



2021 CALIFORNIA ECONOMIC IMPACT REPORT

BAY AREA

The Bay Area includes the nine counties surrounding the San Francisco Bay: Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano and Sonoma counties. The region is recognized as the “birthplace of biotech” and is a globally significant innovation ecosystem. Bay Area companies in the Life Science industry directly employed 178,958 people in 2020, with average annual earnings exceeding \$179,000 per year, the highest average annual earnings in California. The industry supported over 411,000 jobs in the region (direct/indirect/induced) in 2020 and generated \$159 billion in economic activity in Total Business Sales. Major sub-sectors include Research and Manufacturing, Medical Devices and Equipment, Biotechnology, Biopharmaceuticals, Scientific/Research Tools, and Food and Agriculture Biotech.



178,958

people in the region were directly employed by Life Science companies in 2020



\$159B

generated in economic activity in Total Business Sales in 2020

2020 Annual Economic Impact

| | |
|------------------------|----------------|
| Total Jobs | 411,198 |
| Labor Income | \$54.5 billion |
| Total Business Sales | \$159 billion |
| Gross Regional Product | \$104 billion |

SOURCE: IMPLAN, FBEI

2020 Key Metrics

| | |
|---------------------------|-----------|
| Establishments | 4,028 |
| Unique Companies | 3,063 |
| Direct Employment | 178,958 |
| Average Compensation | \$179,528 |
| Share of Total Employment | 3.4% |

SOURCE: IMPLAN, CA EDD, NIH, FBEI

2020 NIH Funding

\$2.3B

Total NIH Funding

SOURCE: NIH, FBEI

The Bay Area’s Life Science community rests on a foundation of scientific research and progress supported by the National Institutes of Health (NIH), and 40% of all California NIH funding comes to the Bay Area. UCSF, Stanford University, UC Berkeley, Kaiser Foundation Research Institute, and SRI International were among the region’s key recipients in 2020.



For full report visit www.biocom.org/eir



2020 Economic Impact by County

Life Science establishments are located in all nine counties in the Bay Area region and generated \$159 billion in economic impact in 2020. San Mateo County and Santa Clara County are the largest contributors, with both generating more than \$40 billion in economic activity.

| | Total Jobs | Labor Income | Total Business Sales | Gross Regional Product |
|----------------------|------------|------------------|----------------------|------------------------|
| Alameda County | 77,332 | \$8,331,581,167 | \$23,771,529,217 | \$14,084,157,967 |
| Contra Costa County | 14,331 | \$1,269,435,388 | \$3,788,853,017 | \$2,152,217,082 |
| Marin County | 11,198 | \$1,555,322,590 | \$7,657,975,809 | \$4,673,783,441 |
| Napa County | 1,137 | \$73,304,247 | \$229,324,677 | \$111,327,639 |
| San Francisco County | 29,907 | \$4,788,146,639 | \$10,757,848,453 | \$7,479,682,048 |
| San Mateo County | 64,631 | \$11,461,699,417 | \$40,561,996,244 | \$27,644,991,605 |
| Santa Clara County | 109,902 | \$16,563,851,738 | \$40,077,113,987 | \$26,787,650,086 |
| Solano County | 8,645 | \$1,153,319,934 | \$7,227,084,575 | \$4,578,767,569 |
| Sonoma County | 11,874 | \$1,082,984,061 | \$3,397,039,526 | \$1,828,455,777 |

SOURCE: IMPLAN, FBEI

2020 Key Metrics by County

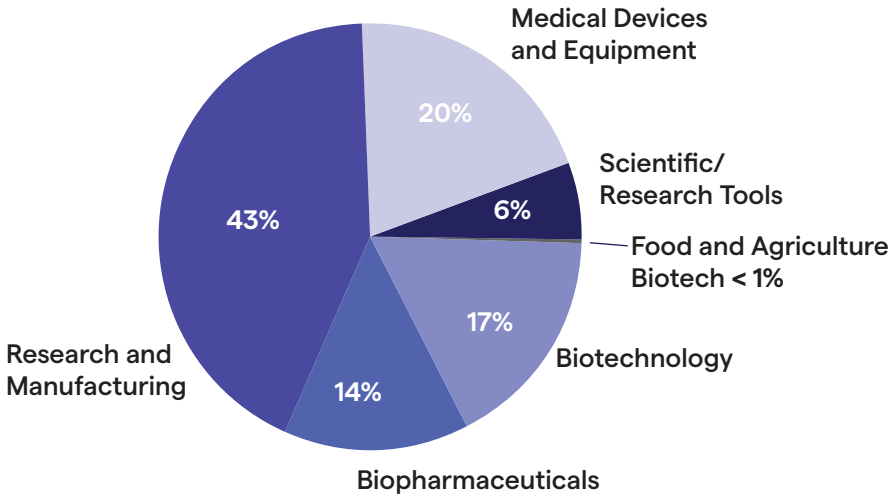
There were 3,063 unique Life Science companies in the Bay Area in 2020. The largest concentrations of companies are located in Santa Clara County, Alameda County, San Francisco County and San Mateo County.

| | Establishments | Unique Companies | Direct Employment | Average Compensation | Share of Total Employment | Total NIH Funding |
|----------------------|----------------|------------------|-------------------|----------------------|---------------------------|-------------------|
| Alameda County | 937 | 663 | 38,034 | \$134,736 | 3.7% | \$383,894,796 |
| Contra Costa County | 383 | 283 | 7,724 | \$104,442 | 1.4% | \$11,400,377 |
| Marin County | 170 | 150 | 4,760 | \$200,318 | 2.5% | \$23,309,291 |
| Napa County | 47 | 45 | 720 | \$67,449 | 0.7% | \$0 |
| San Francisco County | 622 | 438 | 17,636 | \$185,550 | 1.8% | \$1,067,574,147 |
| San Mateo County | 553 | 483 | 37,268 | \$227,384 | 6.6% | \$127,470,364 |
| Santa Clara County | 1,026 | 773 | 62,972 | \$187,906 | 4.4% | \$704,269,279 |
| Solano County | 98 | 93 | 4,329 | \$213,520 | 2.3% | \$1,892,381 |
| Sonoma County | 193 | 136 | 5,514 | \$125,363 | 1.9% | \$994,000 |

SOURCE: IMPLAN, CA EDD, NIH, FBEI



2020 Life Science Sub-Sector Employment



Biotechnology: Research entities involved in nanotechnology as well as biotechnology.

