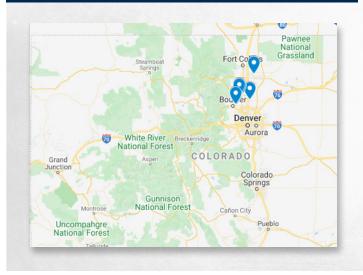


CONSTRUCTION PROJECTS

COLORADO

Major Projects (5M+) 2015-20



Colorado Fact Sheet, 2015-20 Pharmaceutical & Biotech Mfg and R&D

Number of Major Projects

(\$5+ million)

9

Major Project Valuation

(Any major project active between 2015 and 2020)

\$360 million

Total Construction Spending

(Capital and maintenance expenditure, 2015-20)

\$528 million

Largest Construction Projects, Pharmaceutical and Biotech Manufacturing and R&D, 2015-20

Project Owner	City	State	Years	Project Value
Agilent Technologies Incorporated Frederick Grassroot "Project Apothecary" Nucleic Acid APIs I	Frederick Manufacturing Plant	СО	2016-19	\$135 million
AGC Biologics Incorporated Boulder Bulk Bio/Purification/Fill Finish CDMO Plant Covid P	Boulder roject Blizzard Upg	СО	2020-22	\$100 million
Novartis Gene Therapies Longmont Clinical-Stage/Commercial Gene Therapy Plant Re	Longmont novation and Expansion	СО	2019-20	\$55 million
MedImmune LLC Boulder Lakecentre Clinical-Scale/Bulk Biologics Plant Upfit 8	Boulder & Recommissioning	СО	2016-18	\$25 million
KBI Biopharma Incorporated Boulder Microbial Biologics-CMO and CRO Plant Cell Therapy	Boulder Production Train Add	СО	2017-18	\$15 million
TOLMAR Incorporated Windsor Topical Dermatologics CMO Commercial-Scale Plant	Windsor Addition/Upfit Phase II	СО	2014-16	\$12 million
TOLMAR Incorporated Windsor Semisolids, Liquids, Injectables CMO Pilot Plant Add	Windsor ition Phase I	СО	2012-16	\$8 million
Amgen Incorporated Longmont Aranesp Injectables Plant Closure, Dismantlement	Longmont & Sale	СО	2015	\$5 million
Cambrex Corporation Longmont Clinical Novel Drug Manufacture & Development C	Longmont DMO Plant Reno/Fit-Up	СО	2017	\$5 million

COLORADO

Construction Labor Overview, 2015-20 Pharmaceutical & Biotech Mfg and R&D

1,067,607

Total Labor Hours

(14 trades; installation and maintenance)

199,655

Union Labor Hours (est.)

(State union % in non-residential = 18.7%)

\$5,434,598

Total

Union Earnings (est.)

Industry Analysis: Colorado

Pharmaceutical Manufacturing (2019) (NAICS = 325400)

Firms:

196

Employees:

4,888

Annual Wages:

\$416 million

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 QCEW employment in non-residential construction firms in 2019 (assumes union density equals zero in residential construction). 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"). Photo Credit: Google Earth.

Colorado Construction Labor Hours by Trade, Pharmaceutical & Biotech Mfg and R&D, 2015-20						
	Installation	Maintenance	Total			
Boilermaker	9,449	3,675	13,125			
Carpenter	40,225	29,937	70,162			
Electrician	235,659	100,480	336,139			
HVAC Installers	24,322	1,679	26,000			
Instrumentation Tech	142,344	36,472	178,816			
Insulator	20,985	8,818	29,803			
Ironworker	20,492	28,899	49,391			
Laborer	44,707	11,248	55,955			
Millwright	32,636	33,197	65,833			
Operator	51,496	8,462	59,958			
Painting	7,438	8,344	15,782			
Pipefitter	98,286	10,670	108,957			
Scaffolding	17,039	5,809	22,848			
Welder	14,534	20,303	34,838			

307,995

759,612



1,067,607