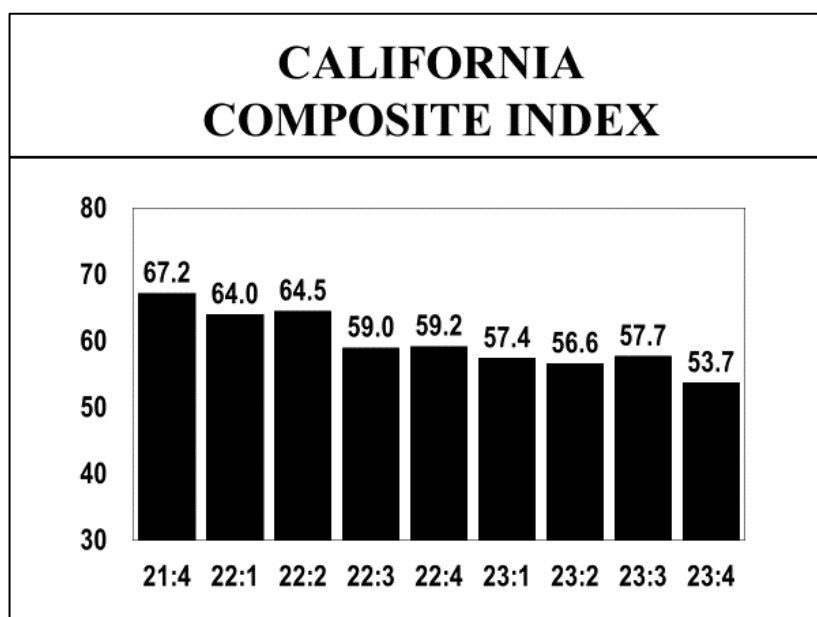


PRESS RELEASE

THE CALIFORNIA MANUFACTURING SECTOR STAYS ON A GROWTH PATH

ORANGE, CA — Based on a survey of purchasing managers, the California Composite Index, measuring overall manufacturing activity in the state, decreased from 57.7 in the third quarter to 53.7 in the fourth quarter, indicating that the manufacturing sector is expected to grow at a lower rate in the fourth quarter. “Purchasing managers have noted that there is uncertainty in the near future regarding the performance of the economy. The word uncertainty was the most used word in the comments. They are in a “wait and see” mode as they put it. They fear that consumer spending will be mostly on necessities. Supplier deliveries continue to improve in many industries and backorders are being filled, they wrote. The WGA/SAG labor strikes are affecting some firms. Inflation and the high price level today compared to early 2022 are a major concern since they are affecting consumers’ choices,” said Dr. Raymond Sfeir, director of the purchasing managers’ survey. Production and new orders are expected to grow at a lower rate in the fourth quarter, and commodity prices are expected to rise at a higher rate. The high-tech industries are expected to grow at a lower rate and the non-durable goods industries are not expected to grow in the fourth quarter.



California Manufacturing at a Glance

Composite Index	53.7	Increasing at a lower rate
Production	57.6	Increasing at the lower rate
Inventories of purchased materials	51.7	Increasing at a lower rate
Commodity prices	67.3	Rising at a higher rate
Supplier deliveries	49.5	Faster
New orders	53.9	Increasing at a lower rate
Employment	54.4	Increasing at a lower rate

Performance by Industry Group

The index for the **non-durable goods industries** decreased from 58.6 in the third quarter to 56.1 in the fourth quarter, indicating that these industries are expanding at a lower rate. Production is expected to grow at a lower rate as the index decreased from 67.0 to 58.0. Employment and commodity prices are expected to grow at a higher rate.

The **high-tech industries** include the following: Computer & Electronic Products, and Aerospace Products & Parts. The high-tech industries currently employ about 384,000 employees, amounting to 28.4% of total manufacturing employment in the state. The index for the high-tech industries decreased from 60.6 in the third quarter to 55.9 in the fourth quarter, indicating a lower growth rate in the fourth quarter. Production is expected to grow at a substantially lower rate as the index decreased from 70.3 to 60.3. New orders and employment are expected to grow at a lower rate. Commodity prices and inventories of purchased materials are expected to grow at a higher rate.

