

CITY OF MORAINE

EXISTING CONDITIONS REPORT





Source: City of Moraine



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Source: https://en.wikipedia.org/wiki/Moraine,_Ohio



SECTION 1

REGIONAL CONTEXT

REGIONAL CONTEXT

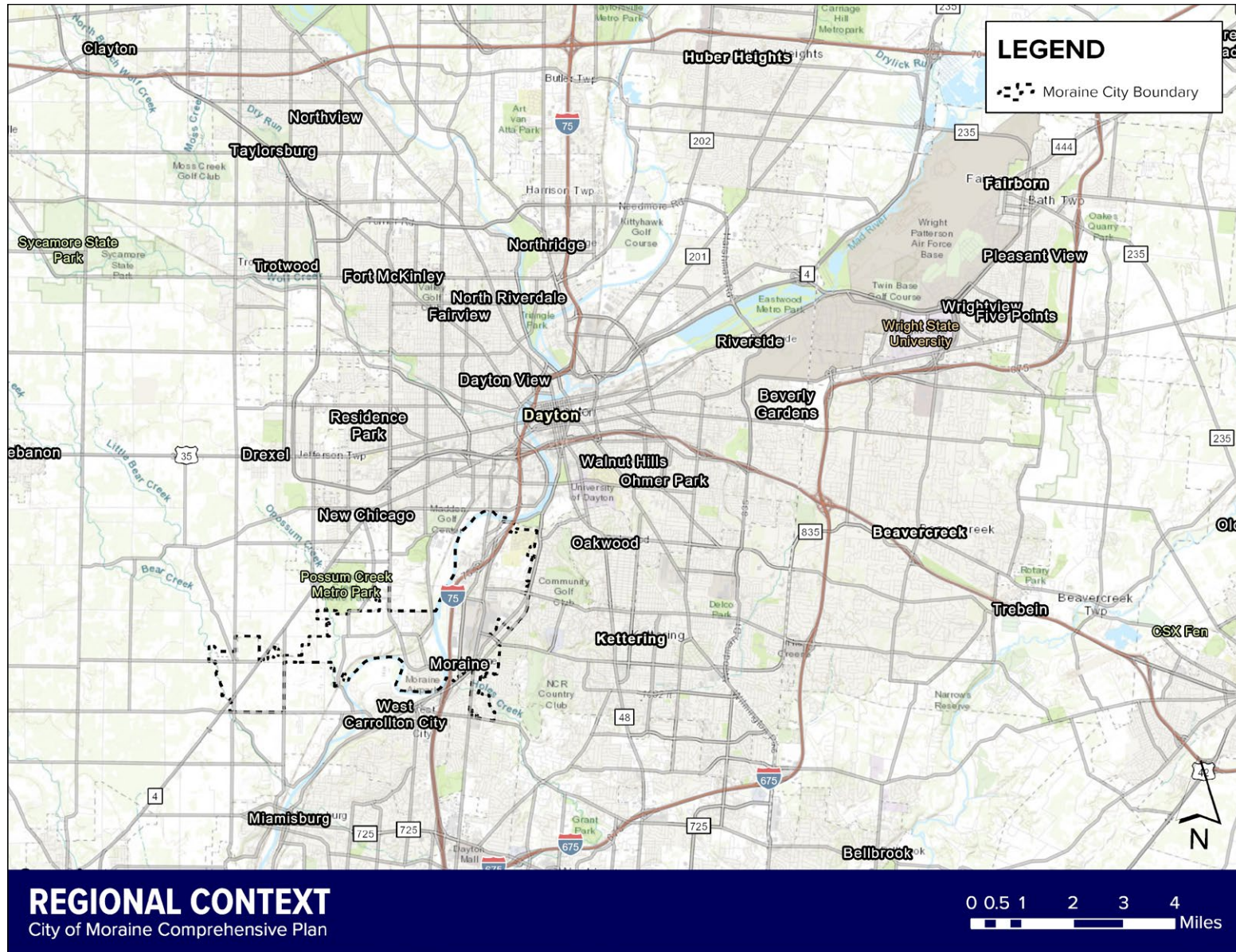
Located southwest of Dayton, the City of Moraine is a community with a rich history in automotive manufacturing and early aviation. As shown in Figure 1, Moraine Regional Location, the City is bound on three sides by incorporated areas: the cities of Dayton, Kettering, and West Carrollton. I-75 and the Great Miami River also bisect it.

COMPARISON CONTEXT

This report reviews demographic data for “comparison communities.” Comparison communities are those similar in population size to Moraine or have similar characteristics, such as proximity to major Ohio cities, a large industrial area or industrial park, and areas with high and low development density.

The communities reviewed were the City of Rossford (Toledo metropolitan area), the City of Girard (Youngstown metropolitan area), the Village of Obetz (Columbus metropolitan area), and the City of Springdale (Cincinnati metropolitan area). In addition, the State of Ohio and Montgomery County data was reviewed to examine potential similarities and differences between these cities and towns of similar size.

FIGURE 1: MORAINE REGIONAL LOCATION



Source: American Structurepoint inc., ESRI.



Source: https://en.wikipedia.org/wiki/Moraine,_Ohio



SECTION 2

REVIEW OF EXISTING PLANS

REVIEW OF EXISTING PLANS

Part of the planning process involves revisiting past planning efforts from the City, county, and region. Past plans provide an insight into what was essential to the community and how it has changed. The goals and objectives discussed in the following sections were partly developed based on goals from the previous plans.

Each past planning effort is unique and offers a particular perspective on the desired goals and outcomes of the City. An overview of past plans was completed to better understand their content, purpose, impact, and relevance to this plan. The plans and documents that were reviewed and their relevant goals included the following:

- Comprehensive Plan for Moraine, Ohio 1995-2015
- Montgomery County Strategic Plan 2020-2024
- Going Places – An Integrated Land Use Vision for the Miami Valley - 2015





Source: American Structurepoint Inc.

COMPREHENSIVE PLAN FOR MORAINE, OHIO 1995-2015¹

LAND USE AND DEVELOPMENT GOALS

- Promote Moraine’s orderly growth and development by providing ample opportunities to achieve growth expectations.
- Reserve sufficient land areas in appropriate locations for the planned residential, commercial, and industrial growth and development. These areas of new growth should be located where the necessary infrastructure is available or can be economically provided and where there would be the least conflict between existing and proposed land uses. Annexation is encouraged only to the extent that the annexation provides additional leverage for the City to secure and control the lands required to implement this plan’s land use and transportation elements.
- Foster and encourage a balance of housing opportunities responsive to diverse market preferences and needs that stress quality design and development through fair, objective standards and regulations.
- Maximize conservation of existing housing and preservation of established neighborhood character and quality, including manufactured housing communities.
- Encourage the stabilization of existing commercial areas and the development of new commercial nodes in locations that have:
 - Good vehicular access to local residential market areas and regional market areas.
 - Minimize conflict with existing or newly developing residential land use areas.
- Encourage continued expansion and development of industrial land use areas in locations offering the maximum potential for development but compatible with surrounding land uses and transportation facilities.
- Foster compatibility and stability of land uses and densities at incorporation limits.
- Enhance the City’s visual appearance and living environment through effective design, landscaping, and control of visual clutter.

¹City of Moraine, Ohio: Comprehensive Plan for Moraine, Ohio 1995-2015.

ENVIRONMENTAL/UNIQUE FEATURES GOALS

- Promote the preservation of sensitive natural areas within the City, especially areas prone to flooding.
- Promote the preservation of historically significant structures, roadways, trails, etc.
- Promote controlling and regulating the adverse effects of development and uses, such as noise, light, odor, etc.
- Support the preservation of farmlands and unique environmentally-sensitive lands and encourage cooperation between farm and development interests.

INFRASTRUCTURE/SERVICES GOALS

- Provide adequate infrastructure to all existing and planned development that complies with the comprehensive plan.
- Promote the provision of parks, community facilities, and other public services based on adopted standards and commensurate with existing and projected needs.

IMPLEMENTATION GOALS

- Provide for future development of the City through a regulatory framework that, when implemented, promotes a fair and consistent process for land use decisions and development approvals.
- Maintain and enhance the protection of the public interest by providing opportunities for meaningful public input into land use decisions.
- Provide, secure, and control the critical land areas to successfully implement the comprehensive plan's land use and transportation elements. Annexation of unincorporated areas is promoted only to the extent that it meets this goal.

COMPREHENSIVE PLAN FOR MORaine, OHIO 1995-2015

Prepared by
Barge, Waggoner, Sumner and Cannon, Inc.
8755 Gander Creek Drive
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and

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September 1994

MONTGOMERY COUNTY STRATEGIC PLAN 2020-2024²

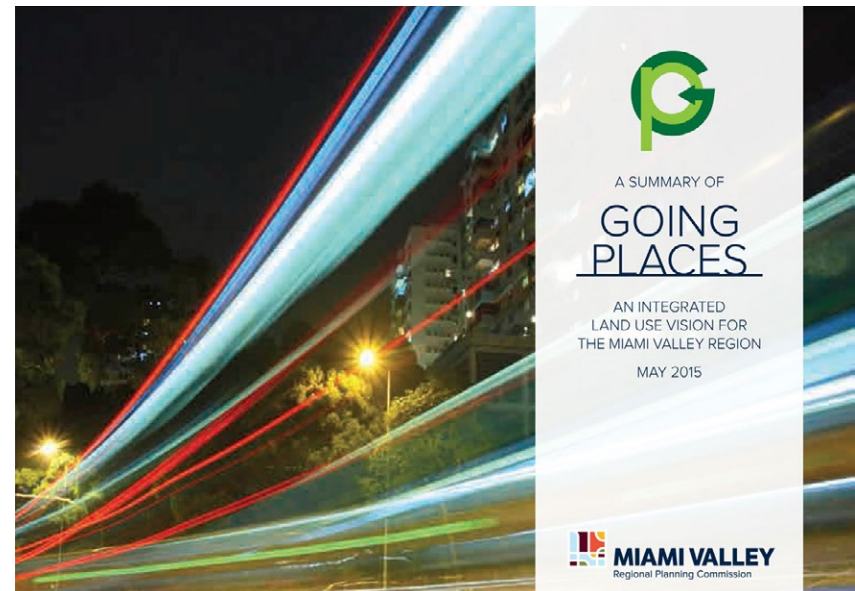
The Montgomery County Strategic Plan 2020-2024 provides objectives and strategies for the focus areas of sustainable community infrastructure, economic stability, thriving youth, community well-being, and effective & efficient government.

KEY STRATEGIES IDENTIFIED IN THE PLAN THAT DIRECTLY IMPACT MORAINE INCLUDE:

- Reinvesting in water, sewer, and solid waste systems.
- Continuing the evolution of a regional green strategy that supports external partners in environmental stewardship.
- Invest in the recruitment, retention, and expansion of business with a focus on target industries:
 - Aerospace
 - Healthcare
 - Information Technology
 - Manufacturing
- Increase international investment in Montgomery County through strategic partnerships.
- Increase success and support for school-aged children.
- Support teens and young adults by addressing barriers and investing in career-focused workforce development and training.
- Ensure the protection of children and support the stabilization of families.
- Provide quality of life and quality of care for our most vulnerable individuals of all ages, including those with severe to profound intellectual disabilities, who are physically challenged, and who have significant medical needs.

GOING PLACES – AN INTEGRATED LAND USE VISION FOR THE MIAMI VALLEY - 2015³

The City of Moraine falls within the Miami Valley Metropolitan Planning Organization area. Miami Valley Regional Planning Commission produced its Going Places plan to define a unified, long-term vision representing what people want the region to look like. It consists of guiding principles and a map illustrating the desired future land use pattern for 2040. Implementation centers on strengthening regional collaboration, providing better information to partner communities for robust and local decision-making, and enriching regional capacity for community development solutions. The City of Moraine was not listed as a contributor to the plan.



²Montgomery County, Ohio: Montgomery County Strategic Plan 2020-2024.

³Miami Valley Metropolitan Planning Organization: Going Places – An Integrated Land Use Vision for the Miami Valley - 2015.



Source: American Structurepoint Inc.



SECTION 3

DEMOGRAPHIC TRENDS

DEMOGRAPHIC TRENDS⁴

OVERVIEW

An analysis of Moraine’s current conditions was carried out to help guide the planning process and provide the necessary background information to develop project and policy recommendations. Topics considered in the analysis included: community demographics, current market conditions, resident amenities, transportation elements, community infrastructure, and the natural environment.

Data used in this analysis was pulled primarily from the US Census Bureau via the following sources:

AMERICAN COMMUNITY SURVEY (ACS)

In addition to the decennial census, the US Census Bureau conducts dozens of other censuses and surveys, including the ACS. The ACS is an ongoing effort that gathers information from a community through a small sample rather than the extensive 10-year survey with which most people are familiar.

ESRI BUSINESS ANALYST

ESRI Business Analyst is a powerful tool for analyzing data within a specific geographic location. ESRI allows data to be observed at a very local level and compared with surrounding groups.

Data from the US 2010 and 2020 Census, ACS, and Bureau of Labor Statistics (BLS) were used.

⁴ American Community Survey, ESRI Business Analyst.

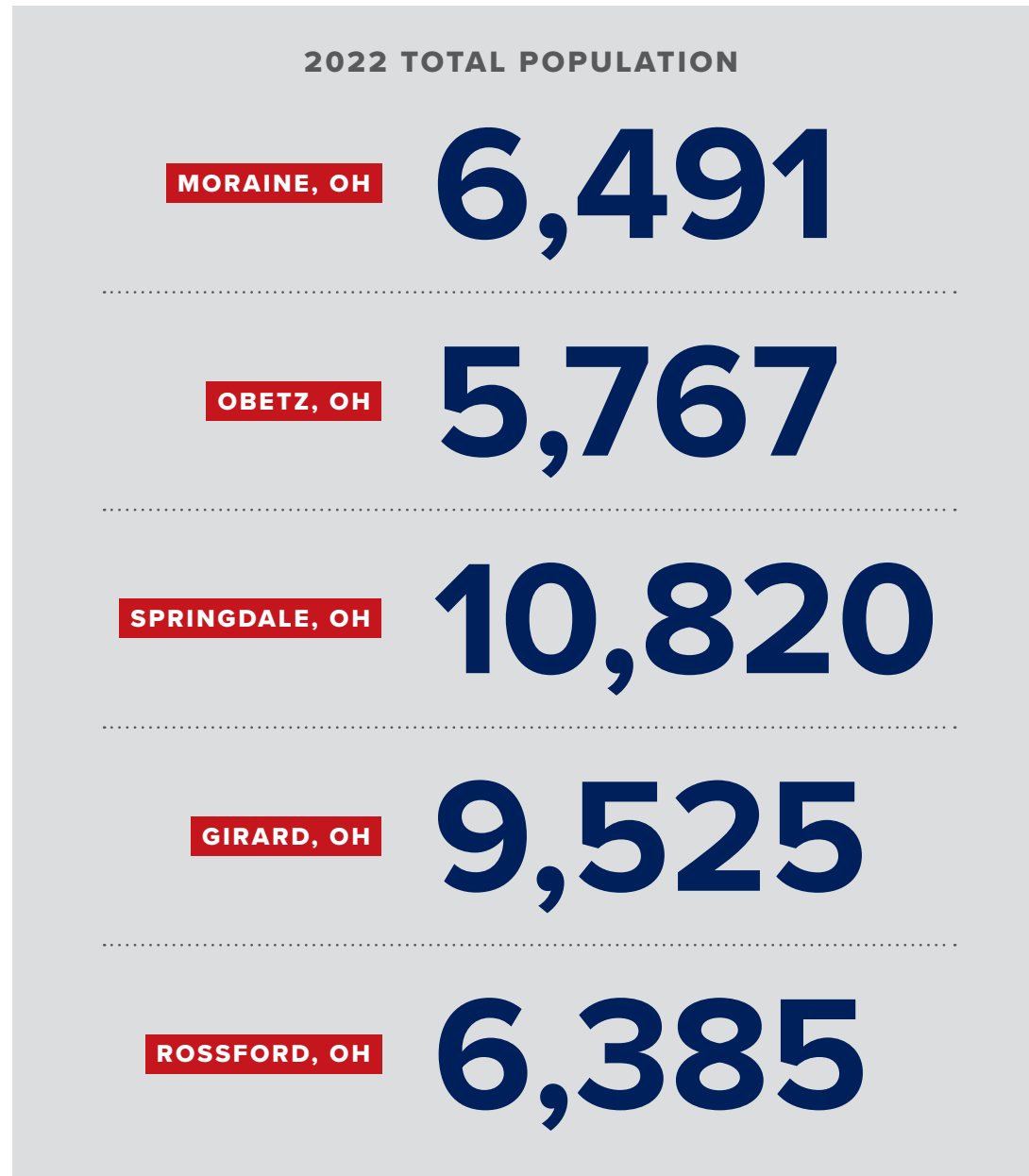
FIGURE 2: COMPARISON COMMUNITIES POPULATION COMPARISONS

DEMOGRAPHICS

When working on a long-range planning effort, documenting the community's and its residents existing composition is an essential first step. Understanding current and historical population trends help identify strategies for population growth, housing needs, and support programming, such as after-school activities or aging citizen get together.

POPULATION

In 2022, Moraine had a population of 6,491. This population was smaller than two out of the four selected comparison communities of Springdale and Girard cities but larger than the village of Obetz and the City of Rossford. Moraine is located in Montgomery County, with a total population of 535,564.



HISTORICAL CHANGE AND PROJECTED GROWTH

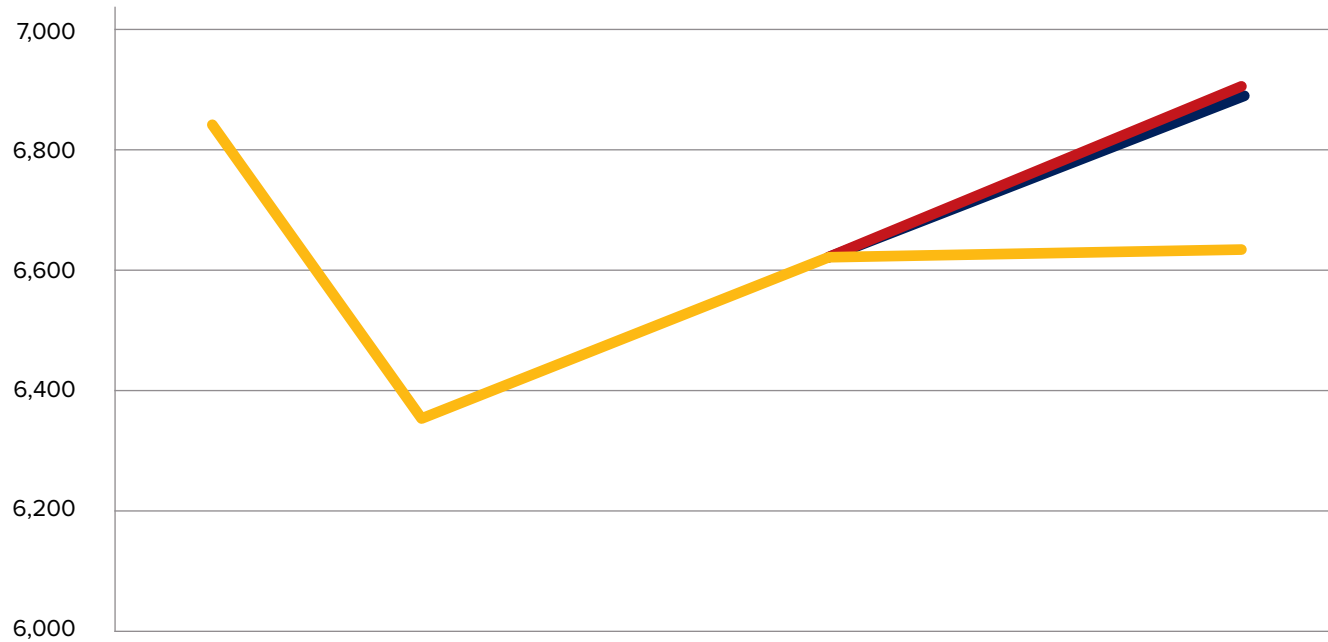
Population projections are an essential component of any long-range planning process. They help determine and quantify the demands placed on public facilities and services based on the potential pace and scale of the community's physical growth. These projections help Moraine officials identify major social and economic development trends and craft policies and programs.

For this existing conditions report, three methods were used to forecast Moraine's population in 2050. The chart below compares different scenarios for future population changes in Moraine. The projections were calculated by utilizing historical population data from the decennial census performed by the US Census Bureau.

ALTERNATIVE GROWTH SCENARIOS

Different growth scenarios were calculated to estimate population growth for the City. Moraine's population has stayed between 6,843 and 6,491 residents since 2000. Moraine's population did decrease from 2000 to a total of 6,355 in 2010 but has since increased by 136 for a current growth rate of 2.1 percent due to new residential development west of the Great Miami River. The linear and exponential projections predicted that the City's population will grow at 2.1 percent and increase to over 6,890 residents in 2050. The step-down population projections showed a slower growth rate due to the declining population of Montgomery County in this same time frame.

FIGURE 3: CITY OF MORAINE POPULATION PROJECTIONS THROUGH 2050



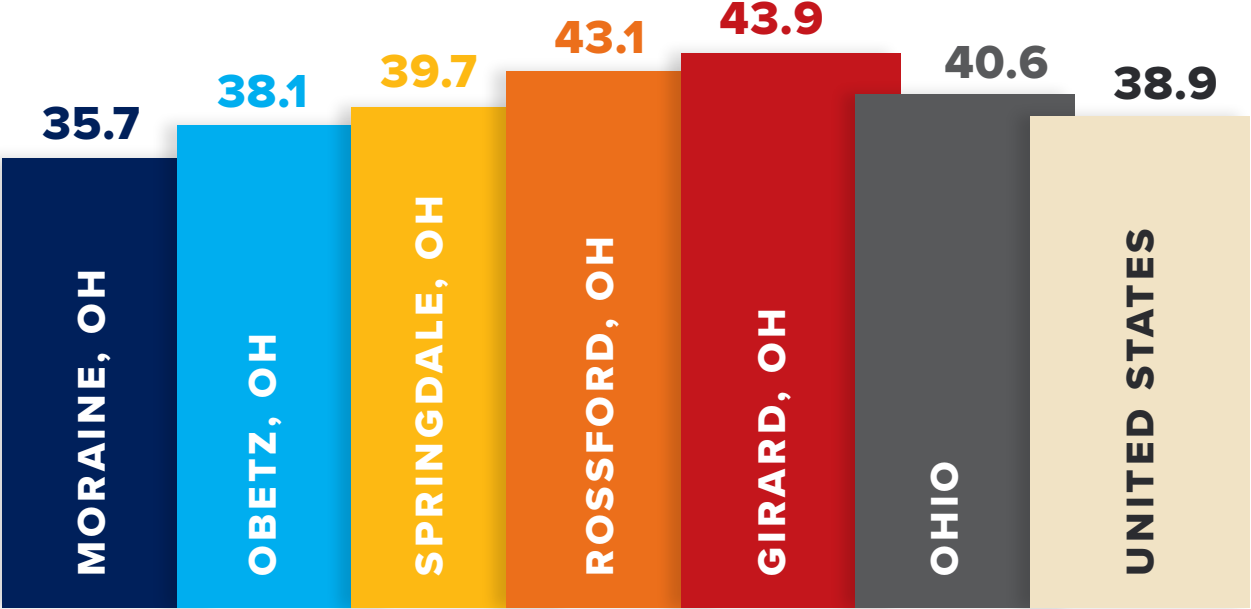
	2000	2010	2020	2030	2040	2050
Linear	6,843	6,355	6,491	6,627	6,766	6,908
Exponential	6,843	6,355	6,491	6,627	6,755	6,898
Step-Down	6,843	6,355	6,491	6,627	6,632	6,637

Source: American Structurepoint Inc.

**POPULATION AGE
MEDIAN AGE**

The median age of Moraine citizens was 35.7 in 2022. This lower median age was a decrease from 2010 of 37.3. When comparing median ages to similar Ohio communities, the State of Ohio, and the US, Moraine’s median age was lower than these other locations. That trend indicated an influx of families with young children or young adults that have moved to the area for work.

FIGURE 4: MEDIAN AGE OF MORaine AND COMPARISON COMMUNITY RESIDENTS



AGE DISTRIBUTION

In 2022, Moraine's residents had an even distribution when looking at age ranges. In general, older communities tend to see a higher percentage of residents in older age cohorts, but Moraine did not see the same trend. The most extensive percentage age range was ages 25-29 at 7.9 percent. A total of 44.5 percent of all residents were aged 30 or less.

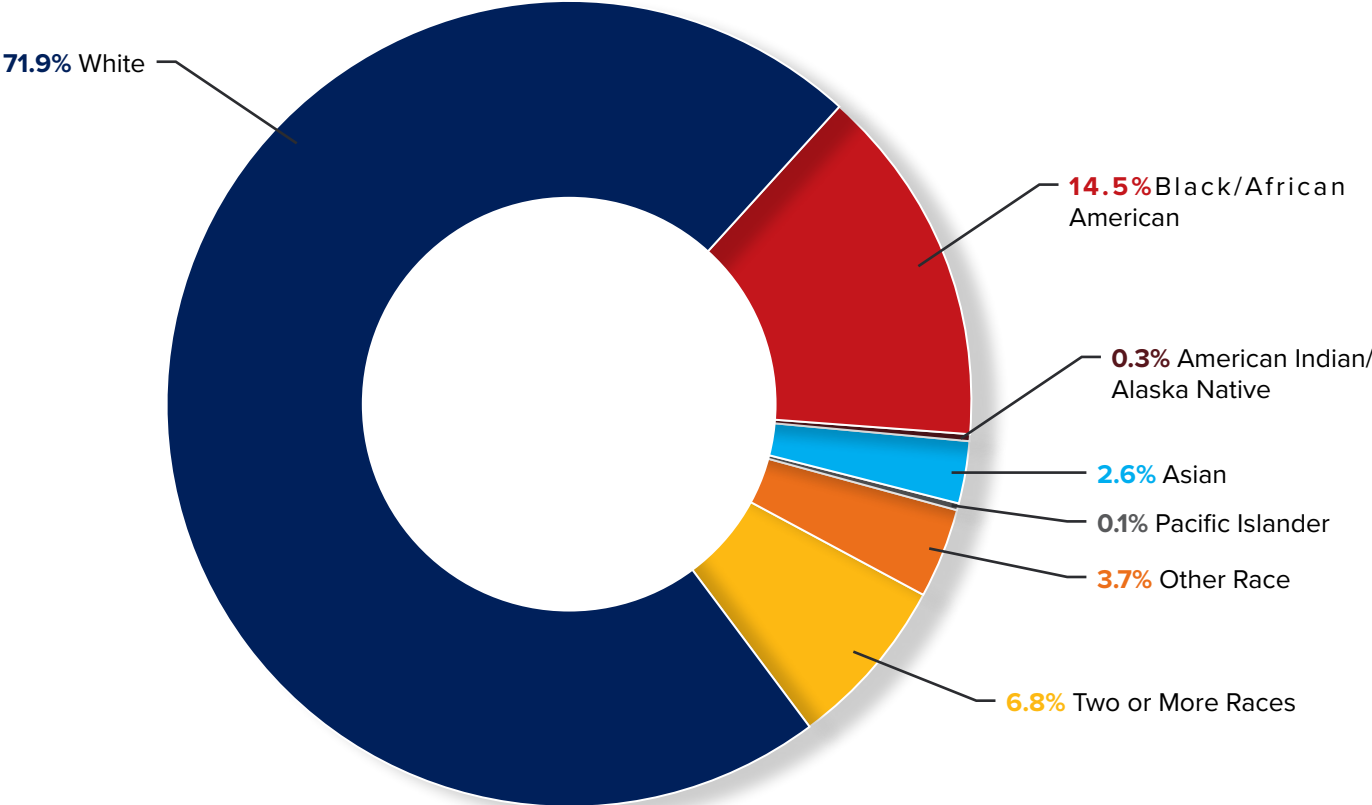
FIGURE 5: 2022 MORAINE RESIDENT AGE RANGES



RACE AND ETHNICITY COMPARISONS

Moraine residents were comprised of multiple ethnicities. The three high percentage segments of the population were White individuals at 71.9 percent. Black/African American residents were 14.5 percent of the population, and 6.8 percent identified as two or more races.

