DEVELOPING OPPORTUNITIES

Presented by **Team NEO • 2023**

With generous support from the
Fund for Our Economic Future

PROUD TO BE PART OF THE NORTHEAST OHIO REGION

JobsOhio Network Partner

Developing Opportunities: Bridging the Gap in Northeast Ohio's Manufacturing Site Inventory

INTRODUCTION

The Developing Opportunities report is a vital call to action to address the supply-demand imbalance of readily available site locations in Northeast Ohio. The goal is to enhance our region's competitiveness for business investment and the probability of securing more manufacturing attraction deals in Northeast Ohio (NEO). Based on Team NEO's business development expertise and real demand experience from project flows over the past two years, this research provides insights into future business investment opportunities and the current state of NEO's manufacturing site inventory readiness. The report highlights industry trends in the most active sectors seeking site locations (advanced manufacturing, semiconductor, energy storage, and food production) as well as available sites that meet high standards of readiness. In the current economic climate, the United States faces a pressing challenge: the tightening demand for manufacturing sites. This scarcity is not just an inconvenience—it is a rallying cry for regions to mobilize and demonstrate their capacity to meet the evolving and exacting needs of industry. As we find ourselves amidst an intensifying national arms race for business attraction and large-scale corporate expansion, the imperative for preparedness has never been more critical.

In NEO's real estate market, vacant office spaces abound post-pandemic, while the demand for manufacturing sites is growing, driven by global trends relating to supply chain onshoring/re-shoring and our national interest in enhancing the production of key components. NEO is well-positioned to benefit from this trend, but the region has been slow to build new inventory over the past 50 years. Only recently has strategic site development risen in prominence. This report highlights the opportunity for our community to invest in well-planned and collaborative site development to help us progress strategically and quickly in our joint efforts to enhance our competitiveness. This will ultimately increase our chances of winning business attraction projects.

WHAT IS THE OPPORTUNITY?

Northeast Ohio, confronted by growing expectations of companies and site selectors to greater speed and certainty in business development projects, needs to improve our ability to meet those expectations by building a dynamic inventory of readily marketable sites that allow us to respond quickly and confidently in competitive site selection processes. The market today favors proactive responses that include assurance of immediate site control, or a clear path to it, and suitability with desired site attributes. The benchmark for perceived readiness has escalated, setting a high bar where only the best-prepared can win.

To contextualize the challenge, let us consider the primary raw material of regional development: land. There is a common misconception that the mere possession of land, including underutilized brownfields and farmland, equates to an inherent competitive edge. However, the presence of land is merely the first piece of the puzzle. Our available land in its current state —undeveloped, unprepared, and not compliant with industry needs— does not constitute a "readily marketable site." It is just land. Instead, the phrase "readily marketable site" connotes an ecosystem fully equipped with the necessary infrastructure, regulatory approvals, environmental clearances, and community support that reduce industry time, risk, and cost burdens.

Time is of the essence, and our response time is alarmingly short. When a company considers investment, it seeks not just potential but certainty—confidence that its timelines will be met, its risks mitigated, and its expenditures justified. We cannot afford the luxury of a reactive stance, waiting to adapt to demands as they arise. Our region must adopt a stance of aggressive preparation, leaning in with intention and foresight to transform our assets into industry-ready sites. **The call to action is clear: We must speed up site readiness, ensuring that when opportunity knocks, we can answer with a resounding "Yes, we're ready." By doing so, we not only enter the competition—we become contenders for victory.**

HOW DID WE GET HERE?

Historical Development Trends

Northeast Ohio experienced significant changes in its population, growth patterns, and industrial development over the past six decades. The 1960s marked the beginning of a challenging period for NEO's population. At the start of the decade, the region's cities were thriving industrial hubs, attracting residents seeking employment opportunities in manufacturing and related industries. The region's transportation infrastructure as we know it today was constructed at this time, anticipating continued growth. The region was blessed with a vast highway, commuter rail, commercial rail, and utility infrastructure to support a further increase in population and economic activity.

The early- to mid-1980s were marked by population decline as structural economic changes took hold. The late 1980s and early 1990s saw signs of stabilization, and the region saw practical efforts to diversify the economy and increase needed infrastructure investments. Much of this growth occurred in the region's suburban communities, making stronger geographic connections between the region's metropolitan areas. The I-77 corridor quickly connected Cleveland, Akron, and Canton, while development along I-76 and Route 30 hosted industrial growth between Mansfield, Akron, Canton, and Youngstown.