The index for the **durable goods industries other than high-tech** decreased from 55.0 in the third quarter to 49.9 in the fourth quarter, indicating practically no growth in the fourth quarter in these industries. Production, and new orders are expected to grow at a lower rate. New orders are expected to decline as the index decreased from 54.7 to 44.9. This is the first time the index dipped below 50 since the second quarter of 2020. Supplier deliveries are expected to be faster for the second consecutive quarter.

Comments by the Purchasing Managers

While there seems to be reasons for optimism, uncertainty in the near term regarding the national economy and multiple global issues, both political and supply chain related, are tempering expectations and most companies that we partner with are in a 'wait and see' mode. (Food)

Very seasonal packaged ice business. Very predictable quarter-to-quarter trends. (Beverage & Tobacco Products)

Reduction in raw material purchases, with production remaining steady due to efforts to reduce inventory approaching year end. (Textile Mill Products)

We don't know if new orders will pick up, so we are operating more lean and mean, less excess inventory. (Apparel)

This is our busy time of our year. We are seeing supply chains lighten up. Our industry is still however in a recession. The box industry has been down since March or 2021. I expect a normalization of steadiness to begin between June through August next year. By that measurement that is a very long recession for this industry. This assumption is based on our government not messing things up more than they have and no out of the blue geopolitical instance. (Paper)

Increased fuel prices will impact our profitability due to fuel surcharges added to all invoices. (Printing & Related Support Activities)

The robust growth coming out of pandemic has continued to slow down. Supplier delivery time is improving. Employment continues to be an area of concern due to the lack of availability of skilled employees. (Chemicals)

The success of our business can be influenced by the Logistics of Supply Chain. Any delays which in essence create longer lead times will indeed impact our customer deliveries. World-Wide - Raw material shortages or controlled allocations in the Supply Chain would be any International Companies largest issue. (Plastics & Rubber Products)

Supply side shortages in hardwood lumber and hardwood veneer are prevalent. Sawmills reduced prices to move inventory but can't afford replacement logs to make lumber. The timber owners are reluctant to reduce their stumpage rates for standing timber to replace kiln dried lumber being sold at lower prices. During the pandemic, demand was inelastic, prices didn't matter but now that demand has slowed, we've become more elastic preferring to be out of stock to wait for better prices on replacement. (Wood Products)

Despite inflation pushing most prices up, we've already seen a slight fall in steel prices which are significant to us. We hope other prices will level off. We've built up some backlog, so we are ramping up production a little and found that laborers for hire are more abundant, but skilled professionals are still hard to find. (Nonmetallic Mineral Products)

With the Aluminum Extrusion Industry / Aerospace industry we are experiencing a very large demand for quotes and PO's. We have a backlog with numbers that we have never seen before. Qualified workers are still an issue. The biggest effect for us is the number of employees we have that are qualified. Receiving raw material has not been an issue. (Primary Metals)

Inflation on commodities is still an issue. Employees' pay rates continue to go up as the minimum wage goes up. Reaching limits on raising costs to our customers. (Fabricated Metal Products)

Supply chain issues overall are improving, however still seeing long lead times on equipment spare parts. Watching the UAW strike closely to see how this may impact employee perception of wage 'fairness'. A significant increase may lead to other people feeling mistreated with typical 3%-6% increases (regardless of the background of UAW). (Machinery)

The US Government is NOT ordering at the same pace or volume as previous years. (Computer & Electronic Products)

Business seems to be stagnating. The prices are lower than COVID but customer sales are slowly picking up. (Electrical Equipment, Appliance & Components)

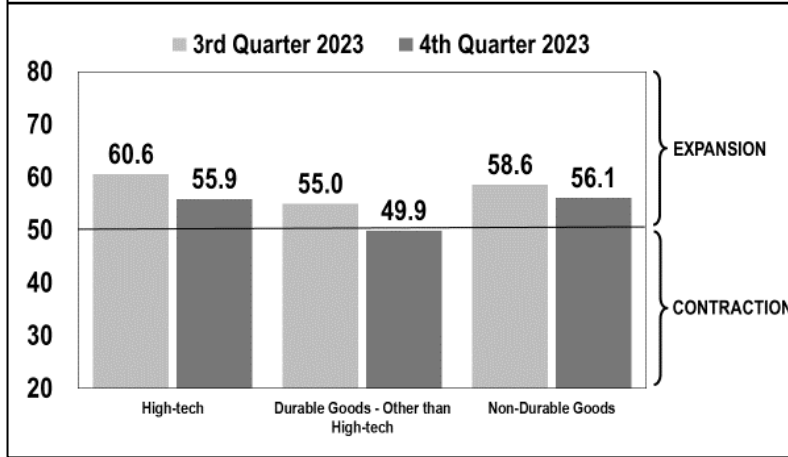
The election & weather. Too hot or too cold will slow sales. (Transportation Equipment)