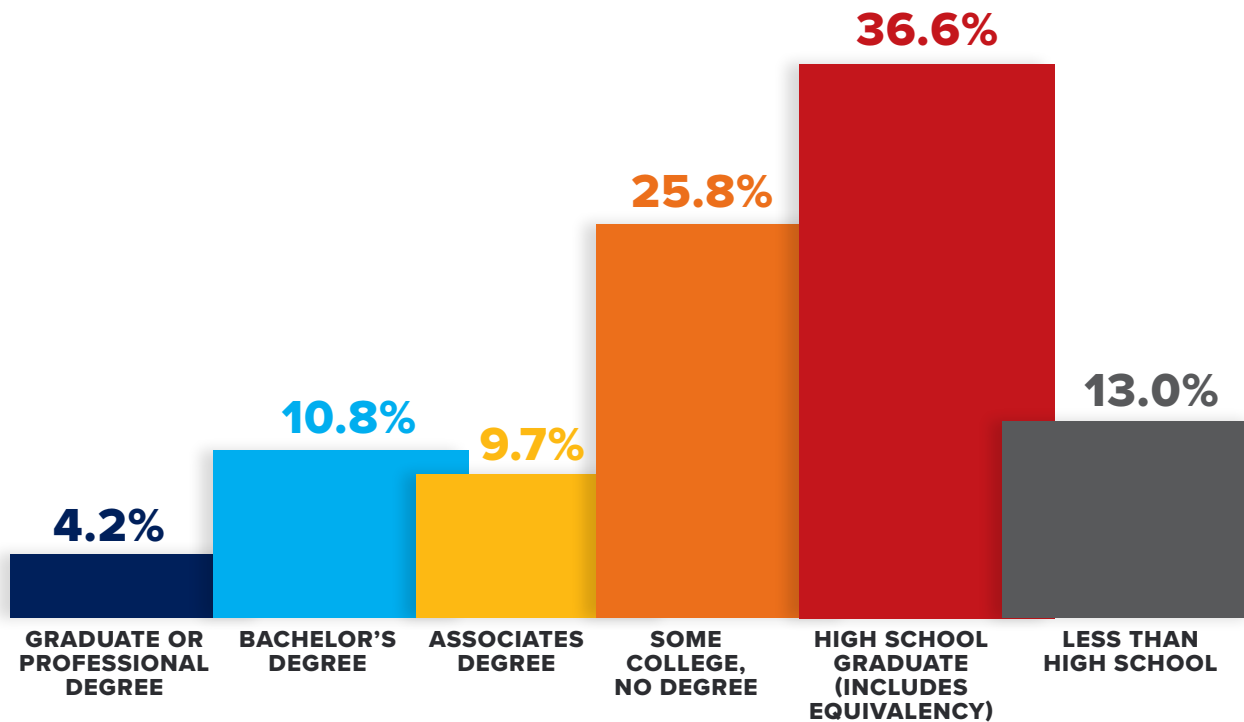
FIGURE 6: RACE AND ETHNICITY



EDUCATION

Moraine residents had varying levels of education, with 36.6 percent of all citizens earning a high-school diploma. Others chose to continue their education, and 25.8 percent attended some college but not obtaining a degree. Another 9.7 percent of residents received an associates degree, while 10.8 percent and 4.2 percent graduated with a bachelor's degree. Finally, 4.2 percent continued past undergraduate studies to obtain a graduate or professional degree.

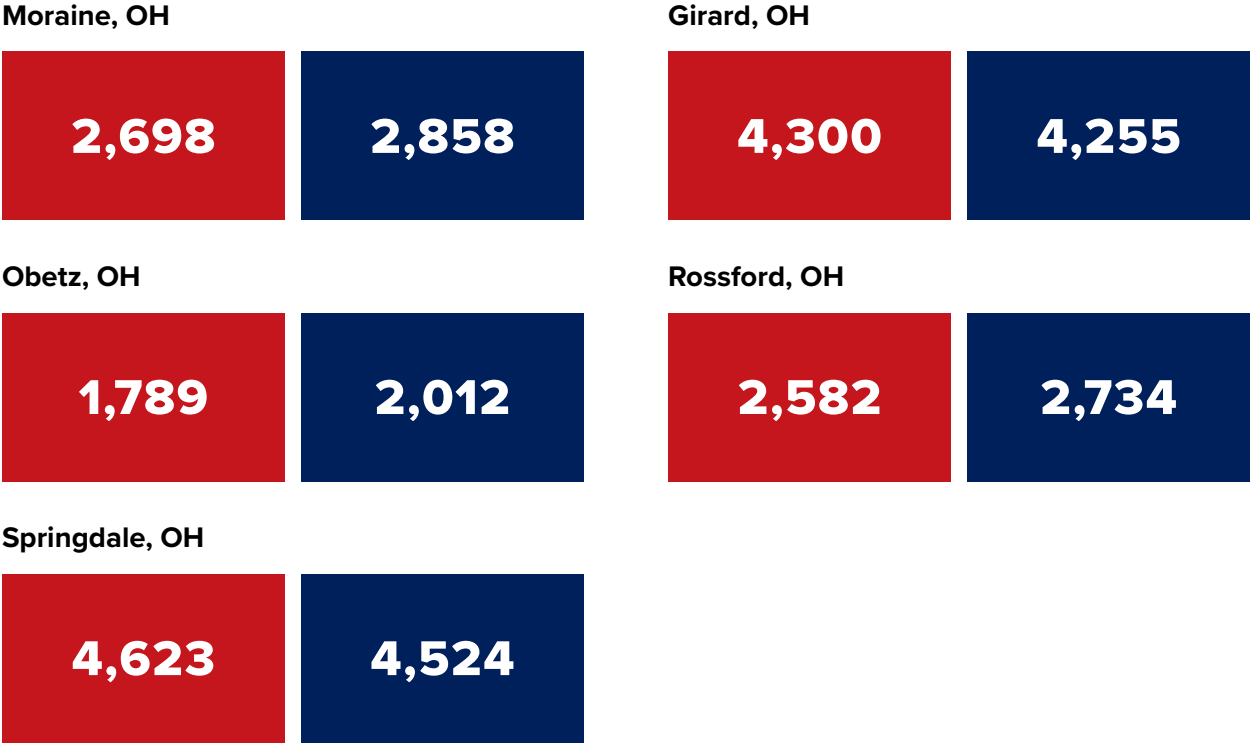
FIGURE 7: EDUCATION RATES IN MORAINE AND COMPARISON COMMUNITIES



HOUSEHOLDS

Moraine had a total of 2,858 households in 2022. That was less than the comparison community of Girard (4,255) and Springdale (4,524) but larger than Obetz (2,012) and Rossford (2,734). The number of households in Moraine increased since 2010, which aligns with the observed increase in population.

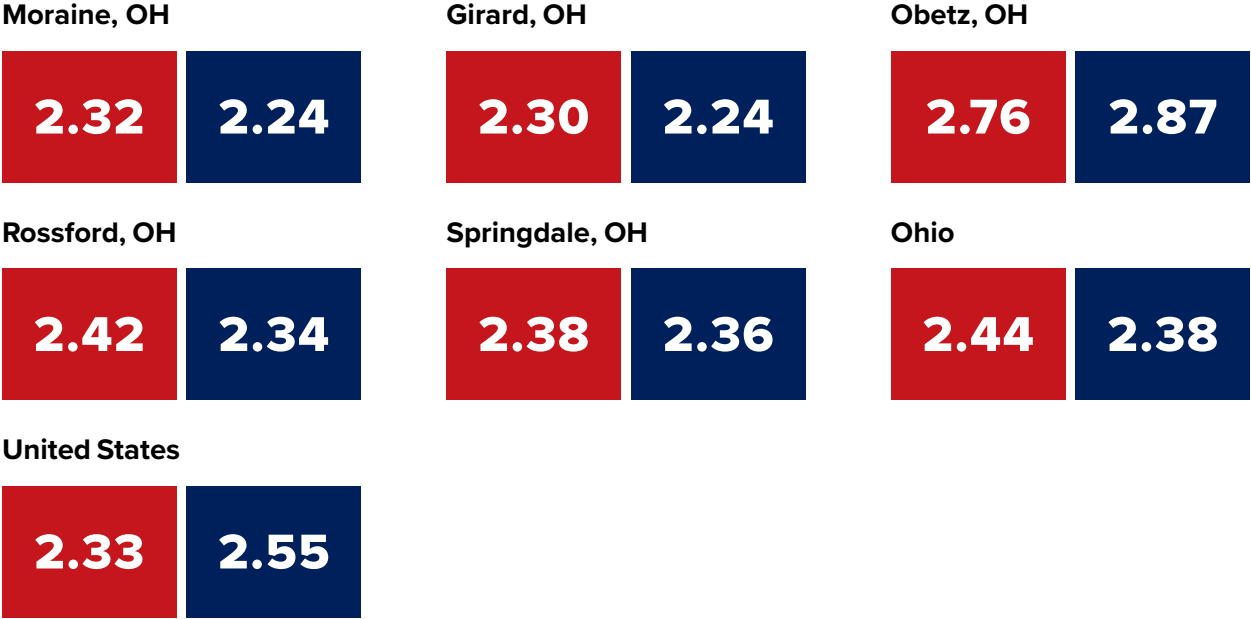
FIGURE 8: NUMBER OF HOUSEHOLDS COMPARISON ■ 2010 ■ 2022



HOUSEHOLD SIZE

The average household size in Moraine decreased from 2.32 family members to 2.24 from 2010 to 2020. Household size also decreased in most comparison communities except Obetz, OH, and the US. Decreasing the household size and increasing households implies that if these trends continue, Moraine will need to add more units to keep up with its population growth, and this same pattern will impact nearby communities, putting more pressure on an already tight housing market.

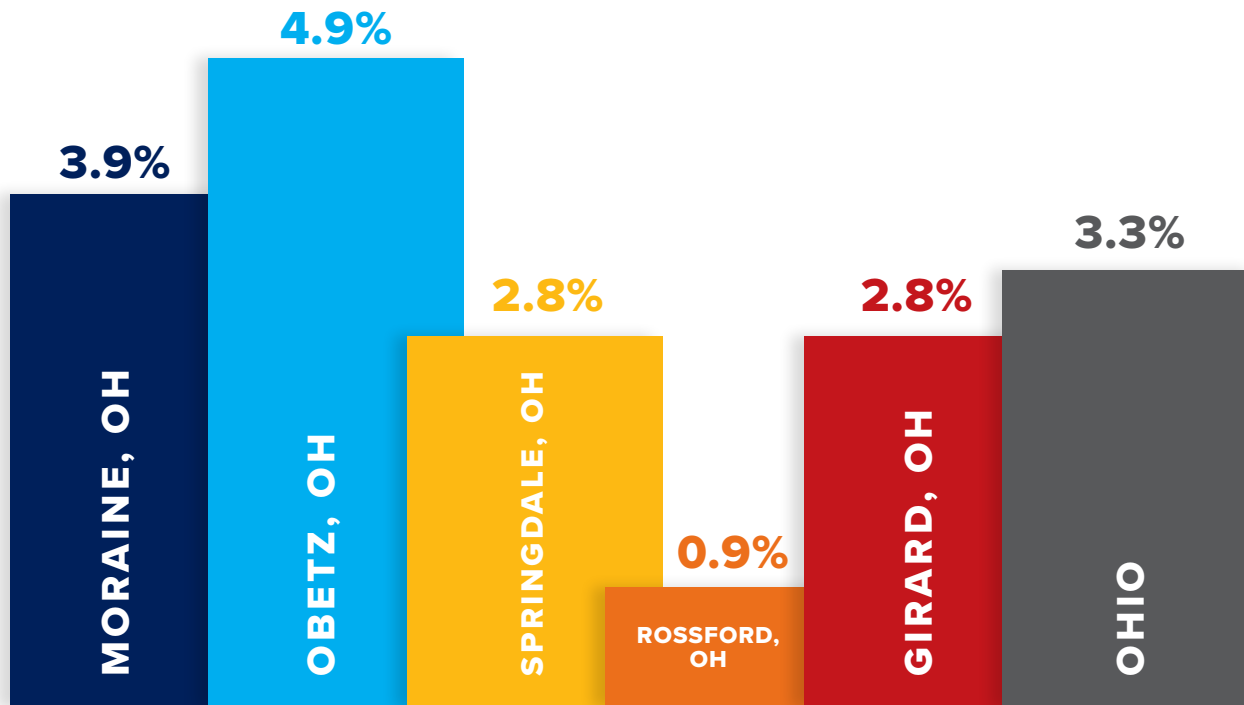
FIGURE 9: AVERAGE HOUSEHOLD SIZE ■ 2010 ■ 2022



UNEMPLOYMENT

Moraine's unemployment percentage in 2022 was slightly below the national average (4.1 percent) and above the State of Ohio (3.3 percent). It was above the comparison communities of Springdale, OH (2.8 percent), Girard, OH (2.8 percent), Rossford, OH (0.9 percent), and below Obetz, OH (4.9 percent). Nationally, unemployment was at historic lows in 2022, and the residents of Moraine were following that trend. Rates under 5.0 percent represent a healthy labor market, and the majority of the City's residents could find meaningful employment.

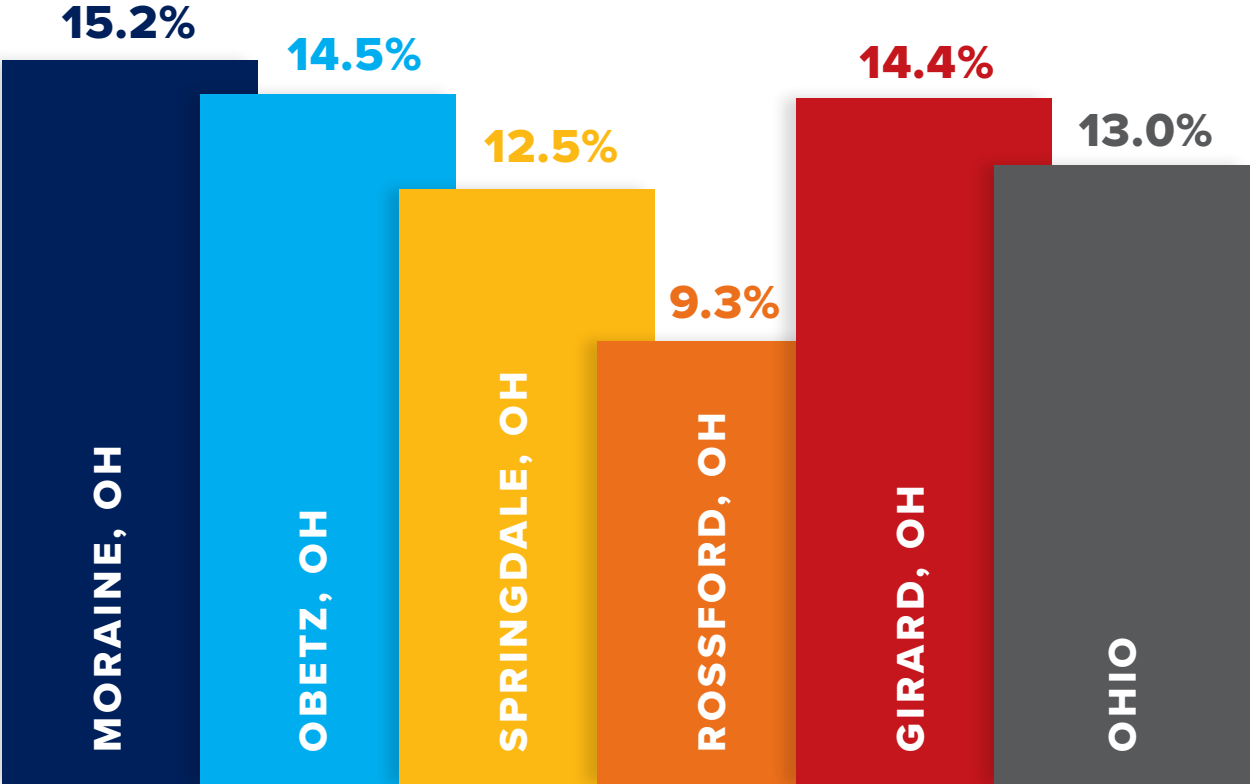
FIGURE 10: UNEMPLOYMENT RATES IN MORAINE AND COMPARISON COMMUNITIES



POVERTY

At 15.2 percent, Moraine’s population had a higher poverty rate than all comparison communities, Ohio, and the country. In 2022, the US Department of Health and Human Services poverty threshold for a three-member household was \$23,030.⁵

FIGURE 11: 2022 POVERTY RATES IN MORAINE AND COMPARISON COMMUNITIES



⁵US Department of Human Health: 2022 Poverty Guidelines: 48 Contiguous States (all states except Alaska and Hawaii).



Source: Getty Images.



SECTION 4

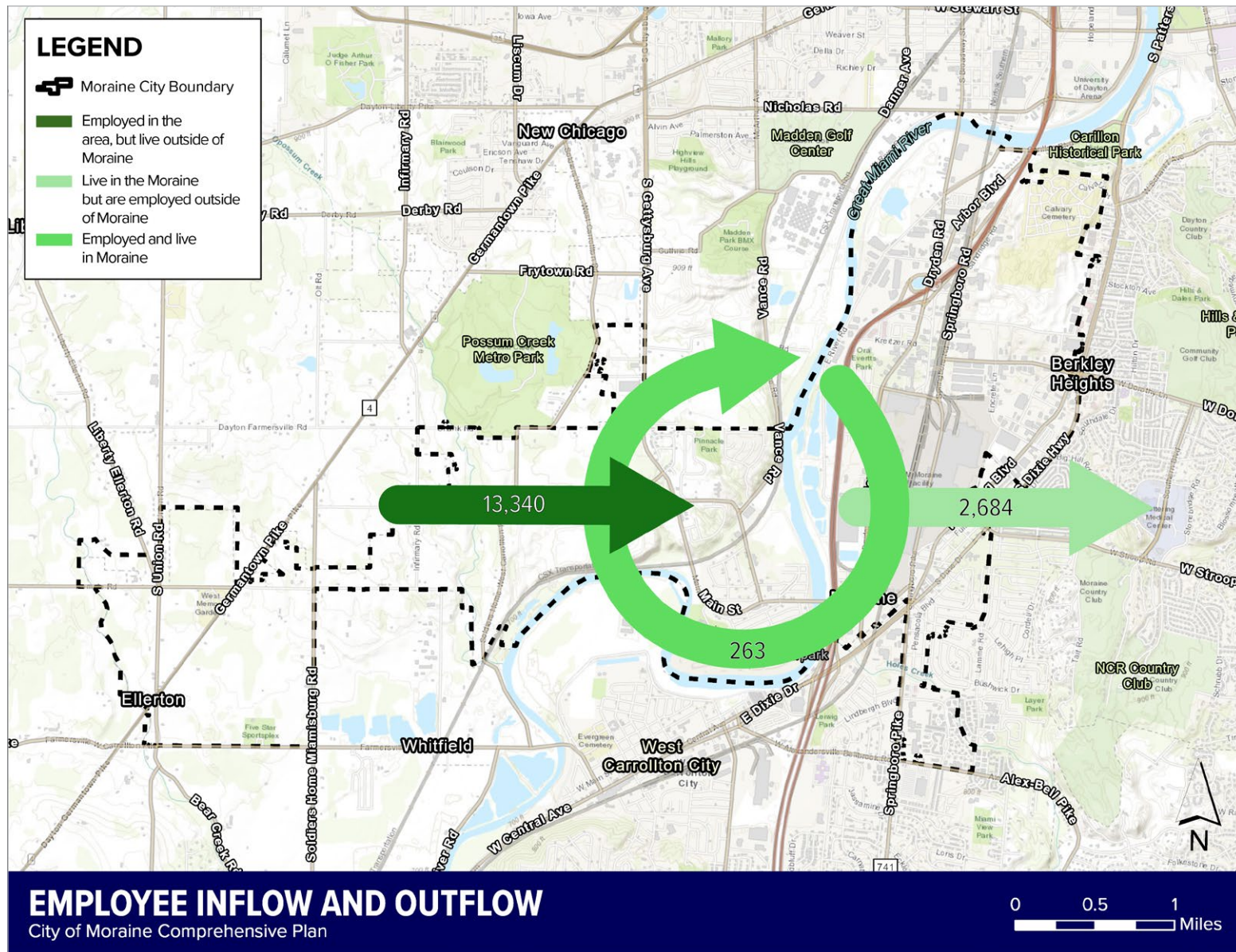
COMMUTER BEHAVIOR

COMMUTER BEHAVIOR⁶

Moraine experiences a sizable daytime population swing. 91.1 percent of its resident labor force (2,684 of 2,947) leave the City for employment. 98.1 percent of those employed in Moraine commute into the City from the surrounding areas, particularly from areas that travel along the I-75 corridor (i.e., from the north, northeast, and south). 55.0 percent of the City's labor force travels less than 10 miles to their place of employment within Moraine.

⁶US Census Bureau: OnTheMap.

FIGURE 12: EMPLOYEE INFLOW AND OUTFLOW





Bessie Ave
Main St

GE

Source: American Structurepoint Inc.



SECTION 5

HOUSING

HOUSING⁷

From 2010 to 2020, Moraine experienced an increase of 99 housing units, reaching a total of 3,115.

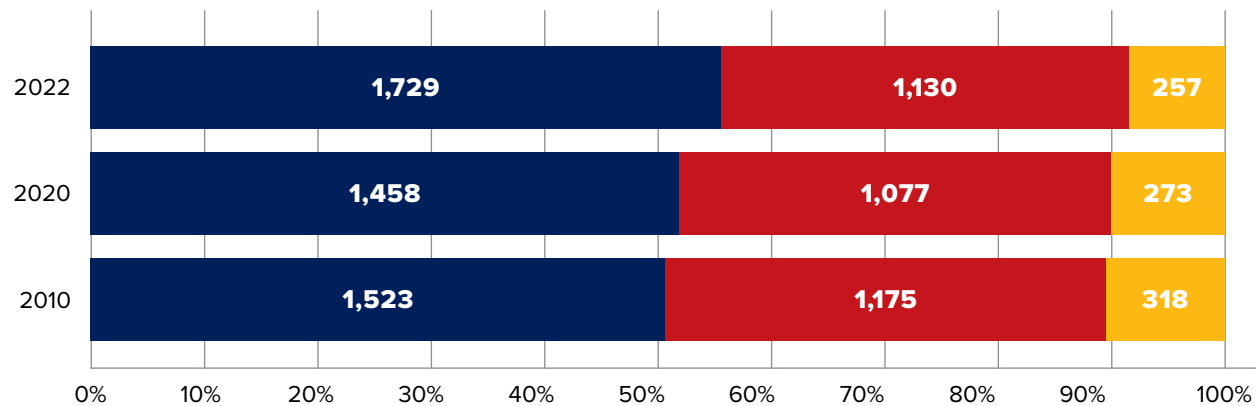
OCCUPANCY

Housing occupancy compares the number of housing units owned, rented, and vacant in a City. In 2010, Moraine had a comparable amount of owner-occupied (50.0 percent) and renter-occupied units (39.0 percent), with a vacancy rate of 11.0 percent. In 2020, Moraine's vacancy rate slightly decreased to 8.0 percent while owner-occupied housing increased to 56.0 percent, leaving 35.0 percent of housing units renter-occupied.

When comparing Moraine's occupancy rates with similar communities, Girard and Montgomery County had the most similar occupancy rates. Compared to Rossford and Obetz, Moraine had a higher vacancy rate and proportion of renter-occupied housing.

