



## 2020 WORLD AG EXPO





### **ECONOMIC IMPACT STUDY**

#### **ABOUT BEACON**



Founded in 2007, Beacon Economics, an LLC and certified Small Business Enterprise in California, is an independent research and consulting firm dedicated to delivering accurate, insightful and objective economic analysis. Leveraging unique proprietary models, vast databases and sophisticated data processing, the company's specialized practice areas include sustainable growth and development, real estate market analysis, economic forecasting, industry analysis, economic policy analysis, and economic impact studies. Beacon Economics provides its clients with the data and analysis required to understand the significance of on-the-ground realities and to make informed business and policy decisions.

#### Practice Areas:

- Economic, Fiscal and Social Impact Analysis.
- Housing, Land Use and Real Estate Advisory.

Economic and Revenue Forecasting.

Litigation and Testimony.

Regional and Sub-Regional Analysis.

Sustainable Growth and Development.

#### EXPERTISE IN ECONOMIC IMPACT ANALYSIS

Since 2011, Beacon Economics has conducted multiple comprehensive analyses that have provided reliable and quantifiable data on the economic impact of entertainment and sporting events and venues, public policies and projects, and universities and other institutions, including USC, UCLA, and California State University, Long Beach. The analyses evaluate major economic impacts associated with these entities and evaluate their fiscal impact on national, state and local governments. By combining sampling methods, financial data, surveys, and other available economic resources with current frameworks for studying economic impacts, Beacon Economics estimates the amount of economic activity generated in the local and broader economy by calculating the spending of entities and other participants in the affected region.

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Photo Credit: Danny Celaya for World Ag Expo®

The World Ag Expo, the world's largest agricultural exposition, takes place annually at the International Agri-Center in Tulare, Calif. In 2020, the three-day event was held Feb. 11-13 and attracted 106,357 attendees and 1,442 exhibitors from 46 states and 56 countries. The World Ag Expo is the event of the year for the Agriculture Industry, where exhibitors showcase the latest and greatest in farming technology and research and interact face to face with clients.

The World Ag Expo is the pick-of-the-crop networking event for exhibitors and attendees alike; it's the nexus for business interaction. Unlike at other agriculture expositions, which can resemble carnivals, roughly 90% of World Ag Expo attendees are involved in the industry, meaning they're wholly interested in exhibitors' offerings. But that isn't to say that business can't be fun — across its three days, the World Ag Expo offers cooking demonstrations and gardening workshops; seminars on topics such as agriculture's role in feeding the world and the politics of farming; a place to wind down and recharge at the Wine & Cheese Pavilion; and the chance to win a Toyota Tundra, with proceeds benefiting Valley Children's Healthcare.

The World Ag Expo has substantial economic, fiscal, and social impacts on California, especially Central California. This analysis highlights the economic, fiscal, and social contributions the 2020 World Ag Expo made to the economies of Tulare County, the rest of Central California (Kings, Fresno, and Kern counties), and the remaining regions of California. In short, the World Ag Expo generated tremendous economic activity, supported numerous jobs, contributed significant labor income, and provided substantial tax revenue to regional and local governments.

#### Key findings:

- Expenditures from the World Ag Expo's operations spending, attendee spending, and exhibitor spending totaled **\$29.7 million** in 2020.
- In 2020, the World Ag Expo generated **\$52.3 million** in economic output, supported **568 jobs**, and contributed **\$20.3 million** in labor income in California.
- Most of the impacts were delivered to Tulare County, where spending totaled **\$30.9 million**, supported **384 jobs**, and contributed **\$12.6 million** in labor income.
- Spending also had a significant impact in the rest of Central California (Kern, Fresno, and Kings counties), generating **\$14.4 million** in economic output, supporting **153 jobs**, and contributing **\$5.4 million** in labor income.
- In the remaining regions of California, **\$7.0 million** in economic output was generated, **32 jobs** were supported, and **\$2.4 million** in labor income was contributed in 2020.
- Spending generated **\$1.8 million** in tax revenue to support local government.
- The World Ag Expo also generated substantial social impacts as a key supporter of the Agriculture Industry and through community and charitable contributions.

