Bryant University | Rhode Island Life Science Hub

DECEMBER 2025

Rhode Island Life Science Industry Economic Impact Report

Executive Summary

Rhode Island Life Science Industry
2025 Economic Impact Report

Rhode Island's life science ecosystem is an economic engine that drives innovation and statewide job and income creation. In 2024, it generated a total economic impact of $5.9 billion in value added, $3.9 billion in labor income, and supported over 50,500 jobs. What drives these figures? It is all about enabling collaborative: universities, hospitals, biotech firms, and service providers working together to accelerate discovery and commercialization, creating economic activity throughout the supply chain and strengthening businesses throughout the state.

Key Highlights

- Total Economic Impact (2024): Jobs: 50,562 (27,279 direct; 23,283 indirect/induced), Labor Income: $3.9 billion, Value Added: $5.9 billion
- Average Annual Wage: $84,754 — 27% higher than Rhode Island's private-sector average ($66,500)
    - Average earning in pharmaceutical and medicine manufacturing and bioscience-related distribution is $135,500 and $137,700, respectively—more than double the statewide private-sector average of $66,500.
- Private Investment: $150 million since Hub launch; State Funding: $17 million
- Multipliers: Employment (1.85), Labor Income (1.70), Output (1.87)
- Industry Composition: Four sub-sectors — Research & Testing, Medical Devices, Pharmaceutical Manufacturing, and Bioscience Distribution.

Growth Trends

- Employment: Increased from 24,533 in 2015 to 27,279 in 2024 (+11%)
- Establishments: Nearly doubled from 1,197 in 2015 to 2,297 in 2024
- Wages: Rose 22% from 2020 to 2024, compared to 13% for all private sectors.

Comparative Impact

The economic contribution of the Life science industry surpasses other major Rhode Island economic clusters:

- Life Science: 50,500 jobs; $3.9 billion in labor income
- Defense Cluster: 34,068 jobs; $3 billion in labor income
- Quonset Business Park: 25,000 jobs; $1.7 billion in labor income.

Rhode Island Life Science Industry By the Numbers

27.3 k Workers directly employed in life science	**50.5 k** Total jobs supported across the state
$84.8 k Average annual wages	**27 %** Higher wages than state's private-sector average
$3.9 B Total labor income supported	**$5.9 B** Total value added supported
$17 M Overall state funding for Life Science	**$150 M** Private investment by Life Science Business

Source: Report by Bryant University

Introduction

The life science industry is a vital and dynamic component of Rhode Island's economy. Innovation is central to this sector. Companies are breaking new grounds with advanced technologies, increasing research efforts, and investing in improved infrastructure and operations. The launch of the *Rhode Island Life Science Hub* in 2023 was a significant milestone. This initiative demonstrates commitment to Rhode Island's competitiveness, creating an innovative ecosystem where business can thrive and contribute to broader economic growth across the state.

The vision for the *Rhode Island Life Science Hub* centers on creating an ecosystem of multi-layered networks in which ideas, talent, and resources flow across interconnected environments. It as envisioned as a network that brings together government agencies, research institutions, hospitals, investors, and more, all collaborating. This cooperation leads to discoveries and encourages business growth. Within this larger ecosystem, universities, biotech companies, hospitals, and specialized service providers work together, share space, and accelerate progress by collaborating closely. The Hub brings together start-ups, research and development teams, accelerators, and venture partners. These groups support early-stage ideas to clinical research and scaling up production. By working together, they are creating a life science community that is continually learning, advancing, and striving for breakthroughs that improve health and drive economic growth.

Since its launch, the Rhode Island Life Science Hub has been a driving force behind efforts to retain, attract, and expand economic activity in the state's life science sector. The Hub has supported 25 companies and awarded $17 million in direct funding to support private life science businesses, which has generated more than $150 million in private infrastructure investments. This has resulted in the creation of hundreds of new jobs throughout the state.

This economic impact report analyzes the life science sector in Rhode Island—how many companies are based here, how many people work in the industry, and what that means for the state. The report utilizes data from the U.S. Bureau of Labor Statistics and IMPLAN modeling to estimate the number of jobs, wages, and economic output in this industry. The findings offer policymakers, business owners, and interested parties a data-driven analysis to understand the sector and how to best support its continued expansion.