In recent years, several industrial development and population trends have been shaping the region:

1. **Diversification into Advanced Industries:** NEO strategically diversified into advanced industries such as healthcare, biotechnology, polymers, energy storage, and advanced manufacturing. This diversification has increased the presence of high-skilled jobs and mitigated some of the volatility of our region's business cycles.

2. **Urban Renewal and Redevelopment:** Ongoing revitalization projects in Akron, Canton, Sandusky, and Wooster have attracted investments and businesses, revitalized older communities, and made them attractive places to live and work.

3. **Education and Workforce Development:** Qualifications for in-demand entry-level jobs are increasing, and employer needs for talent to fill existing open jobs remain severe. Collaboration is growing between educational institutions and businesses to nurture a skilled workforce and retain young talent in the region. Insights from Team NEO's *Aligning Opportunities* report and related supplements addressing obstacles to achievement based on race, gender, and disabilities have informed efforts to align education and skill development with the evolving demands of the job market.

4. **Quality of Life Enhancement:** "Quality of life" has taken on a new level of significance for companies considering a major business investment in a community because of its close relationship with talent attraction and retention. Investments in parks, cultural attractions, and amenities have improved the region's overall quality of life and enhanced our community's attractiveness as a place where companies and their employees can thrive.

Regional Growth Patterns

Northeast Ohio's land use and development patterns do not always align with population trends. Specifically, outward expansion of the region's housing, industrial, and retail opportunities has continued without a corresponding increase in the region's population or economic vitality. This phenomenon is often referred to as sprawl without growth. The result is a landscape where new development takes place, the overall population remains relatively stable, the infrastructure is under-utilized, vacant properties are abandoned, and public services or other civic resources are strained. These factors lead to increased commute times, a reduction of green spaces, environmental challenges, and higher taxes. Significant state and utility subsidies are often needed for new development rather than using those resources to redevelop existing land with available utilities, often a more cost-effective use of available resources.

The Legacy of Overbuilt Infrastructure

The vast infrastructure developed during Northeast Ohio's peak years, notably during the 1960s, presents a double-edged sword. On one side, it symbolizes the region's past prosperity and anticipated growth.

Conversely, as populations and activities migrated out of the region, large parts of this infrastructure became underutilized, some of it even obsolete. Though initially constructed to serve a burgeoning population and thriving industries, the extensive roadways, utility systems, and other public facilities now lay in excess, serving fewer people and enterprises. The ongoing costs to maintain, upgrade, and repurpose these infrastructures increasingly burden the current population and tax base.

WHAT IS THE OPPORTUNITY FOR NORTHEAST OHIO?

Looking forward, Northeast Ohio's extensive, though underutilized, infrastructure presents an opportunity to accelerate strategic investment in site development that aligns with the demand associated with some of the most attractive advanced manufacturing business investment projects Northeast Ohio is seeing. With our existing foundation of transportation, utility, and public facility infrastructure assets, Northeast Ohio is well-positioned to compete for and win major investment projects in industries requiring extensive energy and connectivity, such as advanced manufacturing. For example:

1. **Infill Development and Adaptive Reuse**: Rather than letting old infrastructure decay, NEO can focus on redevelopment projects, transforming unused or underutilized spaces into new opportunities for business attraction and expansion in legacy job hubs. The existing infrastructure may need to be updated or enhanced, but using existing infrastructure can mitigate time, money, and risk obstacles in other locations.
2. **Driving Brownfield Development**: Leveraging tax breaks, grants, or other financial incentives can drive development on previously used industrial lands, which often already possess the required infrastructure. These redeveloped sites can be compelling for large manufacturers looking for extensive plots with built-in utilities and logistical attributes that made them attractive to previous industrial owners.
3. **Smart Infrastructure Upgrades**: Integrating modern technology, such as smart grids, sensors, and sustainable energy solutions, can transform aging infrastructure into state-of-the-art facilities. This breathes new life into the existing infrastructure and positions NEO as a sustainable and smart urban development leader.
4. **Public-Private Partnerships (PPP)**: Collaborative efforts between the public and private sectors can help defray costs while maximizing the benefits of redevelopment and repurposing. PPPs can be used to revitalize transportation corridors, create mixed-use developments, or launch urban regeneration projects.
5. **Promoting Regional Connectivity**: By enhancing the existing transportation links and improving efficiency, NEO can strengthen its position as a regional nexus. Better connectivity will facilitate commerce, tourism, and even daily commutes, making it a more attractive place for residents and businesses.

