DEVELOPING OPPORTUNITIES

Industry Sheets

Presented by **Team NEO • 2023**

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Trends & Themes by Industry

Use these trends extracted from site searches to inform and identify the top strengths of your site, taking into consideration the larger location around it. For example, does your site have high water and sewer capacities? Is there an electric transmission line proximate? Does your labor shed offer strengths in specific Standard Occupation Codes that meet labor & talent demands for a specific industry? Is your site free of height restrictions? Do you have expedited permitting?

There's more than one way to maximize a site's competitiveness: focus on identifying incremental, proactive improvements over time to get more visibility on the site from companies and consultants.

Advanced Manufacturing

Northeast Ohio's most active industry. Accounting for 20% of the region's gross domestic product (GDP), manufacturing is a driving force in Northeast Ohio's economy. The region has built on its strong manufacturing legacy to become a globally recognized center of advanced manufacturing – in sectors ranging from the Internet of Things (IoT) to biomedical devices – with complete life cycle capabilities. Northeast Ohio's robust resources enable companies to develop, produce, and deliver products and services. The region is actively focused on the future of the industry through expanding industry 4.0 technologies and developing the talent to power them. Real estate needs vary widely due to the breadth and diversity of businesses in the manufacturing industry. In the context of proactive site analysis and preparation, it's best to think about trends and themes by the size of the lead opportunities.

PHYSICAL ATTRIBUTES OF SITE

Leads under 50 acres
- Looking for existing buildings or sites, 6" floors, 32' ceiling height 6" floors

Leads between 50 – 200 acres
- Looking "ready" rectangular/square like sites

Leads between 200 – 500 acres
- Sites for build-to-suit
- Rectangular/square like contiguous, developable acreage
- All due diligence needed or clear path to resolution

Leads >500 acres
- Sites for build-to-suit

LOCATIONAL NEEDS

- Distance to intermodal facility is important
- Not in close proximity to residential
- Rail required or preferred

Leads >500 acres
- Rail necessary
- Industrial grade roads

UTILITIES

Leads under 50 acres
- Electric – 7-12 MW power; 70-80% load factor; Gas – 12,715 mcf/ month; Water – 150K GPD; Wastewater – 75K GPD

Leads between 50 – 200 acres
- Electric – 50-80 MW power; 70-80% load factor; Gas – 22,084 mcf/month; Water – 1MM GPD
- Wastewater – 1MM GPD

Leads between 200 – 500 acres
- Electric – 67-185 MW power; 70-80% load factor; renewable energy; Gas – >50,000 mcf/month; Water - 2MM GPD; Wastewater – 75K GPD

Leads >500 acres
- Electric - 110-250 MW power, Gas - >50,000 mcf/month, Water - 1MM GPD, Wastewater - 1MM GPD

OPERATIONAL NEEDS

- Zoned industrial
- 24/7 operations can be required

Leads >50 acres
- 24/7 operations
- Attainment for ozone, particulate matter, sulfur dioxide, lead, NOx, co, mineral rights
- 100'+ tower as part of the building
- Road infrastructure plans approved

EXPLORE YOUR OCCUPATIONAL COMPETITIVENESS

Investigate these priority 2-digit Occupation Profiles (SOC):
Installation, Maintenance & Repair Occupations; Architecture & Engineering Occupations; Installation, Maintenance & Repair Occupations; Production Occupations

WANT TO LOOK DEEPER?

3–6-digit SOCs vary widely depending on the operation in the advanced manufacturing industry.
Be prepared with an understanding of the 2-digit SOCs and respond with more detailed labor pool information when the lead shows up.

Electric Vehicle Battery Production

Located at the center of the U.S. and Canadian automotive industries, with strength in tires, trailers, offroad, motorsports, auto electronics, and energy storage, the Northeast Ohio Region is a smart choice for automotive companies – particularly companies pivoting to electrification. As the second largest US automotive manufacturing state, Ohio has the infrastructure and workforce to support the industry. Northeast Ohio is home to top R&D and manufacturing facilities for lithium-ion battery cathode materials.