This report's key takeaway: among Rhode Island's leading economic drivers, the life science industry stands out. In 2024, the sector supported 50,500 jobs and generated $3.9 billion in labor income—surpassing both the Defense Cluster and the Quonset Business Park. For reference, the Defense Cluster supported over 34,000 jobs and $3 billion in labor income, while the Quonset

Business Park supported over 25,000 jobs and $1.7 billion (according to Senedia and Quonset Business Park sources). These comparisons underscore the strategic importance of the life science industry as a Rhode Island's growth engine, not only in innovation but also in job and income creation.

Life Science Industry

The report defines the Rhode Island Life Science industry as comprising four major sub-sectors:

Pharmaceutical and Medicine Manufacturing Includes establishments that manufacture biological and medicinal products, process botanical drugs and herbs, and make pharmaceutical products like tablets, capsules, and ointments.	**Medical Devices Manufacturing** Includes organizations that are involved in the design, development, and manufacturing of equipment and instruments used in healthcare. This sector includes electromedical apparatus, surgical and medical instruments, surgical appliances and supplies, ophthalmic goods, and dental laboratory products. Together, they support patient care, diagnosis, and treatment through innovation in medical technology and precision manufacturing.
Research, Testing, Medical Labs and Hospitals Includes organizations engaged in scientific research, experimentation, and diagnostic services. It includes research and development in nanotechnology, biotechnology, and the physical, engineering, and life sciences, as well as industrial design and specialized testing laboratories. The sector also includes hospitals, medical laboratories, diagnostic imaging centers, and blood and organ banks that advance technology and public health.	**Bioscience-Related Distribution** Includes merchant wholesalers that supply essential products supporting healthcare and research. This sector includes the distribution of medical equipment, druggists' goods, and farm supplies, ensuring that critical bioscience materials and technologies reach providers, researchers, and producers.

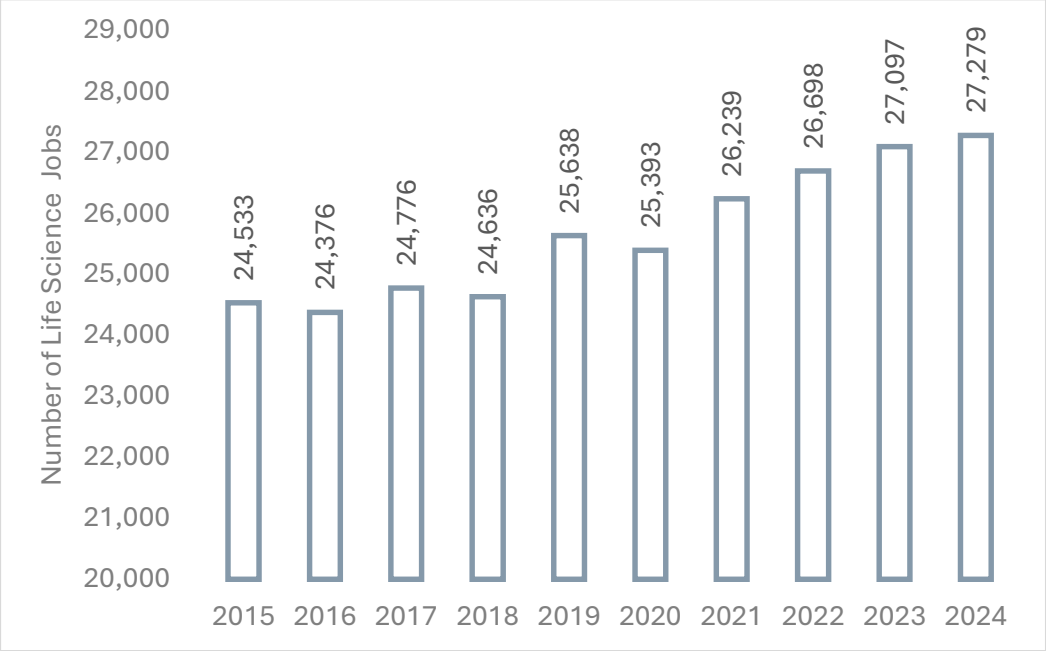
Note: see **Table A1** in the appendix for North American Industry Classification System (NAICS) codes considered in each of these four sectors.