As you can see, Northeast Ohio's extensive yet underutilized infrastructure presents a unique opportunity. With strategic thinking, public and private collaboration, and a focus on modern needs and sustainability, NEO can leverage its past to pave the way for a prosperous future.

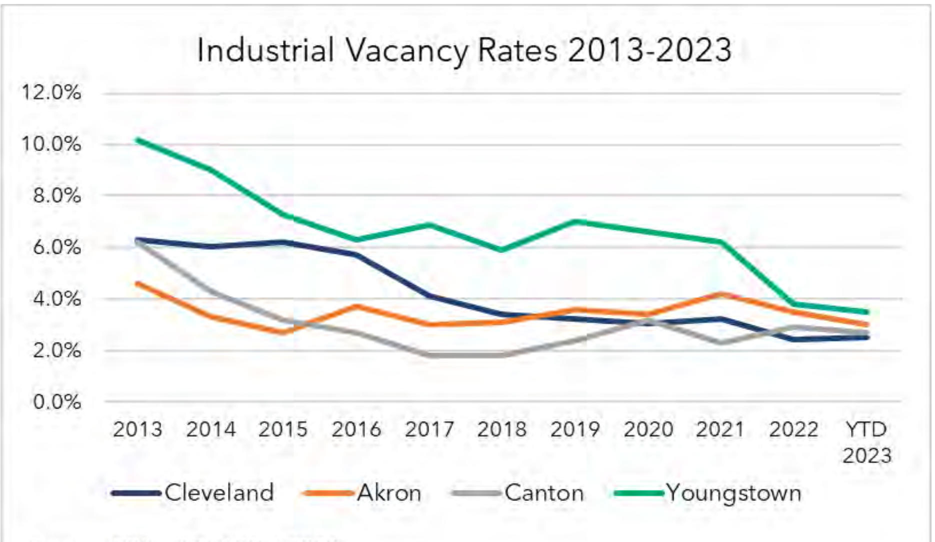
Historical Industrial Real Estate Inventory

Present demand for large manufacturing-ready sites is substantial across the United States. Manufacturers often prefer owning their properties to accommodate future growth and control neighboring land use. This is especially true for manufacturers siting large and complex organizations. However, NEO's ability to compete for those business investment opportunities is impeded by historical industrial real estate investment patterns starting in the 1970s that continue to create challenges today.

Analysis of NEO's industrial real estate inventory reveals critical trends. Most industrial buildings in NEO were constructed before 1964 and do not meet modern building standards. The region's 8% average industrial vacancy rate has shrunk to around 3%.

- Available green space is shrinking as housing developments and retail establishments move away from current job hubs.
- Private development often prioritizes housing, retail, office, logistics, and distribution facilities due to a higher and more certain return on investment.

What is driving these trends? Generally speaking, large site development is more risky and often more costly than other real estate strategies focused on housing or retail-focused strategies. Site development at the right scale in the right location with attributes aligned with business investment demand can help offset the time, risk, and cost challenges typically associated with speculative development.



Source: *CBRE RESEARCH, 2023*

Demand for Manufacturing Sites

Ohio and the broader United States have a strong demand for industrial sites that are primed with ample utility infrastructure. Notably, there has been a surge in competitive site inquiries in the region. From 2015 to 2022, Northeast Ohio was considered for 742 potential business investments that began as site searches. Site readiness was the first hurdle in securing these opportunities. NEO has encountered challenges in turning these initial inquiries into finalized deals. While the region has experienced steady improvement as more communities, developers, and others lean into site readiness, NEO can win more. Of the 742 potential investments, Ohio successfully landed 152 projects, translating to a 20% success rate. Of the successful Ohio deals, NEO secured 32 companies, just 4% of the total inquiries or 20% of Ohio's successes.

Given that Northeast Ohio accounts for a substantial 35% to 40% of the state's economy, population, and business establishments, it stands to reason that NEO could leverage its economic significance to capture a larger share of these opportunities. As Ohio continues to attract the attention of expanding businesses, there is a clear and present opportunity for NEO to increase its rate of winning deals.

