

2021 Master Plan Update

July 2021



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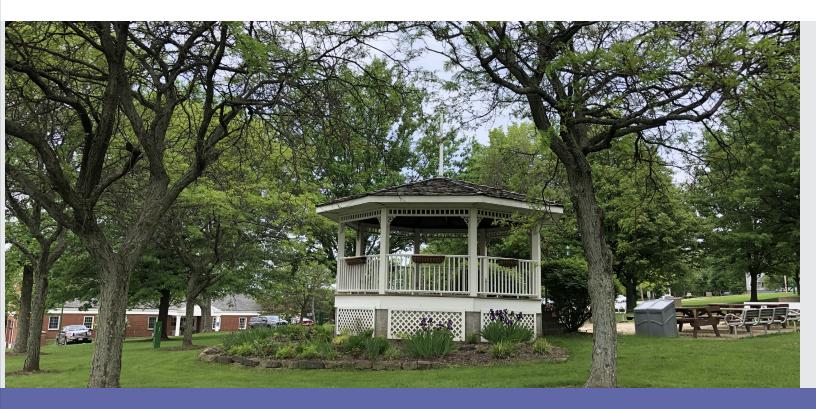
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Executive Summary



The City of North Royalton embarked on the development of a City-wide Master Plan update in January of 2021. The Plan will provide the City with a guiding document used to direct future policy decisions and investments.

The Plan was developed using a four-step process:

- i. Identify Community Vision
- ii. Assess Existing Conditions
- iii. Recommendations
- iv. Implementation

A ten-member steering committee was assembled by the City to help guide the Master Plan update. Committee members represented a broad cross section of the City both demographically and geographically. The committee included business leaders, residents, and representatives from North

Royalton City Schools, and City Council. The committee met monthly to review information provided by the consultant team and to provide direction on plan recommendations. Committee meetings were open to the public and public comment was received at each meeting.

A community survey was distributed for public feedback between February and March 2021. The survey asked general questions regarding quality of life, infrastructure needs, and future town center district desires. The survey received 862 responses. A summary of community survey responses is provided in Appendix A.

Themed Focus Areas

Six themed focus areas were developed based on data analysis and feedback from the public, steering committee and City staff. Multiple strategies and objectives were recommended to address improvements within each of the six themed focus areas. Plan strategies are listed below each theme and are expanded upon in more detail within this planning document.



TOWN CENTER DISTRICT

- 1. Encourage traditional "downtown" type compact development with a mix of uses whose scale is consistent with existing market realities.
- 2. Create a pedestrianoriented, walkable streetscape in the town center area that has a consistent and themed look and feel.
- 3. Ensure a future town center is sustainable and resilient.
- 4. Incentivize catalytic infill development in Town Center District.



ECONOMIC DEVELOPMENT

- 1. Promote economic development in locations that are best suited for nonresidential, job oriented development.
- 2. Retain and grow existing businesses.
- 3. Permit denser residential uses within mixed-use developments and around retail nodes with existing community assets.
- 4. Stimulate and support local business and entrepreneurial activity.



COMMUNITY CONNECTIONS

- 1. Enhance physical bicycle and pedestrian infrastructure within the City to promote safe and convenient biking and walking alternatives to City assets for residents.
- 2. Review and revise existing subdivision regulations so that safe and connected multimodal facilities are encouraged throughout the City.

Themed Focus Areas



RECREATION & ENVIRONMENTAL

- 1. Continue to look for opportunities to expand recreational choice throughout the City.
- 2. Encourage sustainability throughout all City properties and private developments.



PLACEMAKING

1. Enhance elements within the public realm (i.e. within roadway right-of-ways) to establish a "sense of place" that reflect the City's small town, suburban/rural character.



HOUSING

- 1. Continue to provide a diverse offering of various housing types including "step in" and "step down" housing options within the City.
- 2. Ensure new housing developments incorporate green technologies.

Plan Implementation

It is important to understand that the Master Plan is only a starting point in the identification of various potential improvements and initiatives that will each undergo their own respective project development processes.

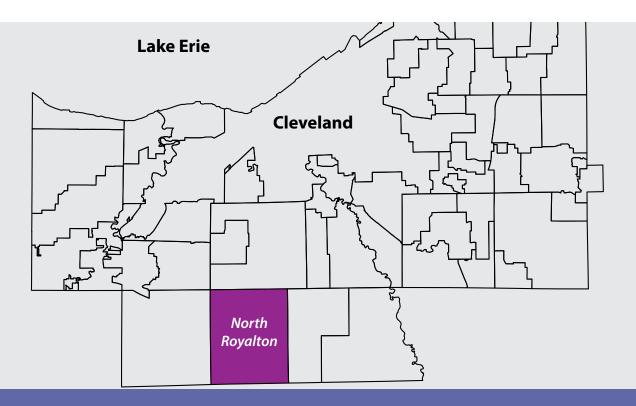
As feasible projects are confirmed and advanced, the public will be reengaged in the iterative process of determining a final course of action. For capital improvements this means input on proposed details such as project limits, accessibility, and design features. For a zoning amendment this would include an opportunity to share feedback on proposed regulations relative to permitted/conditional uses, district boundaries, and density.

As the City moves forward in implementing the vision, projects will be developed based on current priorities and financial considerations. Ultimately, the Master Plan will serve as a guiding document that Administration and City Council can reference and leverage as they continue to maintain and enhance North Royalton as one of the premier communities in Greater Cleveland.

01.

City Background

Regional Background



North Royalton is located in the south central portion of Cuyahoga County, abutting Medina County to the south, Parma to the north, Broadview Heights to the east, and Strongsville to the west. In some ways, North Royalton serves as a gateway between the urban and the rural environments in our region, with very urbanized portions of Cuyahoga County to the north, and the still predominantly rural areas of Medina County to the south.

North Royalton is well connected to the regional and national transportation infrastructure. Cleveland Hopkins International Airport is located just eight miles northwest of the City and is easily accessible from I-71. Interstate 77, with interchanges at Wallings Road and Royalton Road, is located three miles to the east and provides easy access to downtown Cleveland.

The Ohio Turnpike traverses the community, and while there are no interchanges within the City, access to the Turnpike is available from both I-71 and I-77. Easy access to regional and national transportation has made and continues to make North Royalton a very desirable place to live and conduct business.

Brief History

North Royalton was founded in 1818. Knight Sprague, an early settler, had the township named after his native town in Vermont, Royalton. Sometime between 1880 and 1890, the name of Royalton was changed to North Royalton because of another town in Ohio bearing the same name. In the 19th century, Royalton was a community of farmers who maintained a thriving dairy and cheese business. Many mid-19th-century farmhouses still remained in the 1990s. On April 4, 1927, the township officially became the Village of North Royalton. Charles E. McCombs was the village's first mayor; North Royalton as a city adopted the mayor-council form of government. Its growth progressed slowly from a population of 1,051 in 1840 to 2,559 in 1940. In 1950, with a population of 3,939, gas and water lines were brought into areas of the village. Following the post-World War II migration of Cleveland residents to the suburbs and the construction of the Ohio Turnpike in 1955, the population quickly rose to 9,290 in 1960, 12,807 in 1970, 17,705 in 1980, 26,364 in 1995, and 28,648 in 2000. In 1980 the city had 10 industries and over 200 small businesses, the major employer being the Board of Education. North Royalton schools, with an enrollment of 2,750 in 1987, included 3 elementary, 1 parochial, and 1 high school.



This is the North Royalton Village Green as it appeared looking south from Bennett Road in 1905. Note the old town hall in the foreground, near the current location of the North Royalton Police Department. The prominent Baptist Church was razed in 1929. Source – North Royalton Historical Society.

02.

Existing Conditions

Demographics

Population Trends

Before the turn of the century the City of North Royalton experienced large population growth. Between 1970 and 2000, the City's average decennial population increase was about 5,300 people. Between 1990 and 2000, the population grew by 5,541 or 23.5%, from 23,197 to 28,648 individuals, making North Royalton the second highest community in overall growth in the area. In 2010, with a population of 30,444, North Royalton again had the second highest rate of population growth rate in the area, growing 6.3% since 2000.

Based on single and mult-family housing starts since 2010 the City's population has continuted to grow. The rate of growth and exact population totals will be determined once 2020 U.S. Census data is available in the fall of 2021.

30,252

2019 Total Population

43.6

Median Age

▲ From 42.7 in

2010

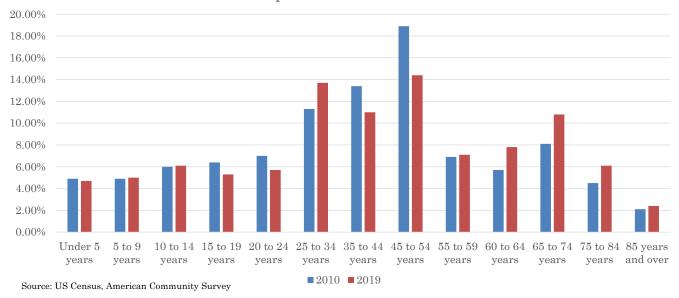
From

2010

in

29,965

Percent of Total Population by Age Cohort Comparison 2010 vs. 2019



Demographics

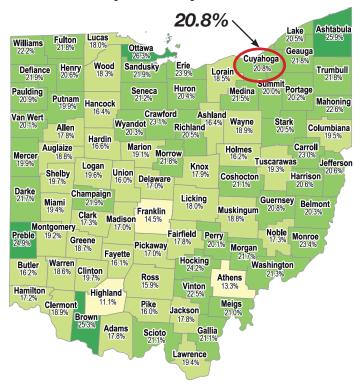
Growing Senior Population

process.

As the Baby-Boomer Generation continues to age, there is a growing trend regionally for more seniors to "age in place". According to AARP, 80% of people 45 and older say they want to age in place or age within their current community. The Ohio Development Services Agency projects that seniors over 65 will comprise of over 20% of Cuyahoga County's population through 2050, up from 15% in 2010.

North Royalton is seeing similar trends within the City. The City has seen growth as a percentage of the total population in all age cohorts over 55 since 2010. The City's median age has risen from 42.7 in 2010 to 43.6 in 2019. While the City's total senior population ranks in the middle as compared to other communities within Cuyahoga County, with roughly 19% of the total population, the effects of a growing senior population and the needs of this population should be considered as part of this planning

Percent of Population over 65 by County - 2050



Source: Ohio Development Services Agency, Office of Research 2018

Projected Change in Population by Age Group 2015 vs. 2040

10,000

10,000

Cuyahoga

Medina
Lorain

Lorain

Demographics

Educational Attainment

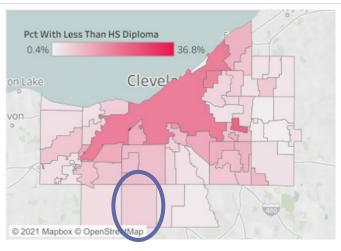
According to 2019 American Community Survey (ACS) data residents within North Royalton are well educated with over 25% of the population over 25 years of age having a Bachelor's degree. Over 14% of the population over 25 years of age has a Master's degree or higher. This is slightly lower than neighboring communities. Maps compiled by the Cuyahoga County Planning Commission illustrate how North Royalton compares to other communities within Cuyahoga County for all levels of educational attainment.

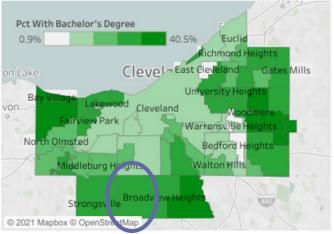
25%

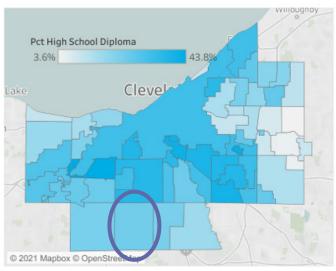
Bachelor's Degree

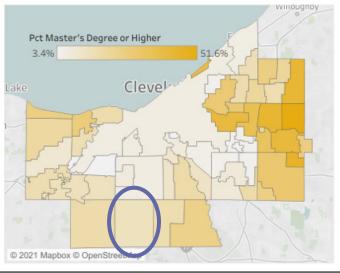
14%

Master's Degree



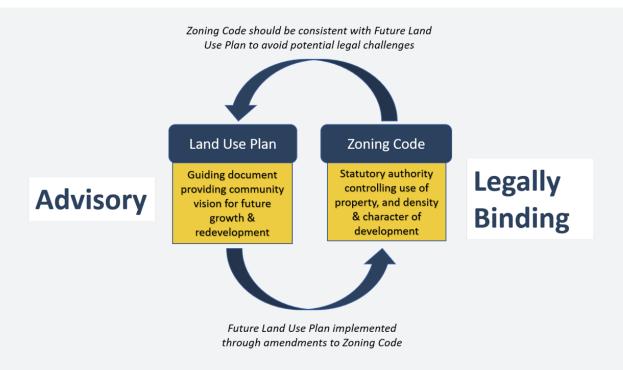






Land Use vs. Zoning

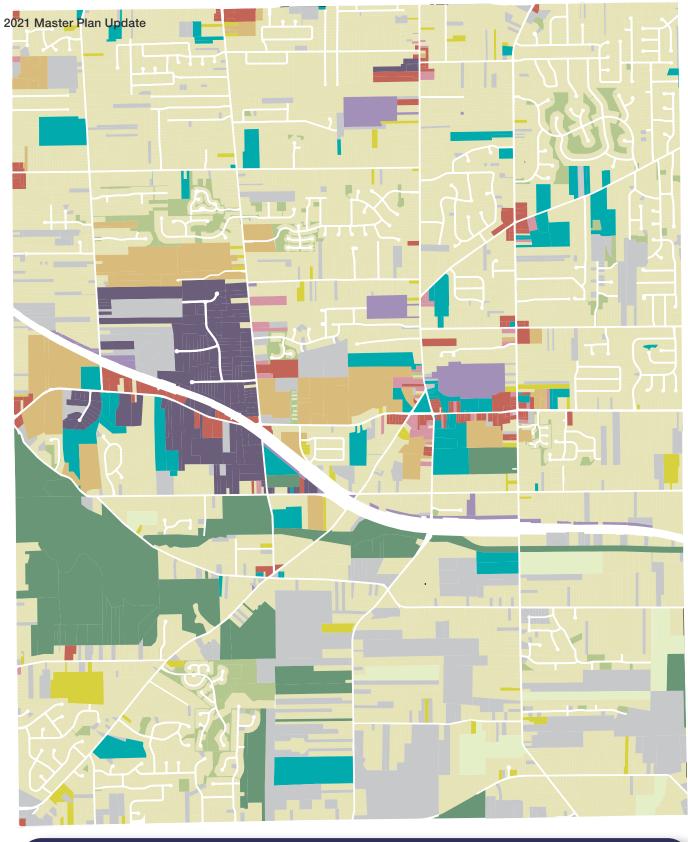
A Master Plan is a guiding document that is not legally binding, whereas the Zoning Code is a statutory authority that governs use of property. The Master Plan will develop recommendations for the type and form of future land uses, but the Zoning Code would need to be amended in a separate process through City Council Resolution for any changes to take place.