Trends in Life Science Employment and Establishments in Rhode Island

Between 2015 and 2024, Rhode Island's life science sector experienced steady employment gains alongside a significant expansion in the number of establishments, signaling both growth and diversification across the industry.

Total life science employment increased from **24,533 in 2015 to 27,279 in 2024**, a **11% rise** over the 10-year period. This compares to a 7% growth in all private employment in Rhode Island **(see Table A2)**. While employment growth was moderate during this period, the strongest growth occurred after 2020, as the sector rebounded and expanded its research, diagnostic, and manufacturing activities post the covid pandemic.

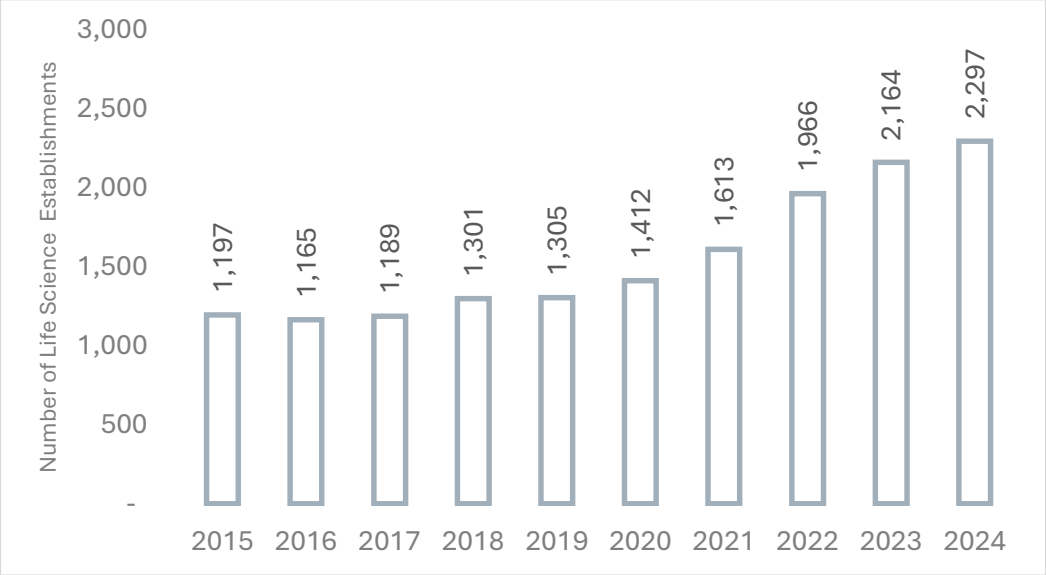
Figure 1: Life Science Employment in Rhode Island (2015–2024)



Source: Author's compilation using data from the US BLS

The number of life science establishments nearly **doubled**, from **1,197 in 2015 to 2,297 in 2024 (see Table A3)**. This growth—outpacing employment expansion — suggests a shift toward a more dynamic and diversified ecosystem, marked by the expansion of small and specialized firms, research organizations, and testing facilities. Overall, the average number of employees per life science establishment declined from roughly **20 to 12**, indicating that much of the sector's growth came from new, smaller enterprises rather than expansion within existing large employers. This aligns with national trends showing increased startup activity and contract-based research and diagnostic services in life science.

Figure 2: Life Science Establishments in Rhode Island (2015–2024)



Source: Author's compilation using data from the US BLS

Composition of Rhode Island's Life Science Industry

Between 2015 and 2024, Rhode Island's life science sub-sectors experienced notable shifts in both employment and business presence (**see Tables A2 and A3)**.