## **METHODOLOGY**

As with any economic impact analysis, this study assesses all spending associated with the 2020 World Ag Expo. For this report, Beacon Economics used data on the World Ag Expo's 2020 operational spending and attendee and exhibitor spending to conduct multiregional impact analyses. Attendee and exhibitor spending data were collected from a comprehensive survey sent to participants shortly after the event concluded.

Impact studies assume that any increase in spending has three effects: a direct effect, an indirect effect, and an induced effect.

- A direct effect is the output of goods or services resulting directly from spending associated with the World Ag Expo.
- An indirect effect is the additional output of goods or services used to support the outputs generated by the direct effect. That is, these impacts are created by the World Ag Expo's supply chain.
- As businesses increase productivity from the direct and indirect effects, their payroll expenditures increase
  through more hiring or increased salaries. Subsequently, household spending patterns expand. These
  new personal market transactions, generating additional outputs of goods or services, are the induced
  effect.

Using the IMPLAN modeling system, Beacon Economics estimated the direct, indirect, and induced economic impacts that the World Ag Expo's expenditures generated in Tulare County, the rest of Central California, and the remaining regions of California in 2020<sup>1</sup>.

DIRECT + INDIRECT + INDUCED = TOTAL IMPACT

<sup>&</sup>lt;sup>1</sup> For details on the IMPLAN modeling system, see the Appendix.



As mentioned, analyses were conducted using three main sources of the World Ag Expo's expenditure categories: World Ag Expo operations spending, attendee spending, and exhibitor spending. Attendee and exhibitor spending figures were collected through a comprehensive survey produced by Beacon Economics. Spending associated with the 2020 World Ag Expo totaled \$29.7 million.

This report assumes that all spending took place in the counties of Tulare, Kern, Fresno, and Kings. Because it's certain that World Ag Expo operations spending occurred in Tulare County, this assumption is made regarding attendee and exhibitor spending. Although some spending may have occurred outside these counties, the vast majority of transactions were within these regions, because each have local businesses that cater to World Ag Expo attendees and exhibitors.

#### WORLD AG EXPO OPERATIONS SPENDING

World Ag Expo operations spending is those expenditures required to plan and maintain business. In 2020, operations spending totaled roughly \$2.4 million. The largest spending categories were Tents and Furnishings (25%), Supplies (14%), and Labor Costs (11%). Labor Costs exclude compensation for International Agri-Center (IAC) staff. Additional spending was for Consultants/Service Contracts, Advertising and Sponsorship, Facility Costs, and Office Expenses. Other WAE Expenses is comprised of many miscellaneous fees, including taxes, gifts and awards, food coupons, and equipment rental.

#### WORLD AG EXPO SPENDING

| CATEGORY                          | EXPENDITURES (\$ THOUSANDS) |
|-----------------------------------|-----------------------------|
| TENTS AND FURNISHINGS             | 589.1                       |
| SUPPLIES                          | 328.9                       |
| LABOR COSTS (EXCLUDING IAC STAFF) | 247.8                       |
| CONSULTANTS/SERVICE CONTRACTORS   | 220.5                       |
| ADVERTISING AND SPONSORSHIP       | 206.4                       |
| FACILITY COSTS                    | 120.5                       |
| OFFICE EXPENSES                   | 36.7                        |
| OTHER WAE EXPENSES                | 604.1                       |
| TOTAL EXPENDITURES                | 2,354.0                     |

Source: World Ag Expo; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.

#### ATTENDEE SPENDING

To determine the direct expenditures made by attendees, two pieces of information are required: the ratio of local to nonlocal attendees, and average spending per person. Beacon Economics' survey found that 44% of ticket purchases were made by attendees who live in Tulare, Kings, Fresno, or Kern counties, and 56% were nonlocal.

Distinguishing between local and nonlocal attendees is key to determining spending per person because nonlocal attendees spend more on average than their local counterparts. Survey findings also revealed spending patterns. As expected, nonlocal attendees spent more on average than locals at the 2020 event and at nearby businesses and attractions, with much of the difference coming from accommodations costs.