742

Business investment opportunities sourced by Team NEO and JobsOhio 2015-2022 that included a site search

152 (20%)

Closed projects in all 6 regions of Ohio

32 (4%)

Closed projects in NEO region

What does that entail? Northeast Ohio communities submitted an average of 8 sites per request to Team NEO in response to competitive business investment opportunities that included a site search in 2022, with only 45% of submissions complete enough to submit to clients and 18% securing site visits. The site selection process has become more sophisticated over the past five years or so. With abundant online information, companies and their advisors quickly eliminate locations that do not meet the standards. Therefore, initial site inquiries are often a numbers and spreadsheet game. Submissions can be rejected when they lack adequate information or fail to meet necessary site attributes. In other cases, the site submission may meet the minimum criteria but still be rejected as it is not as attractive in relation to other site submissions. There is little room for a broader regional sales pitch at the start.

Further, the above numbers reflect the times Northeast Ohio was invited to participate. Companies and site selectors increasingly perform preliminary site exploration using online resources or accessing relationships within the real estate community before contacting economic development organizations in a formal process. How often the region is passed over without a direct engagement opportunity is unknown. Still, the need to have more, better-prepared sites and market them proactively online is clear.

The region is slowly adding new industrial inventory into the market to meet existing industry expansion needs, with most space leased before completion. The new inventory is often in locations with fully tapped utility capacities, causing a need for new or upgraded infrastructure development. There can be attractive opportunities in older communities with excess utility capacity, particularly in water and sewer. However, the development of these locations can require land consolidation and redevelopment—a time-consuming and capital-intensive process. Public interventions, regional planning, and community collaboration is needed to spur speculative development in areas that can meet manufacturing utility demands.

Site Information and Due Diligence

A winning site proposal provides comprehensive information on utility locations, capacity, zoning, ownership, and pricing. Ownership and control of this critical data, as well as the underlying capabilities it represents, is often dispersed among several public and private entities. Economic development professionals are called upon to aggregate and synthesize the data in a compelling, packaged proposal that highlights specific site attributes of importance to prospects as well as any site challenges of necessary remediation issues that need to be addressed. Due diligence studies, including environmental reports, wetland identification, and geotechnical analyses, are essential to mitigate perceived risks for potential end-users, but they are often neglected by property sellers, waiting instead for a known end user to conduct the studies, to avoid costs associated with that type of work. Prospects will rarely wait for completion of due diligence studies or take on the cost of them unless they have a very strong interest in the site for strategic reasons. Instead, they usually move on quickly to other options.

Collaboration and Commuting Patterns

Historically, municipalities have focused on cultivating business growth within their specific borders, often minimizing the impact that significant business investment in one community can have on neighboring communities, driving greater regional success over time. Manufacturing activity, in particular, often creates significant resonant impact throughout a region due to the interconnected nature of supply chains, transportation networks, and workforce mobility. A single manufacturing entity's success can stimulate job creation across many communities in a market, boost ancillary business activity from logistics to local retail, and increase revenue streams for local governments.

A major manufacturing investment, in particular, is far more than a transaction or an isolated act of urban planning—it is a seed with the potential to grow a larger, complex ecosystem of economic activity that impacts future community and commercial planning decisions, effectively shaping the landscape of subsequent endeavors. Foresight and well-placed investment can catalyze the region towards a cohesive economy.

When communities contemplate capital expenditure decisions with a long-term regional site development project in the foreground, they are making decisions about their community's future. Those communities that do it best, do so with a strategic mindset that envisions a series of outcomes and specific moves that need to be made to realize those intended outcomes. In those communities, each new investment in a manufacturing plant, though a single event, can be a catalyst for incremental economic growth. It is like a grandmaster's next move in a game of chess. It is about maintaining vision of how you want the game to progress, looking multiple steps ahead, positioning the pawns of affordable housing where they can best be leveraged, the knights of infrastructure where capacity utilization can be optimized, and the bishops of educational facilities where they can provide maximum impact. Each investment has an impact on the board and is designed to move the region forward as one formidable entity, ready to capitalize on the next opportunity for success and enhance prosperity.

A neighboring community without significant traded sector economic activity still plays a critical role in providing affordable housing development and retail activity that strengthens quality of place for the skilled workforce a new manufacturing plant will likely need. Affordable housing eases the financial strain on employees, can positively impact productivity, and cultivates loyalty to the company through improved retention and the region a consistent tax base. This symbiotic relationship highlights the interdependence that exists within communities.