Research, Testing, Laboratories, and Hospitals remains the largest sub-sector, with employment rising from **20,315 in 2015 to 22,640 in 2024**, a gain of **2,325 jobs (about 11%)**. The number of establishments also grew substantially, from **952 to 1,698**, reflecting an expansion of research facilities, diagnostic labs, and clinical operations. This growth underscores the sector's role as the anchor of Rhode Island's life science economy.

Bioscience-Related Distribution recorded the most significant proportional employment growth, with employment increasing from **1,228 to 1,706 (+39%)** and establishments nearly tripling from **158 to 503**. This surge highlights the growing importance of logistics and supply chain operations that support healthcare and research industries across the region.

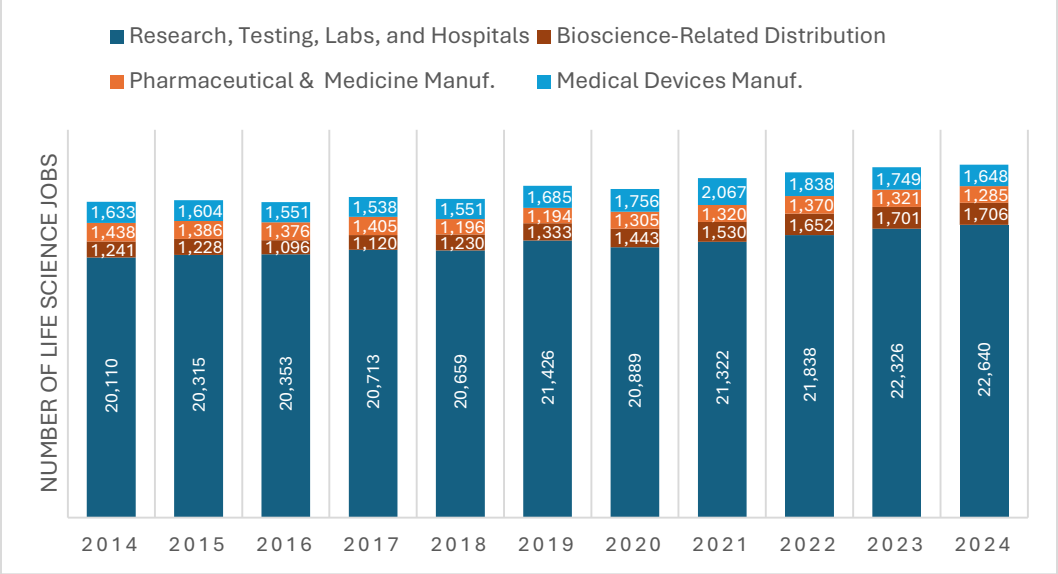
Medical Devices Manufacturing recorded slow employment growth, increasing from **1,604 to 1,648 employees (+3%)**. Establishments remained relatively stable, moving from **70 in 2015 to 72 in 2024**, suggesting that productivity gains and scaling within existing firms drove much of the employment increase.

In contrast, **Pharmaceutical and Medicine Manufacturing** experienced a decline in employment, dropping from **1,386 to 1,285 (–7%)**, while the number of establishments

decreased slightly from **17 to 24** over the same period. This trend reflects ongoing industry consolidation and automation, which have reduced workforce needs even as some new firms entered the market.