#### AVERAGE SPENDING PER ATTENDEE

| CATEGORY                        | LOCAL    | NONLOCAL |
|---------------------------------|----------|----------|
| OUTSIDE FOOD AND BEVERAGE       | \$56.36  | \$58.18  |
| EVENT RETAIL                    | \$35.50  | \$36.12  |
| OUTSIDE RETAIL                  | \$30.93  | \$33.79  |
| OTHER ENTERTAINMENT             | \$25.00  | \$27.67  |
| EVENT FOOD AND BEVERAGE         | \$24.44  | \$28.37  |
| OTHER CENTRAL CA ACCOMMODATIONS | \$21.03  | \$41.30  |
| TRANSPORTATION                  | \$18.52  | \$31.46  |
| TULARE COUNTY ACCOMMODATIONS    | \$4.77   | \$26.28  |
| TOTAL                           | \$216.54 | \$283.17 |

Source: World Ag Expo Attendee Survey; Analysis by Beacon Economics

Note: Totals may not be exact because of rounding.

Survey respondents were asked to exclude money spent on tickets because revenue from ticket purchases would not necessarily be spent in Central California. Although some ticket revenue may have been used to produce the expo, a portion might have been paid to sanctioning bodies or other entities outside Central California. As such, ticket revenue was omitted from the economic impact analysis.

In 2020, 106,357 people attended the World Ag Expo. Attendee spending totaled \$27.0 million. A large portion of attendee spending took place outside of the event itself, illustrating the expo's impact on businesses in the region. Most visitors found accommodation in Central California regions other than Tulare County. Despite the event's location in Tulare County, spending patterns suggest that the expo significantly supports the economies of neighboring counties as it draws customers to the region.

#### TOTAL ATTENDEE SPENDING

| CATEGORY                        | EXPENDITURES (S MILLIONS) |
|---------------------------------|---------------------------|
| OUTSIDE FOOD AND BEVERAGE       | 6.1                       |
| EVENT RETAIL                    | 3.8                       |
| OUTSIDE RETAIL                  | 3.5                       |
| OTHER CENTRAL CA ACCOMMODATIONS | 3.4                       |
| EVENT FOOD AND BEVERAGE         | 2.8                       |
| OTHER ENTERTAINMENT             | 2.8                       |
| TRANSPORTATION                  | 2.7                       |
| TULARE COUNTY ACCOMMODATIONS    | 1.8                       |
| TOTAL                           | 27.0                      |

Source: World Ag Expo Attendee Survey; Analysis by Beacon Economics

Note: Totals may not be exact because of rounding.

#### **EXHIBITOR SPENDING**

Beacon Economics analyzed exhibitor spending in a similar manner. Survey findings revealed the ratio of local versus nonlocal exhibitors and the average amount locals and nonlocals spent per person. In 2020, 1,442 exhibitors participated in the expo, of which 71% were nonlocal and 29% local.

Nonlocal exhibitors spent \$122.73 more on average than locals: \$307.91 compared to \$185.18. The largest spending category for local exhibitors was on Outside Food and Beverage (23%) and Transportation (18%). For nonlocal exhibitors, the largest spending category was on accommodations; 25% of total spending was on accommodations in Tulare County, and 20% on accommodations in other Central California counties. Similar to attendee spending patterns, a large portion of spending occurred outside the event, suggesting the expo supports regional businesses.

#### **AVERAGE SPENDING PER EXHIBITOR**

| CATEGORY                        | LOCAL    | NONLOCAL |
|---------------------------------|----------|----------|
| OUTSIDE FOOD AND BEVERAGE       | \$43.45  | \$44.85  |
| TRANSPORTATION                  | \$32.44  | \$55.10  |
| OTHER CENTRAL CA ACCOMMODATIONS | \$30.86  | \$60.61  |
| OUTSIDE RETAIL                  | \$19.80  | \$21.64  |
| OTHER ENTERTAINMENT             | \$19.05  | \$21.08  |
| TULARE COUNTY ACCOMMODATIONS    | \$13.91  | \$76.65  |
| EVENT FOOD AND BEVERAGE         | \$12.95  | \$15.03  |
| EVENT RETAIL                    | \$12.72  | \$12.95  |
| TOTAL                           | \$185.18 | \$307.91 |

Source: World Ag Expo Exhibitor Survey; Analysis by Beacon Economics

Note: Totals may not be exact because of rounding.

In total, exhibitors spent about \$392,700 in Central California as a result of the 2020 World Ag Expo. The largest spending categories were accommodation (41% total), transportation (18%), outside purchases (32% total), and event purchases (10%).