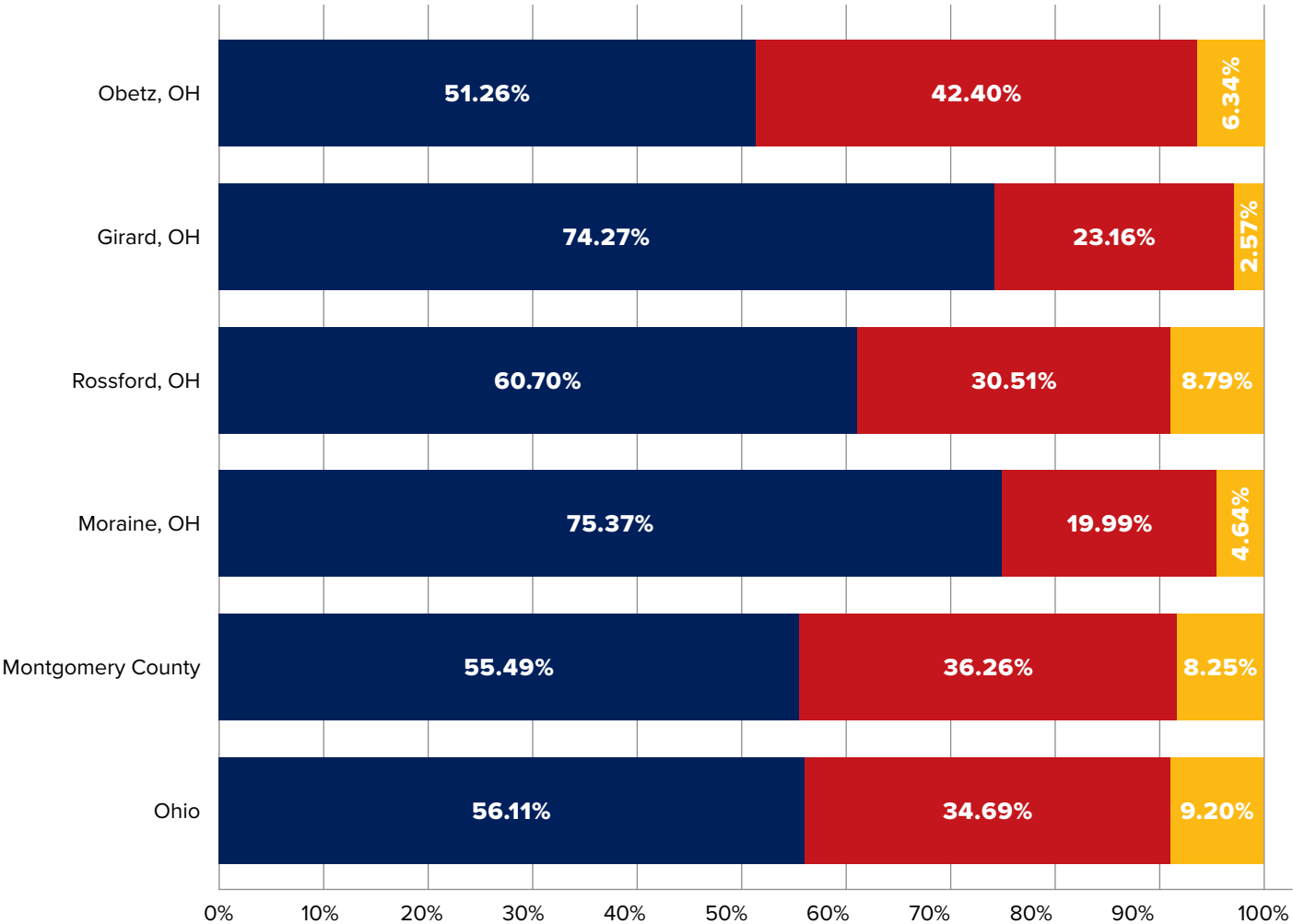
FIGURE 13: TOTAL HOUSING UNITS BY OCCUPANCY

■ Owner Occupied ■ Renter Occupied ■ Vacant



⁷ESRI Community Analyst.

FIGURE 14: 2020 OCCUPANCY RATES FOR MORAINE AND COMPARISON COMMUNITIES

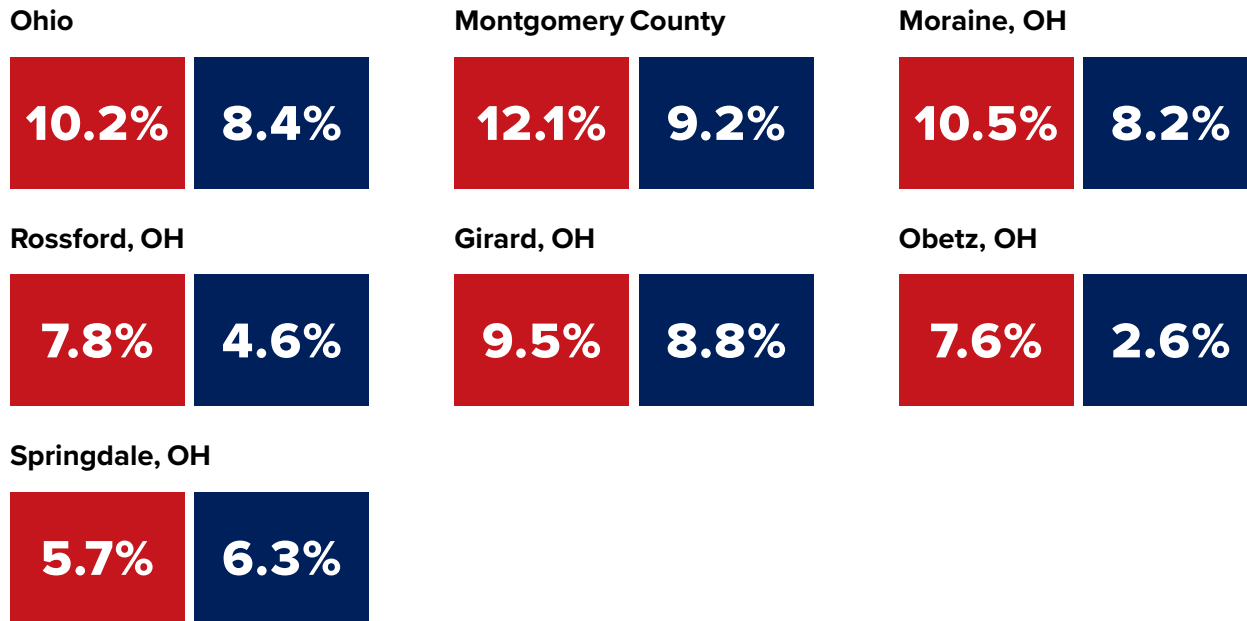


VACANCY

Vacancy rates are a common component of the housing market as units transition to new owners. Higher vacancy rates indicate economic difficulties, a less-than-desirable stock of housing supply, or an oversupply of housing. While the City of Moraine's vacancy rates were comparable to those of Ohio, Montgomery County, and Girard, they were higher than in Rossford and Obetz. Between 2010 to 2020, all of the comparison communities experienced a decrease in vacancy rates, with this decrease being the smallest in the City of Girard.

FIGURE 15: VACANCY RATES FOR MORAINE AND COMPARISON COMMUNITIES

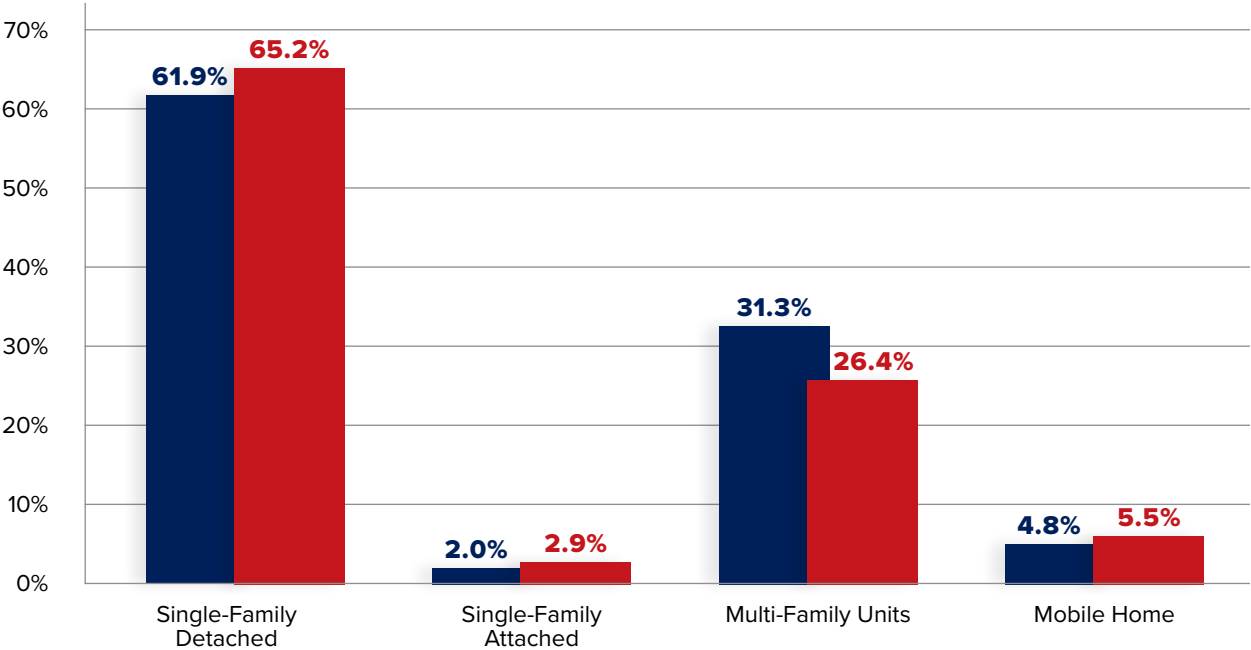
■ 2010 ■ 2022



HOUSING TYPES

In 2010 and 2020, most of Moraine’s housing types were classified as single-family detached. However, the proportion of single-family detached housing slightly increased from 62.0 percent in 2010 to 65.0 percent in 2020. On the other hand, Moraine had a higher proportion of multi-family units in 2010 than in 2020. From 2010 to 2020, the proportion of multi-family units decreased from 31.0 percent to 26.0 percent in 2020. The proportion of single-family attached units and mobile homes remained stable from 2010 to 2020. Single-family attached units accounted for 3.0 percent of the housing types in Moraine in 2020, while mobile homes accounted for 5.0 percent.

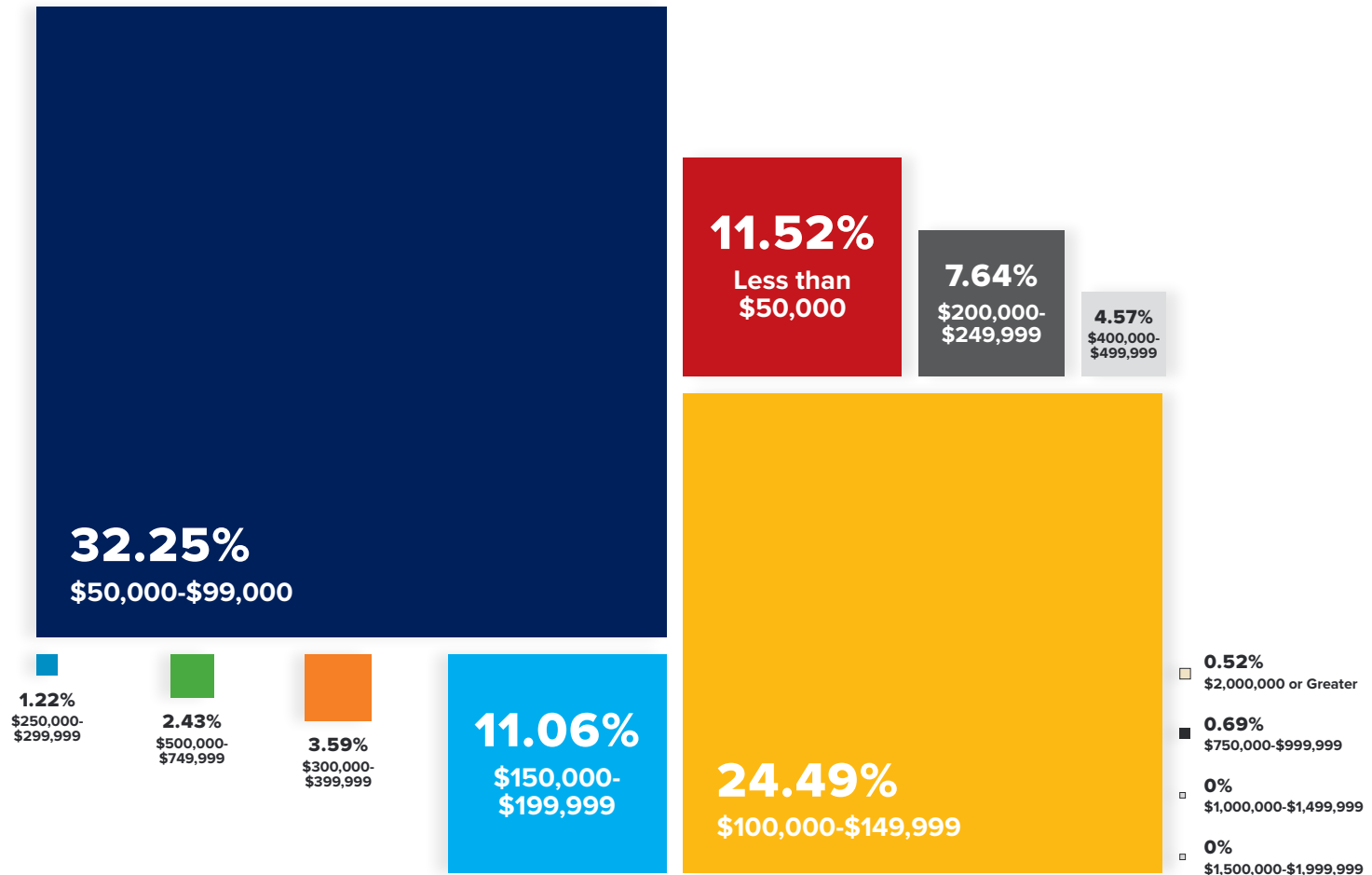
FIGURE 16: HOUSING TYPES



HOME VALUES

Most of Moraine's home values were in the \$50,000-\$99,999 bracket (32 percent). A quarter of home values were in the \$100,000-\$149,999 bracket. Only 0.5 percent of homes were valued at \$1,000,000 or greater.

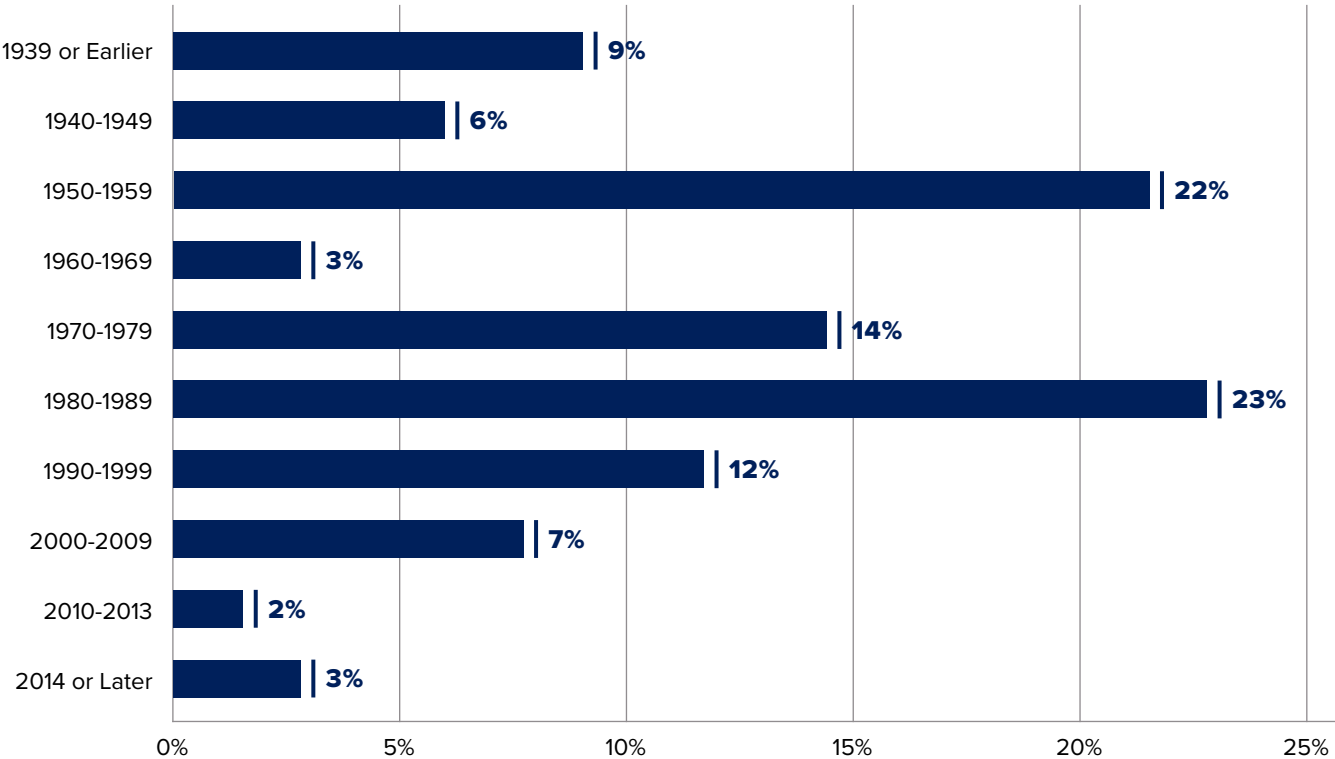
FIGURE 17: 2022 HOME VALUES



AGE OF HOUSING UNITS

Most of Moraine’s housing was constructed between 1980-1989 (23.0 percent). However, 22.0 percent of housing was constructed from 1950-1959. After 1989, housing construction decreased to 12.0 percent, and construction continued to decrease from 2000 to 2009. The most recently constructed units, built in 2014 or later, comprised 3.0 percent of the total housing units.

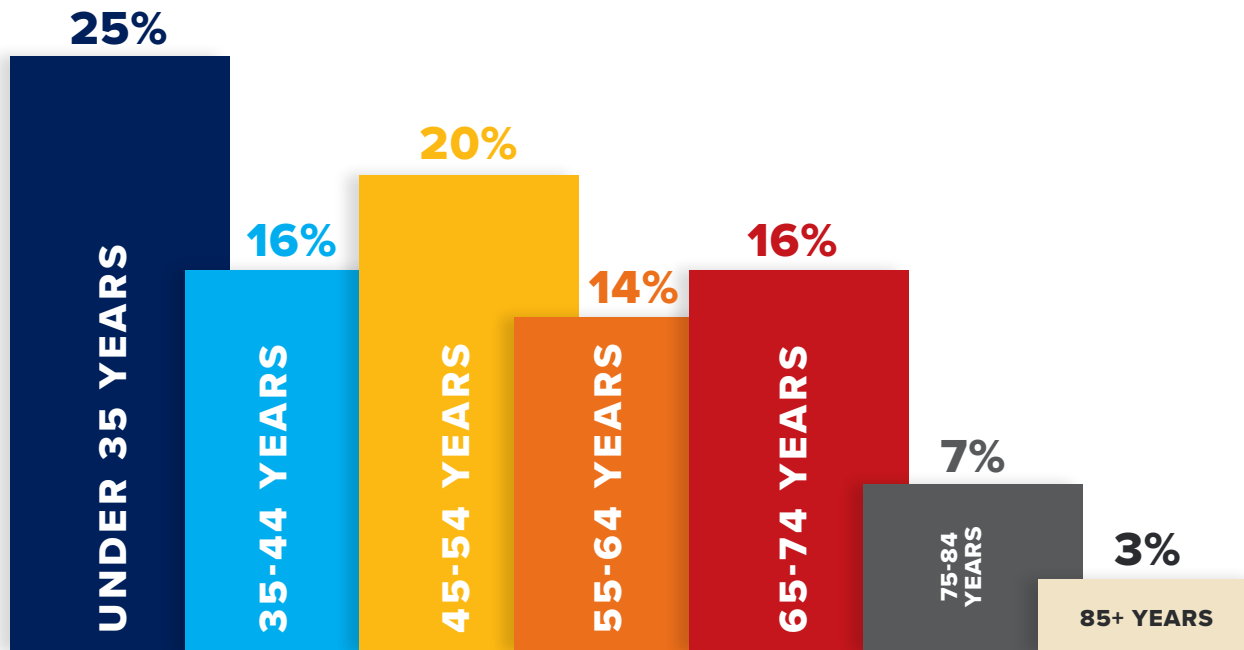
FIGURE 18: DISTRIBUTION OF MORAINE HOUSING BY CONSTRUCTION YEAR



HOUSEHOLDER

“Householder” is a Census term that refers to the individual listed as that housing unit’s primary mortgage or leaseholder.⁸ A quarter of Moraine’s householders were younger than 35. That is consistent with the low median age of Moraine’s population. The second most prominent age group of householders was those aged 45 to 54 (20 percent).

FIGURE 19: 2022 AGE DISTRIBUTION OF MORAINE HOUSEHOLDERS



⁸ US Census Bureau: Subject Definitions.



Source: American Structurepoint Inc.



Source: City of Moraine Facebook Page.



SECTION 6

ECONOMY

ECONOMY

Historically the economy of Moraine has always had strong ties to its robust manufacturing sector. While still a focal point at 8.4 percent of the overall total number of businesses in the City, the mixture of businesses and jobs in 2020 showed that industries in Moraine have diversified.⁹ Specific sectors have come to serve residents and employees, such as the retail trade, accommodations, and food services categories. The information below illustrates Moraine's mix of employers and employees and is organized by the National Industrial Classification System (NAICS). Given the importance of income tax as a revenue source for Moraine, the number and types of jobs in the City represent a significant part of the City's success.

⁹ US Census On The Map Tool.

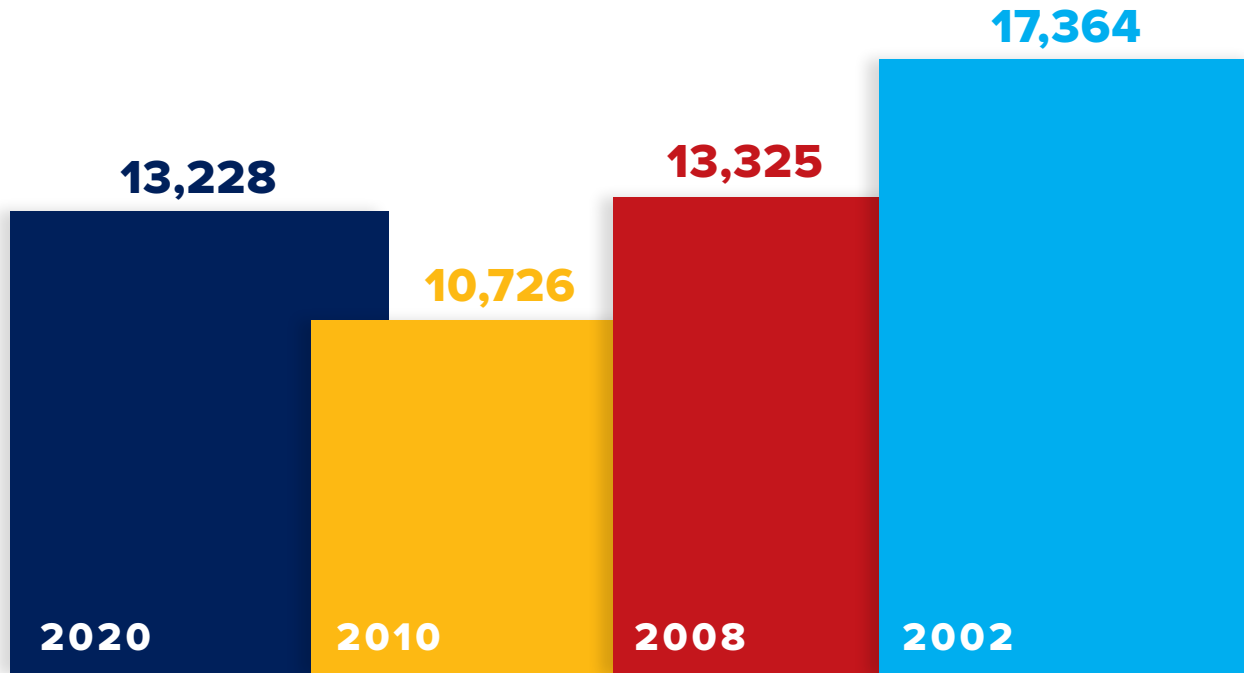


Source: American Structurepoint Inc.

TOTAL EMPLOYMENT

At the end of 2020, 13,228 individuals worked at a business within Moraine's City limits. Figure 20 shows how total employees have ebbed and flowed over the last two decades. In 2002, there were 17,364 workers in Moraine, which declined to 10,726 in 2010. The shuttering of a large General Motors (GM) manufacturing facility was the primary cause for this decrease. However, manufacturers such as Fuyao have returned to Moraine, bringing in new jobs and income. Figure 21 demonstrates the impact of the GM closure. In 2002, manufacturing was 32.2 percent of Moraine's employment mix. By 2010, the share of jobs decreased to 9.6 percent. Manufacturing positions were back up to 29.5 percent of total employment.

FIGURE 20: TOTAL EMPLOYEES IN MORAINE FROM 2002 TO 2020

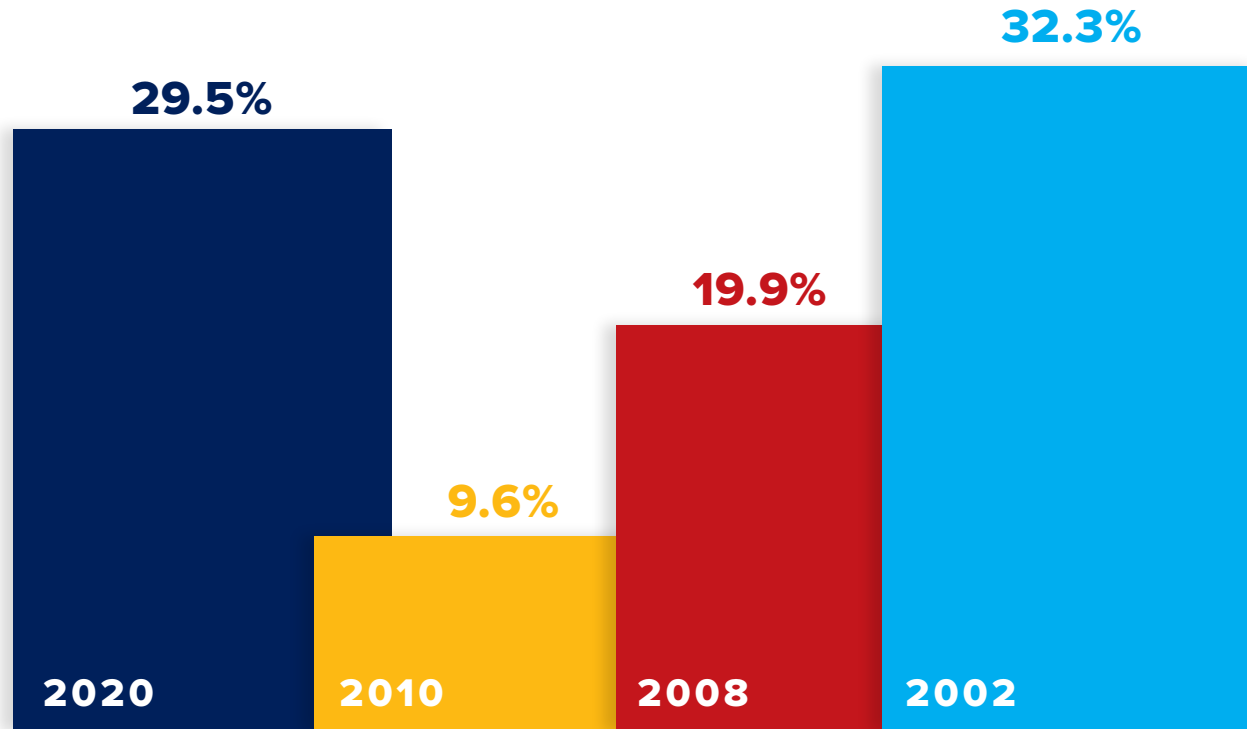


Source: US Census On The Map Tool.