Existing Land Use

North Royalton is 21.4 square miles in total area, the third largest municipality by land area within Cuyahoga County. Over 66%, or roughly 8,100 acres of the existing land area, consists of residential land uses. The vast majority of residential land is devoted to single family residential development. While single family and two family homes are distributed evenly throughout the City, most multi-family residential units are located closer to the central portion of North Royalton, generally along State Route 82. The City's second most frequent land use is parks which comprise over 9% of the City's total area. The Cleveland

Metroparks Mill Stream Run and Brecksville Reservations account for the majority of the park land acreage. A small percentage of total land area is devoted to commercial/retail (3.4%) and industrial (2.5%) uses. Commercial and retail uses are concentrated along the Royalton Road corridor from Bennett to State Roads, and within nodal development clusters at Wallings and State Roads, Bunker and State Roads, York and Sprague Roads, and Bennett and West 130th Street. Most industrial development is concentrated between Abbey and York Road and along Royalton Road within the York and Progress Industrial Parks.





Land Use vs. Zoning

Zoning

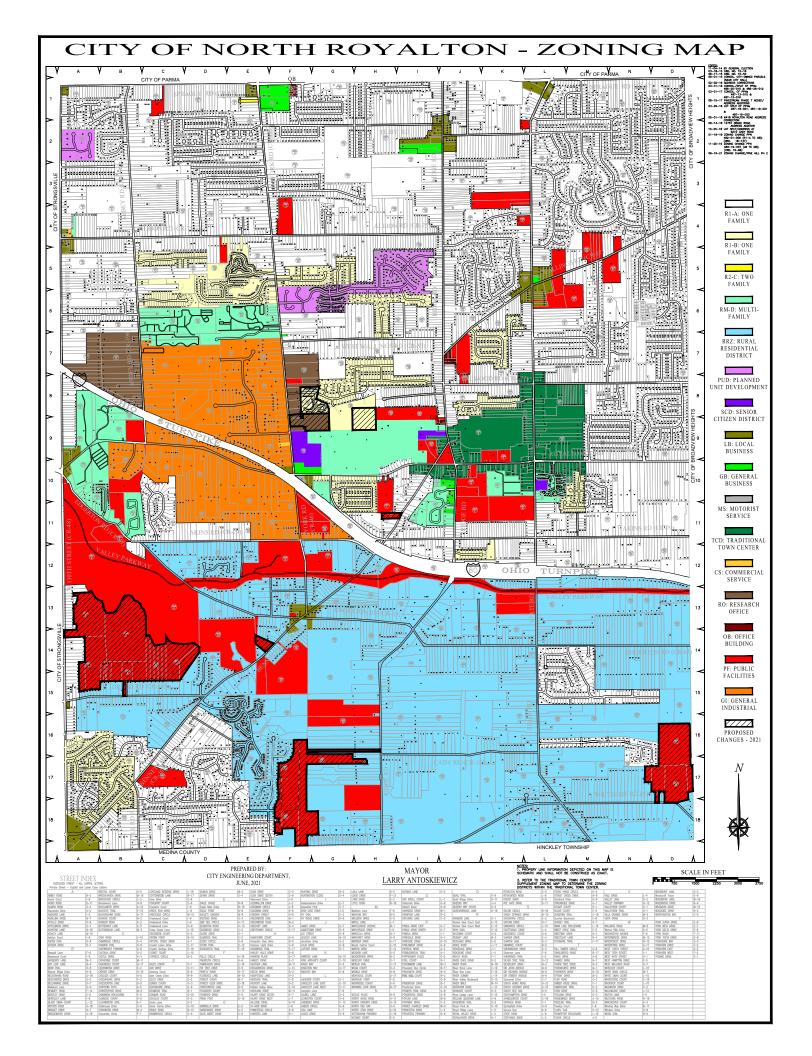
North Royalton's zoning code is one of the primary tools available to the City to influence how it will develop in the future. The zoning regulations dictate how much and what type of development can occur in any given area of land. These land use patterns in turn affect the location, kind, and amount of growth in a community. When used properly, zoning can provide numerous benefits and be a powerful tool to improve the aesthetics of a community, protect the environment, and enhance the overall quality of life.

There are 14 different zoning classifications in the North Royalton Zoning Code. Five of these districts are residential: three single-family districts at various densities, one multi-family district, and one senior citizen district. Nine districts permit nonresidential development including six retail/commercial districts, two industrial districts and one public facilities district. However, there are two additional zoning districts shown on the North Royalton Zoning Map that were deleted from the zoning code in 2004 – the Planned Unit Development District and the R2-C Two-Family District.

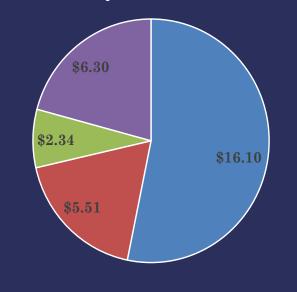
Nearly 75% of the City (10,182 acres) is zoned for residential use, while only 18% (2,435 acres) is zoned for nonresidential, and the remaining 1,091 acres are unzoned public rights-of-way. By far, the majority of the City is zoned for

single-family development, with the R1-A Single Family District the most widespread zoning classification in total acres occupying 5,652 acres in the City. This district requires that single family homes have a minimum lot size of 20,000 square feet. The second-most prevalent zoning classification is the Rural Residential Zoning District, with more than 3,200 acres, which is the prevailing zoning for the mostly semi-rural area of the City south of the Ohio Turnpike. The intent of the Rural Residential District is to preserve the rural character of the City by limiting the density of development to between one unit per acre and one unit per three acres. The next-largest residential zoning district, RM-D Multi-family, is a distant third to the R1-A and R-R districts with less than 525 acres.

The Public Facilities zoning classification comprise the largest category of nonresidential zoning, with 1,075 acres. The Public Facilities District encompasses regional and city-owned park and recreation facilities, schools, government buildings, and churches. Combined, the General Industrial and Research Office districts comprise the second largest category of nonresidential zoning, with 876 acres. The Town Center District includes nearly 300 acres, while the two business districts together total just under 212 acres. Very small amounts of land are zoned Commercial Service, Motorist Services or Office Building.



Total City Revenue - 2020



■Income Tax ■Property Tax ■State Shared Taxes ■Other

In Millions of Dollars Source: City of North Royalton The City of North Royalton collects revenue from multiple sources. Income tax is the largest revenue source for the City accounting for 53% of all City revenue in 2020. Property tax accounts for 16% of City revenue, while state shared taxes account for 8%. The section labeled "other" in the chart to the left that accounts for the remaining 23% of City revenue consists of income generated from City fees (i.e. building permits, etc.), grant awards, and enforcement payments (i.e. traffic violations, etc.). The following pages provide detail into the income generated from both income and property taxes.

Income Tax

Income tax is critical to the City's General Fund budget accounting for roughly 80% of its revenue. In 2019, the City collected over \$16.6M in income tax, the highest annual collection for the City to date. With the onset of the COVID-19 Pandemic income tax revenues were down slightly in 2020 to \$16.1M. It is anticipated with the lingering affects of the Pandemic that income tax revenues in 2021 will be slightly lower than 2020.

The City is fortunate to have a very diverse income tax base with a multitude of smaller employers accounting for income tax revenue. There is not one dominate company that accounts for a large percentage of income tax revenue. This provides relative stability when

projecting anticipated revenues.

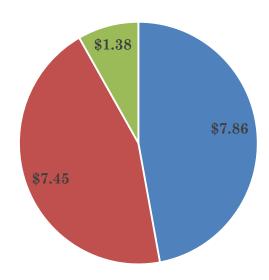
Income tax revenue is paid from a variety of different sources including employees working in the City (workplace tax), employers who pay income taxes on company net profits (net profits tax), and residents who live in the City and work elsewhere (residence tax). As shown in the chart on page 19, employees within the City account for roughly 47% of total income tax collected, while residents living within the City but working elsewhere account for roughly 45%. The remaining 8% of income tax collected come from company's net profits tax.

North Royalton has an income tax rate of 2%, which is in line with many of the neighboring communities. The City provides residents who

work and pay municipal income tax outside of the City up to a 1.25% credit towards the 2% income tax rate. This credit can reduce the amount of income taxes a working resident owes to the City to 0.75%.

Income tax revenue is vital to the City as it accounts for the majority of municipal revenue. Job growth in the commercial office, medical, and light industrial sectors can ensure that income tax revenues within the City continue to grow. Healthy income tax revenues will make it easier for the City to invest in "quality of life" improvements (i.e. parks, sidewalks, bike facilities, etc.) and maintain low property tax rates for residents. It is important that the City zone for expansion of these high-income generating job sections by maintaining or expanding General Industrial and Research Office zoning where appropriate within the City.

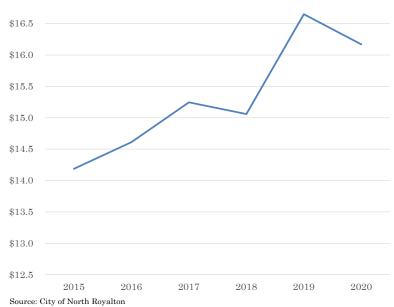
Who Contributes?



- Non-Residents Working in City
- Residents
- Net Profit from Businesses

Shown in Millions of Dollars Source: City of North Royalton





\$17.0

Property Tax

Property tax accounted for 18% of the City's total revenue in 2020. All non tax-exempt residential, commercial, and industrial properties pay property taxes. The property tax rate residents and business owners pay varies from community to community. The table to the right illustrates both residential and commercial effective tax rates within North Royalton and neighboring, Cuyahoga County communities. North Royalton has relatively low property tax rates as compared to similar communities.

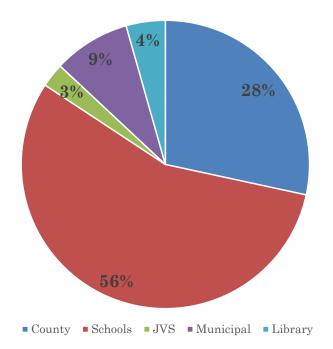
A common misconception is that all property tax collected within a community goes to the local municipality. The majority of property tax revenue typically funds public schools, followed by County levies, particularly if the county has a large, urban center. The chart to the right shows how property taxes are distributed within North Royalton. Only 9% of property taxes go to the City. These funds are allocated to city services, including police and fire services. The majority (56%) of property taxes go to the North Royalton City Schools. Cuyahoga County receives 28% of property tax revenue for various county tax levies. Small percentages are allocated to the public library system (4%) and the Joint Vocational School (3%).

	Effective Tax Rate			
	Residential	Commercial		
North Royalton	74.35	75.76		
Broadview Heights	77.65	86.20		
Middleburg Heights	76.23	87.09		
Parma	82.74	88.22		
Strongsville	77.56	84.44		

Effective Tax Rate is shown in Dollars and Cents on every \$1,000 of Taxable Property Value

Source: Cuyahoga County Fiscal Officer

Property Tax Distribution



Source: Cuyahoga County Fiscal Officer

Hypothetical Development Scenarios

To help illustrate how various development types within the City affect the City's income and property tax revenue, three hypothetical scenarios were developed. The hypothetical scenarios include a small retail development similar to a Starbucks, a small light industrial development with 20 employees, and a small residential development with 20 homes. Though these are simplistic hypothetical scenarios that only account for income and property taxes generated from a potential development, they demonstrate why commercial office and light industrial development with high paying jobs are so important to the City's revenue stream.

Each scenario assumes an average pay rate for new service retail (i.e. Starbucks) employees and light industrial employees based on industry averages. Assumed market property values for all scenarios were based on similar comparable properties within the region. The residential development scenario used North Royalton's average household income and average home values from the latest American Community Survey data from the U.S. Census Bureau.

The light industrial scenario provides the most

annual income to the City. This underscores the need for high-paying jobs within the City to keep City revenues strong to maintain low property taxes and provide future quality of life enhancements.

It is important to note that each of these developments also has a cost to the City in terms of services that need to be provided to each development type. A residential development would require the most city services including but not limited to snow plowing, increased police patrols, additional traffic generation, and increased demand for quality of life improvements including parks and recreational improvements. A light industrial development on the other hand would require the least amount of City services as there would be little increase in traffic generation, police patrols, or demand for quality of life improvements.

These scenarios strictly looked at revenue generated from a particular type of development. Obviously, this is only one of many considerations when planning for future development within a City.



Scenario 1 Small Retail Development



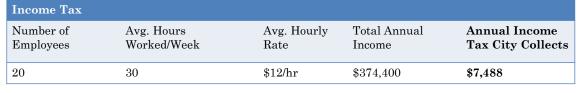
Scenario 2 Small Industrial Development



Scenario 3 Small Single Family Residential Development

Development Scenarios

Scenario 1 Small Retail Development





Property Tax			
Assumed Market Value	Effective Commercial Tax Rate	Annual Property Taxes	Property Taxes Paid to City (9%)
\$1.5M	75.76	\$39,770	\$3,580

Total Annual Revenue to City = \$11,067

Scenario 2 Small Industrial

Income Tax				
Number of Employees	Avg. Hours Worked/Week	Avg. Hourly Rate	Total Annual Income	Annual Income Tax City Collects
20	40	\$40/hr	\$1,164,000	\$33,280



Property Tax			
Assumed Market Value	Effective Commercial Tax Rate	Annual Property Taxes	Property Taxes Paid to City (9%)
\$1.5M	75.76	\$39,770	\$3,580

Total Annual Revenue to City = \$36,860

Scenario 3 Small Residential Development

Income Tax (From residents who work)				
Average Household Income	Annual Resident Income Tax Collected (0.75%)			
\$96,137	\$14,420			



Property Tax			
Number of New Homes	Average Home Value	Annual Property Taxes	Property Taxes Paid to City (9%)
20	\$250,000	\$117,000	\$10,530

Total Annual Revenue to City = \$24,950

03.

Community Engagement

Community Survey

A community survey was offered both online and in print form for residents to provide feedback on critical issues and desires within the community. The survey ran from February through March of 2021 and received 822 total responses. Themes from the survey responses are highlighted below. Complete results are provided within Appendix A.



2

3

Improve Walking & Bicycle Connections

Sidewalks were the most desired improvement along roadway corridors receiving almost 40% of responses.

Maintain Small Town Setting

Write-in comments focused on ensuring that the small town feel of the community remain in place.

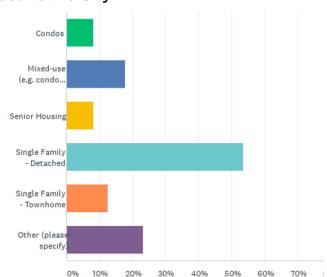
Improve Stormwater Management

Flood mitigation ranked as the second most desired community asset improvement and was a theme from write-in comments.

Housing Desires

While over 50% of respondents supported additional single family housing there was a fair mix of other housing desires as well. Mixed-use housing (i.e. condos over retail) received 143 or 18% of total responses. Single family townhomes were also well received with over 100 responses. This speaks to the desire to have smaller, low-maintenance housing options within the City. Nearly 23% of respondents choose the "other" category where all write-in comments stated that "no additional housing" was desired.

What type of housing would you like to see added to the City?