#### TOTAL EXHIBITOR SPENDING

| CATEGORY                        | EXPENDITURES (\$ THOUSANDS) |
|---------------------------------|-----------------------------|
| TULARE COUNTY ACCOMMODATIONS    | 84.3                        |
| OTHER CENTRAL CA ACCOMMODATIONS | 75.0                        |
| TRANSPORTATION                  | 70.0                        |
| OUTSIDE FOOD AND BEVERAGE       | 64.1                        |
| OUTSIDE RETAIL                  | 30.4                        |
| OTHER ENTERTAINMENT             | 29.6                        |
| EVENT FOOD AND BEVERAGE         | 20.8                        |
| EVENT RETAIL                    | 18.6                        |
| TOTAL                           | 392.7                       |

Source: World Ag Expo Exhibitor Survey; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.

Photo Credit: Danny Celaya for World Ag Expo®

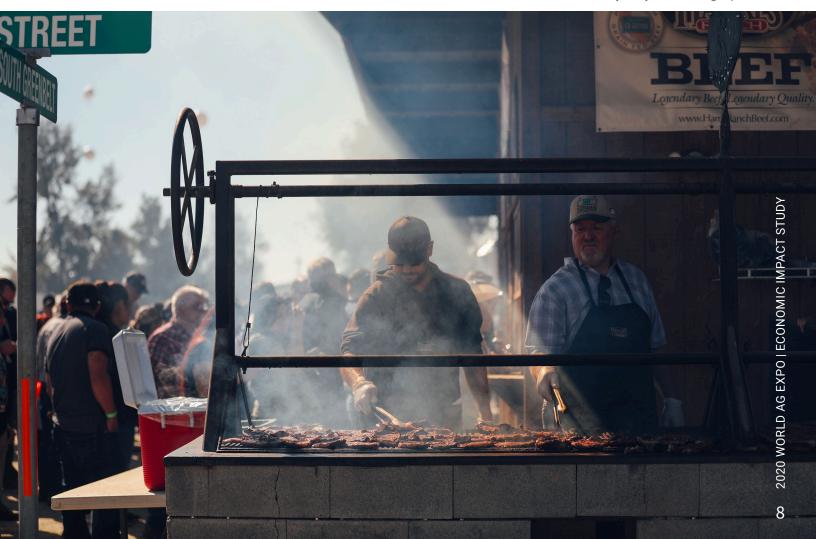




Photo Credit: Danny Celaya for World Ag Expo®

The 2020 World Ag Expo had a substantial economic impact in California, particularly in Tulare, Fresno, Kern, and Kings counties. Spending by attendees, exhibitors, and operations generated \$52.3 million in economic output, supported 568 jobs, and contributed \$20.3 million in labor income throughout California.

This impact study analyzed the economic impact that spending associated with the expo had on Tulare County, the rest of Central California (Kings, Kern, and Fresno counties), and the rest of California.

#### **TULARE COUNTY**

As the expo's home, Tulare County experienced the largest impacts as a result of the World Ag Expo. In 2020, the World Ag Expo generated \$30.9 million in economic output, contributed \$12.6 million in labor income, and supported 384 jobs in the county.

Most impacts came through the direct effect, but secondary impacts (indirect and induced effects) also contributed significantly. About 17% of the impact on employment, 25% of the impact on labor income, and about 32% of the impact on economic output were generated through secondary effects, that is, through supply chain interaction or increased household spending.

#### **ECONOMIC IMPACT, TULARE COUNTY**

| IMPACT TYPE  | EMPLOYMENT | LABOR INCOME (\$ MILLIONS) | OUTPUT (\$ MILLIONS) |
|--------------|------------|----------------------------|----------------------|
| DIRECT       | 318        | 9.4                        | 21.1                 |
| INDIRECT     | 33         | 1.7                        | 5.1                  |
| INDUCED      | 33         | 1.4                        | 4.7                  |
| TOTAL EFFECT | 384        | 12.6                       | 30.9                 |

Source: IMPLAN; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.

#### REST OF CENTRAL CALIFORNIA

As mentioned, the rest of Central California comprises Kern, Fresno, and Kings counties. In total, the World Ag Expo generated \$14.4 million in economic output, supported 153 jobs, and contributed \$5.4 million in labor income in the remaining regions of Central California.