BUSINESSES AND WORKFORCE

Examining the type of jobs in Moraine shows what kinds of businesses were located in the City. Manufacturing took the prime position with 3,904 employees, or 29.5 percent of the entire employee mix. Health Care and Social Assistance was the second leading employment category at 2,312 employees (17.5 percent), and construction occupation was third with 1,045 (7.9 percent).

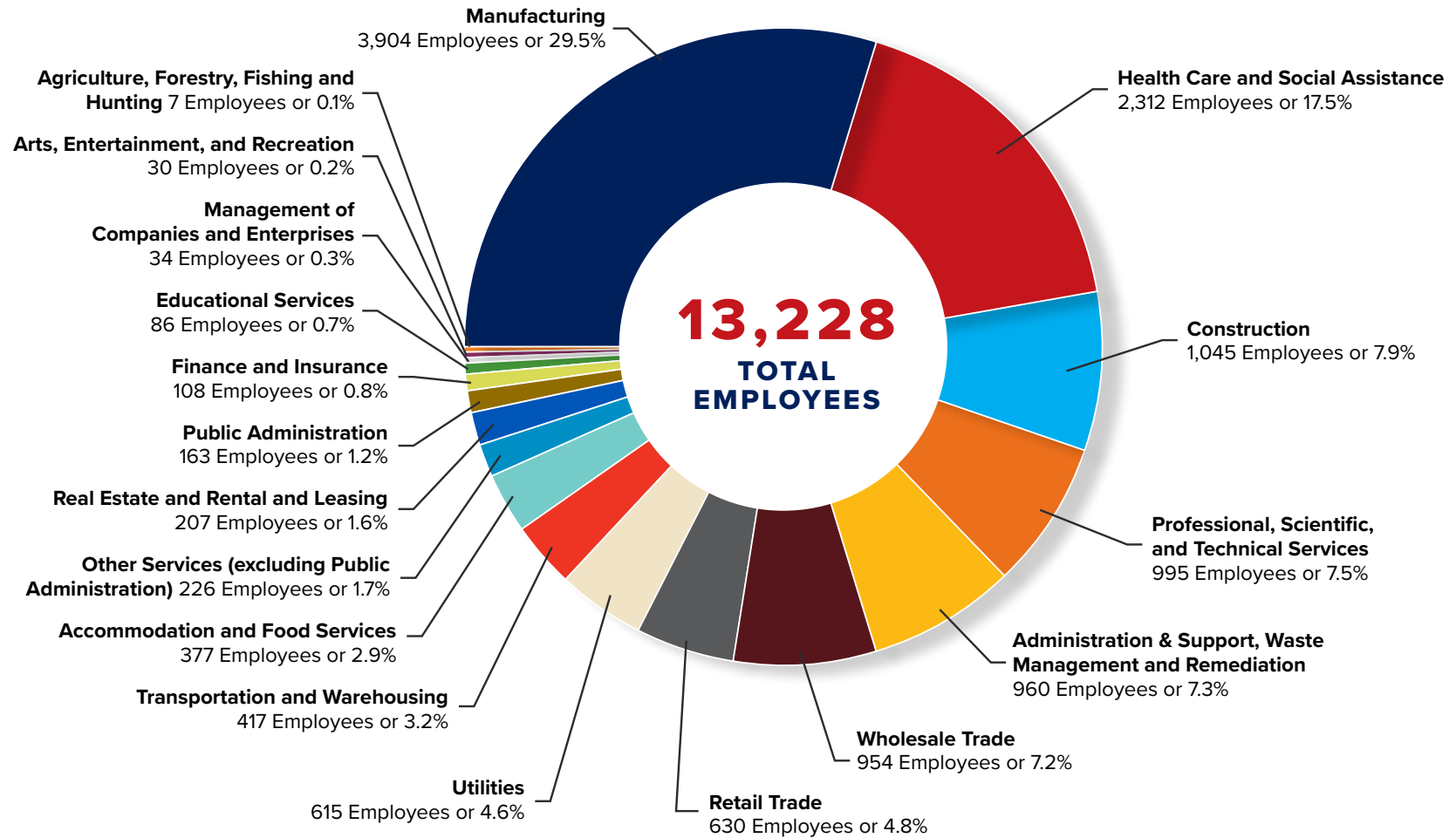
FIGURE 21: PERCENTAGE OF JOBS IN MANUFACTURING INDUSTRIES



Source: US Census On The Map Tool.

¹⁰ Bureau of Labor Statistics.

FIGURE 22: NUMBER AND PERCENT OF NAICS BUSINESS CATEGORIES IN MORAINE



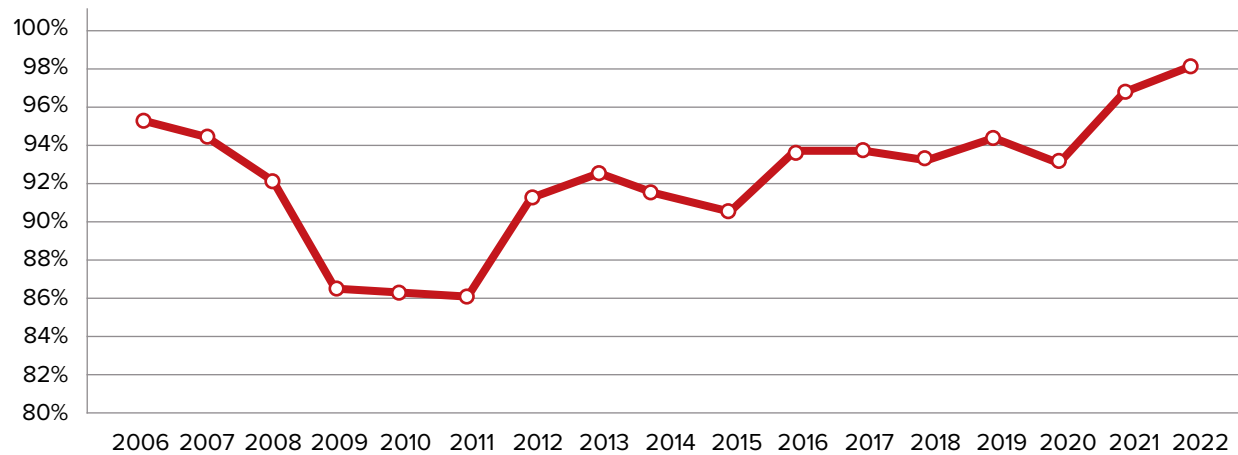
Source: US Census On The Map Tool.

ECONOMIC DEVELOPMENT

Ensuring continued employment growth has been a focus of Moraine's to ensure that the local economy and City's budget continue to thrive. Since the closure of the GM facility, the City has worked hard to re-purpose those former plant sites.

Figure 23 below illustrates the City's industrial building occupancy rates from 2006 to 2022. Before GM's plant closed, the manufacturing space had an occupancy rate of 95.2 percent. Vacancy rates increased dramatically in the 2009 to 2011 time frame before beginning to rebound in 2012.

FIGURE 23: HISTORIC INDUSTRIAL MARKET OCCUPANCY RATES



Source: CoStar, Inc.



Source: City of Moraine Facebook Page.

LOCATION QUOTIENT

Aside from local input and on-the-ground observations, this report examined how the concentration of industries in Moraine compared to Montgomery County, OH, the State of Ohio, and the greater United States to determine if the current mix of companies and jobs aligns with the stated target industries. This comparison also helps identify potential industry clusters to help with recruitment efforts.

This location quotient analysis revealed that the utilities; construction; manufacturing; wholesale trade; real estate and rental and leasing; professional, scientific, and technical services; administration & support, waste management and remediation; and health care and social assistance NAICS categories were concentrated in Moraine. The City outperformed Montgomery County, Ohio, and the US in these industries.



WHAT ARE LOCATION QUOTIENTS?

Location quotient ratios indicate a higher concentration of an employment industry within a given economy Moraine than in a larger economy, such as the US. If a local industry's ratio is 1.0 or higher, this particular local economy has a competitive advantage related to these types of businesses. Also, high location quotients can indicate that a local economy has a large workforce trained in these industries, which can be used to attract industry clusters and complementary businesses.

FIGURE 24: LOCATION QUOTIENT ANALYSIS

NAICS Category	Moraine to Montgomery County	Moraine to Ohio	Moraine to US
Agriculture, Forestry, Fishing, and Hunting	0.00	0.16	0.06
Mining, Quarrying, and Oil and Gas Extraction	0.00	0.00	0.00
Utilities	10.12	8.53	8.30
Construction	1.96	1.80	1.54
Manufacturing	2.60	2.32	3.50
Wholesale Trade	2.01	1.64	1.84
Retail Trade	0.49	0.46	0.46
Transportation and Warehousing	0.72	0.63	0.70
Information	0.44	0.80	0.60
Finance and Insurance	0.18	0.18	0.19
Real Estate and Rental and Leasing	1.27	1.29	1.03
Professional, Scientific, and Technical Services	1.42	1.45	1.13
Management of Companies and Enterprises	0.19	0.10	0.16
Administration & Support, Waste Management, and Remediation	1.19	1.23	1.21
Educational Services	0.08	0.08	0.08
Health Care and Social Assistance	0.79	1.04	1.17
Arts, Entertainment, and Recreation	0.20	0.16	0.16
Accommodation and Food Services	0.35	0.36	0.37
Other Services (excluding Public Administration)	0.65	0.62	0.62
Public Administration	0.38	0.29	0.24

Source: US Census On The Map Tool.

SHIFT SHARE ANALYSIS

This shift-share analysis examined Moraine's job growth from 2010 to 2020. This analysis revealed that changes in the city's manufacturing, healthcare and social assistance, and wholesale trade industries outperformed the US. Manufacturing, healthcare, and social assistance represented particular strengths.¹¹ One item to note is that the industry shift calculation for manufacturing resulted in a negative number meaning that nationally, the manufacturing industry has declined in relative strength from 2011 to 2021. Given recent efforts to re-shore manufacturing to the US, such as the CHIPS Act, as well as supply chain issues caused by the COVID-19 pandemic, investment in this NAICS category should continue to be a priority. Transportation and warehousing revealed a minor competitive share advantage.

The utilities, construction, retail trade, professional, scientific, technical services, administration & support, waste management, remediation, educational services, and accommodation and food services businesses had high negative competitive share values. Utilities, information, retail trade, and education services also had negative absolute change values, meaning these NAICS categories lost jobs from 2010 to 2020.

¹¹ US Census Bureau, Bureau of Labor Statistics, American Structurepoint Inc..



WHAT IS SHIFT SHARE ANALYSIS?

Shift share analysis compares a local economy's growth over a specified time frame to a larger economy (US) change over that same period. This type of analysis is typically broken down into these calculations:

- **National Growth for Industry:** The national growth for the industry calculation shows the number of local jobs a business category is expected to gain or lose based on that same category's national performance. In short, it describes how many local jobs were created or lost because of that industry's rise or decline nationally.
- **Industrial Shift:** This measurement provides insight into whether an industry is growing or shrinking nationwide. An industry with a negative industrial shift is declining. It may help a local economy identify if they are reliant on a shrinking sector or where not to focus recruiting efforts.
- **Competitive Share:** A positive competitive share value indicates that a particular industry is growing faster locally than the national economy and may suggest that the local economy has an industry-specific competitive advantage. Negative competitive share values suggest that this local industry is losing jobs faster than the national economy.
- **Absolute Change:** Absolute change illustrates the total number of jobs gained (positive number) or lost (negative number) in the local economy during the time period used for the shift-share analysis.

FIGURE 25: SHIFT SHARE ANALYSIS

NAICS Category	National Growth	Industrial Shift	Competitive Share	Absolute Change
Agriculture, Forestry, Fishing, and Hunting	0	0	0	7
Mining, Quarrying, and Oil and Gas Extraction	0	0	0	0
Utilities	116	-127	-418	-429
Construction	102	209	-190	122
Manufacturing	114	-41	2803	2,876
Wholesale Trade	78	-49	221	250
Retail Trade	100	-47	-321	-268
Transportation and Warehousing	31	81	24	136
Information	65	-40	-452	-427
Finance and Insurance	16	1	-57	-39
Real Estate and Rental and Leasing	28	10	-87	-49
Professional, Scientific, and Technical Services	121	231	-447	-95
Management of Companies and Enterprises	8	11	-61	-41
Administration & Support, Waste Management, and Remediation	115	114	-302	-73
Educational Services	67	-66	-524	-522
Health Care and Social Assistance	117	103	1042	1,261
Arts, Entertainment, and Recreation	9	-9	-47	-48
Accommodation and Food Services	57	-8	-186	-137
Other Services (excluding Public Administration)	23	-33	29	19

Source: US Census On The Map Tool, American Structurepoint Inc.

LISTED TARGET INDUSTRIES

In addition to occupying vacant space and attracting new employers, diversifying the city's industries is vital to safeguard against too much investment in one or two industry types. With this in mind, the Moraine Economic Development has identified the following targeted industries to ensure business variety:

- Renewable Energy and Energy Efficiency
- Aerospace
- Health Services and Technology
- Advanced Materials and Manufacturing
- Logistics and Distribution
- Business and Professional Services

The location quotient and shift-share analyses demonstrated that Moraine's efforts to attract advanced manufacturing, health services, and technology industries worked. However, industry categories, such as Logistics and Distribution and Business and Professional Services, had not seen the same success rates by 2020. However, both industries had high location quotient values indicating that Moraine is an attractive market for these types of businesses. Therefore, Moraine should continue to market to these sectors given their relatively high wages and how attracting those positions will continue to increase the City's budget with additional tax revenue.

¹² City of Moraine, Ohio: Economic Development.





Source: American Structurepoint Inc.

MARKETS

One major factor in helping economic development efforts is having sites/buildings available for business attraction efforts.

INDUSTRIAL MARKET

In the fourth quarter of 2022, Moraine's industrial market had 10.5 million square feet of building for these businesses with a vacancy rate of 2.0 percent. At that time, there were no buildings listed under construction. Given that Moraine's existing industrial-zoned areas are primarily built out, this is not surprising but highlights the need to continue to assist with building modification efforts and redevelop now vacant properties that once housed industrial buildings. In 2022, there were approximately 141 acres of potential industrial property in the market.¹³

OFFICE MARKET

Office space in Moraine had a vacancy rate of 10.7 percent at the end of 2022. That was slightly higher than the Dayton office market (7.1 percent). Since the end of the COVID-19 pandemic, predicting the need for new office space has been somewhat tricky. Approximately 2.19 acres of office land and 126,000 square feet of existing buildings were available in the market. Given Moraine's desire to attract, professional strategies will be needed to differentiate Moraine's office market from the remainder of the region.¹⁴

¹³ CoStar, Inc.

¹⁴ CoStar, Inc.

RETAIL GAP ANALYSIS

A retail gap analysis shows how much money is spent locally compared to how much money “should” be spent based on the local population’s disposable income. A retail gap analysis helps to:

- Uncover unmet demand and possible opportunities;
- Understand the strengths and weaknesses of the local market area; and
- Measure the difference between actual and potential retail sales.

“Leakage” and “surplus” are the two categories used in a retail gap analysis.

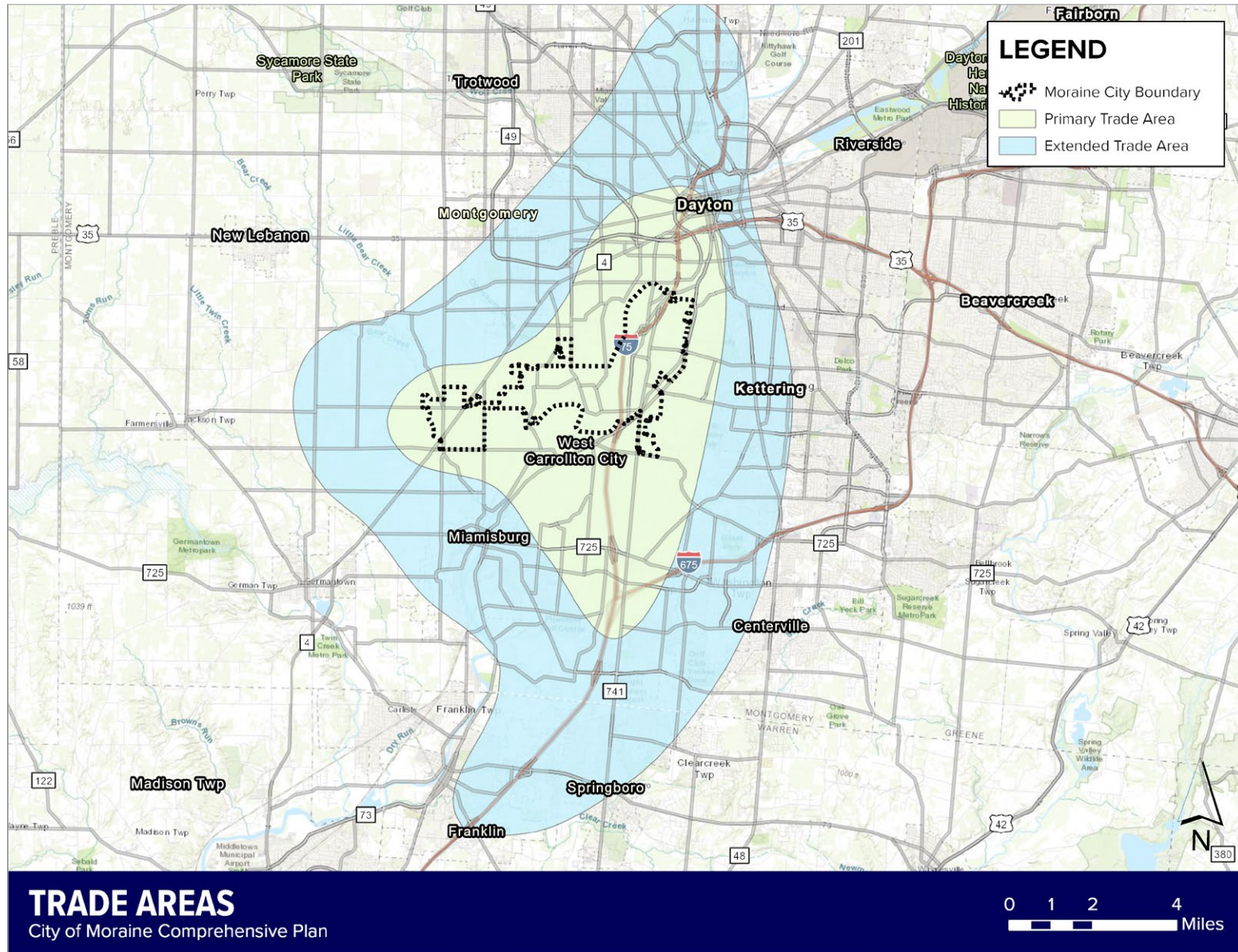
- Leakage in a local market means that people living in a trade area are spending money outside of that trade area. That indicates that additional disposable income could be captured in the trade area but is being lost or “leaking” to competing shopping districts.
- A surplus in a local market means more money is being spent at local businesses than the trade area’s population “should be” spending. A surplus can have multiple meanings:
 - Too many businesses exist in the trade area without enough disposable income to support them all;
 - The trade area attracts spending from additional shoppers beyond the residents’ spending power.

MORAINÉ’S TRADE AREAS

An analysis of Moraine’s population trends, commuter patterns, daytime population, and public input revealed two distance-based trade areas. The two trade areas identified were:

- **Primary Trade Area (10-minute drive):** The primary trade area was defined as a 10-minute drive from Moraine and captured residents and employees that work and likely shop at local businesses multiple times per week.
- **Extended Trade Area (15-minute drive):** The extended trade area was defined as a 15-minute drive from Moraine and captured potential shoppers that may frequent businesses once or twice a month.

FIGURE 26: MORAINE PRIMARY AND EXTENDED TRADE AREAS



TRADE AREAS
City of Moraine Comprehensive Plan

Source: ArcGIS Community Analyst, American Structurepoint Inc.

FIGURE 27: PRIMARY AND EXTENDED TRADE AREA RETAIL GAP ANALYSES

Category	Primary Trade Area (\$)	Extended Trade Area (\$)
Total	-248,211,942	-561,366,040
Motor Vehicle and Parts Dealers	-38,592,840	160,355,745
Furniture and Home Furnishing Stores	1,265,245	-10,271,077
Electronics and Appliance Stores	8,728,452	6,911,390
Building Material and Garden Equipment and Supplies Dealers	7,689,391	44,733,488
Food and Beverage Stores	-44,545,541	-98,291,019
Health and Personal Care Stores	-923,423	30,407,693
Gasoline Stations	3,741,850	59,531,479
Clothing and Clothing Accessories Stores	15,395,060	64,249,143
Sporting Goods, Hobby, Musical Instrument, and Book Stores	3,968,017	-8,764,336
General Merchandise Stores	-13,999,113	-62,005,281
Miscellaneous Store Retailers	3,097,687	-19,811,305
Food Services and Drinking Places	3,806,503	-51,446,806
Drinking places (alcoholic beverages)	2,177,377	-1,212,257
Restaurants and other eating places	-3,853,717	-71,189,816
Full-service restaurants	8,029,712	-23,533,983
Limited-service restaurants	-16,711,653	-46,019,818
Cafeterias, grill buffets, and buffets	931,692	1,941,747
Snack and non-alcoholic beverage bars	3,896,532	-3,577,761

Source: Claritas: Retail Market Power Opportunity Gap by Retail Store Types 2022.

PRIMARY TRADE AREA

Figure 27 shows the reported gap analysis for each significant retail category in the primary and extended trade areas. Surpluses are shown in red and leakages in black. Moraine's primary trade area had a total surplus of -\$248,211,942 for all retail trade categories. The largest reported surplus within the primary trade area was food and beverage stores at -\$44,545,541. The large surplus in motor vehicles and parts dealers indicates that many purchase automobiles or other auto parts and services in this primary trade area. Despite the overall surplus, substantial leakages were observed in the following categories:

- Clothing and Clothing Accessories Stores (\$15,395,060)
- Electronics and Appliance Stores (\$8,728,452)
- Building Material and Garden Equipment and Supplies Dealers (\$7,689,391)
- Gasoline Stations (\$3,741,850)
- Health and Personal Care Stores (\$6,424,595)
- Food Services and Drinking Places (\$3,806,503), specifically, Full-service restaurants (\$8,029,712)

In the primary trade area, large leakages for clothing and clothing accessories stores were noted. Stores, such as TJ Maxx, fall under this category. The Food and Beverage Stores category reported a leakage of (\$3,806,503). Further examination of this leakage revealed an \$8,029,712 potential demand for full-service restaurants. Gasoline stations had an observed leakage, but these retailers rely on multiple other site selection criteria, and the need for another station cannot be determined from this analysis alone.

EXTENDED TRADE AREAS

The extended trade area captured spending within a 15-minute drive from downtown. The extended trade area had a total surplus of **-\$561,366,040**. Moraine's proximity to several community shopping centers in Kettering and regional malls explained the large surplus. Similar to the primary trade area, leakages were also observed in the extended trade area in the following categories:

- Motor Vehicle and Parts Dealers (\$160,355,745)
- Electronics and Appliance Stores (\$6,911,390)
- Building Material and Garden Equipment and Supplies Dealers (\$44,733,488)
- Gasoline Stations (\$59,531,479)
- Clothing and Clothing Accessories Stores (\$64,249,143)
- Health and Personal Care Stores (\$30,407,693)

RETAIL GAP ANALYSIS IMPLICATIONS

Determining which businesses may thrive in any trade area is an inexact science. However, this information provides a good starting point. The first place to look is NAICS data, which shows leakages in the primary and extended trade areas. The following categories had leakages in both trade areas:

- Electronics and Appliance Stores
- Building Material and Garden Equipment and Supplies Dealers
- Gasoline Stations
- Clothing and Clothing Accessories Stores

Of the categories listed, Building Material and Garden Equipment and Supplies Dealers and Clothing and Clothing Accessories Stores were worth additional attention. The observed gap in both trade areas for clothing stores indicates a strong regional demand for more apparel-related shopping destinations. There needs to be more than the observed leakage in the primary trade for building supply stores to attract a new store similar in size to a Tractor Supply Company. However, the more considerable leakage in the extended trade area indicates demand for this store type. The observed leakages in the electronic store category were interesting. Still, both were smaller than the average annual sales for that type of retailer, and attracting one to the area would be challenging.

Two other categories stood out for different reasons. The substantial surplus for motor vehicles in the extended trade area shows a general need for more auto dealers in the region. With a leakage of \$160,355,745, the market could support multiple new manufacturers. The \$8,029,712 leakage for full-service restaurants in the primary trade area is fascinating. Most restaurants average \$1.5 million in annual sales, implying that demand exists for multiple restaurants in Moraine. Retail gap analysis bases the need for businesses only on residents that live in the trade area and not the daytime population, i.e., employees. While this makes sense for most categories, a few, such as restaurants and gas stations, rely on local employees and visitors. Given Moraine's sizable daytime population and workforce, the demand for restaurants is likely more significant than the leakage reported in the primary trade area.

COMMERCIAL/RETAIL MARKET

Moraine had approximately 1 million square feet of retail space in 2022 with a 1.0 percent vacancy rate. In the prior twelve months, from 2021 to 2022, 5,300 square feet were leased. Given the low vacancy rate and a relatively small amount of non-leased space, businesses were not turning over at a high rate. These factors help demonstrate demand and the recent successes of attracting a Tesla dealership and the new Chipotle location. Seemly lack of land was one primary reason for the lack of retail growth, especially considering the leakages observed in the retail gap analysis for specific retail types.¹⁵

HOSPITALITY MARKET

Providing nearby hospitality choices has become a staple for business attraction and retention efforts. Specifically, businesses prefer overnight accommodations and large off-site meeting spaces for out-of-town visitors and executives to stay at or host meetings.

HOTELS

Moraine had 195 total hotel rooms at three properties at the end of 2022, with an average daily rate of \$52.50 and a 12-month occupancy rate of 60.7 percent. Moraine has a relatively small number of rooms at low nightly rates. By comparison, the entire Dayton market had an average daily rate of \$68.34 and an occupancy rate of 59.8 percent. The Dayton market had significantly recovered since the COVID-19 pandemic when occupancy dropped to 39.4 percent.¹⁶ The entire region only had 118 rooms under construction at the end of 2022. This information implies that the market was ready to increase the number of hotel rooms, given Moraine's need for new rooms with high rates to cater to the local business customer.