Steering Committee

The steering committee was created to help guide and inform the Master Planning process. The committee consisted of ten individuals representing local stakeholders, local business owners, residents, and members of council. The committee was designed to represent a broad cross section of the City demographically and geographically. The group met five times throughout the planning process. All meetings were open to the public both in virtual and in person format. Public comments and feedback were taken at each meeting. Meeting minutes are attached within Appendix A.

Assessment

To gather feedback from the group regarding needs and desires within the community, a S.O.A.R. (Strengths, Opportunities, Aspirations, and Realities) discussion was conducted. The results of the group discussion is shown below.

Recommendation Review

The committee provided feedback on draft recommendations and helped to shape the six themed focus areas of the plan. Input from the group helped to define specific action items to meet plan strategies.



Strengths

- Strong School District
- Good Housing Mix
- Low Cost of Living
- Diverse Economic Base

- Re-imagined Town Center
- Leverage Undeveloped Land within Industrial Parks
- Partner with Metroparks

Aspirations

- Improve Bicycle & Pedestrian Connections
- Attract Additional **Dining Options**
- Grown "Step In" and "Step Down" Housing

Realities

- Flooding & Stornwater Management
- Aging Housing Stock
- Perception City is hard to get to

04.

Focus Areas

Themed Focus Areas

Through discussions with the steering committee and City staff, six themed focus areas were developed to provide specific recommendations to address community desires.

















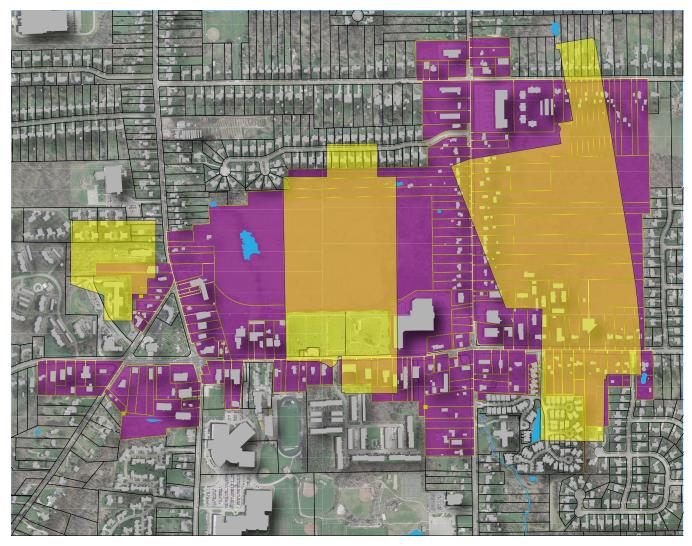
Town Center District Assessment

The development of the Town Center District (TCD) has been a desire of the City for roughly two decades. In 2004 a master plan was developed that created a vision for a traditional town center between Ridge, Royalton and State Roads. The City made considerable efforts to implement the town center vision. However, with changes to the state's eminent domain laws and the onset of the Great Recession, made it difficult to obtain development financing, and the project was abandoned. Since that time some commercial development has occurred along Royalton Road but much of the TCD remains underdeveloped from the 2004 vision. Part of the 2004 vision included future institutional uses including a high school stadium, city hall and library. Each of these institutional uses have been developed in other locations within the City and are no longer a viable part of the original vision. Desire still remains among residents and within the City to create a future town center development. But with changes in retail

development due to the widespread use of online shopping and the onset of the COVID-19 Pandemic, the Town Center concept was reassessed as part of this planning process.

The existing TCD spans 294 acres and contains five separate zoning districts. To gain perspective on how large the TCD is, it was compared to three Northeast Ohio town center developments, First and Main in Hudson, Pinecrest in Orange, and Crocker Park in Westlake. The footprints of each of these developments are highlighted in yellow on the above graphic with the TCD highlighted in purple. The TCD is roughly three times larges in land area than Crocker Park and five times larger than Pinecrest.

With a district as large as the TCD parcel assembly for a development is challenging. There are 194 total parcels within the TCD and with a multitude of different owners, many single-family residential owners. The original vision for the town center development and the subsequent zoning code was developed under the assumption that



How Does the Town Center Compare?



First and Main

Hudson, Ohio
~16 Acres
Mixed Use - 2 Stories
200,000 Sq Ft Res./Retail/Office
20,000 Sq Ft Grocery Store
Public Library
12 Apartment Residences
Community Green
2.50 Miles to Highway



Pinecrest

Orange, Ohio
~58 Acres
Mixed Use - 3 to 4 Stories
162,000 Sq Ft Office
400,000 Sq Ft Retail
145 Unit Hotel
87 Apartments
Small Green Space
Adjacent to Highway

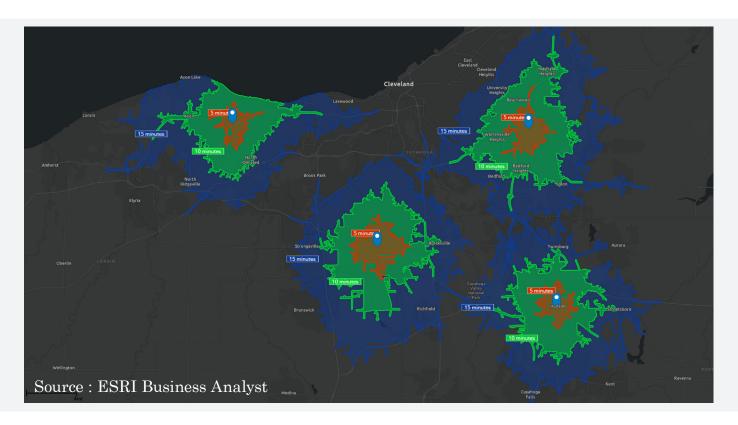


Crocker Park

Westlake, Ohio
~92 Acres
Mixed Use/Townhomes/Office
725,000 Sq Ft Office
>1M Sq Ft Retail
100 Unit Hotel
534 Apartments
130 Townhomes
0.25 Miles from Highway

Town Center District Assessment

a single large development would occur at one time. Due to the existing parcel segmentation and the realities of the retail and office markets, one large town center development is unlikely. A smaller, phased mixed-use development is more likely and should be planned for going forward.



Market Assessment

To gain a sense of the potential buying power around a future Town Center a retail market analysis was conducted. The future Town Center was again compared against First and Main in Hudson, Pinecrest in Orange, and Crocker Park in Westlake. To establish a primary market area, drive time envelopes were created around each development for a five minute (red), 10 minute (green), and 15 minute drive (blue). Given that a future Town Center will be smaller in scale and most likely a local mixed-use center, the 10-minute drive envelope was used for

market analysis. The 10-minute drive envelope encompasses the majority of North Royalton and portions of southern Parma, western Broadview Heights, eastern Strongsville, and northern Hinckley Township. Royalton Road's interchanges with I-71 and I-77 are also included in the 10-minute drive envelope. Existing large retail centers including South Park Mall and the Shoppes at Parma Town were not located within the 10-minute drive envelope.

The total population within the 10-minute drive envelope was 68,839 with an average household income of \$101,972. These numbers are comparable to Crocker Park's and Pinecrest's 10-minute drive envelopes respectively. The area's total number of housing units (30,589) was

Town Center District Assessment

Site	2020 Total Population	2020 Median Household Income	2020 Average Household Income	2020 Total Housing Units	2020 Average Disposable Income	2017 Total Retail Sales	2017 Leakage/Surplus Factor: Total Retail
North Royalton Town Center (10 minutes)	68,839	\$77,566	\$101,972	30,589	\$78,325	\$567,626,063	36.7
Crocker Park (10 minutes)	70,283	\$94,158	\$128,818	30,703	\$94,794	\$1,645,143,078	-6.5
Pinecrest (10 minutes)	103,390	\$60,778	\$103,876	49,902	\$75,250	\$2,442,168,213	-12.4
First and Main (10 minutes)	34,487	\$110,838	\$143,945	13,212	\$105,233	\$806,901,131	-4.0

Source: ESRI Business Analyst and American Community Survey Data

again in line with Crocker Park. As expected, total retail sales within the 10-minute drive envelope were well below each of the existing mixed-use developments at over \$567M.

The final column highlights the retail leakage/surplus factor within the 10-minute drive time. The leakage/surplus factor is rated on a -100 to 100 scale. Leakage in an area represents a condition where retail demand exceeds supply. In other words, retailers outside the market area are fulfilling the demand for retail products; therefore, demand is "leaking" out of the trade area. Such a condition highlights an opportunity for new retailers to enter the trade area or for existing retailers to extend their marketing outreach to accommodate the excess demand. Surplus in an area represents a condition where supply exceeds the area's demand. Retailers are attracting shoppers that reside outside the trade

area. The "surplus" is in market supply.

With both South Park Mall and The Shoppes at Parma Town outside of the 10-minute drive envelope the Town Center's retail leakage factor is high at 36.7. This highlights that many residents within North Royalton are going elsewhere for there retail and dining needs. As anticipated, each of the other existing mixed-use developments have a surplus of retail demand within the 10-minute drive envelope.

Understanding that there are competing retail centers within 10 to 15 minutes of the a future Town Center and given the area's isolated location from highway access, a large, mixed-use development is not probable. The area does have strong demographics within the 10-minute drive envelope with relatively high household incomes. Creating a small, mixed-use development with a focus on local businesses is viable within a future Town Center site.

1. Encourage traditional "downtown" type compact development with a mix of uses whose scale is consistent with existing market realities.

Ensure zoning code encourages development "at the street"

A major draw for any town center development is walkability. A major component of walkability is convenient access to businesses from the street. A future town center development needs to encourage development along roadway right-of-way by limiting building setbacks and mandating the surface parking lots are developed behind buildings. Though this is encouraged within the existing TCD zoning, existing setback requirements could be further limited to ensure development is along the roadway corridor.



Market Square - New Albany, Ohio

Ensure building heights are limited to two to three stories maximum

Though multiple discussions with the steering committee the desire for a small-scaled town center was reiterated. The committee went through exercises where various different town center scales were compared and were asked to choose their most desired scale. The scale of Hudson's First and Main development was the most desired. This was consistent with feedback from the community survey. A future zoning code needs to ensure that building heights are limited to 2 to 3 stories.



First & Main, Hudson, Ohio

Adjust zoning code to limit setbacks and reduce minimum development sizes

The existing TCD zoning code language specifies large building setbacks from single-family residential property lines under the anticipation of a large, retail establishment, with numerous loading docks being developed. Due to market changes discussed earlier, it is no longer anticipated, or desired to have large, retail establishments within the TCD. Existing setbacks range from 250 to 500 feet. These setbacks are excessive and inhibit future development. The City should consider enacting bufferyard standards that specify setback widths and percent of foliage coverage between various conflicting uses (see economic development strategies).

Minimum development sizes are also specified within the existing TCD zoning. The minimum size varies by subdistrict but ranges from 12 to 50 acres. It is no longer anticipated that one, large development will occur within the TCD, but instead, multiple smaller developments. These minimum acreages need to be reduced to encourage smaller developments within the TCD moving forward.



Landscape Buffer - Pinecrest, Orange, Ohio

Encourage smaller-scaled local retail and office uses

Consistent with market realities and the desire to have a traditional town center the TCD should cater to local retail and office uses. The existing zoning language allows for up to a 65,000 square foot retail building to be developed within the district. This scale is roughly equivalent to the existing Giant Eagle on State Road. The City should consider lowering the maximum allowable building size to further encourage smaller businesses.

Consider creating shared parking standards or other innovative parking strategies within the TCD to encourage density and improve sustainability.

An updated Zoning Ordinance could consider revising the current parking standards which are based on a traditional regulation of minimum required number of spaces per floor area of use. Several potential modern best practices are described below which may encourage the development of more environmentally sustainable development patterns that reduce impervious surface areas and promote walkable Town Center District.

• Abolishing Parking Minimums - Minimum parking requirements make assumptions about what types of cars people drive, how long they park them and how far they are willing to walk — assumptions that are often false. These standards promote driving rather than other forms of transportation, resulting in higher development costs and rents, as well as increased storm water runoff, urban heat islands and water pollution.

Parking lots created by minimum requirements have resulted in huge gaps between buildings, making communities far less walkable and bikeable, in order to ensure that every building is completely self-sufficient in the unlikely event of a parking catastrophe. Land use has thus become financially inefficient, as largely unused asphalt precludes more income-producing development opportunities.

• Shared Parking Credits - Spread-out parking requirements assume that each business has its own separate parking supply and that it must be large enough to accommodate the peak hour of the peak day of the year. That assumption results

in excessive parking. Different parking uses peak at different times of day—office parking in the middle of the day, retail in late afternoon and on weekends, restaurants in the evening. Shared parking provisions allow developers to reduce parking supply requirements when different uses can share the same parking spaces.

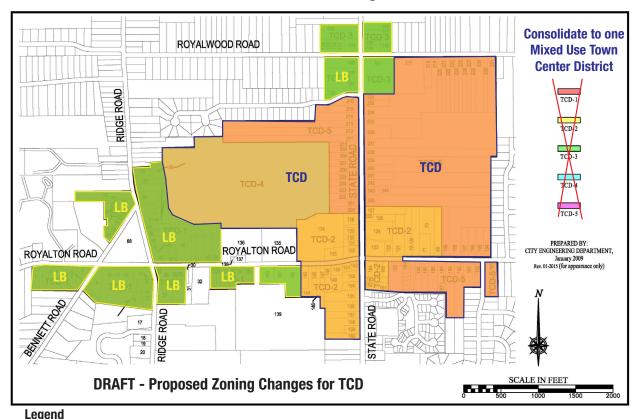
- On-Street Parking The most valuable parking in most commercial and mixed-use places is parking on the street in front of businesses. Yet many cities are careless about keeping on-street parking or do not do enough to ensure the maximum number of spaces per block. Shifting from parallel to diagonal parking can increase parking supply by up to 30 percent per block face.
- Fee-In-Lieu System In places where the City is providing public parking facilities or where a parking district has been created, provisions can be written that allow a developer to pay a set fee in lieu (FIL) of providing parking supply directly. The money from FIL payments is then used to expand public parking supply. It is important that any FIL fee schedule be realistic about actual costs of parking.

Reduce the overall size of the Town Center District and the number of zoning subdistricts

As mentioned within the assessment, the overall size of the TCD is large at approximately 300 acres. With current market realities, it is no longer realistic to believe this entire area will be redeveloped as part of a town center. Areas that are located in current TCD zoning subdistricts 1 and 3 are least likely to see mixed-use redevelopment (see map below). Many of the parcels in these subdistricts are small, and fully developed operating retail, service, or office uses. It is recommended that these areas be rezoned to a Local Business (LB) designation as the vast majority of existing uses are permitted within the LB designation. The remainder of

the existing TCD should be maintained as a mixed-use zoning district to promote a future town center development. The parcels within this area are larger and less developed. It is much more likely future development/redevelopment could occur in this area.

Currently, the TCD has five existing subdistricts, each allowing different uses, development sizes, building setbacks, and densities. These subdistricts are confusing and difficult to understand. To reduce confusion for potential developers and City staff the revised TCD limits should be consolidated into one, mixed-use zoning district.



Local Business (LB)

Town Center District (TCD)

2. Create a pedestrian-oriented, walkable streetscape in the town center area that has a consistent and themed look and feel.

Encourage inclusion of decorative banners/flags, seating, public art or decorative murals, kiosk/bulletin board, lighting and water features throughout TCD.

