North American Industry Classification System (NAICS).

**Detailed Results of the Survey of  
California Purchasing Managers' Expectations  
for the Second Quarter of 2019**

In its attempt to present you with a better delivery of the survey results, the A. Gary Anderson Center for Economic Research has calculated an index for every variable in the survey. The "% Better," is added to half of the "% Same," after which a seasonal factor is used to get a seasonally adjusted index for each variable (except commodity prices). A value over 50 for an index indicates growth and a value below 50 indicates a decline. If for example the index increases from 55 to 59, we say that the growth rate is higher than the previous quarter because 59 is bigger than 55. If the index remains at 55, we say that the growth rate remains the same as the previous quarter. If the index decreases from 55 to 52, we say that we still have growth but that the growth rate is lower than the previous quarter because 52 is smaller than 55. Each industry in the manufacturing sector is represented in the survey based on its employment share of total manufacturing employment in the state.

**Production:** The seasonally adjusted index for production is expected to increase from 65.0 in the first quarter to 67.3 in the second quarter, indicating that production is expected to increase at a higher rate in the second quarter. This is the fortieth consecutive quarter that the production index has been above 50. Production is expected to increase most rapidly in the following industries: Food; Textile Mill Products; Beverage & Tobacco; Apparel; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment; and Miscellaneous. The Furniture industry reported an expected decrease in production.

| <b>Production</b>               | <b>% Higher</b> | <b>% Same</b> | <b>% Lower</b> | <b>Net</b> | <b>Seasonally Adjusted Index</b> |
|---------------------------------|-----------------|---------------|----------------|------------|----------------------------------|
| 2 <sup>nd</sup> Quarter of 2019 | 55.3            | 33.5          | 11.3           | 44.0       | 67.3                             |
| 1 <sup>st</sup> Quarter of 2019 | 42.5            | 43.0          | 14.4           | 28.1       | 65.0                             |
| 4 <sup>th</sup> Quarter of 2018 | 50.6            | 33.8          | 15.5           | 35.1       | 72.6                             |
| 3 <sup>rd</sup> Quarter of 2018 | 51.2            | 34.7          | 14.1           | 37.1       | 67.2                             |

**Inventories of Purchased Materials:** The seasonally adjusted index for inventories of purchased materials is expected to increase from 56.6 in the first quarter to 59.7 in the second quarter, indicating that inventories are expected to increase at a higher rate in the second quarter. Inventories of purchased materials are expected to increase most rapidly in the following industries: Food; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment; and Miscellaneous. The Printing & Related Support Activities industry reported an expected decrease in inventories of purchased materials.

| <b>Inventories of Purchased Materials</b> | <b>% Higher</b> | <b>% Same</b> | <b>% Lower</b> | <b>Net</b> | <b>Seasonally Adjusted Index</b> |
|---|-----------------|---------------|----------------|------------|----------------------------------|
| 2 <sup>st</sup> Quarter of 2019           | 41.2            | 42.7          | 16.1           | 25.1       | 59.7                             |
| 1 <sup>st</sup> Quarter of 2019           | 28.1            | 55.1          | 16.8           | 11.2       | 56.6                             |
| 4 <sup>th</sup> Quarter of 2018           | 38.0            | 44.0          | 17.9           | 20.1       | 64.1                             |
| 3 <sup>rd</sup> Quarter of 2018           | 39.2            | 41.7          | 19.0           | 20.2       | 58.0                             |

**Commodity Prices:** The seasonally unadjusted index for commodity prices is expected to decrease from 76.1 in the first quarter to 68.8 in the second quarter, indicating that commodity prices are expected to rise at a slower rate in the second quarter. Commodity prices are expected to increase most rapidly in the following industries: Food; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Transportation Equipment; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in commodity prices.

| <b>Commodity Prices</b>         | <b>% Higher</b> | <b>% Same</b> | <b>% Lower</b> | <b>Net</b> | <b>Index</b> |
|---------------------------------|-----------------|---------------|----------------|------------|--------------|
| 2 <sup>nd</sup> Quarter of 2019 | 44.9            | 47.8          | 7.3            | 37.6       | 68.8         |
| 1 <sup>st</sup> Quarter of 2019 | 57.9            | 36.4          | 5.7            | 52.2       | 76.1         |
| 4 <sup>th</sup> Quarter of 2018 | 62.4            | 29.5          | 8.1            | 54.3       | 77.1         |
| 3 <sup>rd</sup> Quarter of 2018 | 67.2            | 28.8          | 4.0            | 63.2       | 81.6         |

