

### Why Greenville, North Carolina?

- 2,000+ pharmaceutical jobs in Pitt County
- 8,500+ pharmaceutical jobs throughout the eastern North Carolina region
- High pharmaceutical industry concentration locally and regionally
- Strong manufacturing region
- 90 minutes from Research Triangle life sciences R&D hub

#### **Companies in Pitt County:**

- CMP Pharma
- Metric Contract Services
- Thermo Fisher Scientific

# **Critical Occupations:**

- Industrial engineers
- Medical scientists
- Chemists
- Technicians
- Sales representatives
- Production managers
- Production workers

# **Key Site Selection Considerations:**

- Skilled labor availability
- Water quality
- Telecommunications
- Transportation networks
- Proximity to markets



# Pharmaceutical Manufacturing

**TARGETED INDUSTRY PROFILE** 

# **Pharmaceutical Manufacturing**

Pharmaceutical manufacturing is a key industry within the globally important life sciences sector, a broad industry cluster encompassing industries related to the study of organisms, including humans, animals, and plants.

North Carolina is a leading player nationally in the life sciences cluster (within the top 10 by most rankings), with a comparatively high share of its workforce employed within the sector, a concentration of highly regarded research institutions, and its track record of attracting National Institute of Health (NIH), National Science Foundation (NSF), and venture capital funding<sup>1</sup>. The state is particularly concentrated in the subsectors of drugs and pharmaceuticals; research, testing, and medical labs; and agricultural chemicals.

Pitt County is home to a high concentration of pharmaceutical and medicine manufacturing. With over 2,000 pharma jobs, the industry is over 12 times more concentrated in Pitt County as compared to the United States as whole (location quotient of 12.97). The broader eastern North Carolina region has over 8,500 jobs in this industry. Pitt County comprises part of eastern North Carolina's BioPharma Crescent, a region stretching from Greenville to Wilson that includes several pharmaceutical and medical device manufacturers.

There are several pharmaceutical companies with sizeable facilities in the county. Thermo Fisher Scientific operates a large, 640-acre multipurpose pharmaceutical manufacturing campus in Greenville, producing and packaging solid dose, sterile dose, and other products. Multinational pharmaceutical company, Metric Contract Services, is also in Greenville. Its development and manufacturing facility specializes in complex dosage forms including potent compounds, Schedule II-V controlled substances, inherently unstable compounds and products with poor bioequivalence. CMP Pharma, located in Farmville since 1986, is a specialty pharmaceutical company that develops and manufactures a portfolio of high-value semi-solid and liquid products.

# **Labor Availability**

Within the pharmaceuticals supply chain, Pitt County is best positioned to attract manufacturing activities. Manufacturers of pharmaceuticals rely on a combination of higher- and lower-skilled talent. Highest skilled occupations include chemists, medical scientists, chemical engineers, and industrial engineers. Middle-skill positions include lab technicians and machinery technicians. Lower-skilled positions include machine operators, inspectors, packagers, and other production workers.

Pitt County's labor shed, defined as a 45-minute drive time, has a relatively high concentration of skilled pharmaceutical manufacturing occupations compared to the entire state of North Carolina and the United States, and is particularly concentrated in biological scientists and medical scientists. The labor shed also has a sizable engineering workforce, particularly chemical engineers and industrial engineers. The labor shed is a net exporter of labor for higher-skilled pharmaceuticals manufacturing occupations, meaning more workers commute out of the labor shed than commute in. This suggests local skilled labor is available to support an increased industry presence. Wages for these occupations are generally on par with the national average, pointing to labor cost competitiveness nationally, and particularly compared to high-cost regions where life sciences R&D tend to concentrate, including Boston, San Francisco, San Diego, and Maryland. Pitt County also has access to the state's highest-skilled life sciences talent, which tends to live near the North Carolina Research Triangle, located about 90 minutes away.



1. JLL 2020 Life Sciences Real Estate Outlook





Pharamceutical Manufacturing - High-Skilled Occupation Labor Availability within 45-Minute Commute									
SOC	Description	2019 Resident Workers	2019 Jobs	2019 Net Commuters	2019 Location Quotient	Typical Entry Level Education	Regional Educational Completions (2019)	Region Median Hourly Earnings	National Hourly Earnings
11-3051	Industrial Production Managers	266	271	5	1.14	Bachelor's degree	905	\$49.39	\$50.26
11-9121	Natural Sciences Managers	94	86	(8)	0.97	Bachelor's degree	468	\$58.95	\$62.07
17-2112	Industrial Engineers	491	484	(7)	1.31	Bachelor's degree	27	\$39.88	\$42.33
19-1042	Medical Scientists, Except Epidemiologists	172	141	(31)	0.85	Doctoral or professional degree	146	\$47.06	\$42.71
19-2031	Chemists	180	165	(15)	1.56	Bachelor's degree	101	\$29.80	\$37.32
19-4031	Chemical Technicians	80	72	(8)	0.88	Associate's degree	0	\$17.40	\$23.68
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	267	173	(94)	0.42	Bachelor's degree	0	\$41.18	\$38.75
Total		1,549	1,391	(158)	0.95		1,500	\$41.67	\$42.16

Source: EMSI

Programs offered by East Carolina University in science and engineering offer a consistent pipeline of talent to fill occupations in Life Sciences manufacturing engineering. The Brody School of Medicine and the College of Engineering and Technology offer a variety of degrees that relate to life sciences careers. There were over 1,500 completions in 2019 in degree programs at educational institutions within the labor shed region that prepare students for skilled occupations in pharmaceutical manufacturing.<sup>2</sup>

## **Industry Outlook**

Revenue growth in pharmaceutical manufacturing is expected to outpace the United States economy over the next five years. Operational and supply chain disruptions have occurred as a result of COVID-19, but the industry is expected to rebound relatively quickly, with producers of nondiscretionary pharmaceutical products performing better than non-vital medication producers. Intensifying market competition and increasing price scrutiny on branded products is expected, with consumer preferences shifting toward generic products. The wave of patent expirations for top-selling drugs, most notably the "mini-cliff" in 2015, has caused many manufacturers to move toward biologic drugs, rare diseases, and specialty therapy areas to support long-term growth. To maximize return on investment, many operators pivoted their pipelines to rare diseases, where low prescription volumes can be offset by high per-unit costs and benefit from Orphan Drug Exclusivity, which grants longer patent exclusivity in the United States and the European Union. Orphan drugs for rare diseases and cancer have become increasingly popular over the past five years.



2. EMSI

