

Risk, Readiness & Resilience

A FOOD INNOVATION AND ADVANCED MANUFACTURING ANALYSIS



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EXECUTIVE SUMMARY

Food innovation and advanced manufacturing are entering a period of heightened complexity. Companies are being asked to move faster, operate more efficiently, and build redundancy into supply chains while responding to shifting consumer preferences, climate pressures, and workforce constraints. Location decisions that once prioritized proximity to raw inputs or low-cost labor are now evaluated through a broader lens that includes infrastructure reliability, logistics reach, talent availability, and long-term operational risk.

Middlesex County, New Jersey, has emerged as a compelling environment for food innovation and manufacturing precisely because it addresses these pressures in a coordinated way. The County combines strong food science and agricultural research assets, a dense and diverse workforce, development-ready industrial sites, and one of the most connected logistics networks in the United States.

This report examines Middlesex County through the lens food and manufacturing executives now use when evaluating expansion or relocation: workforce readiness, innovation capacity, logistics resilience, operational reliability, cost-value performance, and long-term adaptability. The findings show a County that is not only responding to industry change but positioning itself to support the next generation of food and manufacturing innovation.

Key Findings Include:

A Nationally Competitive Talent Base

Middlesex County has one of the most educated labor pools in the United States, with 45.1% of adults holding a bachelor's degree or higher and 19% holding a graduate degree, placing the County in the top 4% nationally.¹ This depth supports food science, engineering, quality assurance, and advanced manufacturing roles that are increasingly difficult to staff elsewhere.

Food Innovation Anchored by Research and Industry

Rutgers University's School of Environmental and Biological Sciences and nationally ranked Food Science and Technology program anchor a strong research pipeline. Two of the world's top Flavor & Fragrance companies, Firmenich¹ and Robertet,²

maintain U.S. headquarters in Middlesex County, creating a critical mass of R&D, sensory science, and formulation expertise.

Infrastructure and Logistics That Reduce Risk

Middlesex County's multimodal logistics network moves 23.9 million tons of freight annually across 765 facilities, supporting food manufacturing, cold-chain distribution, and rapid delivery to approximately 40% of the U.S. population within a day's drive.

Manufacturing-Ready Sites with Access to Key Utilities

From brownfield redevelopment initiatives to Class-A industrial parks in the Exit 8A submarket, Middlesex County offers a range of development-ready sites supported by documented water and transportation infrastructure, reducing time-to-market and execution risk.

The Changing Risk Profile for Food Innovation and Manufacturing

Food and advanced manufacturing companies are operating in an environment shaped by overlapping risks. Climate volatility, supply chain disruptions, and labor shortages are influencing where and how companies invest. Surveys of professional site selectors in 2023–2024 show that shovel-ready sites are a decisive factor, often ranking above cost. As a result, companies are placing greater emphasis on locations that support early-stage risk evaluation, operational coordination, and long-term scalability.

Middlesex County is positioned ahead of these constraints. The County benefits from long-standing industrial activity and proactive coordination that allow food manufacturers and processors to evaluate site readiness and development feasibility early in the site selection process, reducing uncertainty and supporting more informed investment decisions.

Labor availability has also become a defining risk factor. While national quit rates have normalized since the pandemic, access to skilled workers in food science, quality assurance, automation, and

maintenance has become more challenging. In 2024, 91% of industrial-focused site consultants agree that access to talent significantly shapes location decisions. Middlesex County's workforce profile is well positioned to meet this demand.

Workforce Strength and Industry Alignment

Middlesex County's workforce is among the most educated and diverse in the nation. 45.1% of adults hold a bachelor's degree or higher, and 19% hold a graduate degree, outperforming peer counties such as Cook County, Illinois, and Maricopa County, Arizona.³

For food innovation, diversity is a competitive advantage. Middlesex County's population reflects a wide range of cultural and culinary traditions, supporting product development, flavor innovation, and market testing across global cuisines. This environment has helped ethnic and specialty food companies develop products locally before scaling nationally.

Education and training pipelines reinforce this advantage. Rutgers University's Food Science and Technology program is ranked #2 nationally and #17 globally, supplying graduates with expertise in food safety, formulation, sensory science, and processing.⁴ At the secondary level, Middlesex County Magnet Schools have launched programs in agricultural and aquacultural technology, supported by federal funding, to train students in hydroponics, aquaculture, and controlled environment agriculture.

Advanced manufacturing is similarly supported through programs at Middlesex College and Magnet Schools focused on CNC machining, mechatronics, robotics, and energy-efficient systems, preparing a workforce for increasingly automated facilities.

Research, Innovation, and Product Development

Middlesex County's food innovation ecosystem is anchored by Rutgers University's School of

Environmental and Biological Sciences and the New Jersey Agricultural Experiment Station. These institutions support research across crop science, food safety, nutrition, and sustainable production, providing companies with access to applied research and pilot testing capabilities.