As detailed within the Placemaking theme of this plan, consistent streetscaping and design elements need to be established within the retail core of the City and within a future Town Center Development. Streetscape cohesion encourages walkability and creates a unique experience for patrons. Streetscaping standards need to be included within the TCD zoning code that detail theming elements particularly since it is anticipated that a future development will happen in multiple smaller phases.



Market Square - New Albany, Ohio

Permit outdoor dining facilities within the TCD.

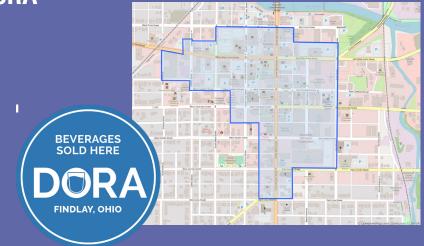
To encourage vibrant street life, outdoor dining should be permitted within the Town Center District. Dining should be allowed along the roadway right of way within a mixed-use area as long as sufficient sidewalk width is still accommodated (8 foot wide minimum). The City should consider outdoor dining as a conditional use and limit the amount of seats allowed outside at each establishment.

If outdoor dining is permitted, the City should

also consider creating a Designated Outdoor Refreshment Area (DORA). A DORA is a specified area of land that a local legislative authority has designated as exempt from certain open container provisions. Thus, patrons within a DORA that purchase an alcoholic beverage for on premises consumption from a DORA designated liquor permit holder can leave the permit premises with an opened alcoholic beverage container and continue consuming it within the DORA.

Case Study: Findlay Ohio DORA

Findlay's DORA was designated in May 2021. The City uses a sticker system to let patrons know which establishments are part of the DORA by placing Green, Orange or Red stickers at establishment entrances. Patrons are allowed to purchase beverages at a DORA establishment and leave that establishment and bring that drink into another designated (green sticker) establishment.



Create a useable public space within TCD to attract visitors.

Successful mixed-use town center developments provide multiple reasons for patrons to visit. A mixture of retail, office, and restaurant options are important, but each development also has a useful public space to allow patrons a place to relax or recreate. A Town Center Development must have a useable public space where small events could occur and people can gather.

A question within the community survey asked what civic improvement was most desired within a future Town Center. Respondents stated that a community greenspace for events or a natural space for walking/picnics were highly desired. A public greenspace with a minimum size of 10,000 square feet should be included within a future Town Center Development.

Ensure a future town center is connected to the community for all modes of transportation.

As detailed within the Community Connections theme, bicycle and pedestrian connections to the Town Center need to be enhanced to allow residents easy access to a future development. Both sidewalk and bicycle improvements along State Road are a priority of this plan. Creating these connections will allow residents in

subdivisions along State Road the ability to reach the Town Center without a car.

In addition, Greater Cleveland RTA bus service needs to be extended into a future Town Center Development. Bus line 53F currently runs down Royalton Road and an additional stop should be added within a future development.

3. Ensure a future town center is sustainable and resilient.

Integrate "Smart City" technology infrastructure, such as adaptive traffic signal systems, public wifi, solar powered and energy efficient lighting, smart parking/wayfinding, rideshare spaces, bikeshare and dockless scooters, and Electric Vehicle (EV) charging stations, to decrease energy consumption, stormwater runoff, and reduce the City's carbon footprint.

Smart Cities lay the foundation for a more sustainable and efficient environment by developing a holistic, open and integrated operating system that allows for data driven decision-making.

Smart Cities are supported by several types of technologies, including:

- Information and communications technology (ICT)
- Connected physical devices using the Internet of Things (IoT) network
- Geographical information systems (GIS)

Each technology works together to collect and contextualize massive amounts of data that can be used to improve the components and systems running within a city. The City should work to ensure future investments in infrastructure and proposed development are compatible with the latest emerging technologies relative to advanced mobility, renewable energy sources, and wireless connectivity.



The Northeast Ohio Areawide Coordinating Agency (NOACA) has developed an Electric Vehicle (EV) Siting Plan that emphasizes employment centers, high amount of work trip destinations, high non-work destinations trip generators, and high volume traffic corridors. NOACA has allocated \$3 million of funding for the creation of a regional program to deploy installation of Level 2 and Level 3 DCFC charging station implementation across the region. Under the program, NOACA will work with community partners to identify specific sites that demonstrate consistency with NOACA regional EV charging station siting plan criteria. North Royalton City Hall was identified in NOACA's Siting Plan as a level 3 charging station site. As development occurs within the Town Center Development the City should encourage the inclusion of electric vehicle charging stations and work with NOACA to construct these facilities.

4. Incentivize Catalytic Infill Development in Town Center District.

Consider creating Community Improvement Corporation (CIC) for strategic parcel assembly.

A major challenge to future development within the Town Center District centers around the ability to assemble private parcels from multiple private owners. Exploring creation of a Community Improvement Corporation (CIC) allows the City to address this issue. Under Ohio law, municipalities face strict limitations on their abilities to participate in land acquisition, disbursal and development processes, including open records requirements that can make delicate negotiations with property owners or potential developers all but impossible.

Establishing a CIC is an effective way to streamline the development process and facilitate a wide range of development scenarios that enhance the municipal tax base. CIC's are non-profit corporations that are enabled under Ohio law to carry out economic development initiatives on behalf of the municipality. CIC's can:

- Conduct negotiations in confidence;
- Buy, hold and sell land, including at a loss if necessary;
- Assemble lands for resale, and land bank if necessary;
- Function as a master developer;
- Offer incentives, such as low-interest loans or strategic grants; and
- Conduct other economic development initiatives, including public relations and advertising.

A CIC is governed by a code of regulations that outlines its relationship to the municipality and defines its purpose as the advancement of the municipality's economic development. The CIC is governed by a Board of Directors that may include residents, business owners, and City officials, and it may be supported by City staff or a contract employee.

Consider utilizing Cleveland-Cuyahoga County Port Authority Financing for catalytic mixed-use development infrastructure including TIF/special assessment revenue bonds and/or construction materials sales tax exemption.

Consider creating Energy Special Improvement District (ESID) to facilitate Commercial Property Assessed Clean Energy (C-PACE) financing.

PACE financing involves public-private cooperation between a property owner, a lender, a municipal corporation, and an energy special improvement district (ESID). PACE is a voluntary program where the property owner agrees to place a special assessment on their property to repay principal and interest payments on special energy improvement projects over a certain term. The lender makes a loan to the property owner for the property owner to undertake a special energy improvement project. In order to levy these special assessments, an ESID needs to be created. The ESID provides for the PACE project by working with the property owner to develop a plan for the project. The municipal corporation where the property is located is automatically part of the ESID when it approves the ESID's formation or the addition of property to it.

Once levied, the special assessments are added to the property owner's tax bill. The special assessments are tied to the land, rather than the property owner. So the special assessments can

stay with the property upon conveyance.

The ESID can grow to support other projects in the same municipal corporation or it can extend to contiguous municipal corporations and townships. Northeast Ohio is supported by a regional ESID called the Northeast Ohio Advanced Energy District (NEO-AED). NEO-AED works with financial partners to bring a PACE program to office, retail, industrial, hotel, multi-family and non-profit property owners. A total of 23 communities are a part of the NEO-AED within Cuyahoga County.

The City should consider joining the NEO-AED as they to become a member of the regional ESID to enable prospective businesses the opportunity to apply for PACE financing. The City would have to pass legislation that allows the City to place special assessments on properties interested in receiving PACE financing. Sample PACE legislation is provided on the following page.

What Qualifies as a Special Energy Improvement?

A special energy improvement project is defined as any property, device, structure, or equipment necessary for the acquisition, installation, equipping, and improvement of any real or personal property used for the purpose of creating a solar photovoltaic project, a solar thermal energy project, a geothermal energy project, a customer-generated energy project, or an energy efficiency improvement, whether such real or personal property is publicly or privately owned, energy efficiency technologies, products, and activities that reduce or support the reduction of energy consumption, allow for the reduction in demand, or support the production of clean, renewable energy and that are or will be permanently fixed to real property.

Positive Impacts of C-PACE

C-PACE financing can benefit everyone involved; from municipalities striving to meet their clean energy goals, to developers seeking financing for improvements for no out-of-pocket costs, and lenders who seek the value of their asset improved.



C-PACE is an innovative economic development tool that gives communities of every size access to capital to support economic development with little or no risk to the local government.

Advantages

- The cost of program implementation bore by the utilizing project
- Expert industry partners provide technical support to local leadership
- Helps administrations meet their environmental objectives
- Can be blended with other financing tools
- Attraction tool to draw developers / investors to community



C-PACE is an innovative financing tool that gives owners & developers access to asset-based capital with long-term fixed-rate for the funding of energy efficiency, water conservation and renewable energy projects.

Advantages

- ✓ 100% financing with no out-of-pocket costs
- ✓ Long-term fixed rates up to 30 years
- Secured by special assessment
- ✓ Non-recourse to owner
- Debt transfers with ownership
- ✓ Preserves owner's capital for other uses
- Energy savings offsets the cost of financing
- Renewable energy or building renovations



C-PACE is a complementary funding mechanism that can be used to complete a capital stack for complex developments, where conventional debt is restricted due to risk tolerance, debt service coverage requirements or loan to value caps.

Advantages

- Lender retains the relationship
- ✓ PACE assessment offset by energy savings
- ✓ PACE to Value capped at 25-30%
- ✓ PACE capital improving their asset and increasing value
- Debt transfers with ownership
- PACE funds difficult to securitize improvements



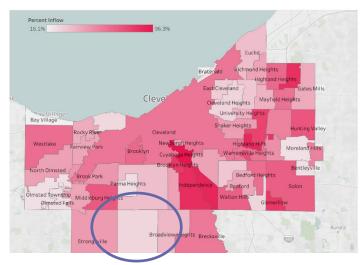


Economic Development Assessment

Workforce

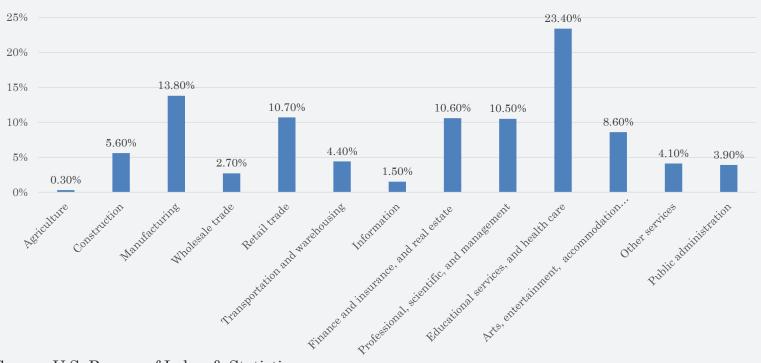
The City of North Royalton is primarily a bedroom community. Of the 16,200 residents who work, 93% work outside of the City. City businesses employ approximately 6,800 workers. Over 5,500 employees work within the City but live elsewhere. This inflow of workers is one of the lowest in the County as illustrated in the map to the right.

The workforce within the City is fairly diverse with five industry sectors accounting for two-thirds of total employment. Educational services and health care account for the largest employment at 23.4% of total jobs, followed by manufacturing at 13.8%. A chart detailing employment by industry sector is shown on the following page.



Source: Cuyahoga County Planning Commission

Economic Development Assessment



Source: U.S. Bureau of Labor & Statistics

Industrial Development

Much of the City's employment is focused along Royalton and York Roads within the existing York Alpha and Progressive Industrial Parks. The City does not have one dominant employer, but has many small business. This provides some stability for the City financially knowing that if one or two businesses closed a large portion of the City's income would not be dramatically affected.

The City relies on income tax generated from employment within these industrial parks. These parks account for a very small percentage of the City's land area (add a number here) but generate a large portion of the City's income tax revenue. There are no other industrial parks or other areas within the City that would be viable for future industrial development. This underscores the importance of keeping this area zoned for future light industrial growth.

The majority of the land within the existing industrial parks is occupied. There is vacant land within areas zoned for general industrial or research office use along Abbey Road, the existing infrastructure is insufficient to support new office or industrial development.

The industrial parks have convenient highway access as they are only three miles from I-71. The recent improvements to the Royalton Road corridor have further improved access and the aesthetics of this area.

Retail Development

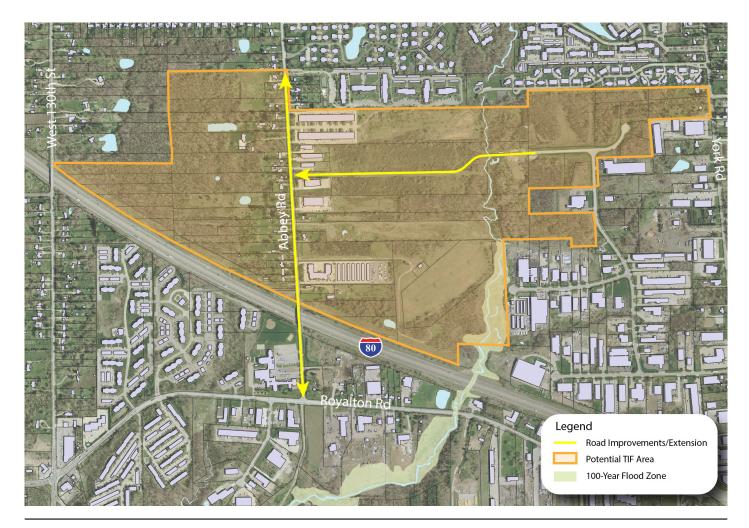
The City's retail development is focused along the Royalton Road corridor between Bennett and State Roads. There are nodal retail developments at major intersections at Wallings and State Roads, Ridge and Bunker Roads, Sprague and York Roads, and at Bennett's Corners.

1. Promote economic development in locations that are best suited for nonresidential, job oriented development.

The Abbey Road Corridor

The Abbey Road corridor is one of the few locations within the City where continued job growth and economic expansion can occur.
Only 876 acres of land or 6.9% percent of the City's total land area is zoned for Research/Office or General Industrial uses. These uses are

restricted to the existing industrial parks along York and Royalton Roads and along the Abbey Road corridor. This industrial area generates a large portion of the City's income tax revenue and is vital for the continued economic growth of the City.



The land along this corridor is zoned for Research/Office uses along the western side, while the eastern side is zoned for General Industrial uses. Most of the corridor is underdeveloped for its intended uses with vacant land or single-family homes. A major reason why the area is seen little development is due to the lack of adequate infrastructure. There are currently no sanitary sewers along this section of Abbey Road. The City has committed to constructing sewers and upgrading the roadway in the coming years as part of a multi-milliondollar public improvement project. This project will build off of the recent infrastructure upgrades along Royalton Road and provide a direct link I-71 which is only 2.25 miles away.

In addition, to the planned infrastructure improvements along Abbey Road the City should also consider extending York Beta Road to intersect with Abbey Road. This connection would provide a more direct route from the highway to the Alpha York Industrial Parkway and unlock additional vacant land along York Beta Road. The City should consider utilizing Tax Increment Financing (TIF) to leverage

the future value of this underdeveloped area. The creation of a TIF district could assist with financing the costs of the proposed infrastructure improvements. A sample TIF district is shown on the previous page.