**Supplier Deliveries:** For this variable, an index value over 50 indicates slower deliveries, and an index value under 50 indicates faster deliveries. The seasonally adjusted index for supplier deliveries is expected to decrease from 57.6 in the first quarter to 55.3 in the second quarter, indicating that supplier deliveries are expected to be slower in the second quarter. Supplier deliveries are expected to be slowest in the following industries: Food; Paper; Chemicals; Fabricated Metal Products; Computer & Electronic Products; Transportation Equipment; and Furniture & Related Products. The Wood Products industry reported an expectation of faster supplier deliveries.

| <b>Supplier Deliveries</b>      | <b>% Slower</b> | <b>% Same</b> | <b>% Faster</b> | <b>Net</b> | <b>Seasonally Adjusted Index</b> |
|---------------------------------|-----------------|---------------|-----------------|------------|----------------------------------|
| 2 <sup>nd</sup> Quarter of 2019 | 20.8            | 68.8          | 10.5            | 10.3       | 55.3                             |
| 1 <sup>st</sup> Quarter of 2019 | 21.8            | 70.5          | 7.7             | 14.1       | 57.6                             |
| 4 <sup>th</sup> Quarter of 2018 | 27.5            | 62.6          | 9.8             | 17.7       | 58.1                             |
| 3 <sup>rd</sup> Quarter of 2018 | 34.7            | 59.3          | 6.0             | 28.7       | 64.4                             |

**New Orders:** The seasonally adjusted index for new orders is expected to increase from 64.2 in the first quarter to 66.5 in the second quarter, indicating that new orders are expected to increase at a higher rate in the second quarter. New orders are expected to increase most rapidly in the following industries: Food; Textile Mill Products; Apparel; Printing & Related Support Activities; Petroleum & Coal Products; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment; and Miscellaneous. No industry reported an expected decrease in new orders.

| <b>New Orders</b>               | <b>% Higher</b> | <b>% Same</b> | <b>% Lower</b> | <b>Net</b> | <b>Seasonally Adjusted Index</b> |
|---------------------------------|-----------------|---------------|----------------|------------|----------------------------------|
| 2 <sup>nd</sup> Quarter of 2019 | 53.2            | 36.1          | 10.8           | 42.4       | 66.5                             |
| 1 <sup>st</sup> Quarter of 2019 | 44.0            | 39.0          | 17.1           | 26.9       | 64.2                             |
| 4 <sup>th</sup> Quarter of 2018 | 42.3            | 36.3          | 21.4           | 20.9       | 64.7                             |
| 3 <sup>rd</sup> Quarter of 2018 | 41.7            | 39.3          | 19.0           | 22.7       | 60.7                             |

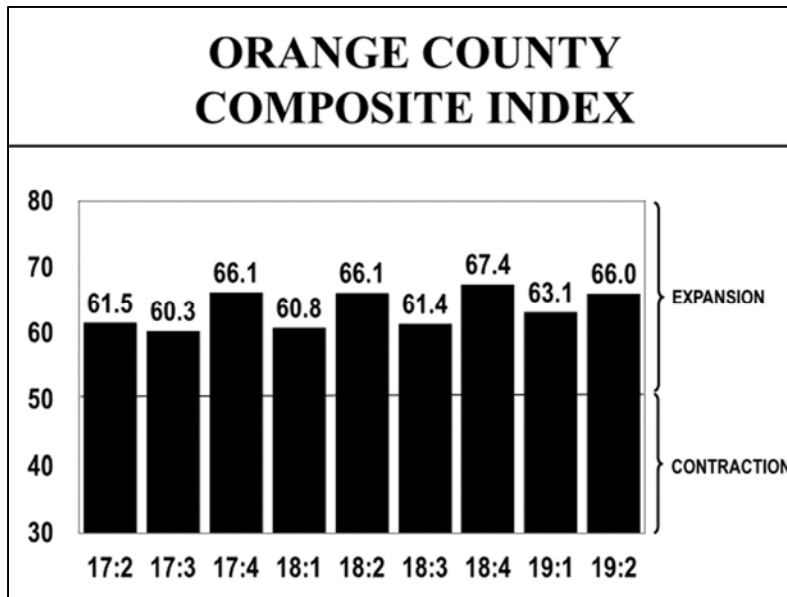
**Employment:** The seasonally adjusted index for employment is expected to increase from 57.7 in the first quarter to 59.9 in the second quarter, indicating that employment in manufacturing is expected to improve in the second quarter. Employment is expected to increase most rapidly in the following industries: Food; Beverage & Tobacco; Paper; Wood Products; Nonmetallic Mineral Products; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment; and Miscellaneous. The Furniture & Related Products industry reported an expected decrease in employment.