PHYSICAL ATTRIBUTES OF SITE

- 26% of leads < 100 acres; 61% of leads between 200 – 500 acres; 13% of leads > 500 acres
- 25'-30' ceiling height for primary manufacturing operation for smaller projects; 60' with up to 200' towers for larger projects
- Companies want to buy the land. Lease structure is unlikely
- Rectangular or square site with favorable topography (flat)
- Wetlands, phase I & phase II, and geotechnical analysis prioritized

LOCATIONAL NEEDS

- Site should not be located adjacent to residential development
- 26% of leads require rail
- Target: 5 miles from highway with industrial grade roadways around the site

UTILITIES

- Electric - Heavy power users: 75 - 400 MW demand; 60%-80% load factor; preferred to be sourced from renewable sources or have renewable sources in the energy mix
- Gas – 100k-500k MCF/Month

UTILITIES *(continued)*

- Water & Sewer - 100K GPD for smaller projects; 600K GPD and higher for larger projects
- Significant infrastructure in place to meet phase 1, with clear plans to expand infrastructure to meet full capacity

OPERATIONAL NEEDS

- Appropriate zoning for industrial use and the jurisdiction should be open to expedited permitting
  - Explain storage restrictions and height restrictions
- Describe process for securing an air permit, followed by process for all permits and approvals
- Access to the supply chain
  - Specific materials needed for battery production include: lithium carbonate, lithium phosphate, iron powders, phosphoric, electrolyte, etc
- The submitted site must demonstrate an adequate qualified labor pool within a 45-to-60-minute commute
  - What are the 5 largest employers; 5 largest manufacturers
- ≈ 1 job/1k sq ft and leads over 200 acres create 2k – 5k jobs

EXPLORE YOUR OCCUPATIONAL COMPETITIVENESS

Investigate these priority 2-digit Occupation Profiles (SOC): Production Occupations; Architectural & Engineering Occupations; Installation, Maintenance & Repair Occupations

WANT TO LOOK DEEPER?

Investigate these common 6-digit Occupation Profiles: General & Operations Managers; Buyers & Purchasing Agents; Electrical Engineers; Industrial Engineers; Mechanical Engineers; Electrical and Electronic Engineering Technologists & Technicians; Sales Representative, Wholesale & Manufacturing; Industrial Production Managers; Customer Service Representatives; Production, Planning & Expediting Clerks; Shipping, Receiving & Inventory Clerks; Maintenance & Repair Workers; First-line Supervisors of Production and Operating Workers; Electrical, Electronic and Electromechanical Assemblers; Miscellaneous Assemblers & Fabricators; Extruding & Drawing Machine Setters; Machinists; Molding, Coremaking and Casting Machine Setters; Multiple Machine Tool Setters; Inspectors, Testers, Sorters; Helpers – Production Workers; Laborers and Freight; Stockers and Order Fillers

Generalized labor breakdown: General production labor (70%), Engineering (15%), Management (10%) Administrative (5%)

Food Production & Processing Industry

Food manufacturing is a thriving cluster in Northeast Ohio, with more than 500 food processors, including big names like H.J. Heinz, Nestlé USA, J.M. Smucker, and Pillsbury, as well as many smaller firms – supplying food and beverage products to consumers worldwide. The region also offers more than 200 food packaging providers, with an emerging specialty in sustainable packaging materials. A trained talent pool of more than 23,000 food manufacturing and production workers, easy access to raw materials and suppliers, and an abundant supply of fresh water from Lake Erie make Northeast Ohio an ideal location for food processing businesses.