The direct effect supported 115 jobs, contributed \$3.4 million in labor income, and generated \$8.1 million in economic output in the remaining regions of Central California. The induced effect also provided significant impact, supporting 14% of jobs, contributing 19% of labor income, and generating 23% of economic output.

#### ECONOMIC IMPACT, REST OF CENTRAL CALIFORNIA

| IMPACT TYPE  | EMPLOYMENT | LABOR INCOME (\$ MILLIONS) | OUTPUT (\$ MILLIONS) |
|--------------|------------|----------------------------|----------------------|
| DIRECT       | 115        | 3.4                        | 8.1                  |
| INDIRECT     | 18         | 1.0                        | 3.0                  |
| INDUCED      | 21         | 1.0                        | 3.3                  |
| TOTAL EFFECT | 153        | 5.4                        | 14.4                 |

Source: IMPLAN; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.

#### REST OF CALIFORNIA

Because this study assumes all spending occurred in Tulare County or elsewhere in Central California, the rest of California experienced no direct impact from the World Ag Expo. But substantial impact was delivered through secondary effects, that is, through the supply chain or by increased household spending.

In total, the World Ag Expo generated \$7.0 million in economic output, contributed \$2.4 million in labor income, and supported 32 jobs throughout the rest of California. The indirect effect accounted for most of the impact, generating 56% of the jobs, contributing 58% of the labor income, and generating 61% of the economic output.

#### ECONOMIC IMPACT, REST OF CALIFORNIA

| IMPACT TYPE  | EMPLOYMENT | LABOR INCOME (\$ MILLIONS) | OUTPUT (\$ MILLIONS) |
|--------------|------------|----------------------------|----------------------|
| DIRECT       | 0          | 0                          | 0                    |
| INDIRECT     | 18         | 1.4                        | 4.3                  |
| INDUCED      | 14         | 0.9                        | 2.7                  |
| TOTAL EFFECT | 32         | 2.4                        | 7.0                  |

Source: IMPLAN; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.

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Photo Credit: Danny Celaya for World Ag Expo®



Photo Credit: Danny Celaya for World Ag Expo®

In 2020, the World Ag Expo delivered substantial fiscal impacts in California to support regional and local governments. In total, spending associated with the World Ag Expo generated \$1.8 million in tax revenue in California. Most was collected through property tax (69%) and sales tax (23%), with the remainder from licenses, permits, and fines. Most tax revenue was collected in Tulare County.

#### FISCAL IMPACT, \$ THOUSANDS

| TOTAL    | 1,204.4       | 474.0              | 128.5      | 1,806.9 |
|----------|---------------|--------------------|------------|---------|
| OTHER    | 103.0         | 42.4               | 11.2       | 156.5   |
| SALES    | 304.9         | 77.8               | 26.2       | 408.9   |
| PROPERTY | 796.5         | 353.8              | 91.1       | 1,241.4 |
| TAX TYPE | TULARE COUNTY | REST OF CENTRAL CA | REST OF CA | TOTAL   |

Source: IMPLAN; Analysis by Beacon Economics Note: Totals may not be exact because of rounding.



Photo Credit: Danny Celaya for World Ag Expo®

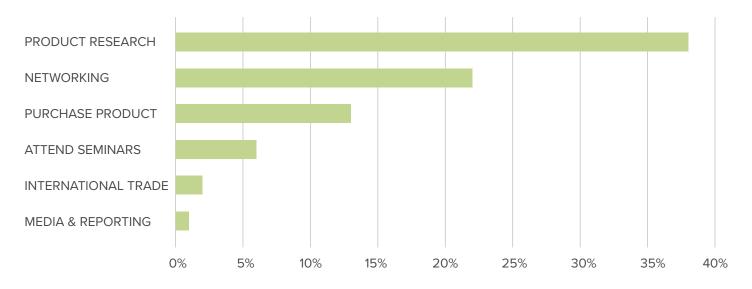
In addition to its substantial economic and fiscal impacts, the World Ag Expo delivers notable social contributions to the wider community. The expo plays a vital role in supporting the Agriculture Industry by bringing people together from around the world to network and engage in the latest research and development opportunities. Additionally, the World Ag Expo provides regional social benefits through community and charitable contributions.

