



Economic Impacts of PFAS in Maine

- **PFAS (Per- and Polyfluoroalkyl Substances)** are chemicals used in a wide variety of health, safety, and consumer applications.
- **Numerous industries in Maine 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



Refrigeration, Air Conditioning, and Heat Pumps



Medicine and Pharmaceuticals



Automotive



Semiconductors

*In total, the PFAS-utilizing industries analyzed helped support nearly **10,000 jobs** and contributed over **\$1.7 billion** to state GDP.*

Economic Impacts

	Employment	Labor Income	GDP
Direct	3,313	\$466M	\$989M
Indirect	3,026	\$232M	\$374M
Induced	3,649	\$197M	\$366M
Total	9,988	\$895M	\$1,729M

Employment Multiplier

Each job in a PFAS-utilizing industry helps support 2.0 other jobs in the economy.

Share of State GDP

PFAS-utilizing industries, their supply chains, and induced impacts account for 2.2% of state GDP.



Economic Impacts of PFAS in Maine: Industry Focus



Aerospace - Maine'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 nearly 2,200 jobs and contributes more than \$275 million to the state economy.

	Employment	Labor Income	GDP
Direct	1,154	\$119.1M	\$168.8M
Indirect	309	\$22.0M	\$32.9M
Induced	736	\$39.7M	\$73.8M
Total	2,199	\$180.7M	\$275.5M



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).

Maine's automotive industry helps support nearly 900 jobs and contributes more than \$100 million to GDP.

	Employment	Labor Income	GDP
Direct	271	\$23.2M	\$34.9M
Indirect	375	\$25.3M	\$44.6M
Induced	254	\$13.7M	\$25.5M
Total	899	\$62.2M	\$105.0M



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 over 4,700 jobs and contributes nearly \$1 billion to the state economy.

	Employment	Labor Income	GDP
Direct	1,290	\$257.1M	\$585.3M
Indirect	1,511	\$118.1M	\$202.8M
Induced	1,960	\$105.7M	\$196.5M
Total	4,761	\$480.9M	\$984.6M



Refrigeration, Air Conditioning, and Heat Pumps - The refrigeration, air conditioning, and heat pump industry depends on PFAS to produce equipment which preserve perishable foods, protect the pharmaceutical cold chain, and support air conditioning systems of vehicles, homes, and industries.

Maine's refrigeration, air conditioning, and heat pump manufacturers support over 100 jobs and contribute nearly \$15 million to state GDP.

	Employment	Labor Income	GDP
Direct	58	\$3.6M	\$8.8M
Indirect	26	\$2.0M	\$3.1M
Induced	29	\$1.6M	\$2.9M
Total	113	\$7.2M	\$14.8M



Semiconductors - Maine'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 2,000 jobs and contributes nearly \$350 million to the state economy.

	Employment	Labor Income	GDP
Direct	540	\$63.4M	\$191.3M
Indirect	805	\$64.9M	\$90.4M
Induced	670	\$36.2M	\$67.2M
Total	2,016	\$164.5M	\$349.0M