As mentioned later in this document, the City should also consider extending high-speed broadband service to this area to further attract future economic development.

Another challenge with this area is parcel consolidation. Many of the parcels in this area are owned by different private owners. This would be another location where, if a Community Improvement Corporate (CIC) was developed, the City, through the CIC could help consolidate parcels for future development.

The York Road Corridor & undeveloped land within existing industrial parks

Though smaller, and noncontiguous in most cases, some industrial land is available for development within the existing industrial parks along Royalton Road and the York Alpha Industrial Parkway. The City should continue to work with these property owners to provide incentives when necessary to assist with economic development and job expansion on these properties.

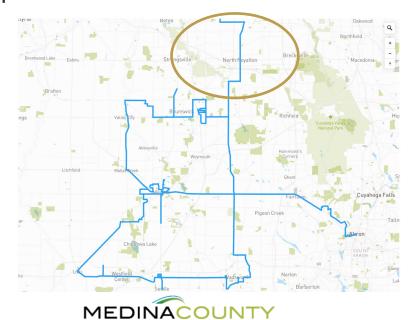


2. Retain and grow existing businesses.

Seek to enhance and expand the City's broadband network to provide faster internet speeds for businesses.

As the world emerges from the COVID-19 Pandemic it has become even more clear that reliable and fast internet speeds are a critical public utility. Quality fiber networks can help spur economic growth and allow businesses to compete in a global market. As part of the American Rescue Plan legislation passed by the federal government in 2021, the City will be receiving funds to address the negative economic impacts of the COVID-19 Pandemic. These funds are eligible to be used to, "Invest in water, sewer, and broadband infrastructure, making necessary investments to improve access to clean drinking water, support vital wastewater and stormwater infrastructure, and to expand access to broadband internet." The City should consider utilized a portion of these funds to create a high-speed broadband network around the existing industrial parks and Royalton Road corridor where the majority of the City's industrial, retail, and office establishments exist.

The Medina County Fiber Network (MCFN) has available high-speed internet running along State Road within the City today (see network map to the right). The MCFN was established in 2011 and is a project managed through the Medina County Port Authority. Funded through revenue development bonds, the MCFN was designed to help companies grow through access to the best technology available. The MCFN



offers scalable internet services with network point-to-point access speeds ranging from 5 Mb to 10 Gb. MCFN also offers high speed data transport capabilities and managed dark fiber service which includes the highest quality fiber optic cabling, above and below ground fiber construction, route planning and path diversity, traffic mapping, ongoing maintenance and testing, sizing and fiber ring optimization. The City should consider partnering with MCFN to extend service down Royalton Road to Abbey Road and within the City's existing industrial parks.

Broadband Case Study - FairlawnGig (Fairlawn, OH)

FairlawnGig is a municipal broadband utility established by the City of Fairlawn that delivers a better Internet experience for residents and businesses in Fairlawn and the Akron/Bath/Fairlawn JEDD. FairlawnGig's high-speed fiber network offers an unprecedented level of Internet service to the Fairlawn area with a gigabit fiber connection to every home and business. The City of Fairlawn established FairlawnGig as a forward-thinking, economic development strategy founded on the belief that business growth, innovation, and community transformation will follow with every connection. The \$10.1 Million capital investment required for the fiber network that passes every home and business was paid for through the City's General Fund. The network is a completely city staffed (and city owned), self-sufficient Internet Service Provider. Services for local residents and businesses include internet and phone.

Continue efforts to engage local businesses in events such as the semiannual business breakfast to foster and maintain good city/business relationships. In light of the COVID-19 Pandemic, consider conducting a virtual business roundtable.

Continue utilizing economic incentives like Tax Increment Financing (TIF) and Community Reinvestment Areas (CRA) to help business growth.

TIF is an economic development tool that enables local governments to finance public infrastructure improvements and, in select circumstances, privately owned economic development projects. TIFs are authorized to be created within "blighted" areas and must prove characteristics of economic distress to qualify. TIF captures the increase in property value of real property. An existing assessed value is established prior to the TIF's enactment. This sets the taxable value of the property for the life of the TIF. As improvements are made to the public infrastructure in the district and/or development occurs, property values should increase. That projected increase in property value is used to fund the aforementioned public

improvements throughout the district.

The City has enacted multiple TIFs including around the Traditions development.

A CRA provides real property tax exemptions for property owners who renovate existing or construct new buildings. Community Reinvestment Areas are areas of land in which property owners can receive tax incentives for investing in real property improvements.

The entire City of North Royalton is included within a CRA district.

3. Permit denser residential uses within mixed-use developments and around retail nodes with existing community assets.

Within TCD, Wallings & State Road Node, York & Sprague Road Node

Each of the areas listed above are locations where denser residential development should be considered. Each has ample retail amenities (e.g. grocery stores, service retail, convenient stores) and the Wallings and State Road node as multiple community assets (e.g. the public library, YMCA and soccer fields) to attract and sustain denser development. Creating density around these nodes will increase the areas walkability and improve the area's economic vitality.

City of Powell, Ohio - Mixed-Use, Nodal Development

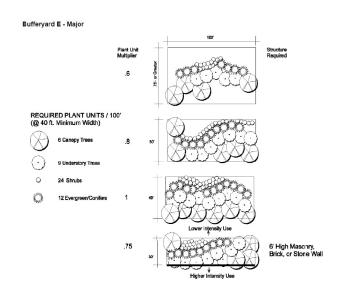
The City of Powell is located outside the I.R. 270 loop on the exurban fringe of Columbus. Though an outer ring community, Powell has embraced compact, mixed-use developments particularly around its small, historic town center.

The Champion Companies recently completed a mixed use developing consisting of 64 one and two bedroom apartments as well as a number of retail sites with frontage along W. Powell Road. This development is within a quarter mile of the historic town center and encourages walkability around the City's community assets.



Ensure adequate buffering between single family residential areas and denser, mixed-use developments is maintained. Consider editing bufferyard standards within the zoning code to provide more detail.

Existing buffering standards are vague and rely on the building commissioner and the planning commission to make individual determinations if the buffering standards have been met for a certain development. Detail could be added to the zoning code to provide more specific requirements to buffering between single family residential properties and higher intensity developments. Though some existing zoning designations specify buffering setbacks required, a table within Section 1288 would help make it clear as to what setback is required between incompatible uses. An example from the City of Hudson is shown to the right. The more the adjacent use is incompatible, the larger and more intense the buffering requirement. More detail could also be provided as to the layout and density of vegetation required within each bufferyard area. Options could be provided to the developer to provide increased vegetation density for a reduced bufferyard width, giving a prospective developer flexibility in site design.



Source: City of Hudson, Ohio

- A. Bufferyard A-Minimal: Minimum bufferyard width five feet. (See Figure 10)
- B. Bufferyard B-Minor: Minimum bufferyard width ten feet. (See Figure 11)
- C. Bufferyard C-Moderate: Minimum bufferyard width fifteen feet. (See Figure 12)
- D. Bufferyard D–Substantial: Minimum bufferyard width twenty-five feet. (See Figure 13)
- E. Bufferyard E-Major: Minimum bufferyard width forty feet. (See Figure 14)

Table 1 Bufferyard/Land Use Matrix										
	Single- Family Residential- Conventional Land Use	Single- Family Attached Townhome Land Use	Single- Family Residential— Open Space Conservation Subdivision Land Use	Multi- Family Residential Land Use	Village Core Non- Residential Land Use	Office Commercial Land Use	Institutional/ Civic Land Use	Retail Commercial Land Use	General Agricultural Land Use	Industrial Land Use
Single- Family Residential–Conventional Land Use	N/A	В	С	D	С	D	D	D	С	Е
Single- Family Attached Townhome Land Use		N/A	С	С	С	D	D	D	D	E
Single- Family Residential-Open Space Conservation Subdivision Land Use			А	С	С	D	D	D	D	E
Multi-Family Residential Land Use				А	В	С	С	D	D	Е
Village Core Non-Residential Land Use					N/A	N/A	N/A	N/A	N/A	N/A
04: 0	+		+				Δ.	D	0	

4. Stimulate and support local business and entrepreneurial activity.

Provide office and/or technology incubation space/program within the town center for small businesses and startups.







Connections Assessment

Due to the nature of the City's growth from a largely rural to a suburban community many of the City's main roadways lack bicycle or pedestrian infrastructure. The City was designed for and still functions as a quiet, bedroom community where residents commute to and from work by car. While this will almost always be true, there is growing demand locally to improve quality of life amenities including bicycle and pedestrian connectivity. In locations where bicycle or pedestrian infrastructure does exist these facilities are often either substandard or contain large gaps. Existing subdivisions generally have pedestrian facilities with adequate internal subdivision connectivity. However, there is limited interconnectivity between subdivisions or along major roadway corridors. These interconnections are where the City can most improve bicycle and pedestrian connections for residents.

The City does boast a segment of the Cleveland Metroparks multi-purpose bike trail. This trail is a true regional asset that runs from Lakewood to

the Cuyahoga Valley National Park and the Ohio & Erie Towpath Trail spanning over 30 miles. The trail links to many recreational assets including an archery range, toboggan shoots, a zip line course, multiple hiking trails, mountain bike trails, and picnic areas. The City has begun to link the multi-purpose trail to the City and constructed a multi-purpose trail along Bennett Road from Royalton Road to Atkins Road. A short segment of trail remains unfinished between Atkins Road and the Cleveland Metroparks multi-purpose trail. The City was awarded construction funding recently from NOACA to fill in this gap and link the civic center to the Metroparks trail.

The City has been diligently working to upgrade their bicycle and pedestrian network in recent years. In 2015, the City and NOACA completed an Alternative Transportation Study which investigated deficiencies in the current bicycle and pedestrian network and prioritized future improvements. The City has received funding to construct priority improvements from NOACA's Transportation for Livable Communities Initiative (TLCI) each year from 2015 through 2019. These

Connections Assessment

funds helped the City construct sidewalk along the western side of State Road from Atkins Road to Memorial Park.

In addition, the City and the Cuyahoga County Department of Public Works recently completed the widening of Royalton Road from West 130th Street to York Road. As part of this project sidewalks were constructed along both sides of Royalton Road, adding 1.65 miles of new sidewalk.



Royalton Road (SR 82) - Looking West

Roads & Traffic

The City has good access to both I-71 and I-77 which makes commutes around the region easy for residents. All city residents are within five miles of a highway interchange. The Ohio Turnpike bisects the City and has interchanges with both I-71 and I-77 which provides convenient east-west access across the State. The City has three State Routes, SR 3 (Ridge Road), SR 82 (Royalton Road), SR 94 (State Road) and several County Routes that act as the main thoroughfares throughout the City. Royalton Road is the City's main east-west corridor and the busiest City street with western sections averaging over 23,000 vehicles per day. Royalton Road is the main commercial and industrial corridor of the City. In general, vehicle traffic numbers are moderate along State and County roads. Average annual daily traffic (AADT) volumes for all State and County roads are illustrated on Page 55. The City currently has no roadway segments or intersections on the Ohio Department of Transportation's (ODOT) Highway Safety Priority Lists. The regional Municipal Planning Organization (MPO), The Northeast Ohio

Areawide Coordinating Agency (NOACA), also



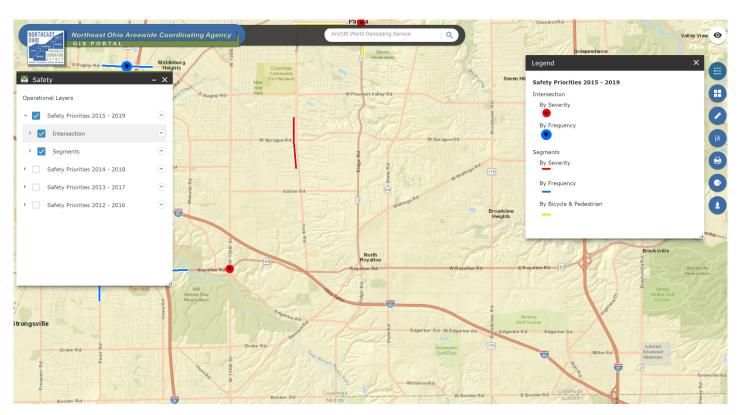
State Road (SR 94) - Looking South

Connections Assessment

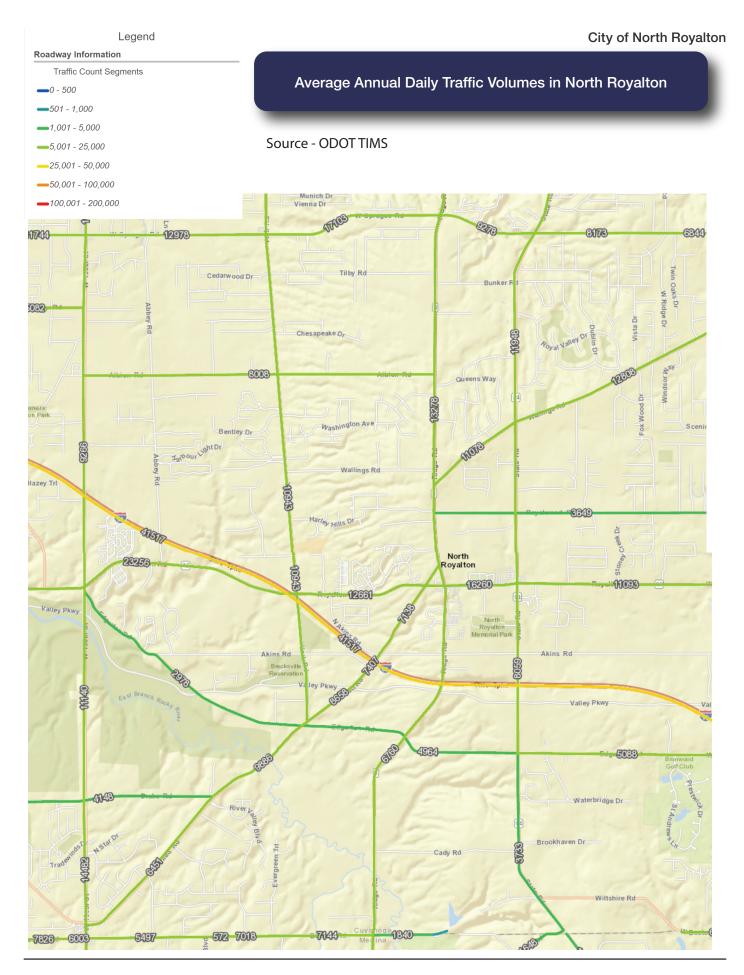
maintains a roadway safety priority list for the five-county region. As illustrated below, the City does have two locations on NOACA's crash severity priority list. The West 130th Street and Royalton Road intersection ranks 16th in the region in intersection crash severity, while a segment of York Road from Lynn Road to the City border ranks 34th in the region for crash severity along roadway segments.