Adopting a strategic point of view on regional development transcends traditional cost-benefit analyses. It is about envisioning a future, a set of commercial and quality of life assets, that can be developed over time by optimizing maintenance and capital spending in disciplined, collaborative decision-making using financial prudence, spatial expertise and social acumen. Every dollar spent today is a brick in constructing tomorrow's regional landscape. Successful execution is a balancing act between the immediate allocation of resources and the enduring impact of those decisions.

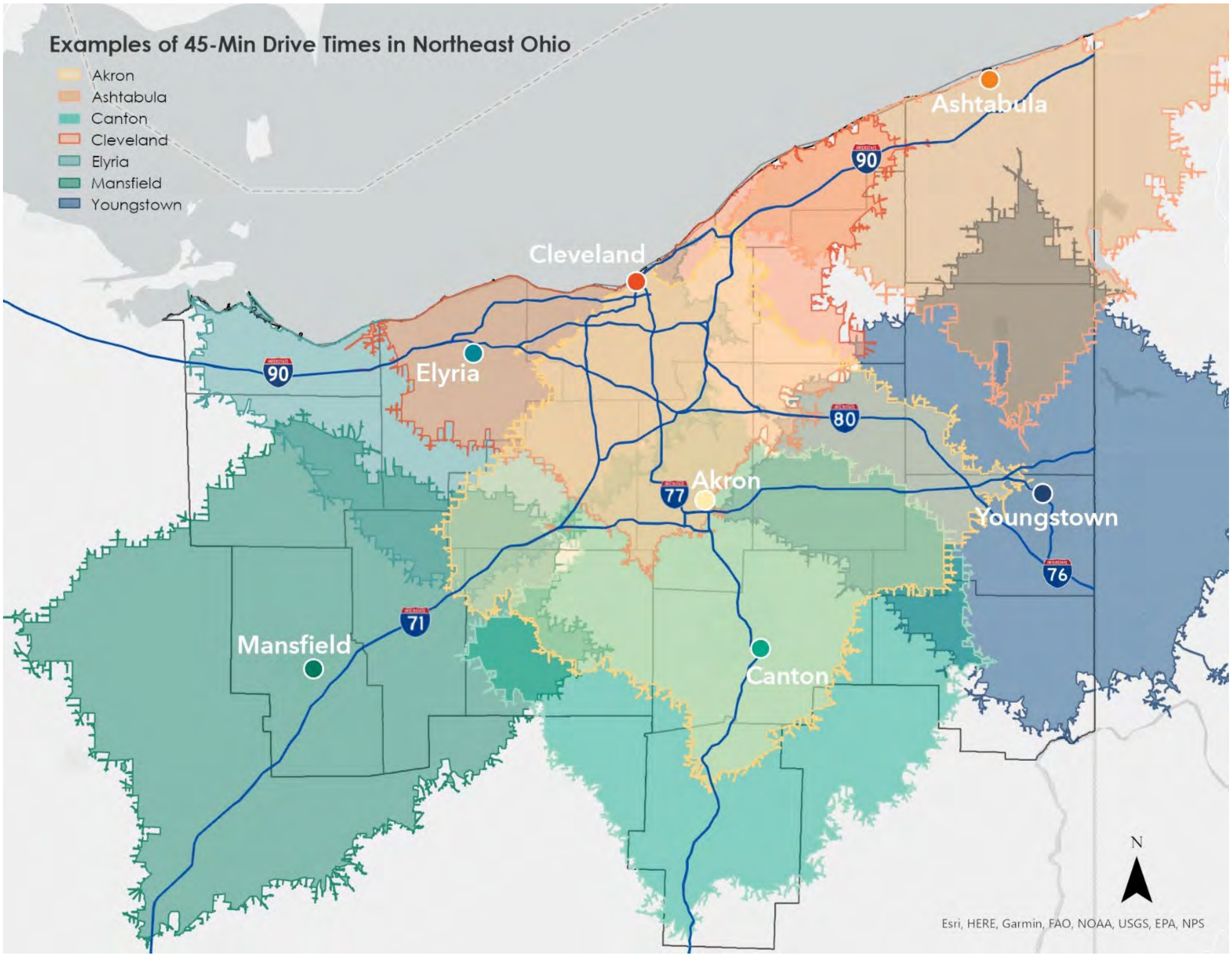
By leaning into the question, "What can I do today to improve the probability of winning tomorrow?" communities embrace a proactive approach to development. This philosophy underscores the belief that efficiency and efficacy are not mutually exclusive. Instead, they are the dual engines that drive speculative work toward tangible outcomes. With a clear understanding of regional strategy and the demand for industrial sites, communities can lean in confidently, targeting the right attributes for development and reducing speculative risk.

