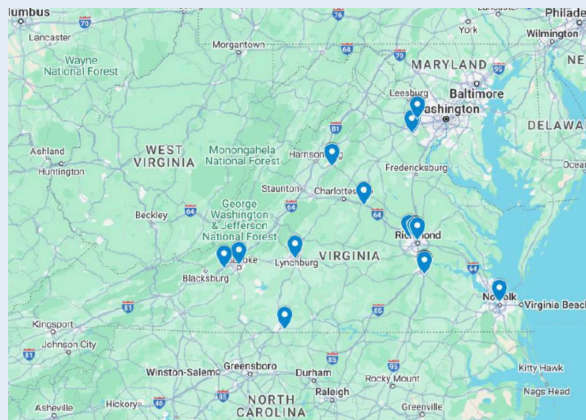


## VIRGINIA CONSTRUCTION PROJECTS

### Major Projects (\$5M+) 2019-2024



### Virginia Fact Sheet, 2019-2024

Pharmaceutical & Biotech Mfg and R&D

**Number of Major Projects**  
(\$5+ million)

**26**

**Major Project Valuation**  
(Any major project active  
between 2019 and 2024)

**\$1.70 billion**

**Total Construction Spending**  
(Capital and maintenance  
expenditure, 2019-2024)

**\$1.83 billion**

### Largest Construction Projects, Pharmaceutical and Biotech Manufacturing and R&D, 2019-2024

Project Owner	City	State	Years	Project Value
<b>Merck and Company Incorporated</b> Elkton Sterile Injectable Plant Gardasil Expansion Project	Elkton	VA	2019-22	\$1,000 million
<b>Merck and Company Incorporated</b> Elkton (Stonewall Facility) Biologics Plant Upgrade and Expansion	Elkton	VA	2016-20	\$168 million
<b>Civica RX</b> Petersburg Grassroot Injectable Fill/Finish	Petersburg	VA	2021-24	\$124.5 million
<b>Pharmaceutical Product Development (PPD) Inc.</b> Richmond Vaccines, Cell & Gene Therapy Products CDMO Plant Expansion	Richmond	VA	2022-24	\$85 million
<b>BIO-CAT Incorporated</b> Troy Microbial Enzyme Fermentation Facility Addition	Troy	VA	2023-24	\$35 million
<b>American Type Culture Collection (ATCC)</b> Manassas Biological Cold Storage/Warehouse/Distribution Expansion	Manassas	VA	2024-25	\$35 million
<b>Pharmaceutical Product Development (PPD) Inc.</b> Richmond Brownfield "PPD CSD-ICD Expansion Bioanalytical Laboratory CRO	Richmond	VA	2021-22	\$32 million
<b>Phlow Corporation</b> Petersburg Stockpile Covid-19 HPAPI'S + Generic Drug Mfg Plant Addition/Reno	Petersburg	VA	2021-23	\$25 million
<b>Phlow Corporation</b> Petersburg Stockpile Covid-19 HPAPI'S + Generic Drug Mfg Plant Addition	Petersburg	VA	2021-22	\$25 million
<b>Pharmaceutical Product Development (PPD) Inc.</b> Richmond Bioanalytical Chromatography Laboratory Building Addition	Richmond	VA	2019-20	\$18 million

# VIRGINIA CONSTRUCTION EMPLOYMENT

## Industry Analysis: VIRGINIA

**Pharmaceutical  
Manufacturing (2023)**  
(NAICS = 325400)

**Firms:**  
233

**Employees:**  
2,743

**Annual Wages:**  
\$284 million

**Wages per Employee:**  
\$103,669

### Data Sources

Pharmaceutical and biotech industry data (projects, spending, labor hours demanded) from Industrial Information Resources (IIR). State industry employment data from the Bureau of Labor Statistics (QCEW) using the North American Industry Classification System (NAICS). State union percent in non-residential construction calculated by dividing union members in construction (unionstats.com) by blue-collar QCEW employment in nonresidential construction firms in 2019 (assumes union density equals zero in residential construction; blue-collar percentage from NAICS=23 using the BLS Occupational Employment Statistics series). Note: Pharmaceutical manufacturing industry statistics (above) do not represent the entirety of the pharmaceutical and biotech industry featured in this study. Most significantly, in addition to NAICS 325400 ("Pharmaceutical Manufacturing"), other industry jobs comprise a subset of NAICS 541700 ("Scientific R&D Services").

## Construction Labor Overview, 2019-2024 Pharmaceutical & Biotech Mfg and R&D

**Total Labor Hours**  
(14 trades; installation and maintenance)

**3,670,784**

**Union Labor Hours (est.)**  
(Estimated state union% in non-residential blue-collar construction trades = 50.7% )

**271,959**

**Union Earnings (est.)**

**\$7,585,134**

## Virginia Construction Labor Hours by Trade, Pharmaceutical & Biotech Mfg and R&D, 2019-2024

	Installation	Maintenance	Total
<b>Boilermaker</b>	<b>42,000</b>	<b>3,484</b>	<b>45,484</b>
<b>Carpenter</b>	<b>178,794</b>	<b>28,380</b>	<b>207,174</b>
<b>Electrician</b>	<b>1,047,462</b>	<b>95,257</b>	<b>1,142,719</b>
<b>HVAC Installers</b>	<b>110,488</b>	<b>1,670</b>	<b>112,158</b>
<b>Instrumentation Tech</b>	<b>632,694</b>	<b>34,576</b>	<b>667,270</b>
<b>Insulator</b>	<b>93,276</b>	<b>8,360</b>	<b>101,636</b>
<b>Ironworker</b>	<b>91,084</b>	<b>27,397</b>	<b>118,481</b>
<b>Laborer</b>	<b>198,714</b>	<b>10,664</b>	<b>209,378</b>
<b>Millwright</b>	<b>145,059</b>	<b>31,471</b>	<b>176,530</b>
<b>Operator</b>	<b>228,890</b>	<b>8,022</b>	<b>236,912</b>
<b>Painting</b>	<b>33,060</b>	<b>7,910</b>	<b>40,970</b>
<b>Plumber + Pipefitter</b>	<b>436,864</b>	<b>10,116</b>	<b>446,980</b>
<b>Scaffolding</b>	<b>75,734</b>	<b>5,507</b>	<b>81,242</b>
<b>Welder</b>	<b>64,602</b>	<b>19,248</b>	<b>83,850</b>
<b>Total</b>	<b>3,378,720</b>	<b>292,064</b>	<b>3,670,784</b>