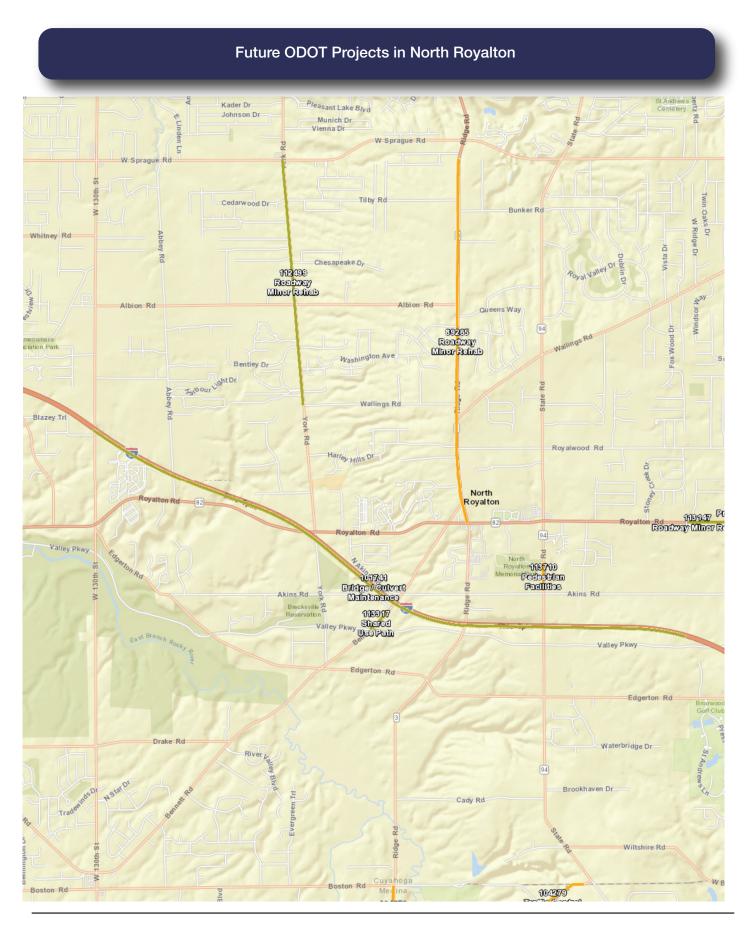
There are several roadway and sidewalk projects planned along City corridors in the near future. The map on Page 56 illustrates these improvements.

The Greater Cleveland Regional Transit Authority (GCRTA) operates one permanent bus route through the City, Route 135 called the North Royalton Loop. This route begins at the York Road Recreational Fields and runs down Royalton Road to I-77.



Source: NOACA GIS





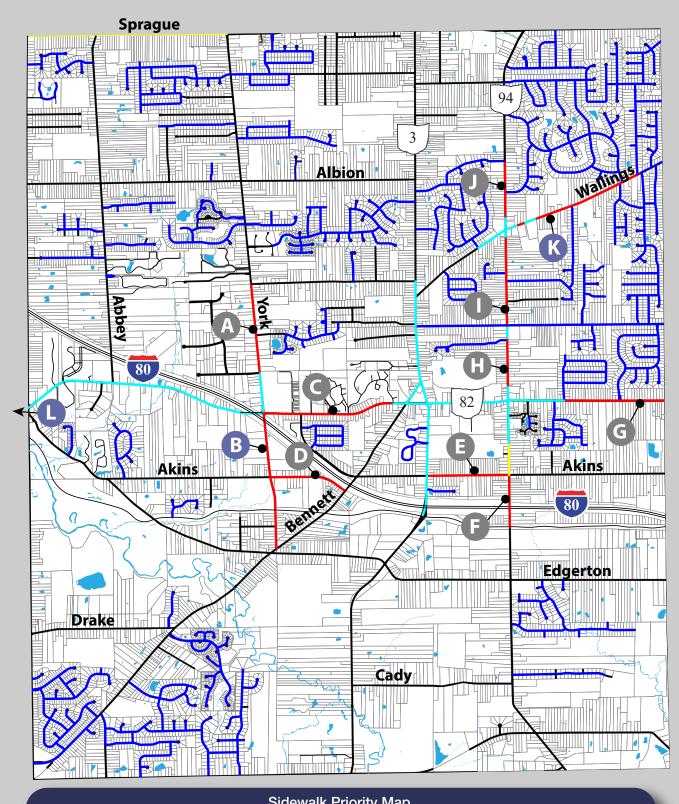
1. Enhance physical bicycle and pedestrian infrastructure within the City to promote safe and convenient biking and walking alternatives to City assets for residents.

Sidewalk Priorities

Sidewalk priorities were determined from feedback from the steering committee and City staff. The City completed an Alternatives Transportation Study in 2015 that identified various priority sidewalk segments throughout the City. As mentioned previously, the City has been vigilant in acquiring grant funding to construct multiple sidewalk segments from that plan. Remaining sidewalk priorities were incorporated with new priority segments from

this planning process. The table below describes each priority sidewalk segment and preliminary costs from the 2015 Alternative Transportation Plan. A map illustrating sidewalk priorities is on the following page. Three sidewalk segments, York Road between Royalton and the All Purpose Trail, Wallings from State Road to Forestwood Lane, and Roylaton Road just west of West 130th (in Strongsville) have been detailed further within this plan.

Recomn	nendation	Linear Feet	5' Sidewalk (one side) Cost at \$138/ft*	5' Sidewalk (both side) Cost at \$138/ft*
Α	York – Alpha Dr to Wallings	3,060	\$422,280	\$844,560
В	York – Royalton to Valley Parkway	3,831	See Detailed Plan & Estin	mate on following page
С	Royalton – York to Glenmont	2,968	\$409,584	\$819,168
D	South Akins – Bennett to York	1,188	\$163,944	\$327,888
E	Akins – Ridge to State	2,867	\$395,646	\$791,292
F	State – Atkins to Valley Parkway	1,894	\$261,372	\$522,744
G	Royalton – Stoney Creek to Broadview	1,907	\$263,166	\$526,332
Н	State – Royalton to Goodman	1,657	\$228,666	\$457,332
I	State – Royalwood to Wallings	2,256	\$311,328	\$622,656
J	State – Wallings to Castle	2,467	\$340,446	\$680,892
K	Wallings – State to Foxwood	4,720	See Detailed Plan & Estin	mate on following page



Sidewalk Priority Map

- Existing Sidewalk
- Existing Sidewalk Completed Since 2015 Alternative Transportation Plan
- Sidewalk Under Construction
- Priority Sidewalk Segments
- Roadway No Sidewalk
- 1 Priority Sidewalks
- 1 Priority Sidewalks (detailed on following page)



York Road from Royalton Road (Rt 82) to the APT-Valley Parkway

The construction of walk along York Road from Royalton Road to the Valley Parkway will create the eastern end of an over 6-mile continuous walking loop (see Page 60). The loop will span North Royalton and Strongsville running along Royalton Road, York Road and the Valley Parkway. The York Road walk will begin at Royalton Road, utilizing the Ohio Turnpike Right-of-Way (ROW), just west of the Turnpike bridge, and proceed approximately 650 lineal feet southwest to the York Road. This route was choosen to avoid traversing under the existing

Turnpike bridge along York Road which has limited shoulder width between the roadway and the abutment slopes. A marked and signed mid-block crosswalk is proposed at the north entrance of the York Road Recrational Fields. The walk continues along the eastern side of the roadway for approximately 3,000 lineal feet. There is a crossing required at Akins Road which will be appropriately identified. The section south of Akins includes two culverts which will have to be modified to ensure pedestrian safety, including, but not limited to railings, additional walls, drainage modifications and guard rail relocations.

Preliminary Estimate

Item	Unit Cost	Total
5-foot concrete walk	3500 lineal feet @ \$110	\$385,000
ROW fence	650 lineal feet @ \$25	\$16,250
Crosswalks	Lump Sum	\$10,000
Culvert modification	Lump Sum	\$80,000
	\$491,250	
	\$123,000	
	Total	\$614,250

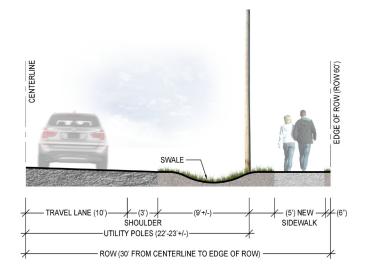






Wallings Road from State Road to Forestwood Lane

Wallings Road east of State Road generally lacks sidewalks to connect neighborhoods directly to the east to local assets including the library, YMCA, and soccer fields. The existing right of way width (60') can easily accommodate sidewalks on both sides of the roadway. Utility poles run along each side of the corridor as well as shallow ditches. These impediments can be avoided if the walk is constructed at the edge of the right-of-way, similar to walk constructed in front of the library. There are close to 50 driveway aprons that must be crossed that appear to be in good condition and do not present grading issues or hazards. A marked and signed mid-block crosswalk is proposed to link the library and the soccer fields.



Proposed Typical Section
Wallings Road - Looking East

Preliminary Estimate

Item	Unit Cost	Total
5-foot concrete walk	7000 lineal feet @ \$110	\$770,000
Crosswalks	Lump Sum	\$15,000
	Subtotal	\$785,000
	25% Contingency	\$200,000
	Total	\$985,000





Royalton Road to All Purpose Trail from West 130th

To complete an over 6-mile walking loop along Royalton Road, York Road and the All Purpose Trail within the Metroparks, a 600 Ft section of sidewalk needs to be constructed to the west of West 130th Street in Strongsville. The City of North Royalton will need to coordinate efforts with Strongsville to implement this section of walkway. This connection was recommended over alignments that connected sidewalk along West 130th Street to the All Purpose Trail due to steep slopes. The walk width will vary from 5 to 6 feet and due to steep side slopes, there will be no tree lawns along approximately 250 lineal feet of the walk. A retaining wall will be required in this area, varying in height from 2 to 3 feet.

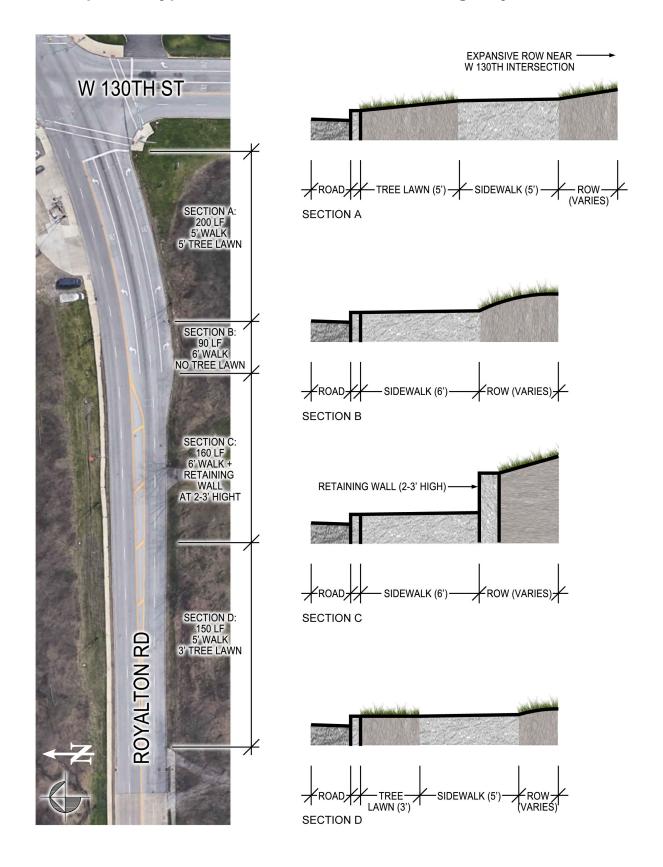


Royalton Road (SR 82) at West 130th Looking West

Preliminary Estimate

Item	Unit Cost	Total
5-foot concrete walk	350 lineal feet @ \$110	\$38,500
6-foot concrete walk	320 lineal feet @ \$130	\$33,500
Retaining Walls 160 lineal feet @ \$300		\$48,000
	\$120,000	
	\$30,000	
	Total	\$150,000

Proposed Typical Sections of Sidewalk along Royalton Road



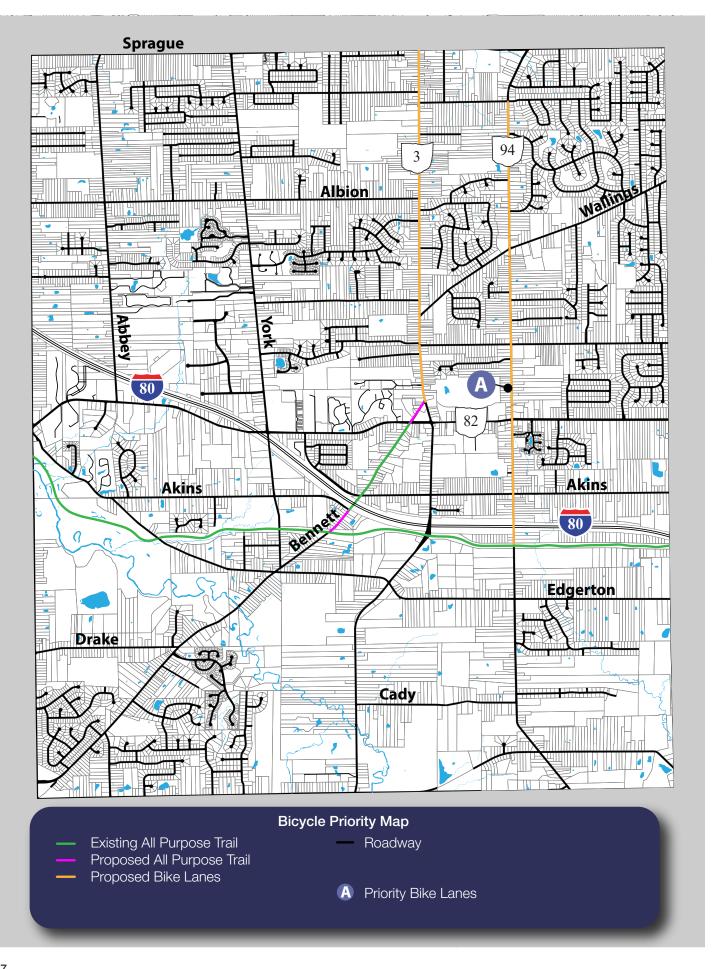


Bicycle Priorities

The City lacks strong north-south connectors to link the Cleveland Metroparks All Purpose Trail with the remainder of the City. Both the Bennett-Ridge Road corridor and the State Road corridor were considered bicycle priority connections. Each link a variety of City assets and a large portion of the City's population. Both corridors were analyzed within the table below to determine what type of bicycle treatment is most realistic to construct. Based on vehicular traffic volumes, roadway width, and existing utilities along each corridor, bike lanes would be the most cost effective bicycle improvements to construct.

Though both corridors should be a priority, the State Road corridor links more local assets and would be much easier to implement as existing shoulders already exist along much of the corridor. The existing shoulder width along the corridor ranges from four to five feet. In some locations where shoulders do not exist (e.g. the Turnpike bridge), sharrows can be placed for small stretches. A map illustrating these locations is shown on page 67. There are four signalized intersections along the corridor. Sharrow makings will be needed to help cyclists navigate major intersections (e.g. Royalton and Wallings). Minor intersections (e.g. Bunker and Royalwood Roads) could implement bike boxes to traverse the intersection. Descriptions and illustrations of these intersection improvements are shown on pages 68 and 69.