The furniture industry continues to see a slowdown in business. Retailers are reporting lower sales than normal. Furniture is so intertwined with housing that it may stay this way until there are interest rate changes. (Furniture & Related Products)

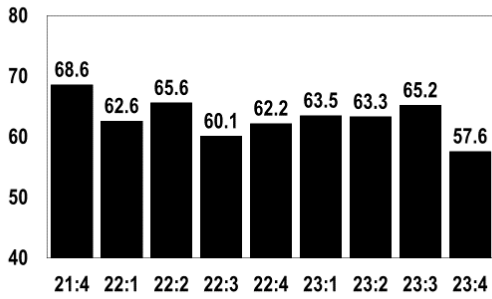
We're considering another rate increase due to gas prices that are on the rise again. Business demand has been good, but regulations and instability caused by our state and federal governments continue to hinder all businesses across the board. (Miscellaneous)

A major increase in orders and quotes is leading to a slowdown in manufacturing due to capacity constraints. (Aerospace Products & Parts)

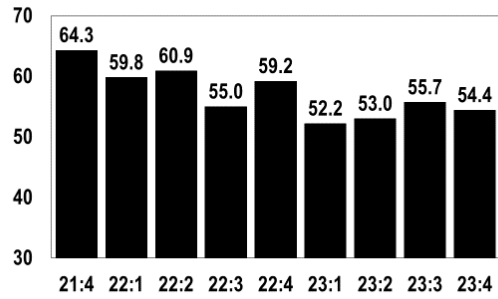
INDICES FOR INDUSTRY GROUPS



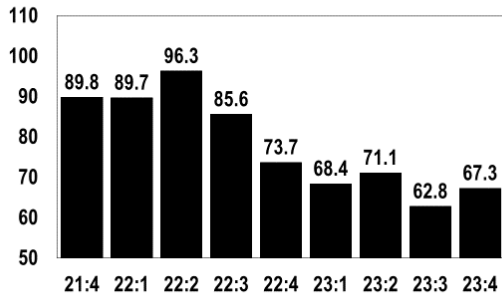
PRODUCTION INDEX



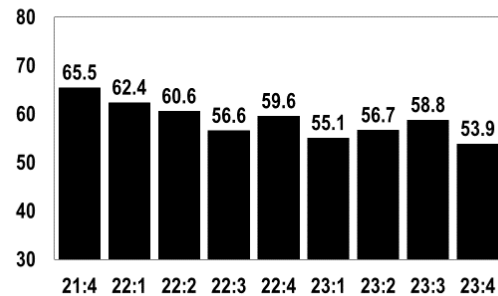
EMPLOYMENT INDEX



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 Fourth Quarter of 2023**

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 decrease from 65.2 in the third quarter to 57.6 in the fourth quarter, indicating that production is expected to increase at a lower rate in the fourth quarter. This is the fourteenth 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; Leather & Allied Products; Paper; Printing & Related Support Activities; Primary Metals; Fabricated Metal Products; Machinery; and Aerospace Products & Parts. Production is expected to decrease most rapidly in the following industries: Beverage & Tobacco; Chemicals; Wood Products; Electrical Equipment, Appliance & Components; and Furniture & Related Products.