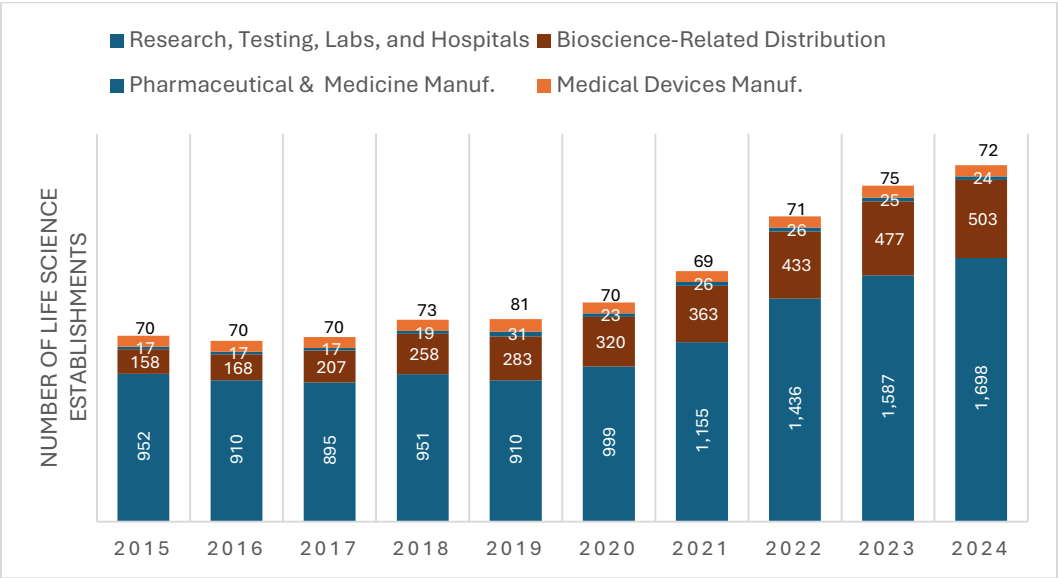
Overall, the data show a broadening and more diversified life science sector in Rhode Island—driven by growth in research, device manufacturing, and distribution, even as traditional pharmaceutical production contracted slightly.

Figure 3: Life Science Employment by Sub-sector, Rhode Island (2015–2024)



Source: Author's compilation using data from the US BLS

Figure 4: Life Science Establishments by Sub-sector, Rhode Island (2015–2024)



Source: Author's compilation using data from the US BLS

Average Annual Earnings

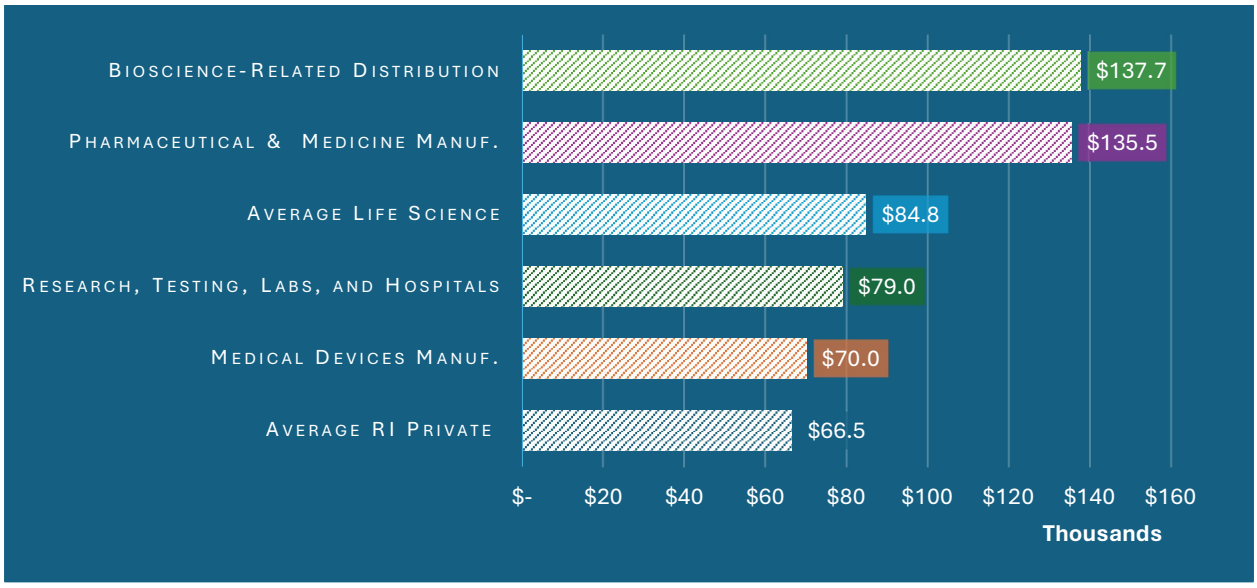
Life science jobs have consistently offered higher wages. By 2024, the average life science worker earned an average of **$84,754,** 27 percent more than the statewide private-sector average -- a salary premium of more than $18,000 annually.