#### SUPPORT OF THE AGRICULTURE INDUSTRY

The World Ag Expo is a key supporter and promoter of the Agricultural Industry as a whole. As the largest agricultural exposition in the world, the event represents many agricultural sectors and brings various experts in farming technology and research together to promote business, share ideas, and explore new developments — helping the industry to grow and flourish.

The World Ag Expo is unique in attracting attendees mainly for business and professional development purposes. As shown in the graph below, most people attend to buy products, network, and learn about new developments through product research or attending seminars.

#### PURPOSE FOR ATTENDING



Source: World Ag Expo

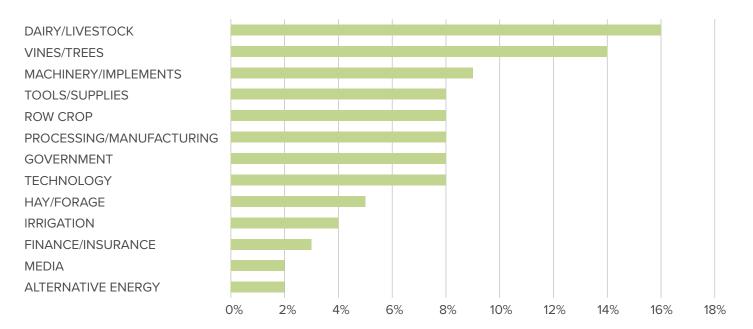
Photo Credit: Danny Celaya for World Ag Expo®



#### **DIVERSITY**

In 2020, the World Ag Expo attracted a diverse population of exhibitors and attendees, from 46 states and 56 countries. Furthermore, the event represents many agricultural sectors. In 2020, the three-largest sectors were Dairy/Livestock (16%), Vines/Trees (14%), and Machinery/Implements (9%). Others included Government, Processing/Manufacturing, Row Crop, and Tools/Supplies. As a melting pot of people representing various agricultural sectors, the World Ag Expo guarantees the opportunity to interact with people who share an interest in agriculture, learning something new, and continuing professional development.

#### REPRESENTED AGRICULTURAL SECTORS



Source: World Ag Expo

#### NETWORKING AND BUSINESS SUPPORT

Filled with farming experts and curious customers looking for ways to make their jobs easier, the World Ag Exp is a prime networking opportunity for anyone in the industry, and an opportunity for businesses to interact and thrive.

The World Ag Expo supports its exhibitors and offers various opportunities to promote their businesses, including exhibitor networking receptions, sponsorships and free marketing material to increase businesses' exposure.

Also, the event recognizes select exhibitors by organizing a contest showcasing the top 10 new products in the industry. Winners are noted with flags on the expo map and are acknowledged during the World Ag Expo Opening Ceremonies.

#### RESEARCH AND PROFESSIONAL DEVELOPMENT

Other learning and development opportunities at the expo include agriculture tours, seminars, and special events. These experiences enable attendees to gain knowledge that can assist in their businesses' growth and sustainability.

Agriculture tours highlight various farming sectors. At the 2020 expo, participants could explore facilities including a dairy farm, vineyards and wineries, orchards, an almond farm, nurseries, and the UC Research & Extension Center. At each location, attendees learned about the facility's history, production, and operations and were provided meals and products to taste.

Seminars and special events focus on sector-specific production, operations, and broader issues in agricultural economics and politics. Sessions and special events featured at the 2020 event included "Hemp Business Applications," "Achieving Sustainable Milk Prices for Dairy Farmers," "Global Trade: A Roadmap to Success," "Drought Assistance in California's Central Valley," and "Strawberries and the Urban Economy."

Furthermore, the World Ag Expo highlights women in agriculture by showcasing numerous sessions directed by professional women in the industry. In 2020, sessions included "Mental Health Wellness and Farm Stress," "AgTech: Are You Ready for It?," "Ag in Social Media," and "Dress for Success from Boots to Suits." Demonstrations from local chefs and artisans take place at the World Ag Women Pavilion.

#### COMMUNITY AND CHARITABLE CONTRIBUTIONS

The World Ag Expo plays an important role in supporting the regional community. One way is through the Toyota Tundra Giveaway. Attendees buy \$5 raffle tickets for a chance to win a Tundra, with proceeds going to Valley Children's Healthcare. In 2019, the expo raised \$87,000 through the Giveaway.

