

Economic Impacts of PFAS in New Jersey

- **PFAS (Per- and Polyfluoroalkyl Substances)** are chemicals used in a wide variety of health, safety, and consumer applications.
- **Numerous industries in New Jersey use PFAS as vital inputs**, whether as an important component of a final product itself or as part of its production process.
- **These industries help support economic activity in addition to what is reported in the official statistics.** This additional economic activity, known as indirect (upstream supply chain) and induced (spending of disposable income by employees) impacts, is estimated using input-output analysis and IMPLAN, a widely used economic modeling system.

Key PFAS-Utilizing Industries



Aerospace



Batteries



Refrigeration,
Air Conditioning, and
Heat Pumps



Automotive



Medicine and
Pharmaceuticals



Semiconductors

*In total, the PFAS-utilizing industries analyzed helped support over **88,000 jobs** and contributed over **\$24 billion to state GDP.***

Economic Impacts

	Employment	Labor Income	GDP
Direct	23.6k	\$7.2B	\$14.7B
Indirect	26.6k	\$3.1B	\$5.0B
Induced	38.3k	\$2.8B	\$4.6B
Total	88.5k	\$13.1B	\$24.3B

Employment Multiplier

Each job in a PFAS-utilizing industry helps support 2.8 other jobs in the economy.

Share of State GDP

PFAS-utilizing industries, their supply chains, and induced impacts account for 3.5% of state GDP.



Economic Impacts of PFAS in New Jersey Industry Focus



Aerospace - New Jersey's aerospace industry use PFAS compounds for maintaining airworthiness and safety performance of aircraft. PFAS help to prevent degradation, corrosion, leakage, and contamination that can otherwise require high levels of maintenance or lead to failures.

In total, the aerospace industry supports over 180 jobs and contributes more than \$25 million to the state economy.

	Employment	Labor Income	GDP
Direct	104	\$10.1M	\$14.7M
Indirect	30	\$3.2M	\$4.7M
Induced	49	\$3.5M	\$5.9M
Total	183	\$16.8M	\$25.3M



Automotive - The automotive industry depends on PFAS compounds to manufacture engine components and in-car electronics. Additionally, PFAS are implemented in some types of automotive safety technology (including driver assistance systems).

New Jersey's automotive industry helps support more than 650 jobs and contributes close to \$92 million to GDP.

	Employment	Labor Income	GDP
Direct	206	\$17.5M	\$25.5M
Indirect	286	\$27.8M	\$46.0M
Induced	166	\$12.0M	\$20.2M
Total	658	\$57.3M	\$91.7M



Batteries - PFAS compounds are used by manufacturers to produce a wide array of battery types due to their chemical, temperature, and oxidation resistance. The uses of batteries include a growing number of green energy applications, including solar energy storage and electric vehicle propulsion.

Battery manufacturers in New Jersey support over 150 jobs and roughly \$24 million toward GDP.

	Employment	Labor Income	GDP
Direct	80	\$10.8M	\$13.9M
Indirect	28	\$2.6M	\$4.1M
Induced	50	\$3.6M	\$6.0M
Total	158	\$17.0M	\$24.1M



Medicine and Pharmaceuticals - PFAS compounds are used as active ingredients and as a resource to achieve purity in the manufacturing and research stages. They are also used in medical packaging applications which preserve the shelf life of life-saving products.

In total, the medicine and pharmaceutical industry supports 78,000 jobs and contributes over \$22.6 billion to the state economy.

	Employment	Labor Income	GDP
Direct	19,880	\$6,779.6M	\$13,942.2M
Indirect	22,886	\$2,730.3M	\$4,437.4M
Induced	35,320	\$2,537.6M	\$4,282.8M
Total	78,085	\$12,047.4M	\$22,662.3M



Refrigeration, Air Conditioning, and Heat Pumps - The refrigeration, air conditioning, and heat pump industry depends on PFAS for preserving perishable foods, protecting the pharmaceutical cold chain, and supporting air conditioning systems of vehicles, homes, and industries.

New Jersey's refrigeration, air conditioning, and heat pump manufacturers support over 3,000 jobs and contribute nearly \$470 million to state GDP.

	Employment	Labor Income	GDP
Direct	1,483	\$128.6M	\$243.5M
Indirect	814	\$84.1M	\$129.6M
Induced	781	\$56.3M	\$95.1M
Total	3,079	\$269.0M	\$468.2M



Semiconductors - New Jersey's semiconductor industry depends on PFAS compounds to manufacture revolutionary technologies that underpin our digital society.

When indirect and induced impacts are included, activity related to semiconductor manufacturing supports over 6,300 jobs and contributes nearly \$1.1 billion to the state economy.

	Employment	Labor Income	GDP
Direct	1,809	\$232.3M	\$429.4M
Indirect	2,548	\$299.3M	\$405.4M
Induced	1,948	\$140.3M	\$237.0M
Total	6,306	\$672.0M	\$1,071.8M