Biopharmaceuticals: Pharmaceutical manufacturers of a wide range of products as well as distributors.

Medical Devices & Equipment: Manufacturers of a large array of products for health care, including optical instruments, surgical apparatus and dental supplies.

Research & Manufacturing: Research and development conducted at colleges/universities or in private medical laboratories.

Scientific/Research Tools: Manufacturers of laboratory instruments, chemicals and other devices used for measuring, displaying and controlling research processes.

Food & Agriculture Biotech: Cellular grown meat and seafood as well as biorenewables used in agriculture and crop production.

SOURCE: IMPLAN, FBEI

2020 Employment by Sub-Sector by County

The Life Science industry employed 178,958 individuals in 2020. Research and Manufacturing is the largest sub-sector for employment accounting for 43%, with Medical Devices and Equipment following at 20%.

| | Alameda County | Contra Costa County | Marin County | Napa County | San Francisco County | San Mateo County | Santa Clara County | Solano County | Sonoma County |
|-----------------------------|----------------|---------------------|--------------|-------------|----------------------|------------------|--------------------|---------------|---------------|
| Biotechnology | 6,863 | 1,103 | 389 | 119 | 3,302 | 6,625 | 10,682 | 322 | 602 |
| Biopharmaceuticals | 3,369 | 852 | 3,028 | 12 | 1,667 | 9,542 | 4,627 | 2,546 | 370 |
| Medical devices & Equipment | 9,225 | 1,414 | 163 | 103 | 2,392 | 3,149 | 16,077 | 412 | 2,183 |
| Research & Manufacturing | 15,543 | 3,657 | 1,108 | 388 | 9,642 | 16,793 | 26,528 | 1,039 | 1,485 |
| Scientific/Research tools | 2,994 | 684 | 71 | 96 | 606 | 1,144 | 5,041 | 1 | 846 |
| Food & Agriculture Biotech | 41 | 14 | 2 | 1 | 27 | 15 | 16 | 8 | 27 |
| Total | 38,034 | 7,724 | 4,760 | 720 | 17,636 | 37,268 | 62,972 | 4,329 | 5,514 |

SOURCE: IMPLAN, FBEI



2020 Educational Attainment by County

The San Francisco Bay Area has a distinct competitive advantage with a highly-educated workforce; 49% of adults have a Bachelor's or graduate degree, as compared to 35% statewide. The Life Science industry supports jobs for all education levels and Biocom California makes a concerted effort to engage with communities around the bay to broaden awareness of the employment opportunities that exist.

| | CA | Bay Area | Alameda County | Contra Costa County | Marin County | Napa County | City & County of San Francisco | San Mateo County | Santa Clara County | Solano County | Sonoma County |
|---|-----|----------|----------------|---------------------|--------------|-------------|--------------------------------|------------------|--------------------|---------------|---------------|
| Less than 9th grade | 9% | 6% | 5% | 5% | 5% | 8% | 7% | 6% | 7% | 6% | 5% |
| 9th to 12th grade, no diploma | 7% | 5% | 5% | 6% | 3% | 7% | 5% | 4% | 5% | 5% | 5% |
| High school graduate (includes equivalency) | 21% | 16% | 17% | 18% | 11% | 18% | 12% | 15% | 14% | 24% | 19% |
| Some college, no degree | 21% | 17% | 16% | 20% | 16% | 23% | 12% | 15% | 15% | 27% | 24% |
| Associate's degree | 8% | 7% | 6% | 8% | 6% | 8% | 5% | 7% | 7% | 10% | 10% |
| Bachelor's degree | 22% | 28% | 29% | 26% | 36% | 22% | 35% | 29% | 28% | 19% | 23% |
| Graduate or professional degree | 13% | 21% | 21% | 17% | 23% | 14% | 24% | 24% | 26% | 10% | 14% |

SOURCE: U.S. CENSUS, FBFI

Policy Priorities

The Bay Area is home to multiple concentrations of life science companies, with distinct micro-clusters found in San Francisco's Mission Bay, South San Francisco and the peninsula, the East Bay around Berkeley and Emeryville, southern Alameda County, and across the North Bay. The companies range from one researcher leasing bench space at a university affiliated incubator, to large global manufacturing companies, and represent every stage of development.

Shared policy concerns for our members in the Bay Area include: the need for additional workforce housing, accessible and connected transit systems, talent acquisition and retention, equitable business tax policies, consistent permitting and inspection processes, and reliable access to utilities.

For over 25 years, Biocom California has helped move the life science industry forward with transformative resources that enable companies to make meaningful connections. With a membership base of over 1,500 companies, we connect our members to each other so they can collaborate and work stronger and smarter together. We connect organizations to capital investment and purchasing solutions so they can grow faster and work more efficiently. We're their link to advocacy that fights for innovation and we provide an environment where their business and talent can thrive. Biocom California is how the life science industry gets connected.