To further support the community, all food vendors at the World Ag Expo are local nonprofits. For some, the expo's large crowds reel in all the fundraising and support they need each year to maintain their business.

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Photo Credit: Danny Celaya for World Ag Expo®



Photo Credit: Danny Celaya for World Ag Expo®

The World Ag Exp has notable economic, fiscal, and social impacts in California. Impacts are particularly strong in Tulare County, the expo's home, and the remaining regions of Central California (Kern, Fresno, and Kings counties).

In 2020, spending associated with the World Ag Expo generated \$52.3 million in economic output, supported 568 jobs, and contributed \$20.3 million in labor income throughout California. Most impacts were delivered to Tulare, Kern, Fresno, and Kings counties. Furthermore, spending associated with the World Ag Expo collected \$1.8 million in tax revenue throughout California, of which \$1.2 million was collected in Tulare County alone.

The World Ag Expo also had notable social impacts in 2020. The event plays a vital role in supporting the Agriculture Industry globally. Additionally, the World Ag Expo benefits the wider community through charitable contributions.

## **APPENDIX**

#### MULTI-REGIONAL INPUT-OUTPUT METHODOLOGY & IMPLAN

This report is based on an economic analysis technique known as Multi-Regional Input-Output (MRIO) analysis, which is a means of examining inter-industry relationships across several regions. A MRIO analysis builds off of the standard Input-Output (I-O) analysis by expanding effects from monetary market transactions beyond a single region and helps capture leakages in other regions.

In a MRIO analysis, the direct effect in one region triggers indirect and induced effects in other regions. The results of the analysis reveal the effects of a change in one or several economic activities on an entire economy, and the economic interdependence of regions.

IMPLAN expands upon the traditional I-O approach to include transactions among industries and institutions, and among institutions themselves, thereby capturing all monetary market transactions in a given time period. This specific report uses the IMPLAN web model. For more information on the IMPLAN modeling process, visit IMPLAN.com.

Although IMPLAN provides an excellent framework for conducting impact analysis, Beacon Economics takes extra precautions to ensure model results are valid, employing decades of experience to tailor the model to the unique demands of each economic impact analysis the firm conducts. Procedures and assumptions are thoroughly and systematically inspected for validity and individual project appropriateness before any analysis is performed.

## **GLOSSARY**

**Direct Effects/Impacts:** The set of expenditures made by the producers and/or consumers of an event, activity, or policy. These expenditures are applied to the industry multipliers in an IMPLAN model, which result in further, secondary expenditures (known as the indirect and induced effects).

**Expenditures:** Money paid for goods or services.

**Indirect Effects/Impacts:** The set of expenditures made by local industries on goods and services from other local industries as a result of the direct effects. This cycle of spending works its way backward through the supply chain until all money "leaks" from the local economy.

**Induced Effects/Impacts:** The set of expenditures made by households on local goods and services as a result of increased labor income generated by the direct and indirect effects.

**Input-Output Analysis:** A type of applied economic analysis that tracks the interdependence among various producing and consuming sectors of an economy.

**Jobs (Employment):** A job in IMPLAN is equal to the annual average of monthly jobs in that industry (this is the definition used by the U.S. Bureau of Labor Statistic and the U.S. Bureau of Economic Analysis, Federal statistical agencies that provide authoritative U.S. economic data). Thus, one job lasting 12 months equals two jobs lasting six months each, which equals three jobs lasting four months each. A job can be either full or part time.

**Labor Income:** All forms of employment income, including employee compensation (wages and benefits) and proprietor income.

**Leakages:** Expenditures, income, resources, or capital located outside the region of study. Because leakages do not affect local industries, they are not included in the economic impact of the region where direct monetary transactions of the study's focus occur.

**Multiplier Effect:** In simple terms, the phenomenon of final increased spending resulting from some initial amount of spending.

**Output:** The value of industry production. In IMPLAN, these are annual production estimates for the year of the data set and are in producer prices. For manufacturers, this is sales plus/minus changes in inventory. For service sectors, production is equal to sales. For retail and wholesale trade, output is equal to gross margin (not gross sales).

**Total Effect/Impact:** The entire economic impact of an event, activity, or policy, found by combining the direct, indirect, and induced impacts.

**Fiscal Impact:** Tax revenue generated at the federal, state, and local level. These expenditures are included in the total impact as government expenditures.