Production	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
4 th Quarter of 2023	32.3	43.8	23.9	8.3	57.6
3 rd Quarter of 2023	46.3	41.0	12.6	33.7	65.2
2 nd Quarter of 2023	47.5	39.0	13.5	33.9	63.3
1 st Quarter of 2023	43.1	38.5	18.4	24.6	63.5

Inventories of Purchased Materials: The seasonally adjusted index for inventories of purchased materials is expected to decrease from 52.3 in the third quarter to 51.7 in the fourth quarter, indicating that inventories are expected to increase at a lower rate in the fourth quarter. Inventories of purchased materials are expected to increase most rapidly in the following industries: Textile Mill Products; Petroleum & Coal Products; Nonmetallic Mineral Products; Transportation Equipment (other than Aerospace Products & Parts). Inventories of purchased materials are expected to decrease most rapidly in the following industries: Apparel; Chemicals; Wood Products; Machinery; and Furniture & Related Products.

Inventories of Purchased Materials	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
4 th Quarter of 2023	25.4	46.7	27.9	-2.5	51.7
3 rd Quarter of 2023	31.5	45.0	23.5	8.0	52.3
2 nd Quarter of 2023	34.1	44.0	21.9	12.2	53.8
1 st Quarter of 2023	43.1	38.5	18.4	24.6	63.2

Commodity Prices: The seasonally unadjusted index for commodity prices is expected to increase from 62.8 in the third quarter to 67.3 in the fourth quarter, indicating that commodity prices are expected to rise at a higher rate in the fourth quarter of this year. Commodity prices are expected to increase most rapidly in the following industries: Food; Textile Mill Products; Apparel; Paper; Printing & Related Support Activities; Petroleum & Coal Products; Chemicals; Plastics & Rubber Products; Nonmetallic Mineral Products; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment (other than Aerospace Products & Parts); Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in commodity prices.

Commodity Prices	% Higher	% Same	% Lower	Net	Index
4 th Quarter of 2023	44.7	45.2	10.1	34.7	67.3
3 rd Quarter of 2023	37.4	50.9	11.7	25.6	62.8
2 nd Quarter of 2023	50.3	41.7	8.1	42.2	71.1
1 st Quarter of 2023	52.3	32.1	15.6	36.8	68.4

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 increase from 48.3 in the third quarter to 49.5 in the fourth quarter, indicating that supplier deliveries are expected to continue be faster in the fourth quarter. Supplier deliveries are expected to be slowest in the following industries: Printing & Related Support Activities; Nonmetallic Mineral Products; Computer & Electronic Products; Electrical Equipment, Appliance & Components; and Miscellaneous. Supplier deliveries are expected to be fastest in the following industries: Food; Paper; Chemicals; Plastics & Rubber Products; and Machinery.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Seasonally Adjusted Index
4 th Quarter of 2023	13.9	72.0	14.1	-0.2	49.5
3 rd Quarter of 2023	14.7	66.6	18.7	-3.9	48.3
2 nd Quarter of 2023	16.5	67.8	15.7	0.8	50.0
1 st Quarter of 2023	25.1	59.3	15.6	9.5	55.4

New Orders: The seasonally adjusted index for new orders is expected to decrease substantially from 58.8 in the third quarter to 53.9 in the fourth quarter, indicating that new orders are expected to increase at a lower rate in the fourth quarter. New orders are expected to increase most rapidly in the following industries: Food; Textile Mill Products; Leather & Allied Products; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; and Aerospace Products & Parts. New orders are expected to decrease most rapidly in the following industries: Beverage & Tobacco; Apparel; Wood Products; Machinery; Electrical Equipment, Appliance & Components; Transportation Equipment (other than Aerospace Products & Parts); and Furniture & Related Products.