MEETING-SPACE

No sizable private meeting space venues for corporate events existed in Moraine. Given the number of international, national, and regional businesses that had facilities in Moraine, there was capacity for this type of facility in the local market.

¹⁵ CoStar, Inc.

¹⁶ CoStar, Inc.





Source: American Structurepoint Inc.



Source: American Structurepoint Inc.



SECTION 7

EXISTING LAND USE AND DEVELOPMENT

EXISTING LAND USE AND DEVELOPMENT

Zoning and land use are two tools that local municipalities use to regulate the use of property. These tools encourage a thoughtful approach to an orderly built environment by reducing conflicts between uses. When conflicts between uses are not well-managed, they can affect land value, productivity, health, and public welfare.

CORRIDORS AND GATEWAYS

Moraine's economic vitality has always been tied to its convenient highway access to I-75 and supporting arterials. This well-connected roadway network has led to prominent industrial and commercial corridors and gateways on the City's eastern portion.

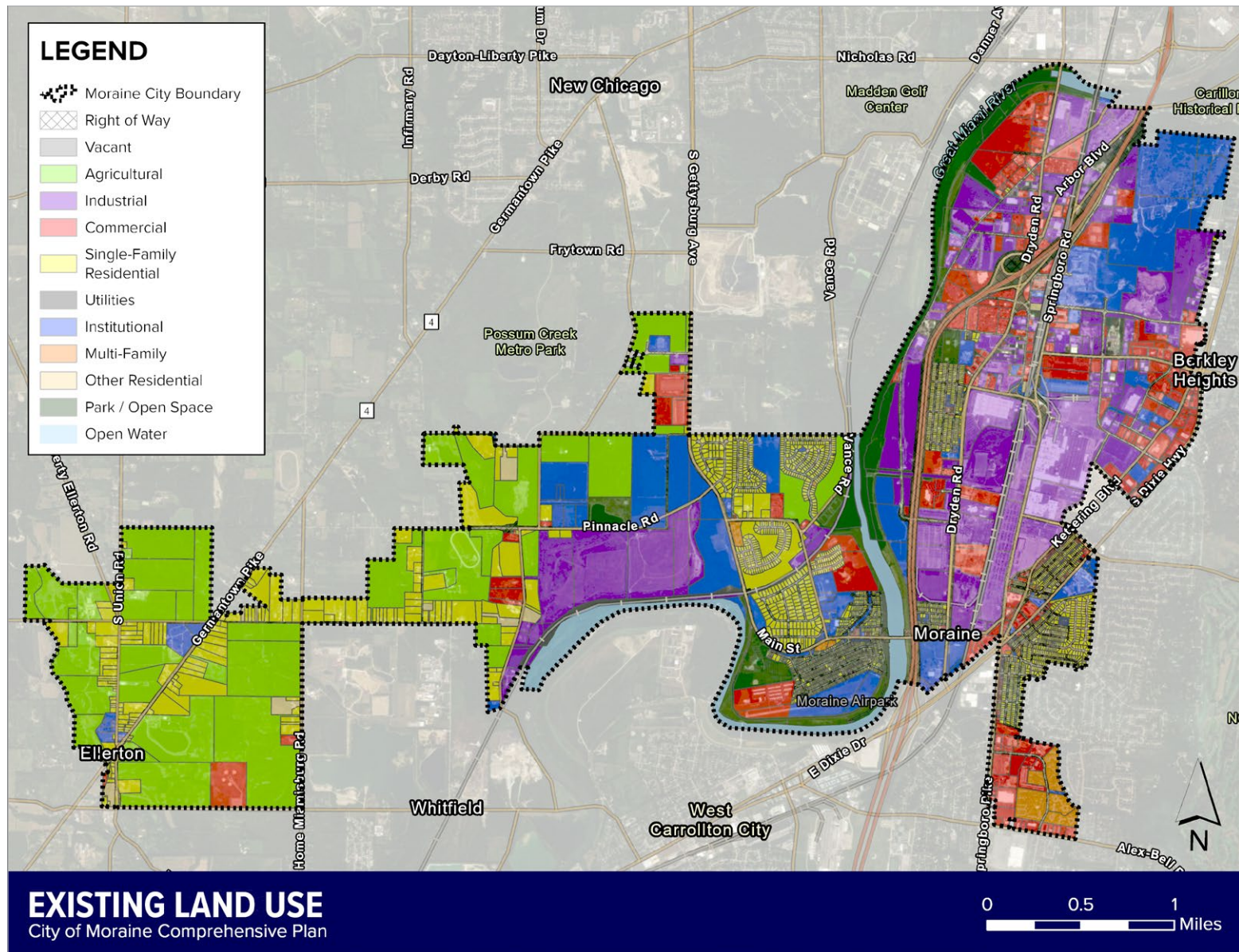
The major industrial corridors (Dryden Road and Springboro Pike/OH-741) run parallel and rely upon the I-75 exits.

- Exit 47 Moraine/Kettering (northbound) & Central Ave/West Carrollton (southbound)
- Exit 50A – Dryden Road (north- and southbound)
- Exit 50B – OH-741 S/Springboro Road (southbound)
- Exit 51 – Edwin C Moses Blvd/Nicholas Road (north- and southbound)

The major commercial corridors are along Dorothy Lane, Kettering Blvd, and South Dixie Highway. Dorothy Lane at the Moraine-Kettering incorporation boundary is the primary gateway to those corridors. The secondary gateway is south at Exit 47 off of I-75 in West Carrollton.

West of the Great Miami River, the Main Street/Pinnacle Road and SR-4/Germantown Pike corridors are characterized by predominately less-intense uses (e.g., agricultural, residential, and institutional) and open space.

FIGURE 28: EXISTING LAND USE MAP



Source: ArcGIS REST Services Directory: Moraine, American Structurepoint Inc.



Source: City of Maraine Facebook Page.



SECTION 8

ZONING AND POLICY

ZONING AND POLICY¹⁷

CURRENT ZONING DISTRICTS

The City of Moraine Planning and Zoning Code is a unified development ordinance that contains subdivision regulations and zoning development standards by defined districts. Select dimensional standards, such as required front yards, are determined by right-of-way lines and classifications defined in the City’s official Thoroughfare Plan. Moraine’s zoning districts are described below.

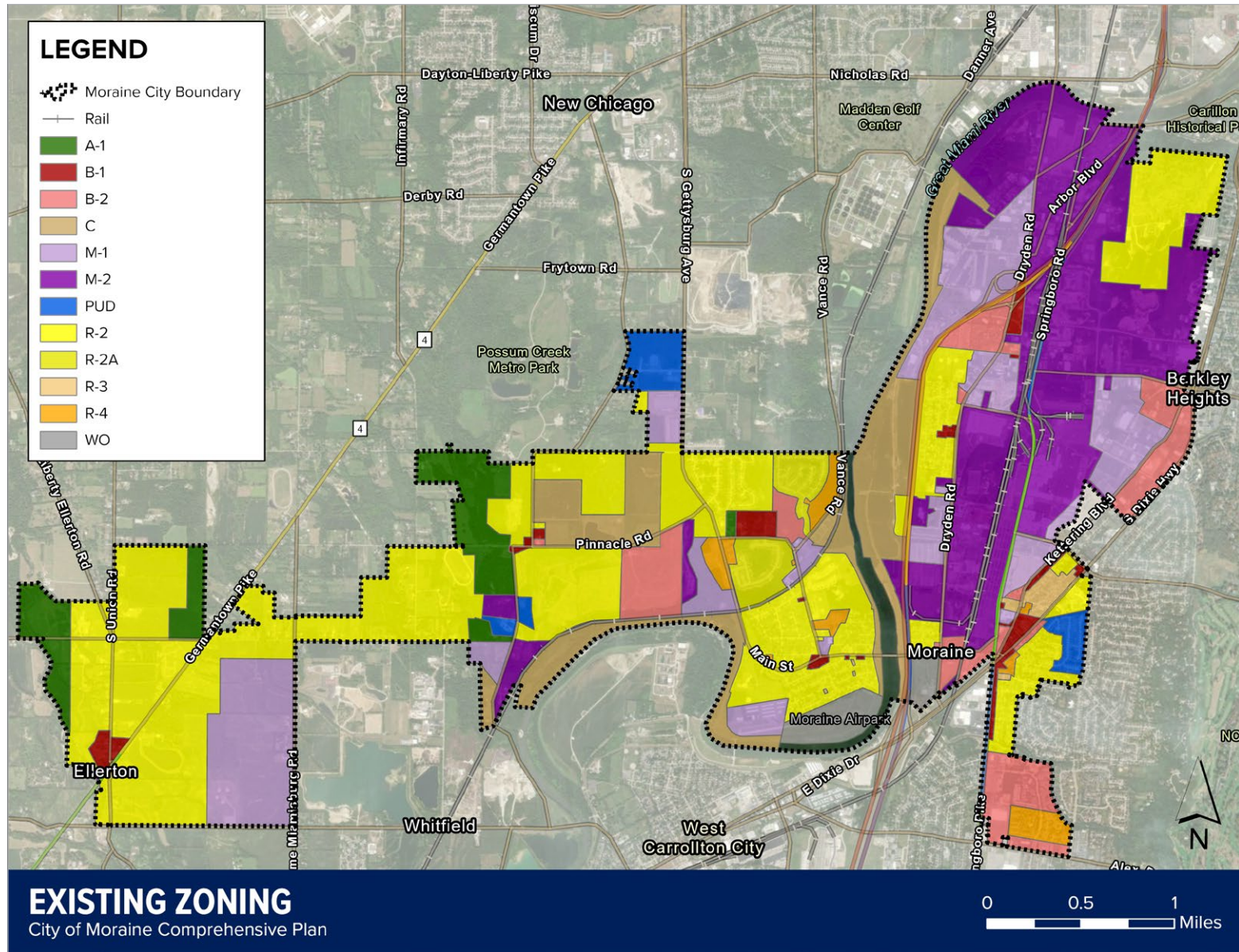
FIGURE 29: AREA CALCULATION BY ZONING CLASSIFICATION

Zoning Districts	City of Moraine	
	Acres	Percentage
A-1: Agricultural	269	4.5
B-1: Neighborhood Business	102	1.7
B-2: General Business	398	6.7
C: Conservation	564	9.5
M-1: Light Industrial	863	14.5
M-2: General Industrial	1362	22.8
Pud: Planned Unit Development	112	1.9
R-2: Single-Family Residential	1,998	33.5
R-2a: Single-Family Residential	48	0.8
R-3: One & Two Family Residential	31	0.5
R-4: Multiple-Family Residential	127	2.1
WO: Wellhead Operation District	92	1.5
TOTAL	5,966	100.0

Source: ArcGIS REST Services Directory: Moraine.

¹⁷ American Legal Publishing: Moraine, Ohio: Planning and Zoning Code, Part 11.

FIGURE 30: EXISTING ZONING MAP



Source: City of Moraine: Zoning Districts of the City of Moraine, Ohio.

AGRICULTURAL (A-1)

The Agricultural district is for agricultural activities and large-lot single-family residential development. Other permitted uses include churches, schools, and hospitals. Special uses include commercial, recreational uses, municipal waste management, and airports (public or private).

This district is further intended to discourage high-density development from areas with woodlands, unsuitable slopes, or other similar characteristics.



This active agricultural site is appropriately zoned A-1.
Source: American Structurepoint Inc.



The house shown is an example of single-family residences permitted within an A-1 district.
Source: American Structurepoint Inc.

NEIGHBORHOOD BUSINESS (B-1)

The Neighborhood Business district is intended to encourage small businesses for daily staple needs. Permitted uses are categorized into Minor B-1 District and Major B-1 District. Minor Districts are those abutting residential districts, and the district area is less than five acres. Permitted uses include eating and drinking establishments without live entertainment, commercial parking lots, retail sales and services, offices, automotive services, and uses permitted within the R-4 District.

All areas outside of Minor Districts are classified as Major Districts. In addition to Minor District uses, permitted uses include theaters (excluding drive-ins), hotels, and automotive repair garages.



These Moraine neighborhood businesses are within a B-1 district.
Source: American Structurepoint Inc.

GENERAL BUSINESS (B-2)

The General Business district is intended to serve the community's broader needs and has a wider market draw than the Neighborhood Business district. Permitted uses include all Neighborhood Business uses and uses that typically require a larger building footprint or outdoor sales, such as building supply retail, wholesale sales, distribution, and post offices. Animal hospitals, nightclubs, and manufactured/mobile home parks are on the list of special uses.



Moraine businesses located within B-2 districts.
Source: American Structurepoint Inc.

CONSERVATION (C)

The Conservation district is intended to preserve undeveloped land, agricultural land, and open space with “distinctive geologic and/or scenic values.” The Conservation zoning districts lie primarily along the Great Miami River. The other sites zoned Conservation are the City’s garden plots on Vance Road and Deer Meadow Park. Permitted uses include greenhouses, recreation areas, agricultural uses (excluding animal sales and feed lots), and gravel pits.



East River Landing is zoned Conservation.
Source: American Structurepoint Inc.

LIGHT INDUSTRIAL (M-1)

The purpose of the Light Industrial district is to encourage low-nuisance industrial uses in areas of adequate road and utility infrastructure. Nuisances such as noxious vapors, dust, noise, and light, are regulated by the City's use-specific performance standards. Permitted uses include body shops, enameling, carpet cleaning, blacksmithing, concrete mixing, appliance manufacturing, and all B-2 uses except smoking establishments. Billboards and outdoor entertainment are among the listed special uses.



The businesses shown here are from the large M-1 district along River Road.
Source: American Structurepoint Inc.

GENERAL INDUSTRIAL (M-2)

The General Industrial district intends to permit a broad range of industrial activities (e.g., products, operational techniques, and size) potentially more impactful to the environment and adjoining uses. The code addresses the potential impacts by requiring additional scrutiny (i.e., special use permit) for all uses except those also permitted in M-1.



Fuyao is an example of the range and size of industrial activities permitted in an M-2 district.
Source: American Structurepoint Inc.

PLANNED UNIT DEVELOPMENT (PUD)

The Planned Unit Development (PUD) district is a flexible zoning designation intended to support innovation and more efficient land use. In exchange for regulatory flexibility, PUDs are held to a higher level of scrutiny than other zoning map amendment requests. They may be required to enter commitments, such as performance bonding and developers' agreements. They may be subject to additional conditions placed by the approving bodies (e.g., the City Council and Planning Commission).

The City of Moraine Planning and Zoning Code lists four types of PUDs:

- Residential (R-PUD)
- Commercial (B-PUD)
- Mixed Use (MX-PUD)
- Industrial (I-PUD)

There are three existing PUDs in Moraine: one R-PUD (i.e., Oak Pointe) and two M-PUDs (i.e., Protect Cure, Inc. and Essential Landscaping & Irrigation).



Adopted in 2020, Oak Pointe is the newest of Moraine's three PUDs.

Source: American Structurepoint Inc.

SINGLE FAMILY RESIDENTIAL (R-2)

The R-2 district intends to provide low-density single-family residential near the City's periphery. The maximum permitted density is 5.8 dwelling units per acre. Maximum building height is 30 feet or 2 ½ stories. In addition to single-family dwelling units, child care centers, and certain agricultural activities are permitted uses. Cemeteries are special uses.



R-2 districts, such as the Heritage Estates subdivision shown here, can be found across Moraine with a wide range of lot sizes.
Source: American Structurepoint Inc.

SINGLE FAMILY RESIDENTIAL (R-2a)

The R-2a district allows a slightly higher-density single-family residential development throughout the City. Permitted uses and special uses mirror R-2 district standards. The maximum permitted density is 6.2 dwelling units per acre. Maximum building height is 35 feet or 2 ½ stories.



The only R-2A districts are the Pinnacle Ridge (shown) and German Village subdivisions.
Source: American Structurepoint Inc.

ONE & TWO FAMILY RESIDENTIAL (R-3)

The One & Two Family Residential district is intended to continue the historical high-density residential established by “originally developed neighborhoods” and to permit two-family units. In addition, the district allows all R-2A permitted uses, excluding commercial kennels.

Minimum lot areas:

- Single-family – 6,000 square feet (7.26 dwelling units per acre)
- Two-family – 8,000 square feet (10.89 dwelling units per acre)

Maximum building height is 30 feet or 2 ½ stories.



The R-3 district is intended for mature, higher-density Moraine neighborhoods.
Source: American Structurepoint Inc.

MULTIPLE FAMILY RESIDENTIAL (R-4)

Multi-Family Residential is intended to continue existing multi-family development patterns and encourage “suburban apartment density.” Multi-family development is noted in the ordinance as a transitional use between single-family neighborhoods and commercial areas. In addition to apartments, boarding houses, hospitals, and R-3 uses are permitted uses. Condominiums are a special use. Maximum building height is 40 feet.

R-4 requires the following minimum lot sizes:

- Single-family – 6,000 square feet (7.26 dwelling units per acre)
- Two-family – 6,500 square feet (13.4 dwelling units per acre)
- Multi-family and other permitted uses – 10,000 square feet

All sites zoned R-4 are currently undeveloped.



Source: American Structurepoint Inc.

WELLHEAD OPERATION (WO)

The WO district intends to protect drinking water against contamination associated with storing, handling, using, and producing regulated substances. Permitted uses include public water facilities, recreation areas, public wastewater facilities operated by Montgomery County, and airstrips (take-off and landing only).

Special uses include gas and electric public utility uses and existing residential uses.



The two WO districts are the Moraine Airpark and part of the Montgomery County Environmental Laboratory campus (shown).
Source: American Structurepoint Inc.

WELL FIELD PROTECTION OVERLAY (WP)

Well Field Protection Overlay is the only overlay district within the City's zoning ordinance. Like the WO district, the overlay intends to protect drinking water against contamination associated with storing, handling, using, and producing regulated substances. Sanitary landfills, hard fills, and junkyards are prohibited within the district. No areas on the zoning map are identified as subject to Well Field Protection Overlay standards.



Source: City of Moraine Facebook Page.

DEVELOPMENT ACTIVITY¹⁸

The volume of filed permits and other development applications provides a general sense of development activity in the City of Moraine. Between 2018 to 2022, 1,987 buildings, zoning, and trade permits were filed for commercial and residential development. Declared job values ranged from \$50 to \$6.1 Million.

Zoning codes are designed to set standards that adequately and reasonably address most development. However, the code does not account for every scenario. A variance to the code may be requested to remedy a property owner's hardship caused by unique site conditions. Based on the presented evidence, the local zoning board judges if a variance is appropriate for the site. Within this same period, 14 variance requests and one violation appeal were heard by Moraine's Board of Zoning Appeals. Most variance requests were for dimensional lot standards (e.g., setbacks, required yards, and lot) in the R-2 and M-2 districts. No cases were heard in 2020 due to COVID-19.

¹⁸ City of Moraine, Ohio.



Source: American Structurepoint Inc.



SECTION 9

TRANSPORTATION AND MOVEMENT

TRANSPORTATION AND MOVEMENT

Moraine is primarily a roadway city, like other communities of its size. The most prominent form of transportation is vehicular travel. Moraine’s large industrial base, aviation heritage, and proximity to Dayton bring access to more rail, air, and public transportation than comparable communities.

ROADWAY CLASSIFICATION

Roadway classifications define roads into interstates, principal arterials, minor arterials, major collectors, minor collectors, and local roadways. Arterial roadways cater to a large traffic volume and serve cross-community travel. Collectors distribute high traffic volume from arterial roads to local streets. Local streets are intended for property access.

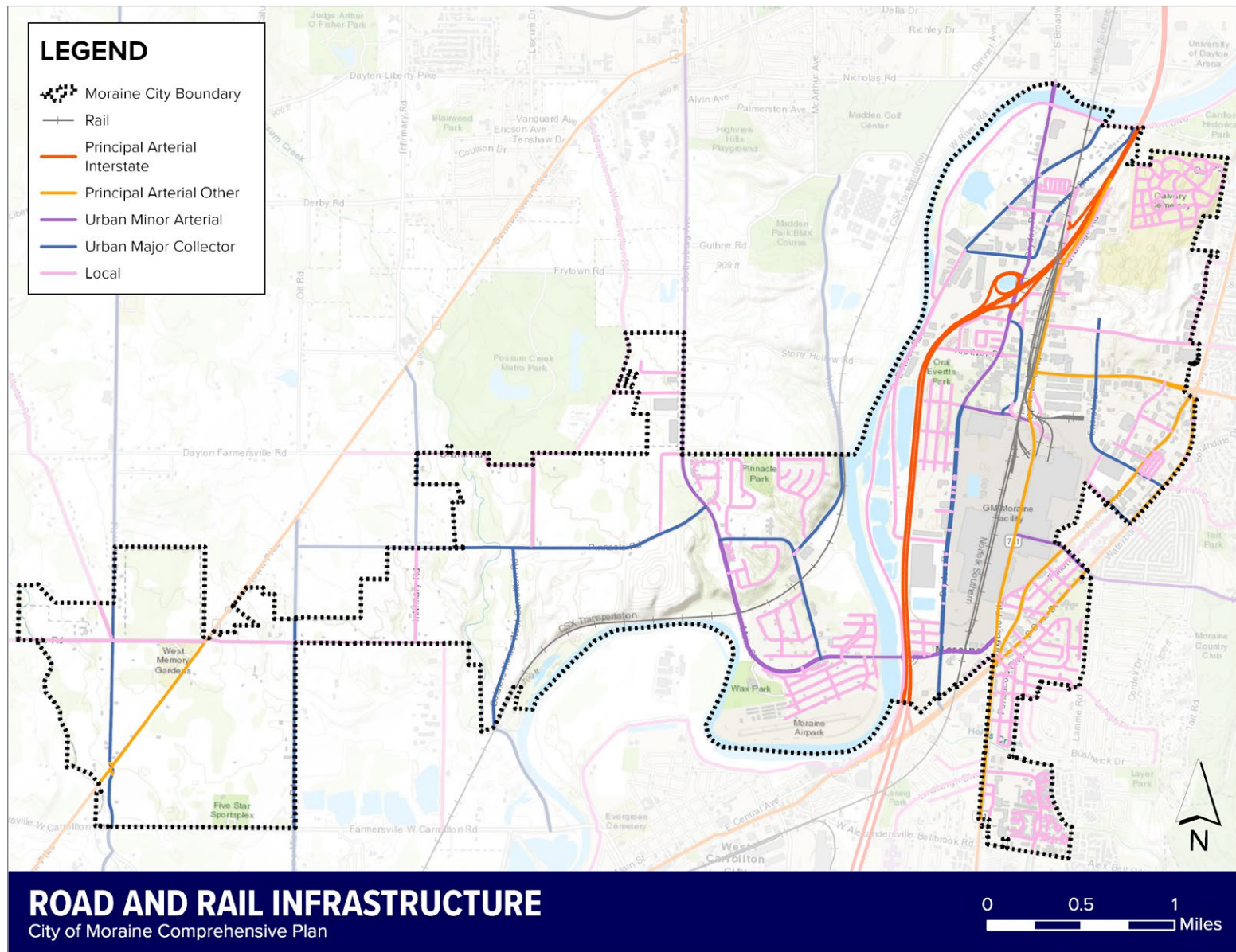
Traffic volumes determine road classification and are measured by annual average daily traffic counts (AADT) from the Ohio Department of Transportation (ODOT). Traditionally, this calculates the annual volume of vehicle traffic on a highway or road by 365 days. The AADT is a straightforward yet helpful indicator of how busy the route is. AADT counts are now provided by the side of the road, by day of the week, and the hour of the day, thanks to more recent developments from GPS traffic data suppliers.

Per ODOT’s Transportation Information Mapping System (TIMS), the roadway functional class within Moraine is provided in Figure 31.

FIGURE 31: FUNCTIONAL CLASS ROADWAY

Roadway	Functional Classification (ODOT)
Pinnacle Road	Urban Major Collector
Germantown Pike	Principal Arterial Other
Main Street	Urban Minor Arterial
IR 75	Principal Arterial Interstate
Dryden Road	Urban Minor Arterial
East River Road	Urban Major Collector
West Dorothy Lane	Principal Arterial Other

FIGURE 32: ROAD AND RAIL INFRASTRUCTURE



Source: County of Montgomery, OH; ESRI; HERE; Garmin; INCREMENT P; USGS; METI/NASA; EPA; USA; Maxar.