Factor	Ridge Road (SR 3)	State Road (SR 94)
Existing Pavement Width	30 Ft (curb to curb)	30 Ft (no curbs)
Existing Vehicular Lane Width	15 Ft (10 Ft in three lane sections)	10 Ft (5 Ft marked shoulders)
Existing Right of Way Width	60 Ft	66 Ft
Existing Assets Along Corridor	Would link to Bennett Road All Purpose Trail, Existing Civic Area	YMCA, Library, Memorial Park, City Hall, Future Town Center
Average Daily Traffic	13,278	11,948
Identified in Previous Plan as Potential Bike Route	Yes – Cuyahoga County Greenways Plan	No
Number of Signalized Intersections (from Metroparks to Bunker Rd)	4	4
Upcoming Improvements	Minor Pavement Rehabilitation – 2022	None





Bicycle Intersection Treatments

Bike Boxes

A bike box is a designated area at the head of a traffic lane at a signalized intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic during the red signal phase.

Bike boxes have many benefits including:

- Increases visibility of bicyclists.
- Reduces signal delay for bicyclists.
- Facilitates bicyclist left turn positioning at intersections during red signal indication. This only applies to bike boxes that extend across the entire intersection.
- Facilitates the transition from a right-side bike lane to a left-side bike lane during red signal indication. This only applies to bike boxes that extend across the entire intersection.
- Helps prevent 'right-hook' conflicts with turning vehicles at the start of the green indication.

Bike boxes are most appropriate where bicycle traffic is being encouraged or already is heavy. They are best placed at signalized intersections with moderate traffic flows and a relatively simple lane designation.

Bike boxes should be considered along State and Ridge Roads at major intersections including Royalton and Wallings Roads.



Source: NACTO - Urban Bikeway Design Guide

Bicycle Intersection Treatments

Intersection Crossing Markings

Intersection crossing markings indicate the intended path of bicyclists. They guide bicyclists on a safe and direct path through intersections, including driveways and ramps. They provide a clear boundary between the paths of through bicyclists and either through or crossing motor vehicles in the adjacent lane.

Benefits include:

- Raises awareness for both bicyclists and motorists to potential conflict areas.
- Reinforces that through bicyclists have priority over turning vehicles or vehicles entering the roadway (from driveways or cross streets).
- Guides bicyclists through the intersection in a straight and direct path

Crossing markings are typically used across signalized intersections, particularly through wide or complex intersections where the bicycle path may be unclear. These markings work well along roadways with bike lanes or cycle tracks as they continue the marked path through the intersection for riders.

Crossing markings should be considered as an alternative to bike boxes at major intersections along State and Ridge Roads.



Source: NACTO - Urban Bikeway Design Guide

Install bicycle and pedestrian support infrastructure (e.g. bike racks, bike repair stations, benches, etc.) around nodes of activity.

While creating quality multimodal connections to desired destinations is most critical to enhancing an area's walkability and bikability, supporting infrastructure also needs to be considered. Detailed below are improvements that should be considered when constructing the multimodal improvements.

(Costs below are shown as relative costs. \$ = Low Cost, \$\$ = Medium Cost, \$\$\$ - High Cost)







PEDESTRIAN WAYFINDING COST \$

Pedestrian wayfinding systems are navigational systems that help pedestrians determine where they are and where they need to go to reach a destination. Traditionally consisting of signs, wayfinding systems can now also involve GPS systems and mobile technology. Wayfinding systems can be designed for entire cities or specific districts within a city. The future Town Center could benefit from consistent pedestrian wayfinding.

BICYCLE PARKING COST \$

Installing bike racks at key intersections and adjacent to desired destinations allow a cyclist the ability to take extended trips. Bike parking can generally be accommodated within the sidewalk or treelawn. In some cases, where sidewalk width is limited, bicycle parking can be placed on the street, typically within on-street parking lanes.

BICYCLE REPAIR STAND COST \$

A bike repair stand includes all the tools necessary to perform basic bike repairs and maintenance, from changing a flat to adjusting brakes. The tools and air pump are securely attached to the stand with stainless steel cables and tamper-proof fasteners. Hanging the bike from the hanger arms allows the pedals and wheels to spin freely while making adjustments.

Traffic Calming

High vehicle speeds impact bicyclists who try to share the roadway, as well as pedestrian safety, vehicle safety and neighborhood quality of life. A number of strategies can be used to calm traffic. Using a variety of traffic calming strategies across the Clty will best control vehicle speeds.

(Costs below are shown as relative costs. \$ = Low Cost, \$\$ = Medium Cost, \$\$\$ - High Cost)







SPEED HUMPS COST \$

Unlike speed bumps, speed humps are longer and tend to be lower to the roadway. Humps can have a rounded or flat top, and the shape may depend on the length of the speed hump. While both speed bumps and speed humps can be difficult for bicyclists to overcome, both can be designed with cuts at the side to allow for easy passage for riders. Multiple bumps or humps are needed at intervals of 300 to 600 feet apart to achieve lower vehicle speeds for an entire roadway. Speed humps are cost effective and are plowable during snow events.

COLORED/TEXTURED INTERSECTION

COST \$\$

Textured or color contrasted pavement gives drivers tactile and audible cues within a traffic-calmed area. If the colors and textures of shoulders, crosswalks, or bicycle facilities contrast with those along the roadway, it will keep drivers alert and in vehicle traffic lanes. Using different textures and colors in paving will also remind drivers that they are in a trafficrestricted or traffic-calmed zone. Textured and color contrasting surfaces are often used in conjunction with one or more other traffic-calming devices.

CHICANES COST \$

A chicane is a series of alternating mid-block curb extensions or islands that narrow the roadway and require vehicles to follow a curving, S-shaped path, discouraging speeding. Chicanes can also create new areas for landscaping and public space in the roadway. The image above illustrates chicanes installed along Woodward Avenue in Lakewood to control traffic speed.

Pedestrian Crossing Treatments

Street crossings are points of conflict between vehicle and pedestrian traffic. To ensure that pedestrians are visible and safe at intersections, several proposed treatments are recommended.

(Costs below are shown as relative costs. \$ = Low Cost, \$\$ = Medium Cost, \$\$\$ - High Cost)







HIGH-VISABILITY CROSSWALK COST \$

Crosswalks that have a high level of visibility help pedestrians feel more comfortable and improve safety for both pedestrians and drivers. The installation of highly visible crosswalks increases the likelihood that drivers will see pedestrians crossing.

Examples of high-visibility crosswalks include those with a ladder design or diagonal markings. Additionally, crosswalks become more visible as their width increases.

MEDIAN REFUGE ISLAND COST \$\$

A pedestrian refuge island is one that creates a protected space in the median or center of a street to assist bicycle and pedestrian crossings. Two-way streets with more than two lanes can be difficult for both bicyclists and pedestrians to cross. The construction of a pedestrian refuge island allows people to wait for vehicle traffic to dissipate from a protected gap in the median.

CURB EXTENSION COST \$\$

Curb extensions are traffic calming devices that physically narrow the roadway, while also giving the appearance of a much narrower roadway. They can create shorter crossings for pedestrians and also reduce vehicle speeds leading to a safer environment for both drivers and pedestrians.

Connection Strategies

2. Review and revise existing subdivision regulations so that safe and connected multimodal facilities are encouraged throughout the City.

Revise the minimum sidewalk widths along any roadway to 5 feet and to 8 feet when the sidewalk is contiguous to a roadway.

Current subdivision regulations specify 4-foot-wide sidewalks on public streets and 5-to 7-foot-wide contiguous sidewalk widths along major arterials. Federal Highway standards recommend 5-foot-wide sidewalks within treelawns and 8-foot-wide contiguous sidewalk widths.

Street Class	Min. Right of Way (ft.)	Back to Back of Curbs (ft.)	Type of Curbs	Pavement, Thickness an Type	Sidewal Width (i
Public Streets	60	Min. 25	Vertical	(Note 1)	4
Local collector	70	28 to 36 (Note 2)	Vertical	(Note 1)	5
Collector	80	36 to 40	Vertical	(Note 1)	5
Industrial	60 to 80	30 to 40	Vertical	By Engineer	-
Major arterial	80 to 100	1 @ 50 2 @ 24 plus	Vertical	By Enginee	5 or 7 when contigue to a curb
Major arterial (commercially or industrially zoned property)	80 to 100	1 @ 50 2 @ 24 plus	Vertical	By Engineer	6

Source: City of North Royalton

Reduce the maximum block length allowed within a new development from 1,400 to 1,200 feet.

Shortening minimum block lengths allow for pedestrians to traverse their neighborhoods easier and provide more connectivity within subdivisions.

Revise the code to include provisions for a 20-foot-wide walking path easement between sidestreets within subdivisions when the block length exceeds 900 feet.

Providing walkway easements between long block lengths is another way to encourage walkability within a subdivision. The easement width of 20 feet allows for a 10-foot-wide path and buffering to be constructed within the easement.





Recreation & Environmental Assessment

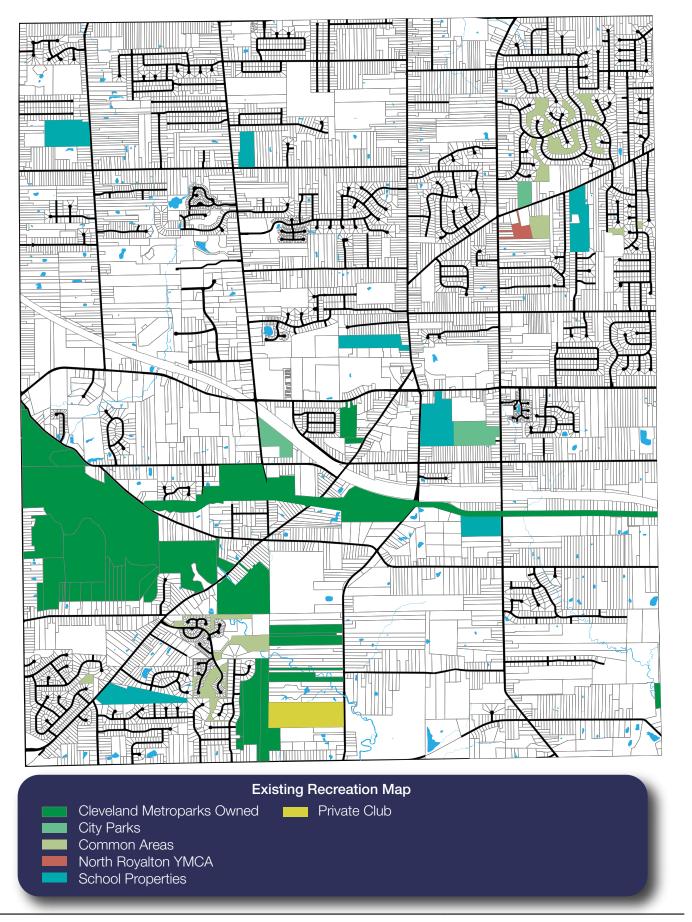
The City is home to Cleveland Metroparks Mill Stream Run and Brecksville Reservations. These reservations provide ample green space for residents as well as an all-purpose trail, archery range, active dog park, picnic areas, shelters and a multitude of hiking trails. Cleveland Metroparks have purchased property between Royalton and Bennett Road, called the Elk Springs Property. Cleveland Metroparks in partnership with the City will be upgrading this property to be a passive park with a trailhead, walking trails, and picnic areas. Cleveland Metroparks and the West Creek Conservancy has been active in conserving land along the East Branch of the Rocky River and are continuing to pursue opportunities to expand conservation efforts when possible.

The City has three community parks designed for active recreation and community use: Memorial Park adjacent to the high school with access from State Road, north of Atkins; Heasley Soccer Fields on Wallings Road across the street from the County Library, and the York Road Recreation

Field, on York Road south of the turnpike Although these areas have not maintained the natural character of the land, they are open spaces and provide the potential for stormwater management and habitat.

The North Royalton Recreation Board oversees the operations of all municipal recreation facilities and programs. The board includes at least one member of City Council and one member of the Board of Education. This partnership ensures that the local recreation facilities and programs are coordinated and not redundant. The Recreation Department offers numerous and innovative programs for residents of all ages.

The map on the following page details existing recreational facilities within the City.



Recreation & Environmental Assessment

Land in North Royalton falls into different watersheds based on where water drains. The majority of the land in North Royalton drains into the East Branch of the Rocky River, while the northeast corner of the City drains to the Cuyahoga River through either Big Creek or Chippewa Creek (see Watershed Map on the following page). Understanding the interconnectedness of the ecosystem helps underscore how the conservation and protection of natural features within North Royalton are important not only to residents and businesses in North Royalton, but also to those within the entire watershed in terms of flooding, erosion, and water quality.

Most development within North Royalton has occurred on flat parcels of land, where the topography has not been a deterrent. As these desirable sites become developed, the steeper, more "difficult" sites remain to be developed. Often efforts to make these remaining "difficult" sites developable require extensive grading, deforestation, filling, and ground stabilization, yet slopes above a 12% grade are typically composed of fragile, highly erodible soils. While steep slopes provide visual interest and contribute to the City's character, any significant disturbance to the hillside's environment may result in land instability, alteration in drainage patterns, soil erosion, sedimentation to waterways, and loss of scenic value. Therefore, it is important to identify those areas of slope that could be at risk to degradation by development. The Development Constraints Map on Page 78 shows areas of the City where there are slopes that are 12% or greater. A major concentration of these steep slopes is in the southern half of

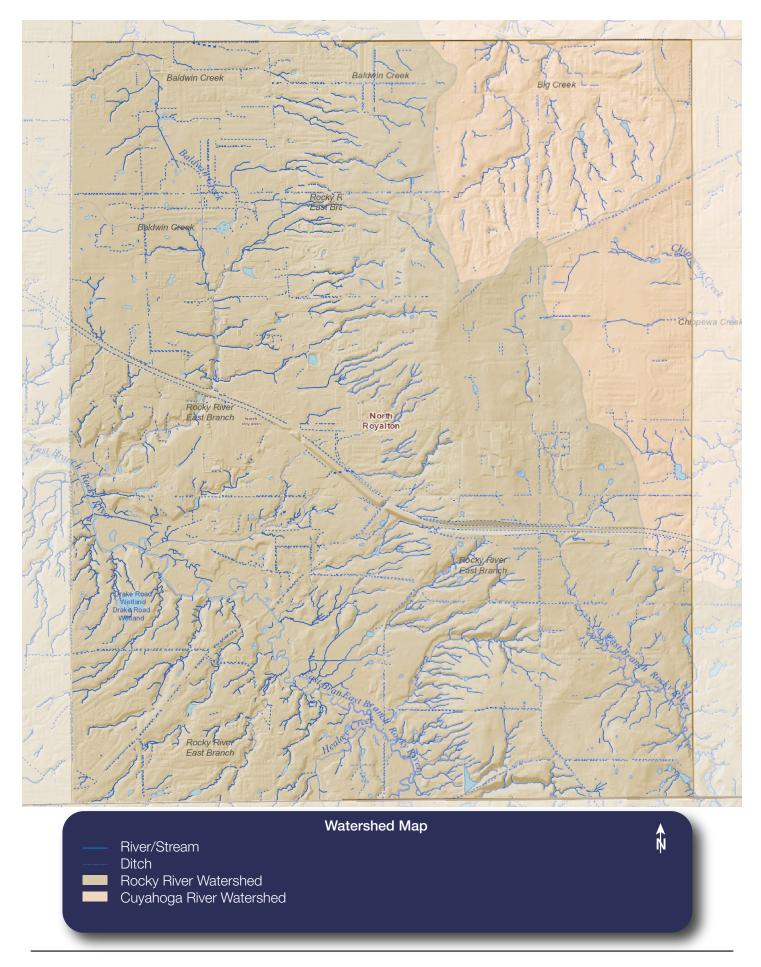
the city, where slopes sometimes exceed 50%.