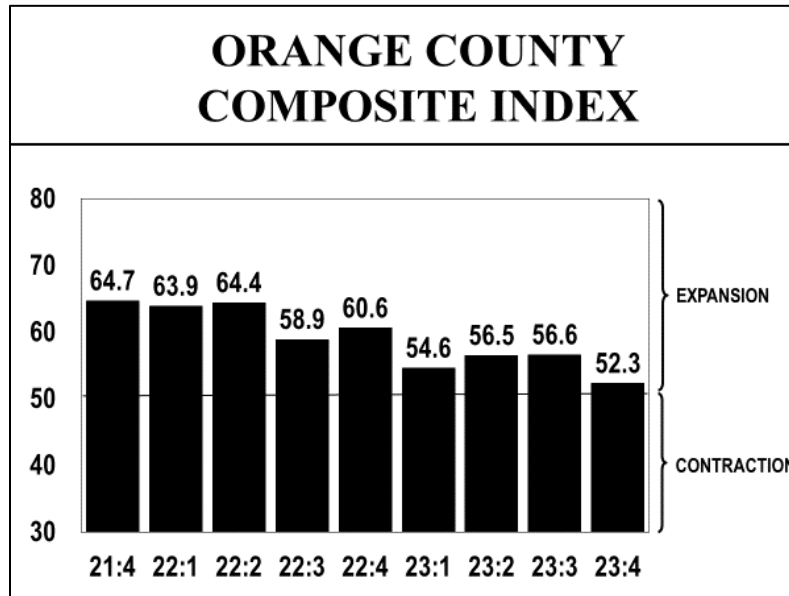
New Orders	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
4 th Quarter of 2023	29.6	42.3	28.1	1.4	53.9
3 rd Quarter of 2023	39.3	41.1	19.6	19.7	58.8
2 nd Quarter of 2023	38.6	42.6	18.8	19.8	56.7
1 st Quarter of 2023	34.7	39.7	25.6	9.1	55.1

Employment: The seasonally adjusted index for employment is expected to decrease from 55.7 in the third quarter to 54.4 in the fourth quarter, indicating that employment in manufacturing is expected to increase at a lower rate in the fourth quarter. Employment is expected to increase most rapidly in the following industries: Food; Nonmetallic Mineral Products; Fabricated Metal Products; Transportation Equipment (other than Aerospace Products & Parts); and Aerospace Products & Parts. Employment is expected to decrease most rapidly in the following industries: Wood Products; Furniture & Related Products; and Miscellaneous.

Employment	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
4 th Quarter of 2023	19.5	66.2	14.3	5.3	54.4
3 rd Quarter of 2023	25.7	62.8	11.6	14.1	55.7
2 nd Quarter of 2023	22.3	63.5	14.2	8.0	53.0
1 st Quarter of 2023	22.9	57.7	19.4	3.5	52.2

Orange County's Manufacturing Survey

The Orange County manufacturing sector's Composite Index decreased from 56.6 in the third quarter to 52.3 in the fourth quarter, indicating that the county's manufacturing economy is expected to grow at a slower rate in the fourth quarter.



The seasonally adjusted index for production decreased from 64.1 in the third quarter to 59.3 in the fourth quarter, indicating that production is expected to increase at a lower rate in the fourth quarter. The seasonally adjusted index for inventories of purchased materials decreased from 60.3 to 49.8 indicating that inventories are expected to shrink slightly. The supplier deliveries index remains below 50 for the fourth consecutive quarter, indicating that deliveries will continue to be faster in the fourth quarter. New orders are expected to decrease in the fourth quarter as the index dipped below 50, however employment is expected to grow at a higher rate.

The index for the **non-durable goods industries** increased from 50.9 in the third quarter to 53.7 in the fourth quarter, indicating that these industries are expected to expand at a higher rate in the fourth quarter. The index for inventories of purchased materials decreased to the lowest level in many years indicating that inventories of purchased materials are expected to decrease further in the fourth quarter. The index for the **high-tech industries** decreased from 65.3 to 59.7, indicating that these industries are expected to expand at a lower rate. The index for new orders decreased substantially from 70.5 to 55.5 indicating that new orders will increase at a lower rate. The index for production decreased as well, indicating that production is expected to increase at a lower rate. The index for the **durable goods industries other than high-tech** decreased from 55.1 to 47.8 indicating that the durable goods industries other than high-tech are expected to decline in the fourth quarter. Production, inventories of purchased materials, and new orders are all expected to grow at a lower rate, but employment is 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

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| JANUARY | <ul style="list-style-type: none">› Economic Forecast Conferences for the Inland Empire› California Purchasing Managers Survey |
| APRIL | <ul style="list-style-type: none">› California Purchasing Managers Survey |
| JUNE | <ul style="list-style-type: none">› Economic Forecast Update Conference for the U.S, California and Orange County |
| JULY | <ul style="list-style-type: none">› California Purchasing Managers Survey |
| OCTOBER | <ul style="list-style-type: none">› California Purchasing Managers Survey |
| DECEMBER | <ul style="list-style-type: none">› Economic Forecast Conference for the U.S., California and Orange County |