

From Innovation to Employment

IP's Role in Job Growth



Intellectual property (IP) is a cornerstone of the U.S. economy and benefits all Americans. From rural towns to bustling cities, strong IP rights create well-paying jobs, heal the sick, educate the young, provide entertainment and form new businesses across all 50 states and the District of Columbia. IP is not only a driver of growth, it has allowed the United States to be the global economic superpower.

This study, *From Innovation to Employment: IP's Role in Job Growth*, examines the nationwide impact of IP intensive industries, revealing the critical role they play in shaping the American workforce, providing good paying jobs, and strengthening economic output. Beyond direct employment, the benefits of IP extend throughout the economy—stimulating supply chains, encouraging R&D investment, and generating broad ripple effects that support local and community businesses and workers far beyond IP-intensive sectors.

The Chamber's report reinforces what many policymakers have recognized: IP-intensive industries are not only a leading source of high-quality jobs but also a catalyst for economic activity across diverse regions. States like Texas, Michigan, and North Carolina rank near the top in total IP contributions, collectively supporting millions of jobs and adding billions to the economy. Meanwhile, states such as Delaware and New Hampshire demonstrate the outsized influence of IP, with strong per-job

economic contributions and significant R&D investments. These findings highlight the universal importance of IP.

IP's economic impact is further amplified through indirect job creation and income growth. Each dollar invested in IP-intensive industries triggers a multiplier effect—driving demand for suppliers, boosting wages, and reinvesting capital into local businesses and economies. Specifically, \$1 invested in R&D spending supports directly and indirectly \$1.87 of GDP. This interconnected framework demonstrates how protecting and promoting strong IP strengthens not just individual industries, but the economy as a whole.

As global competition intensifies, a strong American IP framework is essential to sustaining and expanding these economic benefits for workers and consumers. This will ensure that the United States remains the global leader in opportunity, innovation, creativity, and technological advancement.

Total IP

IP remains a cornerstone of the U.S. economy, driving job growth, wage increases, and opportunity. In 2024, there was over \$5 trillion of existing IP throughout the country, supporting jobs in all industries, in every state, and for businesses of all sizes. Top-performing states showcase the significant value that IP brings to workers across the country:

IP per Job	
Washington	\$63,000
North Carolina	\$25,600
Utah	\$19,600

R&D Spending

Investment in research and development (R&D) is a key driver of IP creation and economic growth. In 2024, total U.S. R&D spending reached \$799 billion, fueling advancements across multiple industries. These states stand out for their strong commitment to innovation, with some of the highest R&D spending relative to their economies:

Percent of GDP	
New Mexico	7.7%
North Carolina	3.1%
Virginia	2.1%

IP-Related Wages

IP-intensive jobs offer significantly higher wages compared to non-IP roles, contributing to greater economic security for American workers. On average, the wage premium for IP jobs is \$18,438 above non-IP jobs. These states exhibit strong wage premiums, with IP jobs paying more than non-IP positions:

IP vs. non-IP Job Wages	
Maryland	\$26,000
Virginia	\$24,456
Texas	\$24,322

Economic Impact of R&D Activity

Investment in R&D has direct and indirect economic benefits because of the workers it employs and the incomes those workers earn and then spend.

California	
Jobs supported by R&D	3,052,000 Jobs
GDP supported	\$490 Billion
Income supported	\$337 Billion

Massachusetts	
Jobs supported by R&D	780,000 Jobs
GDP supported	\$123 Billion
Income supported	\$88 Billion

Texas	
Jobs supported by R&D	673,000 Jobs
GDP supported	\$75 Billion
Income supported	\$56 Billion

IP Licensed for Export

IP licensing is critical to expanding the global reach of American innovation and creativity, and maintaining the global competitiveness of U.S. industries abroad, with total IP-related exports reaching \$140.36 billion in 2024.

Texas leads the nation in IP-related exports. Louisiana and Florida also demonstrate strong IP export activity, reinforcing the global reach of U.S. innovation and creativity.