From 2020 to 2024, average annual earnings in Rhode Island's **life science sector** rose from **$69,339 to $84,754**, a **22% increase** over this period. In comparison, average earnings in the **all-private sector** increased from **$58,768 to $66,500**, a 13**% gain (see Table A3)**. The strongest year of growth for life science occurred in 2022, when wages surged 8.5 percent, followed by continued solid gains of 3.6 percent in 2023 and 7.4 percent in 2024.

This sustained wage momentum in life science in aligned with rising demand for healthcare innovation, diagnostics, and bioscience production capabilities during and following the pandemic period. It also underscores the sector's robust expansion and its growing role in Rhode Island's high-value economy.

Within the life science sub-sectors, wage levels vary by specialization. The highest-paying subsectors are pharmaceutical and medicine manufacturing and bioscience-related distribution, with average annual wages of $135,500 and $137,700, respectively—more than double the statewide private-sector average of $66,500. Workers in in research, testing, laboratories, and hospitals ern an average of $79,000 while those employed in medical device manufacturing earn about $70,000 annually.

Figure 5: Average Annual Earnings: Life Science sub-sectors, 2024



Source: Author's compilation using data from the US BLS

The wage advantage in life science underscores the sector's concentration of **high-skill, knowledge-based, and technical roles**, particularly in research, medical technology, and specialized laboratory work.

Overall, **life science remains a high-wage anchor industry** in Rhode Island's economy—offering stable, well-compensated employment opportunities that outpace most other private-sector jobs. The sector is both **growing and evolving**. Rhode Island's life science cluster is broadening its base through innovation, entrepreneurship, and applied research, supported by university partnerships, access to talent, and emerging bioscience-related infrastructure. Continued investment in **workforce training, laboratory facilities, and scale-up support** will be key to translating this establishment growth into sustained job creation and long-term competitiveness.

TOTAL ECONOMIC IMPACT

Rhode Island's life science ecosystem is already having a significant impact on economic activity across the state. This interconnected system of universities, biotech companies, hospitals, research institutions, and specialized service providers generated a total economic impact of $5.9 billion in value added, $3.9 billion in labor income, and supported over 50,500 jobs in 2024. These results demonstrate the Hub's impact through direct and strong multiplier effects across the ecosystem. Direct contributions from life science organizations accounted for 27,279 jobs, $2.3 billion in labor income, and $3.1 billion in value added, while indirect and induced effects added another 23,283 jobs, $1.6 billion in income, and $2.7 billion in value added.

Table 1: Impact of the Life Science Industry: Rhode Island

Impact	Employment	Labor Income (Million)	Value Added (Million)
Direct impact	27,279	$2,289	$3,145
Indirect + Induced impact	23,283	$1,605	$2,731
Total Impact	**50,562**	**$3,894**	**$5,875**
Multiplier	**1.85**	**1.70**	**1.87**

Source: Author's compilation using data from the US BLS and IMPLAN.

The **direct impact** encompasses the employment, income, and economic activities of all life science organizations in Rhode Island. The **indirect impact** reflects the inter-industry effects that occur when suppliers of goods and services to life science organization use their payments to purchase additional inputs—equipment, rent, and raw materials—thereby generating further

jobs, income, and output across the state. The **induced impact** arises from the household spending of income earned both directly from employment in life science industries and indirectly through the supply chain. This spending stimulates additional demand for goods and services, leading to further job creation, income growth, and economic output in the state.

IMPLAN economic modeling indicates that the life science sector exerts a substantial multiplier effect on Rhode Island's economy. Specifically:

- For every 100 direct jobs created within life science industries, an estimated 85 additional jobs are supported across other sectors statewide.
- Every $100 in labor income paid to life science employees generates approximately $70 in additional labor income throughout the broader Rhode Island economy.
- Similarly, each $100 in output produced by life science operations results in an estimated $87 in output across other industries.

These findings underscore the strategic importance of Rhode Island's life science ecosystem—not only as a hub for health innovation but as a driver of broad-based economic growth. By linking research, manufacturing, and distribution within a collaborative framework, the sector magnifies its impact well beyond its immediate footprint, positioning Rhode Island for sustained competitiveness and prosperity.