Finally, community buy-in is instrumental in reinforcing a developer's decision. When a community conveys certainty and support for industrial development, it provides more than moral backing—it demonstrates a commitment to partnership that is as valuable as any financial investment. This collective endorsement does not just buoy the developer's confidence in the community as a partner; it also engenders a sense of shared destiny, where the success of the industrial project becomes a communal triumph.

In the evolving economic development landscape, fostering collaboration among neighboring communities offers substantial growth potential. Manufacturers and businesses inherently operate with a regional mindset, considering factors such as supply chains access across multiple communities, workforce accessibility, and tapping into a diverse talent pool from different markets as core inputs in the business case for their investment decisions. Therefore, a business investment project with a broad-reaching impact—particularly in the manufacturing sector—can benefit multiple communities concurrently. NEO's intricate road and transportation systems enable fluid mobility across municipal boundaries, allowing other communities to participate in the growth and prosperity the new investment presents. Notably, 41% of NEO's workforce lives in one county and works in another. This interconnectedness implies that a business's success in one locality indirectly benefits several adjacent communities.

Municipalities may think more openly about opportunities for shared success. Collaborative efforts among communities can lead to shared resources and infrastructure, a broader tax base, lowering individual tax burdens, and enhancing public services and community amenities. Regional collaboration enables celebrating successes in neighboring markets and recognizing their contribution to collective growth. By embracing interdependence and fostering collaboration, NEO can tap into an expansive realm of opportunities that benefit all participating entities.

A 45-minute drive time from major population hubs across the region will cross many communities and additional population hubs. For example, an employer in the City of Akron will attract workers from the Cleveland, Elyria, Youngstown, Canton, and Mansfield markets. The map below provides a visual of multiple 45-minute drive time labor sheds around different regional cities to demonstrate further the connected nature of sites and labor sheds across different political boundaries.



Current Supply and Demand Analysis

The current analysis of site inventory supply and demand identifies pressing needs in NEO, primarily in the semiconductor, electric vehicle, energy storage, and new technology sectors. The present inventory deficiency is a function of demand flows. Demand for industrial space in the U.S. and Ohio is up for many reasons, including substantial federal funding opportunities for the abovementioned industries. Other drivers of demand are the on-shoring and reshoring trends since the pandemic, Ohio's increased reputation as a business-friendly state, and disruption in other parts of the U.S. due to climate change and resource shortages. The table below Team NEO's inventory gaps table summarizes the gaps in the region's real estate inventory.

Today's opportunity is to build a dynamic inventory of readily marketable sites and a disciplined process that allows NEO's economic development professionals to meet the expected demand for business investment today and in the future. The most attractive business attraction opportunities come with a variety of expected attributes and require us to respond quickly and confidently that we have a site that meets the need.

Northeast Ohio's site inventory is deficient in 300+ acre sites with robust utilities for heavy manufacturing, 50+ acre sites with robust utilities and proximity to a skilled workforce, cold storage facilities, R&D lab space, and light and general manufacturing space near public transit and highway access. The demand for electric power is also increasing, with increasing interest in access to renewable energy sources. Development of new competitive inventory in competitive locations will take time. However, working as a regional economic development network, we can close the inventory gap faster by aligning on strategies to identify available sites and the investment needed to make them market-ready faster.