CONDITIONS

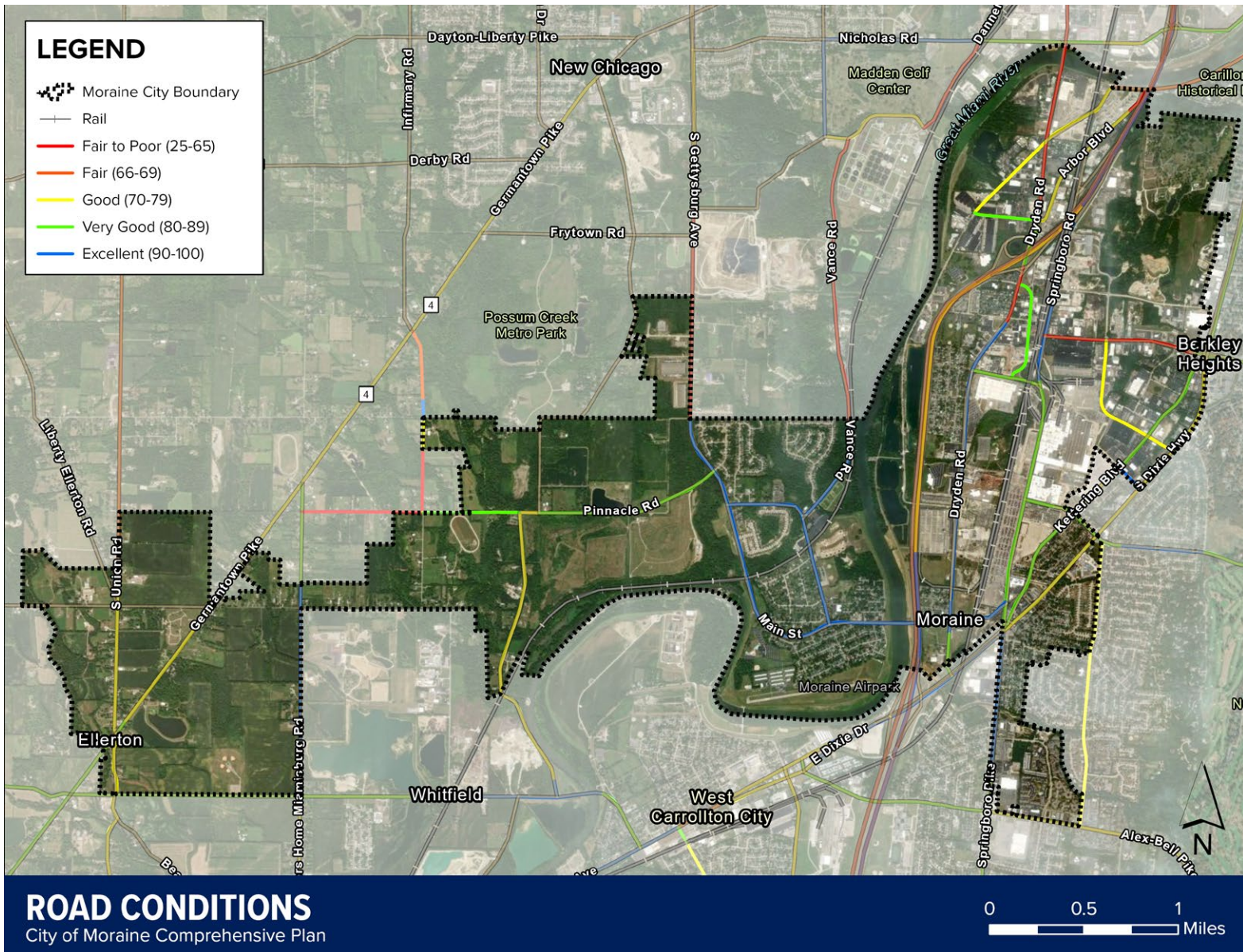
The condition of each road segment is reflected in Pavement Condition Rating (PCR). PCR is based on a numeric score between 100 and 25:

- 100 to 90 – Excellent Condition
- 89 to 80 – Very Good Condition
- 79 to 70 – Good Condition
- 69 to 66 – Fair Condition
- 65 to 25 – Fair to Poor Condition

A score of 25 to 65 indicates that the pavement shows signs of significant distress and structural failures and should be considered for pavement repair or replacement. Dorothy Lane and portions of Dryden Road have poor pavement conditions that fall into the Fair to Poor category. All other roadways noted in Figure 33 have a Good or higher rating.¹⁹

¹⁹ American Structurepoint Inc.

FIGURE 33: ROAD CONDITIONS



Source: County of Montgomery, OH; ESRI; HERE; Garmin; INCREMENT P; USGS; METI/MASA; EPA; USA; Maxar.

AIRPORTS

The Dayton International Airport serves Moraine and the entire Dayton metropolitan area for leisure, commercial travel, and air cargo services. The facility is located 16 miles north of Moraine adjacent to I-70 and a quick approximate 15-minute drive from many of Moraine's employment centers. Given the number of international companies with buildings in Moraine, this convenient access is vital for business retention and attraction efforts.

Within Moraine's City limits is the Moraine Airpark. Moraine Airpark Inc. and Montgomery County jointly own this local airport, which is the home base for the National Waco Club and Spinners Discount Pilot Shop. The Airpark contains one asphalt paved runway, multiple hangers for airplane storage, a club building, and a helicopter landing/take-off pad. While this facility does not serve commercial flights, it could expand to potential uses, including residential properties with private aircraft hangers and private/chartered flights for executives visiting Moraine businesses.





Source: American Structurepoint Inc.

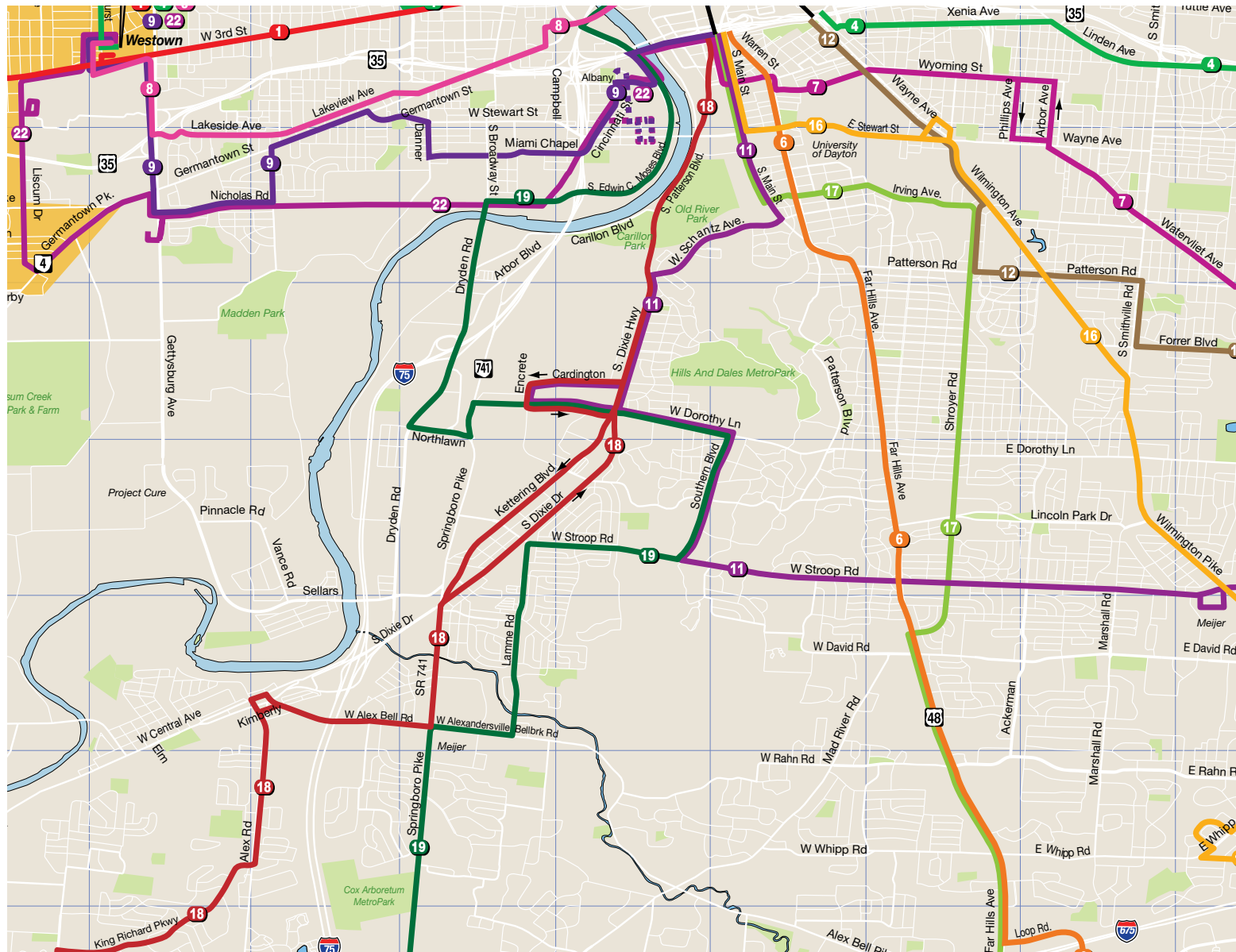
RAILROAD

Moraine's manufacturing community is served by two rail lines that run north to south through the community connecting Moraine with the Dayton area. The Norfolk Southern line runs parallel to Springboro Road and through the heart of the business community, providing multiple spur opportunities through the corridor. The CSX Corporation also provides rail service following the western bank of the Great Miami River. Both rail corridors provide access for goods refined and created in Moraine to the Midwestern rail network and the remainder of the US market.

PUBLIC TRANSPORTATION

The Greater Dayton Regional Transportation Authority (GDRTA) provides the primary public transportation resource in Moraine. Three of the GDRTA's bus routes serve locations in the City's limits, routes 11, 18, and 19. All three routes provide service throughout the day, starting around 6:30 AM and ending around 12:30 AM. However, the routes only reach areas of the City east of the Great Miami River and offer limited-stop locations on Dryden Road, Kettering Boulevard/Dixie Rive, and near the Kettering Medical Center.

FIGURE 34: GDRTA MAP HIGHLIGHTING ROUTES IN THE MORAINE AREA



Source: GDRTA Route Map.



Source: Getty Images.



SECTION 10

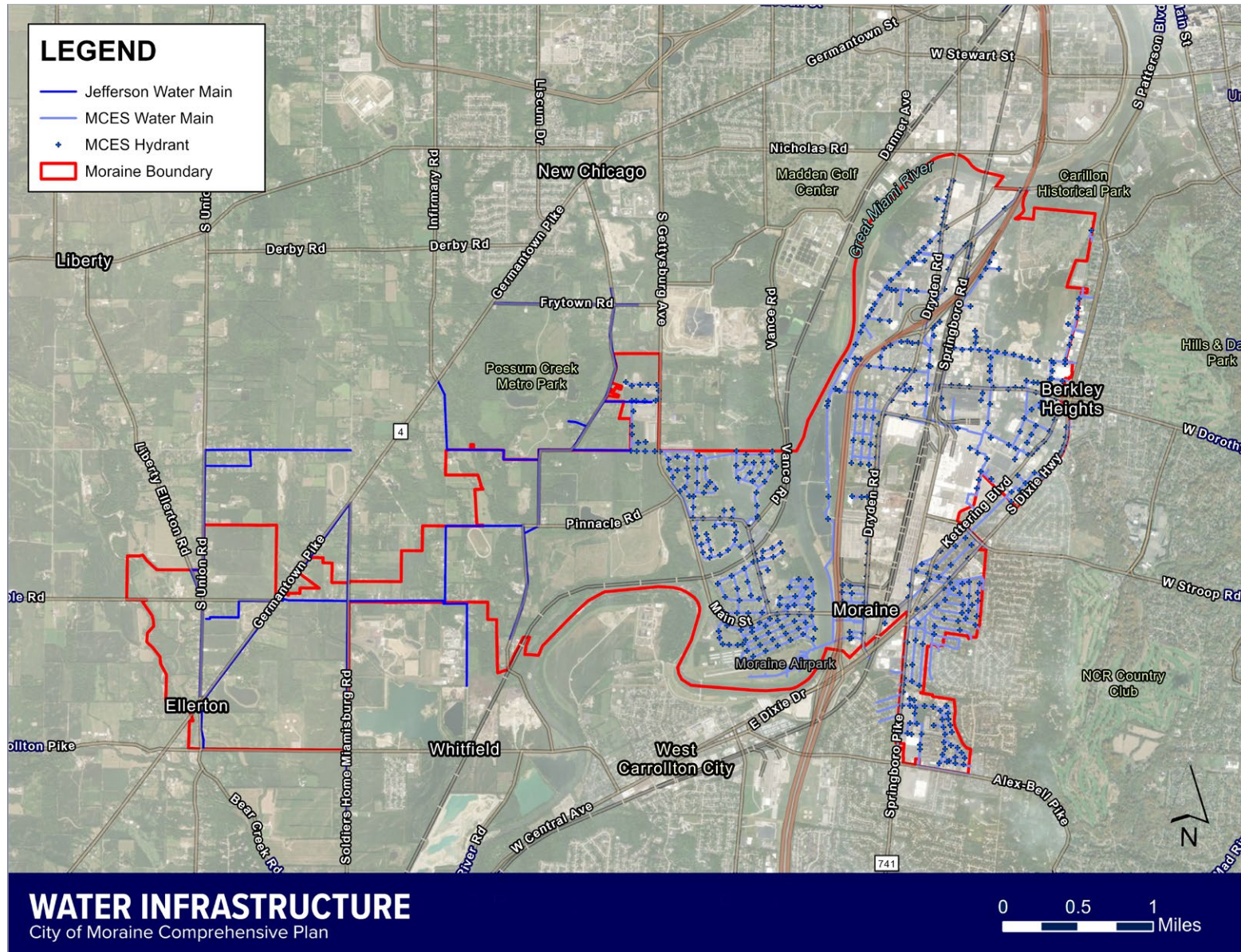
UTILITIES

UTILITIES

WATER

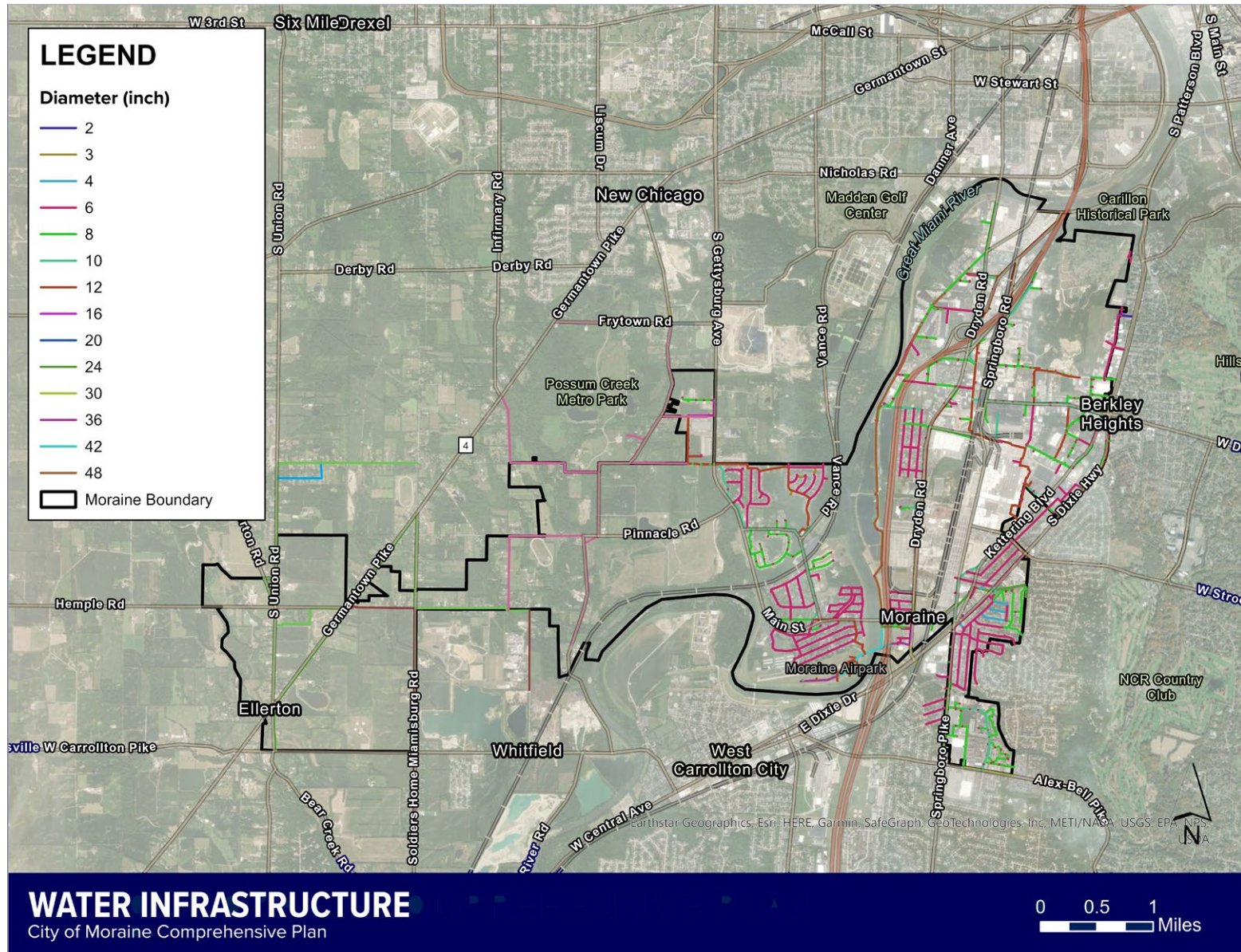
Jefferson Regional Water Authority (JRWA) primarily serves the portion of the City west of Main Street, and Montgomery County Environmental Services (MCES) serves the area east of Main Street. Figure 35 shows the JRWA and MCES water main locations within the City. Figure 36 shows the diameters of the water mains within the City of Moraine.

FIGURE 35: EXISTING WATER INFRASTRUCTURE



Source: MCES, JRWA.

FIGURE 36: WATER MAIN DIAMETERS



Source: MCES, JRWA.

The City is served directly by JRWA from the water treatment plant and a 350,000-gallon water tower with another 300,000-gallon water tower that back-feeds the area. JRWA operates one treatment facility with a design flow of 0.75 MGD with an average daily flow of 0.334 MGD. JRWA has plans for an upcoming capital improvements project to design a water treatment plant upgrade, including two additional duolator filter systems that would increase the plant's capacity to around 1.44 MGD. They anticipate this to be completed in 2026.

Several water tanks and pressure zones serve the City of Moraine from MCES. Most water mains are ductile iron, were built between 1950 and 2000, and are 6-12" in diameter.

MCES has the following upcoming water capital improvement projects:

- Upgrade and possible relocation of the German Village Water Booster Station located along Vance Road
- Abandonment of the groundwater wells at the Miami Shores well field. All current water supplied by MCES is purchased from the City of Dayton
- Replacement of the Caylor Water Storage tank located near Caylor Road and South Gettysburg Avenue
- Replacement of any identified lead services

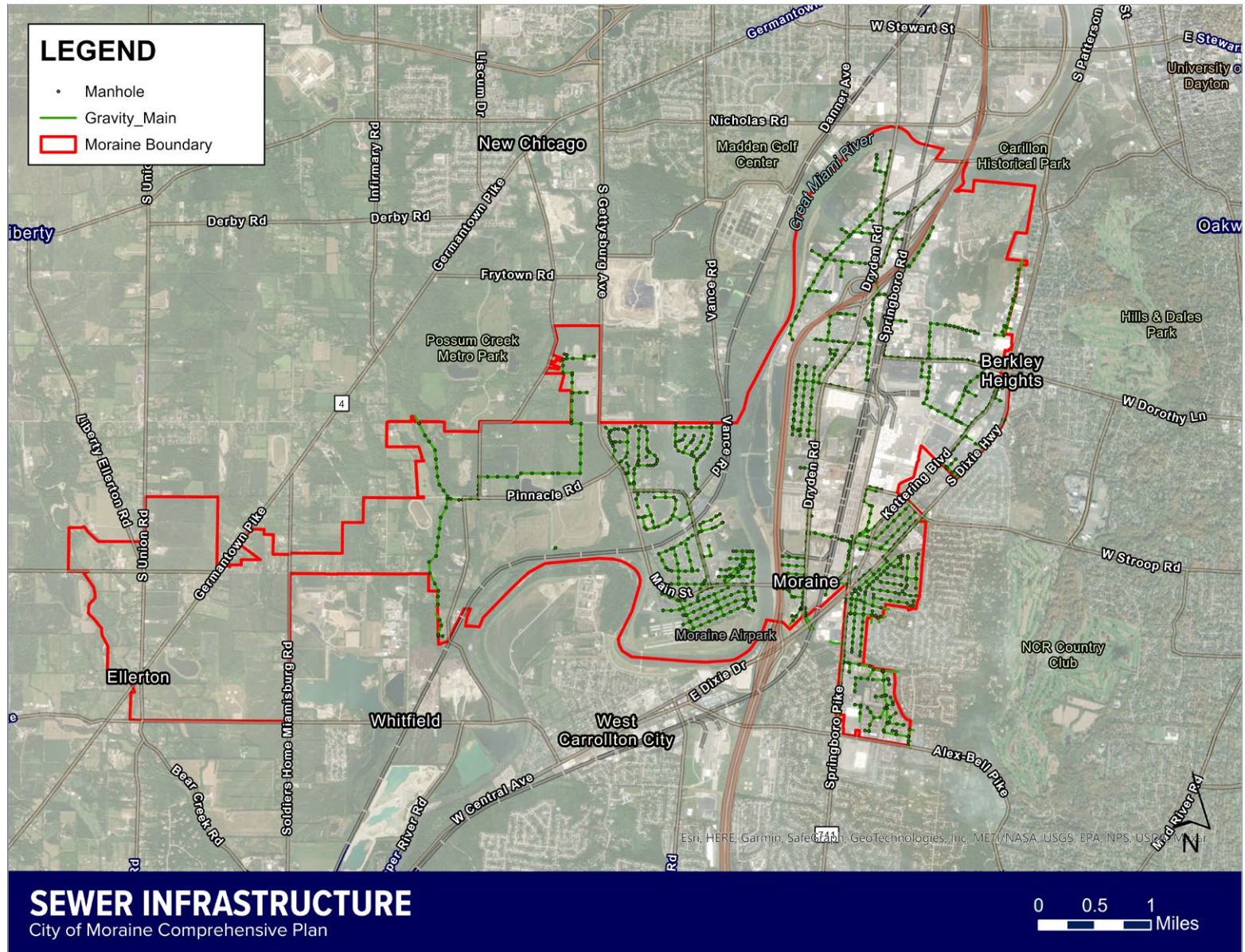
SANITARY SEWER

MCES provides sanitary sewer service to the City of Moraine. Figure 37 shows the location and diameter of the sanitary sewers in the City of Moraine. Properties that are not shown adjacent to sewers are served by septic systems.

The sewers that flow to the East River Road Sanitary Sewer Lift Station, located along East River Road in the north of the City, discharge to the Dayton Wastewater Reclamation Facility. All other sewers serving Moraine flow to the Western Regional Water Reclamation Facility (WRWRF). That facility is owned and operated by MCES, with a design capacity of 20 MGD and an average daily flow of 11.84 MGD. That facility has about 8 MGD of average dry weather daily flow capacity. The sewers between Main Street and the Little Miami River flow to the Miami Shores sanitary lift station at the southwest corner of Sellars Road and Vance Road. This lift station discharges to the system on the east side of the river.

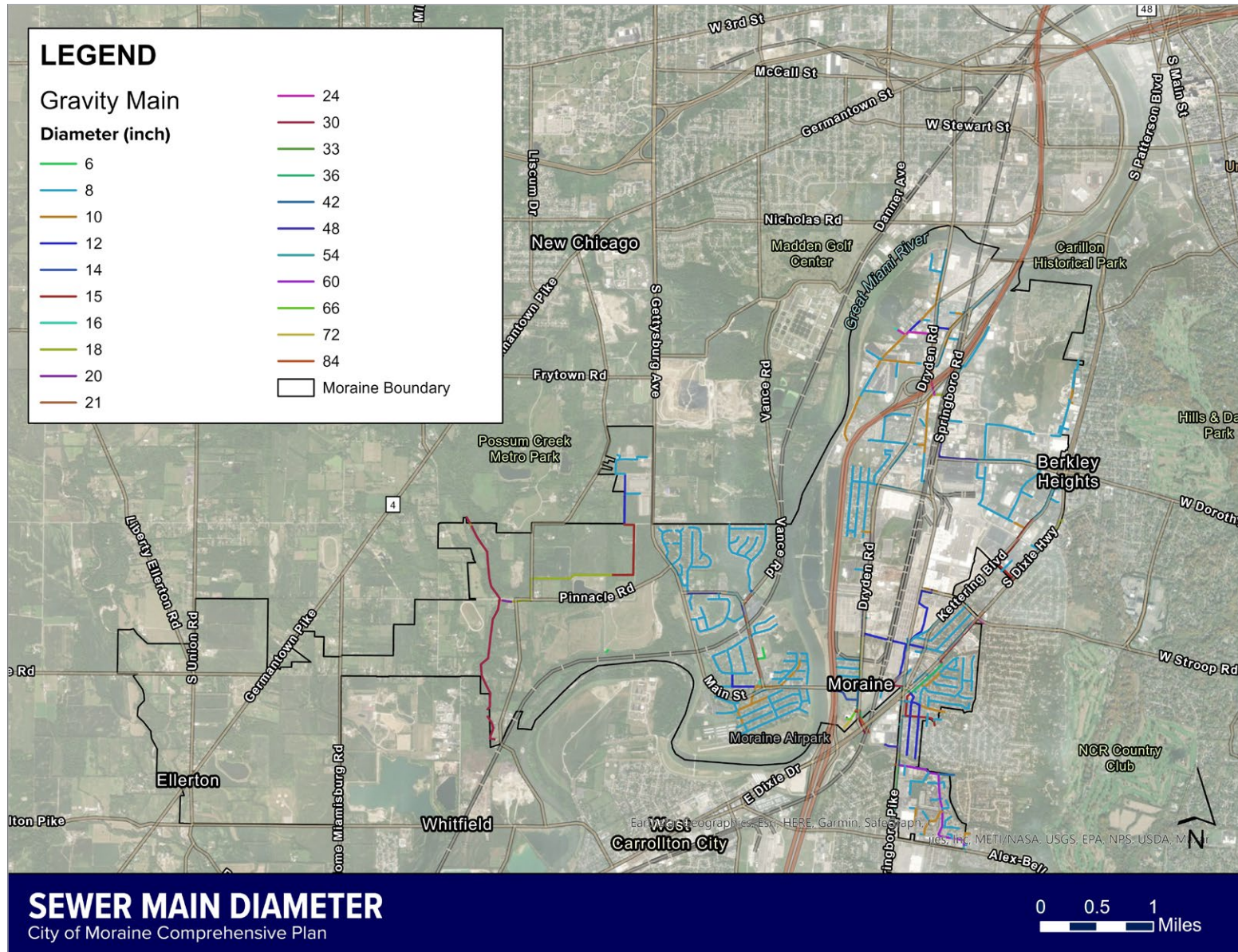
The Miami Shores sanitary lift upgrade is an upcoming MCES sanitary sewer capital improvement project. The project will address current electrical, pumping, and force main issues/restrictions.

FIGURE 37: EXISTING SANITARY SEWER INFRASTRUCTURE



Source: MCES, JRWA.

FIGURE 38: GRAVITY MAIN DIAMETERS



Source: MCES, JRWA.

STORM SEWER

The City maintains a storm sewer system. The City's Storm Water Plan, dated January 2022, governs the design and implementation of stormwater in Moraine to maintain compliance with their MS4 permit.

ELECTRIC

All portions of the City are served solely by AES Ohio.

NATURAL GAS

Centerpoint Energy provides natural gas service, with limited service to the far west area of the City surrounding SR 4.

COMMUNICATIONS²⁰

AT&T, Spectrum, Frontier Communications, and Altafiber provide telecommunication services. Data Yard is a Dayton-based provider that offers commercial service to the area.

BROADBAND

With the increased reliability on broadband services, broadband communications planning is rapidly becoming necessary for various services. The recent COVID-19 pandemic exacerbated this need. While the level of necessity varies by location, each business and household must have reliable broadband access to connect to the greater community.