IP-Related Exports	
Texas	\$32 Billion
Louisiana	\$7 Billion
Florida	\$5 Billion

Pennsylvania

State Highlights

Stock of IP

\$153.0 Billion

Annual impact of R&D

368,447 jobs supported

Compensation of IP Workers

\$85,263

Annual spending on R&D

\$26.1 Billion

IP exported

\$3.9 Billion

Stock of IP

IP is an important part of every job in the economy. Every state has an existing stock of IP that supports all the jobs in that state. IP stock consists of things like software, the products of R&D, investment, copyrights, patents, and trademarks. There is \$153.0 billion of existing IP in Pennsylvania. That works out to \$19,361 per job in the state.

Annual Spending on R&D

The development of new IP supports the creation of new jobs and raises the wages of workers. The more businesses and governments in a state generate new IP, the more new jobs the state will create, and the faster workers' wages rise. The creation of new IP correlates strongly with investment in R&D. States with more R&D investment will see their IP grow faster and workers will see commensurate gains. Pennsylvania invested \$26.1 billion last year, which was 2.7% of its GDP.

Economic Impact of R&D Activity

Jobs, Spending, and Compensation

In addition to the creation of IP, investment in R&D has direct and indirect economic benefits because of the workers R&D-intensive industries employ, and the higher incomes those workers earn and subsequently spend in their local economies.

In Pennsylvania, R&D activities directly and indirectly support 368,447 jobs. Those activities directly and indirectly support \$43.8 billion of the state's local economy, which accounts for 4.5% of that state's total GDP.

R&D investment in Pennsylvania directly and indirectly supports \$32.9 billion of the state's personal income, which is 3.7% of the state's total personal income.

Total IP

\$153.0 Billion

Total IP per Job

\$19,361

Pennsylvania

\$19,089

National average

R&D Spending

\$26.1 Billion

R&D as Percent of GDP

2.7%

Pennsylvania

2.2%

National average

R&D Impact on Jobs

86,460

Total jobs supported

3.0%

Percent of jobs supported

R&D Impact on GDP

\$43.8B

Total GDP supported

3.0%

Percent of GDP supported

R&D Impact on Personal Income

\$32.9B

Personal income supported

3.7%

Percent of personal income

Compensation of State's Workers Directly Creating IP

Highly skilled workers create new IP through their R&D work. Because of their expertise, these workers generally earn higher wages than workers that do not work actively to create new IP. States benefit from having more high-skilled workers because they earn more and contribute more to the state's economy.

In Pennsylvania, the median annual wage of an IP-creating worker is \$85,263. The median annual wage of all other workers is \$68,626. There is an \$16,637 annual wage premium for worker engaged in IP creation.

IP Exported

IP is a valuable asset that businesses can earn royalties from by licensing to other businesses, both at home and abroad. In fact, licensing IP abroad is a major component of exports from each state.

Pennsylvania businesses earned \$3.9 billion of payments for licensing IP licensed abroad last year.

Median wages

\$82,998	\$61,186
IP jobs	Non-IP jobs

Difference in wages

\$16,637

IP licensed for export (2024)

\$3.9B



Methodology

Total IP per State

The Chamber used data from the Bureau of Economic Analysis (BEA) on the existing stock of IP in the economy and allocated it to each state based on the state's share of R&D investment, software workers, and entertainment workers, also using data from BEA.

Annual Spending on R&D

The Chamber used data from the Bureau of Economic Analysis (BEA) on spending on R&D in the economy and allocated it to each state based on the state's share of compensation paid to R&D workers, also using data from BEA.

Economic Impact of R&D Activity

Using data from BEA, the Chamber inputted the number of R&D workers in every data to the REMI PI+ model to calculate the total (direct and indirect) impact of R&D investment in each state on each state's GDP, income, and employment levels.

Compensation of State's Workers Directly Creating IP

The Chamber used occupational data from the Bureau of Labor Statistics to calculate the wage differential between jobs that create IP and those that only utilize IP.

IP Exported

The data do not include physical goods or the provision of services, rather it is the charges for the use of intellectual property, such as (1) charges for the use of proprietary rights, such as patents, trademarks, copyrights, and franchises, and (2) charges for licenses to reproduce and/or distribute intellectual property embodied in produced originals (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast). Charges for end-user rights to use general use computer software and outright sales of customized computer software are included under computer services. Charges for end-user rights to use audiovisual content, such as film, television programming, and sound recordings, as well as outright sales of audiovisual originals, are included under audiovisual services, a component of personal, cultural, and recreational services.