The presence of Firmenich and Robertet, two of the world's leading Flavor & Fragrance companies, creates a dense R&D environment that supports collaboration, talent circulation, and innovation spillovers. These firms anchor a broader ecosystem of sensory scientists, chemists, and formulation experts who contribute to nutraceuticals, functional foods, and specialty products.

This concentration allows companies to move more efficiently from concept to commercialization, reducing development timelines and technical risk.

Manufacturing Sites and Industrial Readiness

Middlesex County offers a compelling inventory of manufacturing-ready sites. Strategic brownfield redevelopment has transformed legacy industrial properties into modern facilities. Notable examples include the Rockefeller Group's redevelopment of a former ExxonMobil research campus in Edison into a 900,000-square-foot distribution center, and the Piscataway Logistics Center, a \$250 million redevelopment creating 2.1 million square feet across five buildings and more than 1,500 permanent jobs.

For companies requiring new construction, Class-A developments such as Prologis Park Cranbury, a 2 million-square-foot industrial park with immediate access to NJ Turnpike Exit 8A, provide modern specifications and connectivity. These sites support food processing, packaging, cold storage, and advanced manufacturing operations.

Logistics, Distribution, and Access

Food companies depend on speed, freshness, and reliability. Middlesex County's logistics network supports 23.9 million tons of freight annually through 765 facilities, providing redundancy across highway, rail, port, and air cargo modes.⁵

The County's location enables same-day or next-day delivery to major Northeast markets, reaching approximately 40% of the U.S. population within a one-day drive. Proximity to the Port of New York and New Jersey supports both imported inputs and export-ready products, while Newark Liberty International Airport provides air cargo access for high-value or time-sensitive goods.

This reach allows food manufacturers to shorten supply chains, reduce spoilage risk, and respond quickly to market demand.

Climate Resilience and Operational Stability

Climate risk has become a central consideration in food manufacturing location decisions. Middlesex County offers a moderate risk profile relative to regions facing drought, extreme heat, or wildfire exposure.⁶ Its inland location reduces vulnerability to coastal storm surge, while proactive flood mitigation efforts, supported by \$1.1 million in federal funding, strengthen drainage and critical infrastructure in southern municipalities.

Compared to West Coast or Sunbelt markets experiencing water scarcity and climate volatility, Middlesex County offers greater long-term operational stability for food and beverage production.

Cost Structure and Incentives

While Middlesex County is not a low-cost market in nominal terms, it delivers strong productivity and access per dollar. Median household income is approximately \$110,000, compared with \$104,453 in New York County, New York, and \$80,579 in Cook County, Illinois.

Food and manufacturing companies can access a range of incentives, including NJEDA programs, sales tax exemptions on manufacturing equipment, workforce training grants, and Urban Enterprise Zone benefits in designated municipalities. These tools improve project economics and support long-term competitiveness.

Industry Trends and Future Outlook (2025–2030)

Middlesex County is aligning its assets to support emerging trends in food innovation and advanced manufacturing. Growth areas include plant-based and functional foods, sustainable packaging, automation and robotics in food processing, and controlled environment agriculture.

Recent investment announcements underscore this trajectory. In 2025, Hotpack, a global leader in sustainable food packaging, announced a \$100 million investment to establish its first North American manufacturing and distribution facility in Edison, validating Middlesex County's appeal to global food innovation firms.⁷

Over the next decade, continued investments in STEM education, infrastructure, and site readiness position Middlesex County to support reshoring, automation, and innovation-driven manufacturing.

A Platform for Scalable Food Innovation

Food innovation and advanced manufacturing require locations that balance speed, reliability, and adaptability. Middlesex County, New Jersey, offers that balance. Its combination of research capacity, workforce depth, logistics reach, and infrastructure readiness reduces risk while enabling companies to innovate and scale. For food and manufacturing companies seeking confidence in an increasingly complex environment, Middlesex County presents a location designed to perform today and adapt over time.

With 3.5x the national average of food scientists and technologists, Middlesex County, NJ, is where the future of flavor is shaped.

For more information, visit:
biz.DiscoverMiddlesex.com

Notes

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3. Federal Reserve Bank of St. Louis, "Educational Attainment for Middlesex County, New Jersey (HC01ESTVC1734023)," Federal Reserve Economic Data, retrieved from <https://fred.stlouisfed.org/series/HC01ESTVC1734023>
4. Rutgers University, "World and Global Rankings," *Rutgers University Communications*, retrieved from <https://communications.rutgers.edu/services-resources/rankings#chapter=a-nameworld-aglobal-rankings-274>
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6. Rutgers Climate Resource Center, "New Jersey Climate Change and Flood Risk," *Rutgers University*, retrieved from https://njclimateresourcecenter.rutgers.edu/wp-content/uploads/2020/03/CHPR_Final_12.6_2017.pdf
7. Hotpack Global, "Hotpack to Invest \$100M in Its First U.S. Manufacturing Facility in New Jersey," *Hotpack Global*, retrieved from <https://www.hotpackglobal.com/news-details/hotpack-to-invest-100m-in-its-first-us-manufacturing-facility-in-new-jersey/>