An important distinction here is Internet vs. broadband. The Internet is a network of data, colloquially known as the "World Wide Web," accessible through capable devices (e.g., computers, laptops, smartphones, etc.). Broadband is the technology used to connect those devices to the Internet. While a cable or a Wi-Fi router had to be used in the past, broadband requires only an access point to provide high-speed Wi-Fi to nearby areas.²¹

²⁰ Montgomery County Community & Economic Development: Utilities: Communication.

²¹What is the difference between Broadband, Internet and Wi-Fi? (n.d.). Home Network Solutions Berkshire.

EMERGENCY SERVICES

Protection from unwanted events is a vital service that cities provide to their constituents. Moraine primarily provides these public safety services through the City's Police Department and Fire Division.

POLICE DEPARTMENT

In 2021, the Moraine Police Department comprised 32 full-time equivalent staff and officers.²² Moraine's police department was looking to ensure their commitment to serving the community by purchasing 28 body cameras, and in-car video equipment, to enhance evidence gathering and maintain accurate records through WatchGuard.²³

In addition to the more traditional policing and public safety duties, the Moraine Police Department also offers the following services:

- Vacation and security checks
- Traffic school
- Self-defense classes
- Records retention
- Patrols
- Special assignments section

FIRE DEPARTMENT AND EMERGENCY MANAGEMENT SERVICES (EMS)

In addition to the 27 full-time equivalent staff employed by the City to provide fire fighting and EMS,²⁴ the Moraine Fire Division prides itself on providing a full range of community-oriented programs. A few highlights from 2021 included:

- Installing 32 infant car seats
- Teaching 160 students CPR
- Performing free blood pressure screens to senior citizen communities²⁵

²² City of Moraine Annual Comprehensive Financial Report, December 31, 2021.

²³ City of Moraine 2021 Annual Report.

²⁴ City of Moraine Annual Comprehensive Financial Report, December 31, 2021.

²⁵ City of Moraine 2021 Annual Report.



Source: City of Moraine Facebook Page.

COMMUNITY FACILITIES

EDUCATIONAL FACILITIES²⁶

Moraine does not have a City school district. Instead, the City is served by three public school districts –Kettering CSD, West Carrollton CSD, and Jefferson Township LSD. Local schools are listed below, and those within City limits are noted (*).

Kettering CSD

- Fairmont High
- Kettering Middle
- Van Buren Middle
- Kettering Early Childhood Education Center*
- Southdale Elementary

West Carrollton CSD

- West Carrollton Senior High
- West Carrollton Junior High
- Harold Schnell Elementary
- Frank Nicholas Elementary* - (used for school administration only)
- West Carrollton Intermediate*
- West Carrollton Early Childhood Center
- Harry Russell Elementary School

Jefferson Township LSD

- Jefferson High
- Blairwood Elementary

CHARTER SCHOOLS²⁷

Miami Valley Academies is a tuition-free public community school with open enrollment for kindergarten to 8th-grade students. The school is located southeast of the City.

²⁶ City of Moraine: Local Schools.

²⁷ Miami Valley Academics.





Source: Getty Images

COLLEGE/UNIVERSITY

The only higher education institution within the incorporated limits of Moraine is Indiana Wesleyan University's Dayton Education and Conference Center at the City's northeastern corner. Indiana Wesleyan University is a Christian college and offers Master, Bachelor, and Associate degree programs ranging from accounting to theology.²⁸

Within a 10 miles radius of Moraine is the University of Dayton and Sinclair College. The University of Dayton is a private institution currently rated the #1 Catholic university in the US for engineering research.²⁹ Sinclair College is a community college founded in 1887 with five regional campus locations throughout Southwest Ohio, including on Wright-Patterson Air Force Base. Aviation maintenance, cyber investigation, and respiratory care are noted as in-demand degree programs.³⁰

From further away within the Dayton area, Wright State University and Clark State College are approximately 15 miles from the City. Named for the Wright brothers, Wright State University is a national public university with 315 degree programs and over 10,000 students.³¹ Clark State College is a public community college that opened in 1962 and has one of the many police academies in the state. Since 2018, it has offered special applied baccalaureate degree programs in Web Design and Manufacturing Technology Management.³²

TRADE SCHOOLS

The two closest vocational and technical schools are the Miami Valley Career Technology Center (5.7 miles away) and Dayton Job Corps Center (5.2 miles away) north of the City.

²⁸ Indiana Wesleyan University: Dayton Ed. Center.

²⁹ University of Dayton.

³⁰ Sinclair College.

³¹ Wright State University.

³² Clark State: Clark State Approved for Second Bachelor's Degree.



Source: Getty Images



SECTION 11

PARKS AND RECREATION

PARKS AND RECREATION

Parks provide many aesthetic and recreational benefits for our cities. They are a source of positive benefits in the economic base, health, environment, and social importance. Parks and recreation improve the local tax base and increase property values in a community. They also help the environment by protecting groundwater, preventing flooding, and improving our air quality. Finally, parks provide a sense of public pride and cohesion to communities.

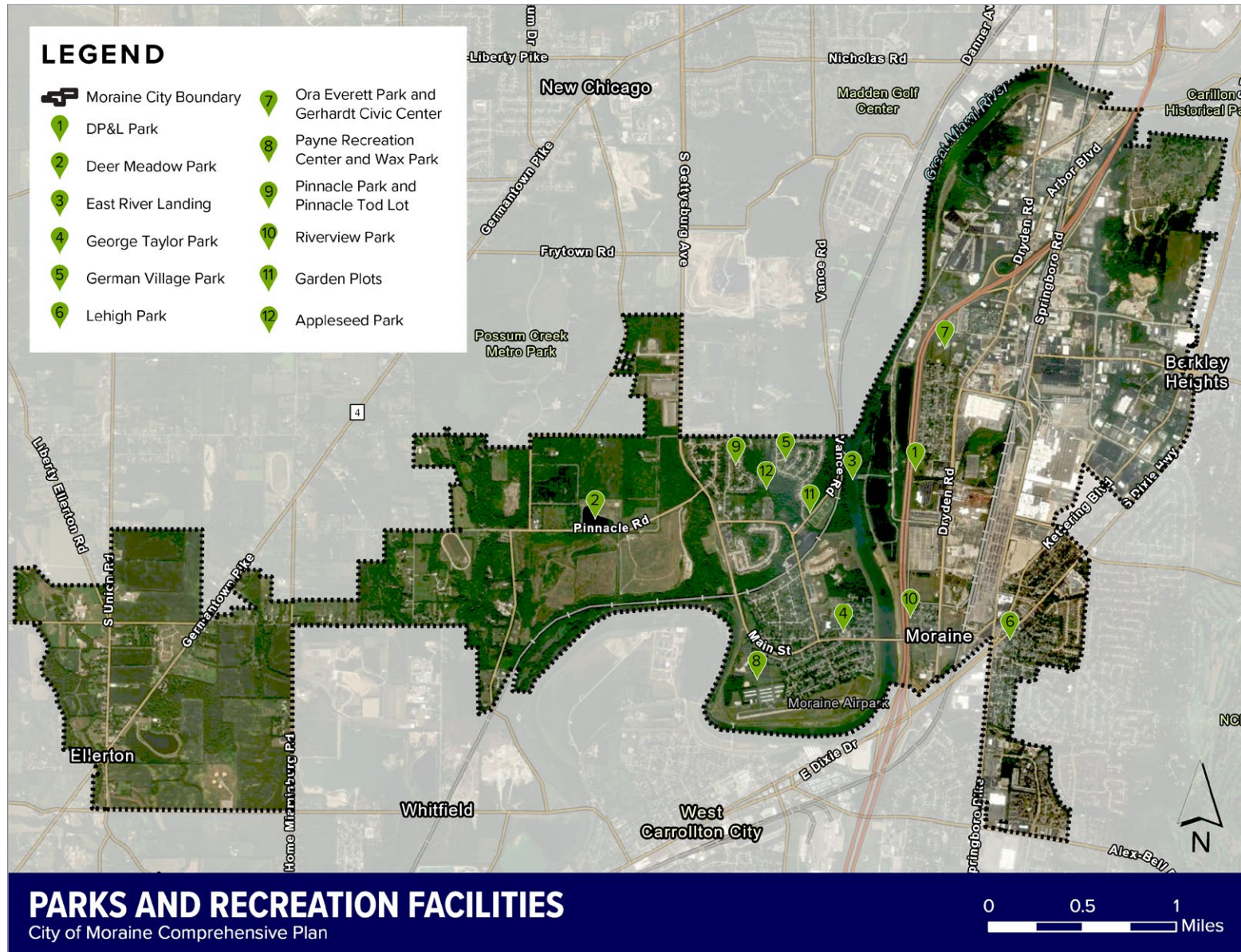
The City of Moraine Parks and Recreation Department's mission is to create experiences for its community that support growth and wellness, connect nature and the environment, and encourage education and enjoyment.³³ Moraine Parks and Recreation promotes:

- Family atmosphere
- Sense of community pride
- Community health
- Fitness and active lifestyles
- Developing and empowering youth
- Unity and inclusiveness of the community

The City of Moraine residents and visitors have more than 15 parks and recreational activities to enjoy. These parks or recreational amenities range from regional parks, neighborhood parks, and community parks to trailheads and recreational trails. The parks system comprises close to 165 parkland acres, not including recreational centers, trails, and small memorial plaque parks.

³³ The City of Moraine: Parks & Recreation.

FIGURE 39: MORaine PARKS AND RECREATION



Source: Miami River Valley Regional Planning Commission Geo-Spark.

PARK AND RECREATION FACILITIES

The City of Moraine Parks Map shows the location and geographic distribution of all parks sites managed by the City. The park identification numbers correspond to those described in this Park Analysis section.

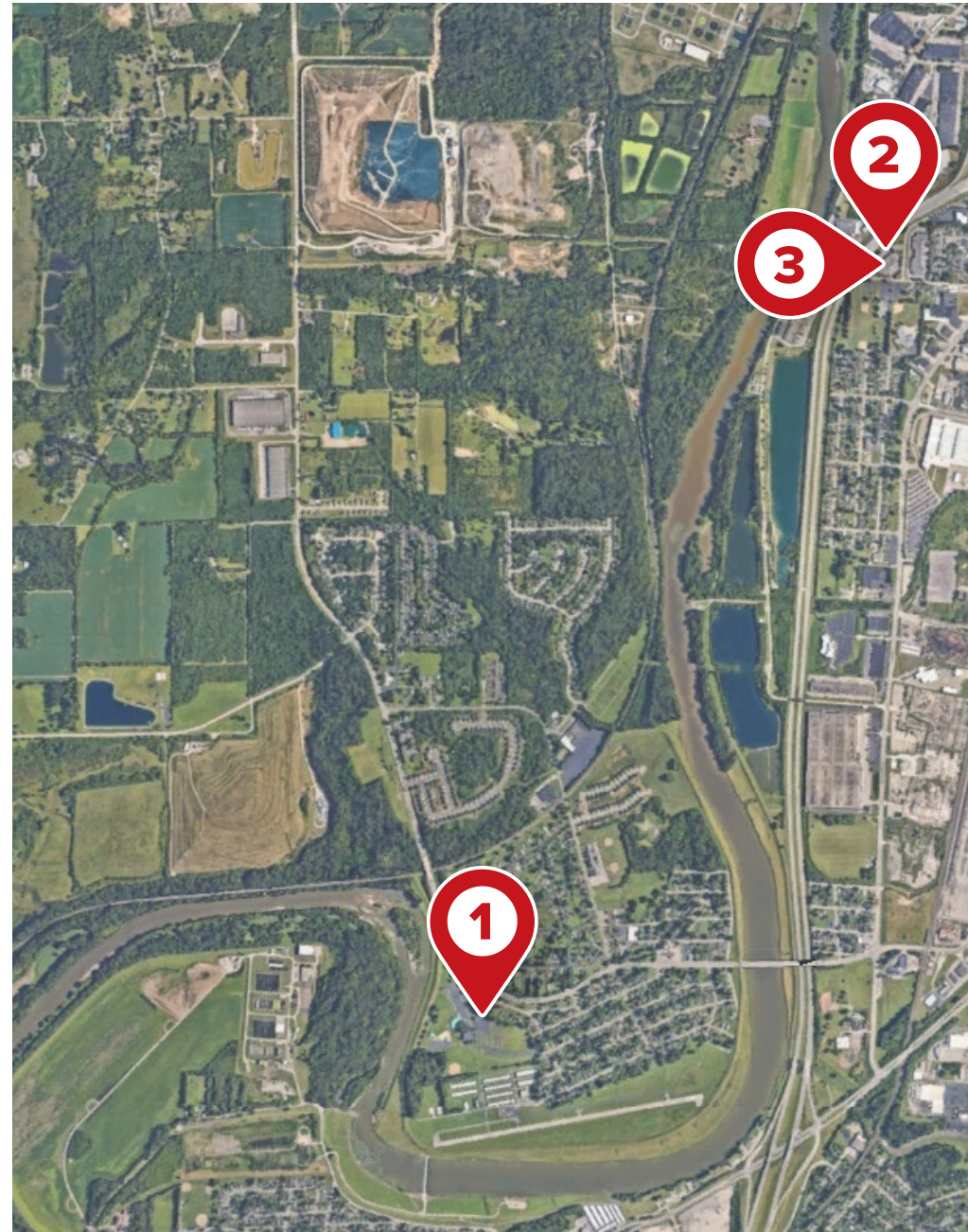
1 PAYNE RECREATION CENTER AND WAX PARK³⁴

The Payne Recreation Center is at Wax Park (3800 Main Street). The facility offers a variety of amenities and classes to the community of Moraine. The recreational center is well-known by the community as a place to workout, play basketball, play volleyball, or hang out at the Kid's Kastle. The following amenities and classes are offered at the Payne Recreation Center:

Amenities:

- Kids Kastle
- Cardio/Exercise Room
- Weight Room
- Aerobics Room
- Cardio Theater
- Basketball Gym (for basketball and volleyball leagues)
- Basketball Court
- Volleyball
- Locker Rooms
- Meeting rooms (capacity of 143, 83, 60, or 30 people)
- Multipurpose room
- Indoor Walking/Running Track (15 laps to make a mile)
- Restrooms

³⁴ Parks & Recreation - The City of Moraine.





2 GERHARDT CIVIC CENTER

The Gerhardt Civic Center is located at 3050 Kreitzer Road. The recreational center offers a variety of amenities, including a game room for visitors to enjoy and have fun. Other amenities in this recreational center include:

Amenities:

- Game Room at GCC
- Weight Room at GCC
 - Free weights
 - Medicine ball
 - Treadmill
 - Rowing machine
- Restrooms
- Meeting rooms
- Kitchen

3 ORA EVERETTS PARK

The Ora Everetts Park is located at 3050 Kreitzer Road. The park offers 13 parkland acres to the Moraine residents. Ora Everetts Park is a great park that offers the following amenities:

Amenities:

- Playground
- Picnic tables
- Grills
- 2 Shelters
- 3 Ball fields
- Walking Path (1/4-mile path)

4 PINNACLE TOT LOT

Pinnacle Tot Lot is located at 3670 Charlotte Mill Drive. The park offers 4.5 parkland acres to Moraine residents and visitors. This park is also a trailhead for the 0.1 mile hiking trail spur, which connects with the Johnny Appleseed Hiking Trail, which begins in this park. The following amenities are offered in this park:

Amenities:

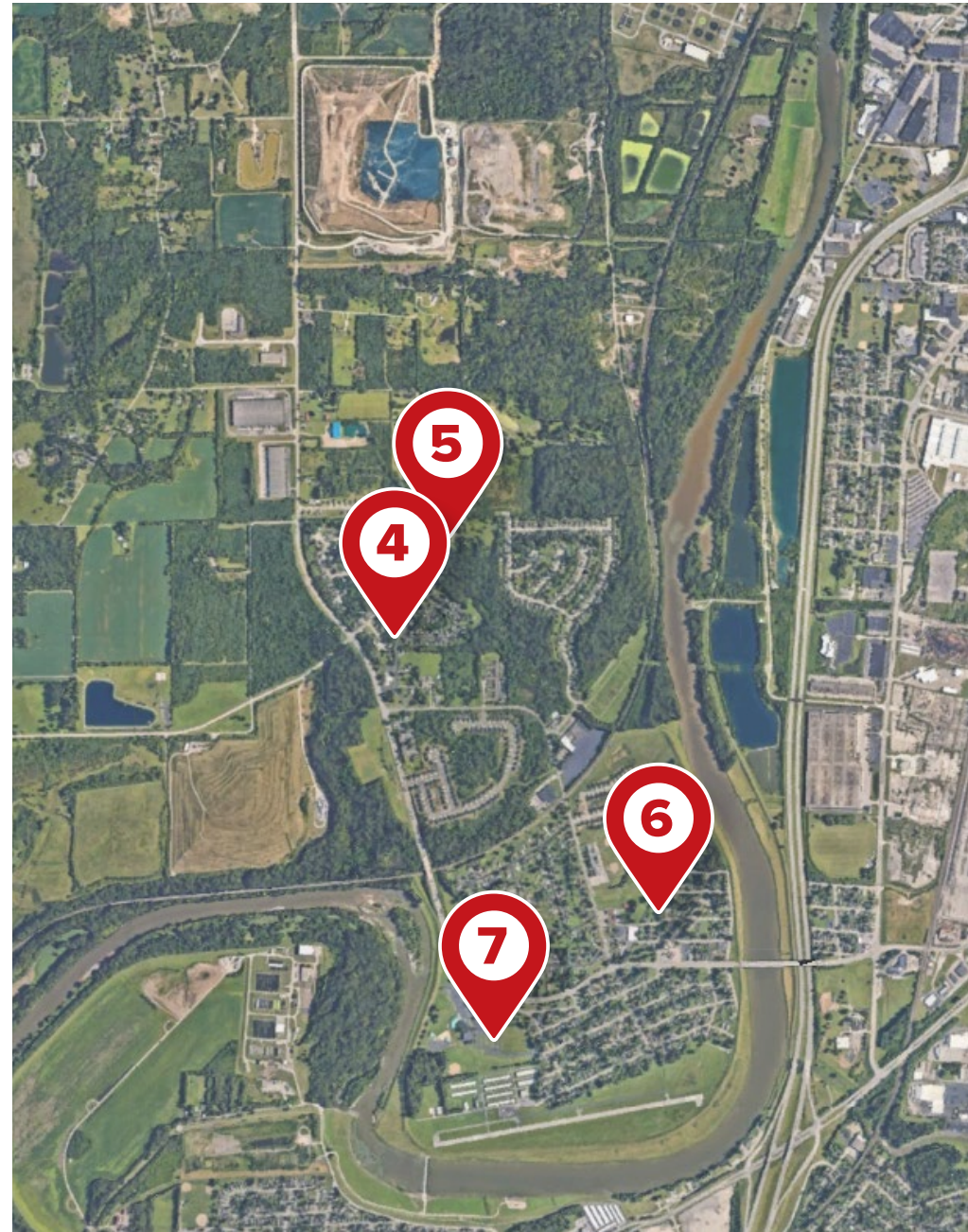
- Playground
- Picnic tables
- Grills
- Shelters
- Basketball courts
- Trailhead
- The hiking trail (0.1 miles) connects to the Johnny Appleseed Hiking Trail

5 PINNACLE PARK

Pinnacle Park is located at 3060 Charlotte Mill Drive. The park offers 18.5 parkland acres to Moraine residents and visitors. The park offers a unique amenity: a climb on the space needle; this is the first one in Ohio. A hiking trail in this park connects to the Pinnacle Tot Lot trail, which, as previously mentioned, connects to the Johnny Appleseed Hiking Trail. Other amenities offered by Pinnacle Park include:

Amenities:

- Playground
- Picnic tables
- Grills
- Shelters
- Space Needle
- The hiking trail (0.1 miles) connects to the Johnny Appleseed Hiking Trail





6 GEORGE TAYLOR PARK

George Taylor Park is located at 4709 E. Venetian Way. The park offers two parkland acres to Moraine residents and visitors. George Taylor Park is situated near the hamlet of Miami Shores. The park offers the following amenities:

Amenities:

- Playground
- Picnic tables
- Grills
- Shelters
- Basketball courts
- Restrooms
- Tennis courts

7 WAX PARK

Wax Park is located at 3800 Main Street. The park offers 32 parkland acres to Moraine residents and visitors. The park is the largest and most popular park in Moraine. The park offers the following amenities:

Amenities:

- Playground
- Picnic tables
- Grills
- 3 Shelters
- 1 Ball Field
- Restrooms
- Fishing

8 LEHIGH PARK

Lehigh Park is located at 2607 Lehigh Place. The park offers 0.5 parkland acres to Moraine residents and visitors. The park is one of the smallest parks located in a neighborhood. The park offers the following amenities:

Amenities:

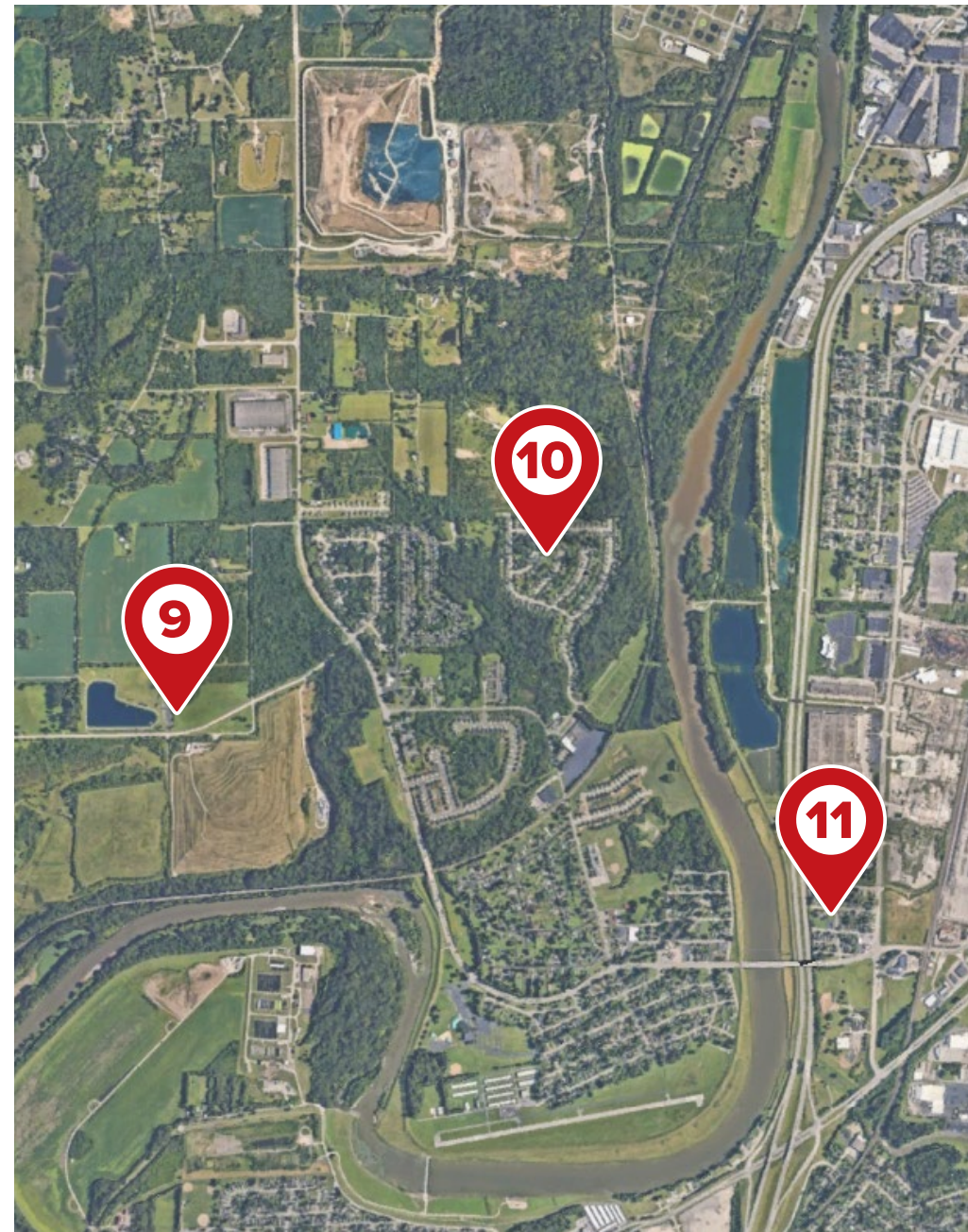
- Playground
- Picnic tables
- Grills
- 1 Youth-Only Basketball Court (12 years and younger)

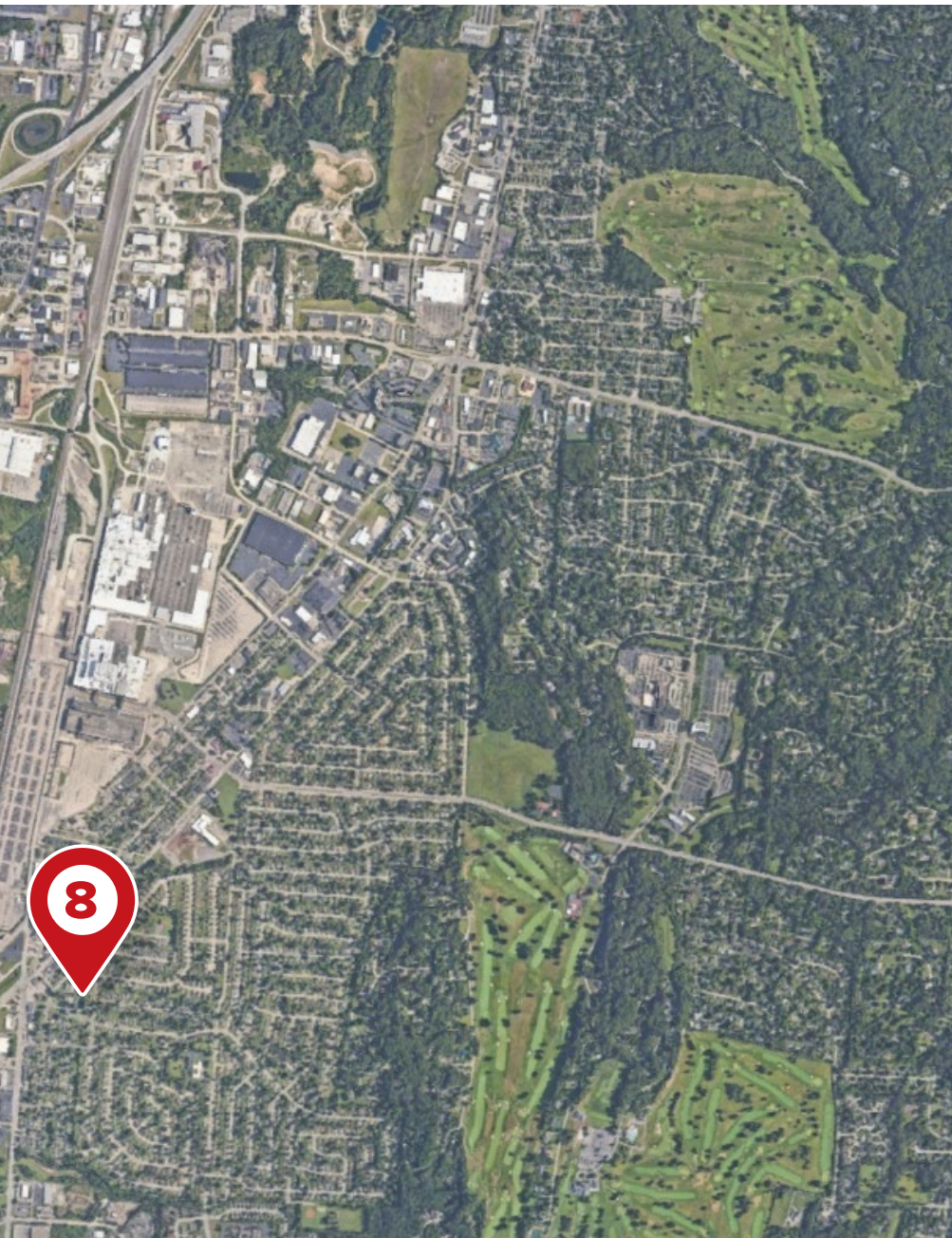
9 DEER MEADOW PARK

Deer Meadow Park is located at 4321 Pinnacle Road. The park offers 29 parkland acres to Moraine residents and visitors. Deer Meadow Park is the second largest park in Moraine. This park offers a variety of amenities, including a pond stocked with bluegill, catfish, bass, and perch. Net fishing is not allowed in this park. The park also has a seasonal nine-acre pond stocked with seasonal fishing derbies. Special seasonal events are held at the skate park. Other amenities offered by the park include:

Amenities:

- Skate Park
- Picnic tables
- Grills
- 2 Shelters
- Restroom
- Walking path
- Disc golf
- PAR exercise system
- Fishing
- 9-acre Pond





10 GERMAN VILLAGE PARK

German Village Park is located at 370 Blumen Lane. The park offers 0.5 parkland acres to Moraine residents and visitors. The park offers the following amenities:

Amenities:

- Playground
- Picnic tables
- Grills
- Shelters

11 RIVERVIEW PARK

Riverview Park is located at 3021 Lakehurst Court. The park offers 0.5 parkland acres to Moraine residents and visitors. As the name of the park indicates, this park faces the Miami River and is located by the Great Miami River Recreational Trail.