| <b>Employment</b>               | <b>% Higher</b> | <b>% Same</b> | <b>% Lower</b> | <b>Net</b> | <b>Seasonally Adjusted Index</b> |
|---------------------------------|-----------------|---------------|----------------|------------|----------------------------------|
| 2 <sup>nd</sup> Quarter of 2019 | 33.7            | 55.8          | 10.4           | 23.3       | 59.9                             |
| 1 <sup>st</sup> Quarter of 2019 | 27.0            | 60.4          | 12.6           | 14.4       | 57.7                             |
| 4 <sup>th</sup> Quarter of 2018 | 31.3            | 57.7          | 11.1           | 20.2       | 62.7                             |
| 3 <sup>rd</sup> Quarter of 2018 | 38.3            | 49.4          | 12.3           | 26.0       | 61.6                             |



## Orange County's Manufacturing Survey

The Orange County manufacturing sector's Composite Index increased from 63.1 in the first quarter to 66.0 in the second quarter, indicating that the county's manufacturing economy is expected to grow at a higher rate in the second quarter. This is the third consecutive quarter that the Orange County index has been above California's index.



The seasonally adjusted index for production increased from 66.1 in the first quarter to 69.6 in the second quarter, indicating that production is expected to grow at a higher rate in the second quarter. This is the fortieth consecutive quarter that the production index has been above 50. The seasonally adjusted index for new orders increased from 64.9 in the first quarter to 75.1 in the second quarter, indicating that new orders are expected to grow at a higher rate in the second quarter.

The index for the **non-durable goods industries** barely changed from 66.2 in the first quarter to 66.3 in the second quarter, indicating that the second quarter growth rate will be the same as the first quarter's rate. The index for production increased from 67.4 in the first quarter to 70.2 in the second quarter indicating a higher growth rate in the second quarter. The index for the **high-tech industries** also barely changed from 67.0 in the first quarter to 66.8 in the second quarter, indicating that the second quarter growth rate will be the same as the first quarter's rate. The index for the **durable goods industries other than high-tech** increased from 58.4 in the first quarter to 66.2 in the second quarter, indicating that the durable goods industries other than high-tech are expected to grow at a higher rate in the second quarter. Production, new orders, and employment are expected to grow at a higher rate.

## **ABOUT THE ANDERSON CENTER FOR ECONOMIC RESEARCH**

The A. Gary Anderson Center for Economic Research (ACER) was established in 1979 to provide data, facilities and support in order to encourage the faculty and students at Chapman University to engage in economic and business research of high quality, and to disseminate the results of this research to the community.

## **ANNUAL SCHEDULE OF CONFERENCES AND PRESS RELEASES**

- JANUARY**
- › Economic Forecast Conferences for the Inland Empire
  - › California Purchasing Managers Survey
  - › Orange County Consumer Sentiment Survey
  - › California Consumer Sentiment Survey
- APRIL**
- › California Purchasing Managers Survey
  - › Orange County Consumer Sentiment Survey
  - › California Consumer Sentiment Survey
- JUNE**
- › Economic Forecast Update Conference for the U.S, California and Orange County
- JULY**
- › California Purchasing Managers Survey
  - › Orange County Consumer Sentiment Survey
  - › California Consumer Sentiment Survey
- OCTOBER**
- › California Purchasing Managers Survey
  - › Orange County Consumer Sentiment Survey
  - › California Consumer Sentiment Survey
- DECEMBER**
- › Economic Forecast Conference for the U.S., California and Orange County