Great & Small Opportunities
3-35 acres or <300K square feet
(66% of food production leads)

PHYSICAL ATTRIBUTES OF SITE

- More likely to seek single tenant buildings only; land and multi-tenant buildings possible
- 16'-25' ceiling height
- Environmental and wetlands studies are crucial
- Buildings cannot have been previously used for heavy industry

LOCATIONAL NEEDS

- Proximity to residential is important (no less than ¼ mile)
- Companies are interested in practical public transportation options for employees

UTILITIES

- Electric – 2 – 5 MW at full capacity, 277/480V required
- Gas – 10K mcf/month
- Water – 100K GPD, Process water capacity may be needed
- Wastewater – 100K GPD

OPERATIONAL NEEDS

- Zoning permits food mfg
- Explain the readiness or path to a food grade building
- Labor costs relative to the nation and/or other similar markets is meaningful
- Who are the major food manufacturing and manufacturing employers within a 60-minute drive time
- ≈1 job/1K square feet

Great & Large Opportunities
50-160 acres or 300K+ square feet
(34% of food production leads)

PHYSICAL ATTRIBUTES OF SITE

- Building or land
- Square or rectangle shaped site desired
- Single tenant building needed
- 32'-42' ceiling height
- All due diligence studies completed are crucial
- Not in FEMA 100- or 500-year floodplain

LOCATIONAL NEEDS

- Proximity to residential is important (no less than ½ mile)
- Companies are interested in practical public transportation options for employees

UTILITIES

- Electric – 7 – 10 MW at full capacity, 277/480V required
- Gas – 120K mcf/month, 17 PSI
- Water – 600K GPD, Process water capacity may be needed
- Wastewater – 600K GPD

OPERATIONAL NEEDS

- Zoning permits food mfg
- Operations are likely 24/7 or 24/6
- A tower or tall stack (≈60'+) may be needed
- Labor costs relative to the nation and/or other similar markets is meaningful
- Who are the major food manufacturing and manufacturing employers within a 60-minute drive time
- 1.5 jobs/1K square feet

EXPLORE YOUR OCCUPATIONAL COMPETITIVENESS

Investigate these priority 2-4-digit Occupation Profiles (SOC): Production Occupations; Food Scientists & Technologists; Food Science Technicians

WANT TO LOOK DEEPER?

Investigate these common 3-4-digit Occupation Profiles: Industrial Production Managers; Food Scientists & Technologists; Food Science Technicians; Food Preparation Workers; Industrial Machinery Installation, Repair & Maintenance Workers; First-Line Supervisors of Production & Operating Workers; Assemblers & Fabricators; Food Processing Workers; Metal Workers & Plastic Workers; Other Production Occupations

Semiconductor Industry

The Northeast Ohio region semiconductor industry chips away at the competition. Here you will find resources to promote expansion for chip designers, materials suppliers, equipment manufacturers, chip foundries/FABs, and assembly, packaging, and testing. The region's access to Lake Erie, part of the largest fresh surface water system on earth, ensures that fresh water supply is reliable, abundant, and cost-effective. Significant investment in higher education and training to serve the semiconductor industry is creating a pipeline of talent in the region.

Megaprojects: Likely requirements for semiconductor fab (wafer manufacturing)

PHYSICAL ATTRIBUTES OF SITE

- 600 – 1,800 acres for sale
- Greenfield sites that are square – rectangular shape
- Environmental, archeological and wetlands studies are crucial
- Land needs to be free of utility transmission lines due to potential for ElectroMagnetic Interference (EMI)

LOCATIONAL NEEDS

- Located within 15-30 miles of major interstate or highway
- Not rail served
- Sensitive to vibrations & certain adjacent uses within .5-1 mile

UTILITIES

- Electric - > 500 MW at full capacity phased over 10+ years, 86% -98% Electric Load Factor, renewable energy in the mix
- Gas – 250k-500k MCF/ Month
- Water - > 20 MGD
- Wastewater - > 16 MGD up to 41 MGD
- Must show time, cost & scope to all infrastructure upgrades to meet the requirements

OPERATIONAL NEEDS

- Operation will likely require a Title V major source air permit based on regional and national air quality and emission standards
- Are there known easements or impediments on site and height restrictions?
- Operation is likely 24/7/365
- Clarity on talent pipeline and alignment with local institutions to train workers to meet demand. Mega project opportunities in the Semiconductor Industry create thousands of new jobs.