Amenities:

- Playground
- Picnic tables
- Grills
- Shelters

12 DP&L PARK

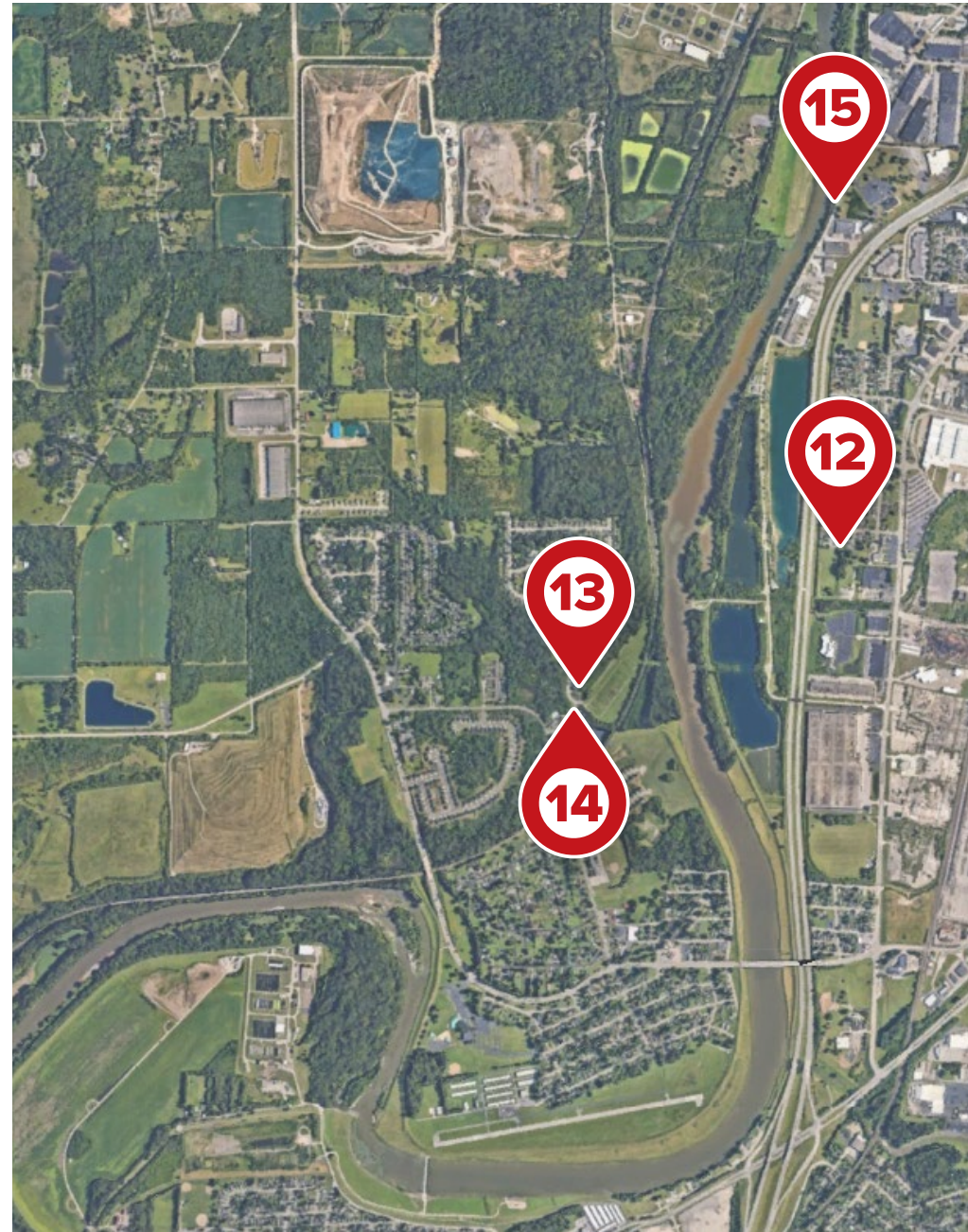
DP&L Park is located at 2916 Cadillac Street. The park offers 8.4 parkland acres to Moraine residents and visitors. The park also faces the Miami River and I-75 Highway.

Amenities:

- Playground
- Picnic tables
- Grills

13 APPLESEED PARK

Appleseed Park is located at 3000 Dorf Drive. The park is the historical site of the apple tree grove that Johnny “Appleseed” Chapman planted in the 1820s. This park has a trailhead, as the south trailhead of the Johnny Appleseed Trail begins at this site.





GARDEN PLOTS

Garden Plots are located at the Corner of Dorf Drive and Vance Road on a 10.3 acres site. The Garden Plots are open for the community to plant their vegetables. There are 78 plots available to reserve by residents.

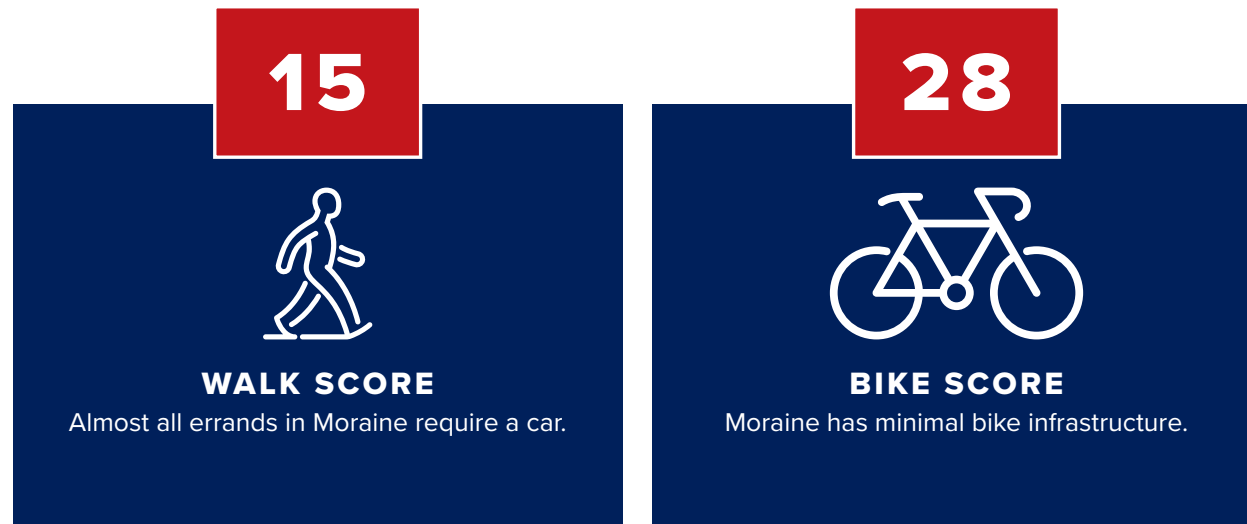


EAST RIVER LANDING

East River Landing is located at East River Road and the corner of the Miami Valley Recreational Trail. A ramp is located off of East River Road and corner of the Miami Valley Recreational Trail. Residents and visitors can enjoy jet skiing, water skiing, tubing, or fishing in this recreational area.

TRAILS AND BIKEWAYS³⁵

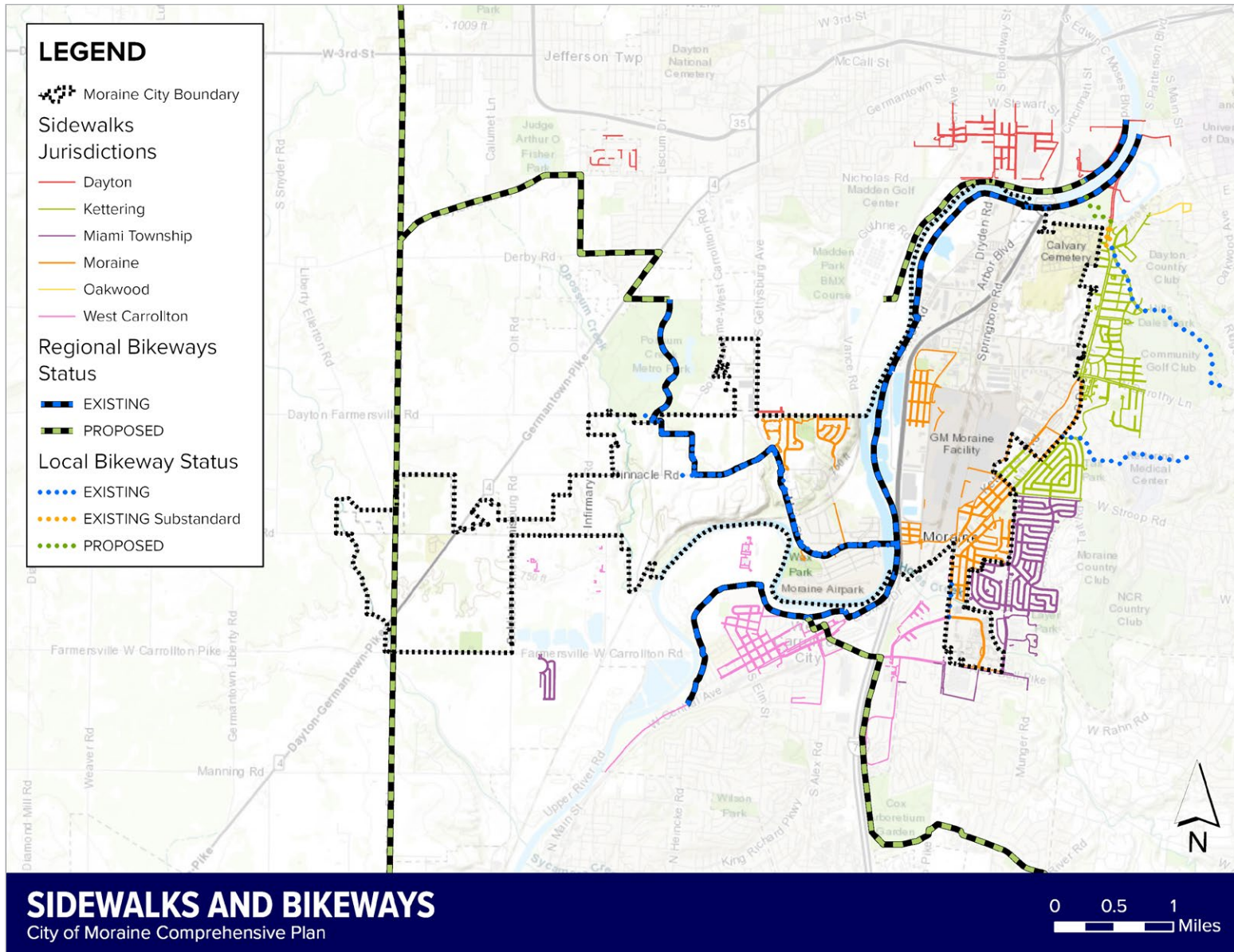
Moraine has access to local and regional alternatives to automotive transportation that provide pedestrian connectivity within and outside the City. Walk Score is a metric that evaluates the walkability of a location based on the distance between community destinations and pedestrian friendliness. Similarly, Bike Score evaluates how suitable a community is for biking based on existing infrastructure, connectivity, slopes, and community destinations.³⁶ Both evaluation scales are out of 100 and an average of the overall area. Figure 40 shows that there are generally opportunities to improve pedestrian infrastructure in Moraine.



³⁵ City of Moraine: Parks and Trails.

³⁶ Walk Score: Moraine, OH.

FIGURE 40: SIDEWALKS AND BIKEWAYS



Source: Miami River Valley Regional Planning Commission Geo-Spark.

MIAMI VALLEY RECREATIONAL TRAILS (BIKING/WALKING)

Miami Valley Trails provides over 350 miles of paved and multi-use recreational trails around Ohio's Miami Valley. The trails connect schools, parks, historic landmarks, and area attractions. The City of Moraine built a couple of sections of the Great Miami River Trail. These sections can be accessed through the following locations:

- 4.5 miles of the 37.1-mile bike trail. Access via Main St. Bridge Bikestairs, East River Road., and Carillon Blvd.
- The 2.3-mile trail was built by the City of Moraine in 1991
- The 0.7-mile trail was built by the City of Moraine in 2014

WRIGHT BROTHER PINNACLES HIKING TRAIL (HIKING)

The Wright Brother Pinnacle Hiking Trail is 1.1 miles in length. Hikers can access the trail at two different locations:

- Trailhead A: begins opposite the Pinnacle Road Bike Trail at 4210 Pinnacle Road, just east of DTE Biomass Energy
- Trailhead B: begins opposite the Main Street Bike Trail about .4 miles north of the entrance to Wax Park, 3800 Main Street

JOHNNY APPLESEED HIKING TRAIL (HIKING)

Johnny Appleseed Hiking Trail was built in memory of John Chapman and acted as a reminder for the community to conserve and enjoy nature. Hikers can access the trail at four different locations:

- Next to the historical marker at Johnny Appleseed Park, 3000 Dorf Drive, at the entrance to the German Village subdivision
- North Pinnacle Park trailhead
- The Pinnacle Park Tot Lot Trailhead begins at 3300 Charlotte Mill Drive in the Heather Hills subdivision
- The Pinnacle Park Trailhead at 3060 Charlotte Mill Drive in the Heather Hills subdivision

NATIONAL RECREATION AND PARKS ASSOCIATION NATIONAL METRICS³⁷

Data were obtained from the 2023 NRPA Agency Performance Review Report to conduct the national comparisons. The NRPA provides local park and recreation professionals with an annual NRPA Park Metrics report. The report highlights characteristics of America’s local public park agencies with graphics categorized into seven sections: park facilities, programming, responsibilities of park and recreation agencies, staffing, budget, agency funding, and policies.

The report also serves as a resource that assists park agencies and recreation professionals in effectively managing and planning their operating resources and capital facilities. The data provided allows parks and recreation agencies/professionals to build customized reports that allow comparisons with other agencies. The data can be used to benchmark data provided to apply for funding support, improve their current operations, increase their parkland, and serve their community better.³⁸

NRPA’S COMPARISONS

The following NRPA Metric Comparison examines NRPA metric comparisons stated in their 2023 Agency Performance Review metrics for places with a population serving less than 20,000 residents. The comparison metrics included are the residents per park, acres per 1,000 residents, and miles of trails. The NRPA median metrics were compared to the City of Moraine’s current number of parks and total park acreage as of 2023, utilizing the 2022 population for the City limits. The comparisons indicate the future need for more or less parkland, miles of trails, and the number of parks. The following findings are illustrated in the Park Land and Trails NRPA Metrics Comparison table (Figure 41).

FIGURE 41: PARK LAND AND TRAILS NRPA METRICS COMPARISONS

	City of Moraine	All Agencies	Jurisdiction Serving less than 20,000
Total parks	15	-	-
Residents per park	433 Residents	2,287 Residents	1,225 Residents
Acres per 1,000 residents	19 Acres	10.8 Acres	13 Acres
Miles of trails	9.2 Miles	15 Miles	4 Miles

Source: NRPA: Agency Performance Review: Field Report | Research | National Recreation and Park Association.

³⁷ NRPA: Agency Performance Review: Field Report | Research | National Recreation and Park Association.

³⁸ NRPA 2023 Agency Performance Review.

PARK ACRES PER 1,000 RESIDENTS

NRPA's median metric for cities serving fewer than 20,000 residents is 10.8 acres per 1,000 residents. In 2023, the City of Moraine had 19 acres of parkland per 1,000 residents. That indicates that the City is currently offering more parkland than other jurisdictions.

NUMBER OF RESIDENTS SERVED PER PARK

The 2023 NRPA's median number of residents served per park was 2,287. The NRPA's metric for cities serving less than 20,000 residents was 1,225 residents per park. The comparisons show that in 2023, the City served 433 residents per park, which is lower than the NRPA median metric and the jurisdiction comparison. Lower values of residents per park are more favorable since it potentially indicates better accessibility to park facilities.

MILES OF TRAILS

The 2023 NRPA's median number of trail miles was 15. The NRPA's metric for cities serving less than 20,000 residents was 4-trail miles. As of 2023, the City of Moraine offers 9.2 miles of trails resulting in a favorable comparison with the NRPA of 20,000 or fewer residents.

SUMMARY OF NATIONAL COMPARISONS

When comparing the City of Moraine to the NRPA metrics, the results illustrate that the City exceeds the national average for the total of residents per park. The national median average per park per park was 2,287; the City serves 433 residents per park. Although this service level exceeds the NRPA standard, the City of Moraine should be encouraged to maintain its parks and plan for new facilities.

The national median average for trails was 15 miles; currently, the City offers 9.2 miles of trails. The comparison shows that the City needs more trail miles. The City could plan to construct new trails. Trails provide recreation and transportation opportunities and influence the economy and community development.



Source: American Structurepoint Inc.



Source: Getty Images



SECTION 12

GOVERNMENTAL SERVICES

GOVERNMENTAL SERVICES³⁹

In addition to the public safety divisions, the City of Moraine offers the following services to residents:

- Building & Zoning
- Economic Development
- Engineering
- Parks & Recreation
- Streets
- Planning

As the City responded to the shuttering of the GM plant, reductions in full-time City staff were made and continued in 2020. Notably, between 2010 and 2020, Recreation and Culture staff had a two-thirds reduction.

FIGURE 42: MORaine FULL-TIME CITY STAFF

	2010 Staff ⁴⁰	2020 Staff ⁴¹	2010-2020 Percent Change
General Government	37	22	-40.5%
Police	44	30	-31.8%
Fire	45	28	-37.8%
Highways and Streets	18	17	-5.6%
Community Development	6	4	-33.3%
Recreation and Culture	39	13	-66.7%
Garage	4	3	-25.0%

³⁹ City of Moraine: Departments and Services.

⁴⁰ Ohio Auditor: City of Moraine Comprehensive Annual Financial Report.

⁴¹ Ohio Auditor: City of Moraine 2021 Financial Report.



Source: City of Moraine Facebook Page.



Source: premierhealth.azureedge.net.



SECTION 13

HEALTHCARE FACILITIES

HEALTHCARE FACILITIES

While Moraine hosts medical clinics, rehabilitation centers, and specialized healthcare facilities, it does not have a dedicated hospital. The closest major facility is the Kettering Health Main Campus, approximately three miles away. The full-service hospital offers in-patient, out-patient, urgent, and emergency room care.

Local medical facilities include Fidelity Health Care, Premier Community Health, and South Community Health Center.



**MORAINE
BUSINESS CENTER**

www.bdtransport.com



Source: American Structurepoint Inc.



SECTION 14

ENVIRONMENTAL FEATURES

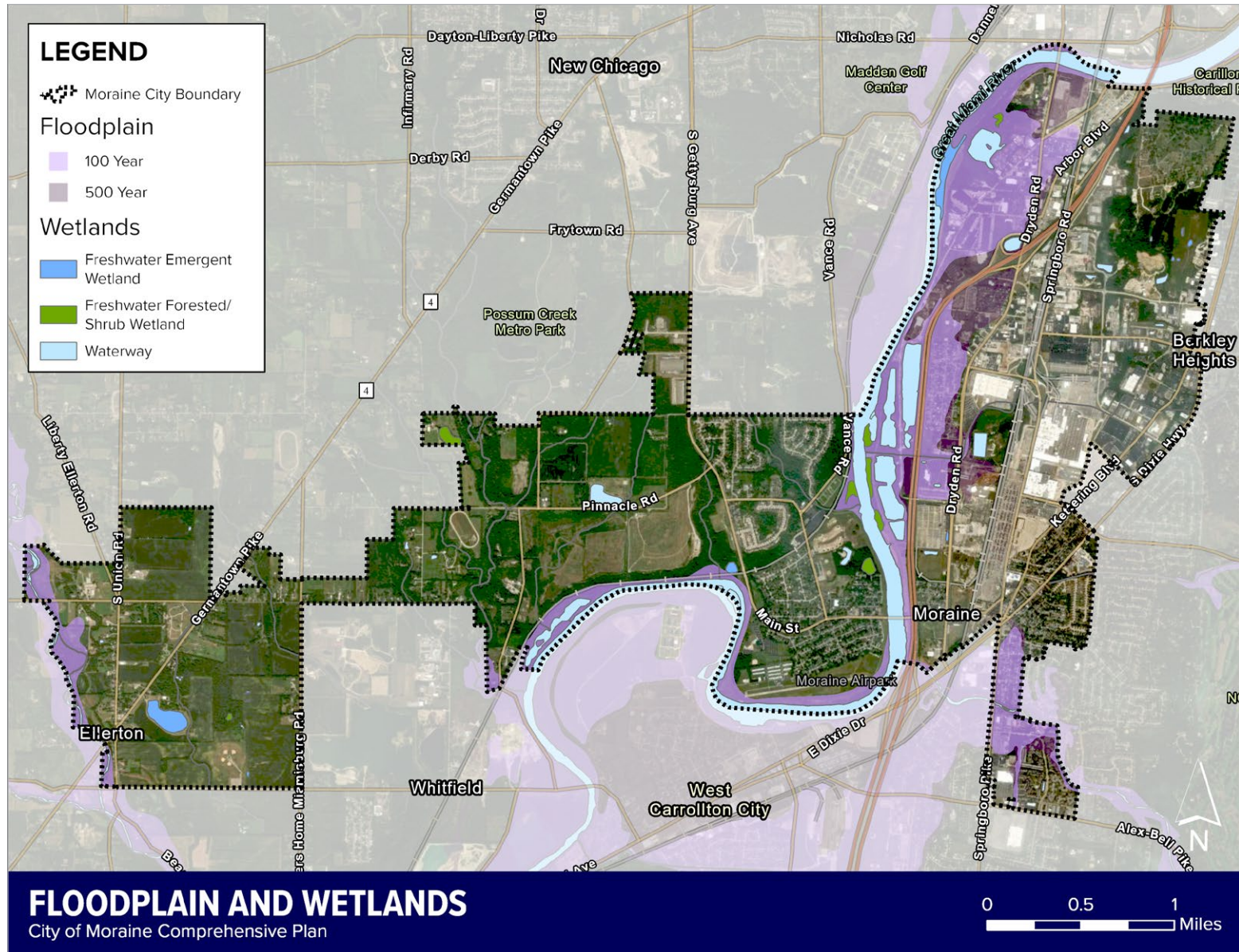
ENVIRONMENTAL FEATURES

The Great Miami River bisects Moraine, dividing the City's high-intensity industrial and commercial area to the east from its low-intensity and predominately residential area to the West. It is a defining characteristic of the City's layout and one of its greatest assets.

The City overlaps four watershed areas: The Town of Oakwood-Great Miami River, Holes Creek, Opossum Creek-Great Miami River, and Mouth Bear Creek. As of January 2022, no pollutants were reported for watersheds in the City of Moraine's Stormwater Management Program.⁴²

⁴² City of Moraine: Storm Water Management Program.

FIGURE 43: MORaine FLOOD AREAS AND WATER RESOURCES



Source: Miami River Valley Regional Planning Commission Geo-Spark.

CONTAMINATION CONCERNS

Development and industrial activity can contaminate soils, water, or other natural resources with chemicals, metals, or other pollutants. These pollutants can pose long-term risks to residents, ecology, and economic development, with significantly damaging cases rendering otherwise developable land unusable without substantial and costly remediation and repair.

BROWNFIELDS

The EPA defined a brownfield as a property with the presence or potential presence of a hazardous substance, pollutant, or contaminant.⁴³ There are no state or federal brownfield sites within the City of Moraine; however, there are two Resource Conservation and Recovery Act (RCRA) sites, often referred to as “RCRA brownfields.”⁴⁴ RCRA sites are treatment, storage, and disposal facilities that may require cleanup. These sites experience “slowed reuse or redevelopment due to real or perceived concerns about actual or potential contamination, liability, or [regulatory] requirements.”

- General Motors Powertrain Group/Moraine Engine Plant (4100 Springboro Road)
- General Motors Moraine Assembly (2601 West Stroop Road)

⁴³ USEPA: Overview of EPA's Brownfields Program.

⁴⁴ USEPA: Types of Contaminated Sites.

⁴⁵ Broadview Waste Solutions: Brownfields vs. Superfunds.



AMERICAN
STRUCTUREPOINT
INC.