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DISCLAIMERS

Dr. Edinaldo Tebaldi, Professor of Economics at Bryant University, led the preparation of this report at the request and for the Rhode Island Life Science Hub. The author has exercised due and customary care in conducting this research and report. Every effort has been made to ensure the quality of the analysis.

The author thanks Ayesha Issah, Healthcare Informatics and AI graduate students, for her research assistance with data collection.

Appendix

Table A1. Industry Definitions of the Life Science Industry – Rhode Island

NAICS	Subsector
32541	**Pharmaceutical and Medicine Manufacturing**
	Medical Devices
334510	Electromedical apparatus manufacturing
339112	Surgical and medical instrument manufacturing
339113	Surgical appliances and supplies manufacturing
339114	Dental Equipment and supplies manufacturing
339115	Ophthalmic goods manufacturing
339116	Dental laboratories
	Research, Testing, and Medical Laboratories
541380	Testing laboratories
541420	Industrial Design Services
541713	Research and development in nanotechnology
541714	Research and development in biotechnology
541715	Research and development in the physical, engineering, and life sciences
621511	Medical laboratories
621512	Diagnostic imaging centers
621991	Blood and organ banks
622110	General Medical and Surgical Hospitals
	Bioscience-Related Distribution
423450	Medical equipment merchant wholesalers
424210	Druggists‘ goods merchant wholesalers
424910	Farm supplies merchant wholesalers

Table A2: Life Science Employment in Rhode Island (2015–2024)

Year	Pharmaceutical & Medicine Manufacturing	Medical Devices	Research, Testing, Labs, and Hospitals	Bioscience-Related Distribution	Total Employees
2015	1,386	1,604	20,315	1,228	24,533
2016	1,376	1,551	20,353	1,096	24,376
2017	1,405	1,538	20,713	1,120	24,776
2018	1,196	1,551	20,659	1,230	24,636
2019	1,194	1,685	21,426	1,333	25,638
2020	1,305	1,756	20,889	1,443	25,393
2021	1,320	2,067	21,322	1,530	26,239
2022	1,370	1,838	21,838	1,652	26,698
2023	1,321	1,749	22,326	1,701	27,097
2024	1,285	1,648	22,640	1,706	27,279

Source: Author's compilation using data from the US BLS

Table A3: Life Science Establishments in Rhode Island (2015–2024)

Year	Pharmaceutical & Medicine Manufacturing	Medical Devices	Research, Testing, Labs, and Hospitals	Bioscience-Related Distribution	Total **Establishments**
2015	17	70	952	158	1,197
2016	17	70	910	168	1,165
2017	17	70	895	207	1,189
2018	19	73	951	258	1,301
2019	31	81	910	283	1,305
2020	23	70	999	320	1,412
2021	26	69	1,155	363	1,613
2022	26	71	1,436	433	1,966
2023	25	75	1,587	477	2,164
2024	24	72	1,698	503	2,297

Source: Author's compilation using data from the US BLS

Table A4: **Average Annual Earnings: Life Science vs. Private Sector (2015–2024)**

Year	Pharmaceutical & Medicine Manufacturing	Medical Devices	Research, Testing, Labs, and Hospitals	Bioscience-Related Distribution	Average Life Science*	Average RI Private
2015	130,659	60,845	58,402	83,160	63,883	48,740
2016	120,901	64,071	57,800	87,315	63,088	49,570
2017	118,092	67,742	59,025	91,864	64,400	50,927
2018	117,716	70,756	59,232	95,558	64,611	51,709
2019	124,485	63,239	61,706	100,794	66,763	52,920
2020	127,454	66,803	62,764	114,267	69,294	58,768
2021	116,747	60,071	64,766	116,275	70,015	60,662
2022	122,227	71,045	68,778	140,784	76,132	62,977
2023	119,595	66,927	73,114	135,242	78,881	64,337
2024	135,507	70,009	78,954	137,737	84,754	66,500

Source: Author's compilation using data from the US BLS . * Calculated by dividing total wages for all employees in the sector by the number of employees.