Non-mega projects in semiconductor manufacturing and suppliers of semiconductor manufacturing

- Similar needs as semiconductor fab mega projects above, but on smaller sites with lower utility demands
- 50 acres; 18 – 30 MW; 2-4 MGD water and sewer; 50K MCF/Month

EXPLORE YOUR OCCUPATIONAL COMPETITIVENESS

Investigate these priority 2-digit Occupation Profiles (SOC): Production Occupations; Installation, Maintenance & Repair; Architecture & Engineering; Management

WANT TO LOOK DEEPER?

Investigate these common 3-4-digit Occupation Profiles: Operations Specialties Managers; Computer & Information Analysts; Engineers; Drafters, Engineering & Mapping Technicians; Sales Representatives; Wholesale & Manufacturing; Office & Administrative Support; Supervisors of Installation, Maintenance & Repairers; Electrical and Electronic Equipment Mechanics; Installers and Repairers; Other Installation; Maintenance & Repair Occupations; Supervisors of Production Workers; Assemblers & Fabricators; Metal & Plastics Workers; Other Production Occupations; Material Moving Workers

Example Location & Site Analysis for *Great & Large Opportunities* the Food Production Industry

The Stark Farm site in Stark County is well positioned to compete for *Great & Large Opportunities* in the Food Production industry. The ZoomProspector record is a great example to use as a model for your site record.

Top site & location strengths aligned with the Food Production Industry Sheet

- 1,890 Food Processing Workers within 30-min drive time labor shed and 2.46 Location Quotient
- Development-ready land that can deliver a single tenant & food grade building
- Zoning allows for food processing operations as a use by right
- 60' building height allowable for a tower; towers above 60' can pursue a height variance
- Site can deliver the utility capacities desired for food manufacturers (wastewater infrastructure may need to be expanded)
- All due diligence studies have been completed
- Site is ½ mile from nearest residential
- Rectangular site boundary can be delivered
- Not in a 100- or 500-year floodplain
- List of permits & timelines are available and based on two large projects already developed on site
- Major Food Companies within 20 miles: Smucker Co., Sugardale Foods, Brewster Cheese, Case Farms, Shearer's Foods
- Major Food Wholesalers within 20 miles: Smith Foods, Frito-Lay, Walnut Creek Foods, Fresh Mark Inc.
- Major Manufacturers within 20 miles: Republic Steel, The Timken Company, Gradall Industries, & Diebold Nixdorf
- Site serviced by SARTA Bus Route 157 mornings, late afternoons and evenings
- Two large projects have been developed on the site in the last 3 years: Hendrickson & Tractor Supply

Additional proactive action steps to consider:

- 24/7 or 24/6 operation would need approval
- Analyze and market labor costs for food production related occupations relative to the nation
- Visit the *Ways to Act: Site & Location Analysis* section of The Book to further advance the preparedness of the site

Example Location & Site Analysis for *Great & Small Opportunities* in the Food Production Industry

This site is well positioned to compete for *Great & Small Opportunities* in the Food Production industry. Visit the Opportunity Commerce Park ZoomProspector record to discover additional site & location information.

Top site & location strengths aligned with the Food Production Industry Sheet

- Phase I & II environmental site assessments, wetlands delineation and geotechnical analysis are completed
- Property owner secured funds for environmental remediation & site preparation
- Developer can deliver a single tenant food grade building
- Rail spur has been evaluated and is feasible if needed from an end user
- Labor strengths: 3,500 Food Processing (51-3000) jobs within a 30-minute drive time signalizing labor specialization
- Zoned General Industry (GI-B4) – food manufacturing is an allowed use
- Large water & wastewater lines serve the site
- Cluster of food-based companies within a 2-mile radius including Pierre's French Ice Cream, Orlando Baking Company, Miceli Dairy Products, Domino Sugar, Hillcrest Foodservice
- ESG^P score of 92 – this signals an opportunity to present alignment to corporate ESG goals & objectives
- Multiple 7-day bus routes available with a stop directly in front of the site

Additional proactive action steps to consider:

- Residential is ¼ mile away, but established food production operations in proximity provide precedent for the use. Confirm this position with the city and stakeholders.
- Confirm electric, gas, water & wastewater capacities
- The record needs additional information about utility capacities.
- Visit the *Site & Location Analysis* Toolkit to further advance the preparedness of the site