FILLING INVENTORY GAPS WILL ENABLE SUPPLY CHAIN GROWTH ACROSS DRIVER INDUSTRIES

Site Type	Acreage	Total Inventory that Meets Acreage Only	Electricity (peak demand)	Natural Gas (per month)	Water/Sewer (gal/day)	Industry Supply Chains	Site Inventory Gaps	Inventory that Could Fill the Gap
Mega Site	500-1,000+	**0**	200 MW	1.5 MM mcf	2 million	Microelectronics, Electric Vehicles	1000+ acres with robust water, sewer, and electricity	0
Heavy Manufacturing	100-500	**45**	45 MW	1.5 MM mcf	1 million	Batteries, Electric Vehicles	300+ acres with robust utilities and rail service	3
Light Manufacturing	10-20	**72**	7,000 kW	5,000 mcf	50,000	Food Packaging	Proximity to public transit, road, and rail service	7
General Manufacturing	25 +	**152**	15,000 kW	50,000 mcf	500,000	Food Processing, Metals, Plastics and Materials	Food grade buildings, proximity to public transit, road, and utility infrastructure	21
Research & Development	5- 20	**60**	1,500 kW	4,000 mcf	10,000	Healthcare, Medical Devices	Wet labs, R&D space in proximity to major medical institutions	0
Warehouse/ Distribution	20-100	**145**	5,000 kW	400 mcf	10,000	Food/ Pharma/ Specialty Storage	Cold & freezer storage, redundant electricity	3
Office Space	1-25	**17% vacancy rate for office**	2,000 kW	5,500 mcf	50,000	Professional Services	none	

Analysis of Business Investment Opportunity Inquiries

Team NEO analyzed data from 147 site inquiries from companies considering Northeast Ohio for business investment from 2021-2022. The analysis provides valuable insights into industry demand. While mega- and large-lead opportunities capture attention, 56% of leads require 1-100 acres. Transparency in the timeline for operations, infrastructure details (water, sewer, electric, gas, and roadways), completed due diligence, and talent availability within a defined labor shed are crucial factors for companies evaluating sites. The most active industries are Advanced Manufacturing (41%), Automotive (23%), Food Sciences & Agriculture (13%), Energy & Petrochemicals (10%), and Information Services & Software (8%). The most active supply chains include Batteries, Electric Vehicles, Solar Panel Manufacturing, Food Production, Chemical Manufacturing, and Semiconductors.

THEMES:

Time - A clear understanding of how long it takes to begin and ramp up operations is a top priority for companies looking at sites

Risk - Complete due diligence reports

Cost - Detailed information on existing infrastructure with a clear understanding of how infrastructure upgrades will happen

MOST ACTIVE INDUSTRIES:

- Advanced Manufacturing (41%)
- Automotive (23%)
- Food Science & Agriculture (13%)
- Energy & Petrochemicals (10%)
- Information Services & Software (8%)

MOST ACTIVE SUPPLY CHAINS:

- Batteries
- Electric Vehicles
- Solar Panel Manufacturing
- Food Production
- Chemical Manufacturing,Semiconductors

The report emphasizes the need for collective action to bridge the gap and increase NEO's competitiveness in winning projects. The region must focus on proactive data gathering and site identification with the same vigor as project opportunities. Community leadership should capitalize on their strengths and support efforts to build upon them. Recognizing that site development can be time-consuming and capital-intensive, stakeholders must collaborate to drive strategic site development, redevelopment, and adaptive reuse.

Small Heavy & General Manufacturing: Leads tend to group around 30 acres of land. Existing buildings are often desired, with many opportunities for ≤ 100K sq. ft. with 24'-26' ceilings. Plan for 5-10MW of power and 500K GPD of water. The usual timeline is to be operational in 9-12 months. Environmental, wetlands, and preliminary geotechnical reports are due diligence priorities. Build-to-suit averages ≈11K square feet/acre and creates 2 jobs/1K sq ft.

Large Heavy & General Manufacturing: Power is a top priority, and height restrictions are a common question for towers used in operations. Direct rail is preferred, but proximity to intermodal/transload facilities can suffice. Zoning should be in place or have a clear path to approval, particularly for 24/7 operations. Existing buildings usually need 30' ceilings. Land preference is 100+ acres in a non-residential area with room to expand. Existing due diligence and a clear timeline for permits and approvals are paramount, especially for planned infrastructure improvements. For electricity, expect an 80% load factor and prepare for questions about redundant and renewable power. Water needs typically run between 1M-2M gallons per day (GPD). In addition to utilities, labor will be a top priority, and companies will ask about notable manufacturing companies in the area.

Light Manufacturing: Preference will be for buildings with 6-8" floor thickness and 24'-32' ceiling heights. Utility needs must be met immediately due to companies wanting to be operational in 9-12 months. Companies are more likely to be open to a lease but still prefer to own. Existing buildings typically occupy ≈12k square feet per acre, creating 1 job/1K square feet.

Warehouse/Distribution: The key factor is proximity to the interstate (5 minutes or >5 miles). Access to nearby and dense population centers is a major consideration. Sites should be flat, square, or rectangular and buildings will occupy 15K square feet/acre, averaging .5 jobs/1K square feet. Utility demand is minimal, and rail is not typically required.