

CHIPPING IN: THE U.S. SEMICONDUCTOR INDUSTRY WORKFORCE AND HOW FEDERAL INCENTIVES WILL INCREASE DOMESTIC JOBS

SIA/Oxford Economics Report: Robust federal incentives for domestic chip manufacturing would create an average of nearly 200,000 American jobs annually as fabs are built and add nearly \$25 billion annually to U.S. economy



THE ECONOMIC CONTRIBUTION OF THE U.S. SEMICONDUCTOR INDUSTRY

The U.S. semiconductor industry is substantial, directly contributing **\$246.4 billion** to U.S. GDP and directly employing over 277,000 workers in 2020. However, the economic contribution of the semiconductor industry extends far beyond fabrication facilities (fabs) or research facilities where its products are designed and manufactured. The strong demand for all types of chips facilitates the need for a broader domestic support ecosystem including manufacturing equipment, materials, design services, testing labs, and R&D activity. This ecosystem creates activities that generate additional economic value throughout the U.S. economy.



THE ECONOMIC IMPACT OF FEDERAL CHIP INCENTIVES

SEMICONDUCTOR INDUSTRY ASSOCIATION

A \$50 billion federal investment program to incentivize domestic semiconductor manufacturing would add **\$24.6 billion** annually and would create an average of **185,000 temporary jobs** annually throughout the U.S. economy from 2021 and 2026. Over this six-year build-out period, therefore, the cumulative annual impact of such an incentive program on GDP and jobs would be **\$147.7 billion** and **1.1 million**, respectively.



LONG-TERM, POSITIVE DOMESTIC JOBS IMPACTS FROM INCENTIVES

Building up the domestic semiconductor industrial infrastructure will have an enduring positive impact on the U.S. economy and jobs. An investment of \$50 billion would help create an estimated **10 additional fabs** in the U.S. that would otherwise not be built and add **42,000 new semiconductor jobs** to the U.S. economy. Therefore, we would expect the U.S. semiconductor workforce to reach **319,000** by 2027. In addition, the U.S. semiconductor industry would support roughly **2.13 million jobs** in the U.S. economy in 2027, an increase of **280,000** from the 2020 total of 1.85 million.



OTHER KEY FINDINGS:

- Semiconductors are a critical input for more than 300 downstream economic sectors, accounting for over 26 million U.S. workers.
- The semiconductor industry's **jobs multiplier is 6.7**, meaning for each U.S. worker directly employed by the semiconductor industry, an additional 5.7 jobs are supported in the wider U.S. economy.
- Workers in the semiconductor industry are highly productive, and wages reflect this at \$170,000 annual income, on average, in 2020.
- **One in five workers** in the industry has not attended college, meaning the industry provides important blue-collar opportunities, in which jobs exist for workers to gain skills and earn family-sustaining wages.
- The semiconductor industry employs a greater share of non-white workers when compared to the average of all industries in the U.S.