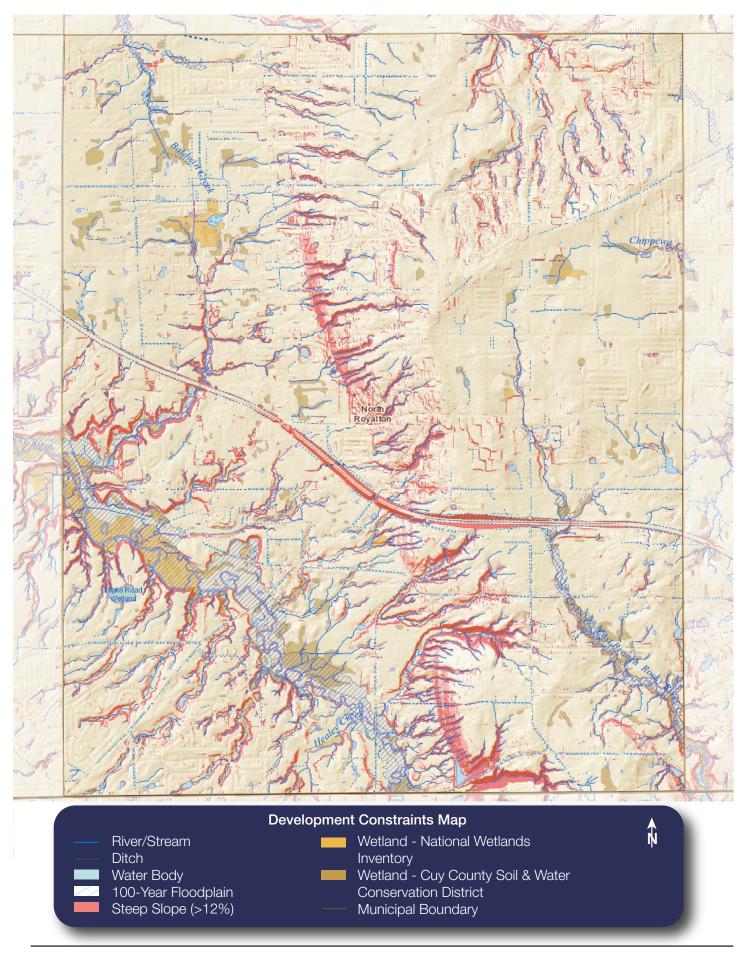
In general, this area is defined as being south of Edgerton Road, north of Wiltshire Road, west of State Road, and east of Ridge Road.

Floodplains are flat, low lying, bottom land areas along stream banks where stormwater accumulates due to clay soils and lack of slope. Floodplains provide excellent habitats for fish and wildlife by serving as breeding and feeding grounds.

The "100 Year Flood Plain", is defined by the Federal Emergency Management Agency as an area subject to flooding at least once every one hundred years. Development within a floodplain may be subjected to severe water damage during wet periods. In addition, development in floodplains can exacerbate the potential for flooding in areas downstream from the development as a result of increased run off and disruption of natural vegetative cover.

Wetlands are areas covered by water or areas having waterlogged soils for long periods during the growing season. They generally include swamps, marshes, bogs and similar areas. Wetlands are an important natural resource because they reduce flooding by providing temporary water storage during storm events, which slows the downstream flow of water. Since wetlands detain water, pollutants have a chance to filter out, thus improving water quality. Some wetlands are hydrologically connected to groundwater systems; therefore, wetlands can be important to recharging the groundwater reservoirs. Wetlands also provide food and habitat for many animals.





1. Continue to look for opportunities to expand recreational choice throughout the City.

Implement recommendations from the Memorial Park Master Plan. Improvements will enhance park facilities and improve access.

Improve existing facilities, including

- The skate park
- Tennis and basketball courts
- Volleyball courts
- Upgrading shelters
- Improved landscaping on the State Rd frontage
- Greener/storm water efficient parking areas
- Picnic areas adding more furnishings and shade

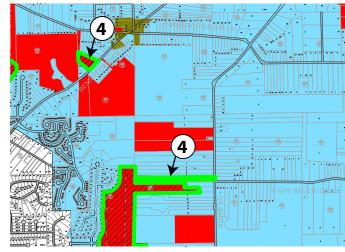
Add new facilities based on resident input, including

- Pickleball courts
- Splash pad
- All-purpose perimeter trail
- Movie and performance area including stage and lawn seating
- Year-round climate-controlled pavilion
- Great lawn for special events
- Additional rest rooms
- More natural areas; less mowing



Continue to work with regional partners (e.g. The Cleveland Metroparks, West Creek Conservancy, etc.) to conserve environmentally significant land along the East Branch of the Rocky River and within areas south of the Turnpike to maintain the City's rural character.

Cleveland Metroparks have added over 157 acres of conserved land within the City of North Royalton since the last Master Plan Update in 2014. Cleveland Metroparks and West Creek Conservancy are working hard to continue to conserve vital wetlands and riparian areas along the East Branch of the Rocky River.

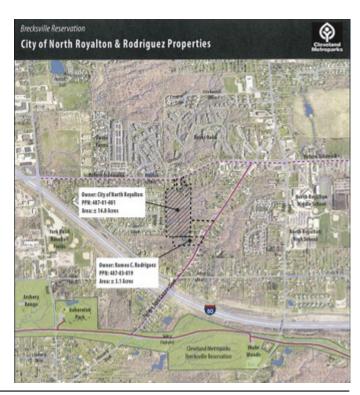


Metroparks Recent Acquisitions

Support the creation of a passive park on the old Elek Springs property along Bennett Road.

Elek Spring is located near the area of Royalton and Bennett Roads. The property is adjacent to an all-purpose trail that runs along the western side of Bennett Road south to Atkins Road and an additional future trail to be constructed by the City of North Royalton would provide a connection from the 14702 Bennett Road property south to Brecksville Reservation and Valley Parkway. The property includes a ravine, streams, old growth trees, as well as a natural spring.

The proposed plan will include a natural foot trail, approximately a half of a mile in length which would be a couple of feet wide and loop within the interior of the property, and up to Royalton Road. A small trailhead and picnic area will also be constructed along Bennett Road.



2. Encourage sustainability throughout all City properties and private developments.

The City should utilize green infrastructure to reduce surface water runoff within public property and along roadway right-of-ways where practical.

Create regulations that promote the use of green infrastructure within surface parking lots to reduce stormwater runoff.

Creating green and sustainable parking lots involves several design elements. These elements include maximizing shading and greening, incorporating naturalized drainage, utilizing paving that infiltrates, using energy efficient lighting and renewable energy generation, adding safe pedestrian circulation, and successfully integrating and connecting parking in the community. Any combination of these elements can be used in new parking lots or the redevelopment of existing lots.

These elements provide many options to make parking lots more sustainable. When natural drainage systems, including bioretention, are combined with permeable paving systems, extensive greening, and sustainable practices, a parking lot can be transformed into an environmental asset.

The City should expand on recent revisions to off-street parking and loading standards to incorporate stormwater management requirements.

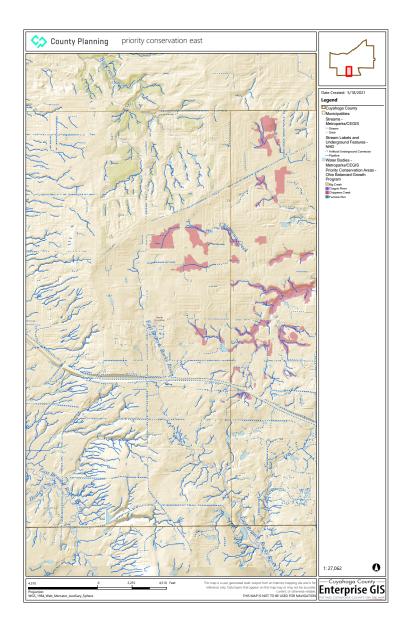


Source : Green Sustainable Parking Guide

Continue to protect watershed health guided by the recommendations of the Balanced Growth Plans.

North Royalton is the confluence of several watersheds: it is the site of the headwater streams of Chippewa Creek, Big Creek, and portions of the Rocky River including two of its tributaries, the East Branch and North Royalton 'A'. Headwater streams are the uppermost streams in a river network. These streams are critical for trapping floodwaters, recharging groundwater, removing pollutants, providing fish and wildlife habitat, and sustaining the overall watershed health. Development that harms headwater health will harm runs, lakes and bays downstream. The map to the right illustrates priority conservation locations identified in the Big Creek and Chipewa Creek Balanced Growth Plans. The City should:

- a) Continue to enforce riparian and wetland setbacks.
- b) Use the watershed plans, which detail development and conservation of natural resources, as a guide to decision making within North Royalton.
- c) Continue to work with watershed groups, land conservancies and the Cuyahoga Soil and Water Conservation District and seek their input on development and conservation initiatives.

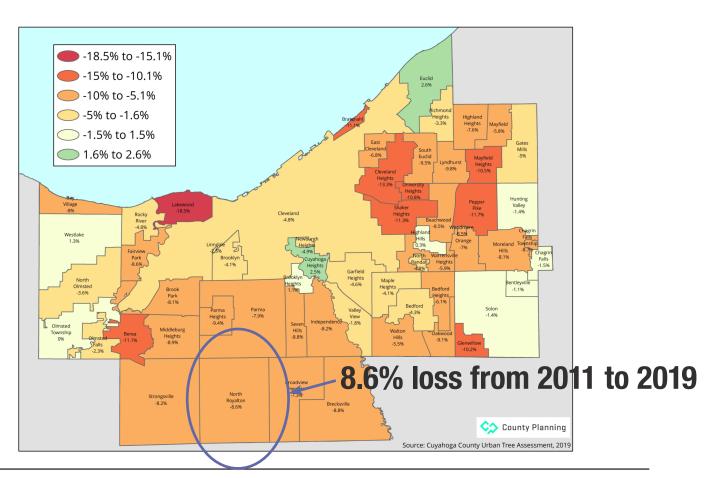


Consider increasing the City's tree canopy to help mitigate the impacts of the urban heat island, flooding, and other climate impacts.

Like much of Cuyahoga County, the City has lost tree canopy cover since 2011 (see map below). A tree canopy provides many benefits to communities: improving water quality, reducing erosion, reducing stormwater runoff, saving energy, reducing air pollution, enhancing property values, providing wildlife habitat, facilitating social and educational opportunities, and providing aesthetic benefits. Trees are vital for many reasons such as reducing heat island effect and enhancing overall mental and physical health.

In his 2019 State of the County Address, Cuyahoga County Executive Armond Budish announced a significant new program to expand the percentage of the urban tree canopy throughout Cuyahoga County. Cuyahoga County will contribute \$5 million dollars over the next five years for planning, and to evaluate, remove unhealthy trees, maintain trees, and plant trees for a significantly improved tree canopy.

The Healthy Urban Tree Canopy Grant Program is a competitive grant program has been established to complement the efforts of the Cuyahoga County Department of Sustainability and the strategies published in the Cuyahoga County Climate Change Action Plan to combat the deleterious effects of climate change and its impacts to residents. The City should pursue this grant funding source to improve the tree canopy.



Considering offering a tree replanting program to replace dead street trees.

Currently the City has no program in place to replace or plant new street trees. The City should look to provide either an incentive program to residents and businesses to reduce the cost of replacing street trees or a program where residents can request new street trees if desired. The City could look to share the cost with the

owner provided the owner maintain and care for the tree. If this program is pursued, the City should specify tree types that are acceptable within treelawns. Care should be taken in selecting species that are salt resistant and whose height and canopy don't interfere with existing utilities.

City of Worthington Ohio - Tree Replacement Program

Each year, the City of Worthington offers City residents the opportunity to purchase trees for planting along the street right of way in front of their homes at half the price they would pay purchasing their tree at a nursery or plant store. The trees offered for sale are recommended by the Worthington Arbor Advisory Committee, a volunteer group of experts who consider several biological and environmental factors when selecting tree species.

\$90

Cost to the Resident

18 Months

Tree guaranteed, one replacement allowed

Adopt hillside regulations that restrict development on steep slopes.

Currently, steep slopes are mentioned only in the context of riparian setback regulations and are required to be protected only if they are adjacent to stream. However, not all slopes in North Royalton are adjacent to streams. Hillside preservation is an important component to a healthy environment and maintaining property values. Hillsides often feature unique ecosystems and organisms, but are also fragile, and prone to soil erosion if disturbed, which can damage waterways, properties and property values.



Placemaking Assessment



The City lacks cohesive signage and streetscaping elements along major roadway corridors and within City-owned properties. The city's commercial corridors have standard highway lighting, signage and limited streetscaping elements (e.g. planters, banners, medians, etc.). While portions of the Royalton Road corridor have erected decorative fencing when private properties are redeveloped, the fencing is inconsistent and does not define the corridor. Decorative lighting is present at the Village Green but is not represented in other portions of the City

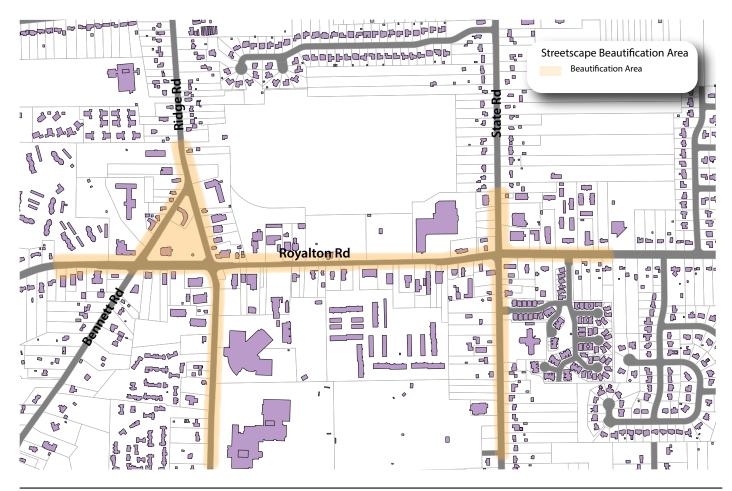


Placemaking Strategies

- 1. Enhance elements within the public realm (i.e. within roadway right-of-ways) to establish a "sense of place" that reflect the City's small town, suburban/rural character.
 - Create consistent streetscapes along major roadways to provide a cohesive sense of place.

The City's existing civic and retail center should have consistent streetscaping elements to create character and build a "sense of place". The map below illustrates the potential boundaries of a beatification district. The area includes Royalton, Ridge, State and Bennett Roads and extends south along Ridge and State Roads far

enough to include the High School and Memorial Park. Though existing roadway right-of-way are relatively tight along Royalton, State and Ridge Road this is one element that the City controls and various improvements can be constructed to improve the visual appearance of the streetscape. Improvements could be as simple

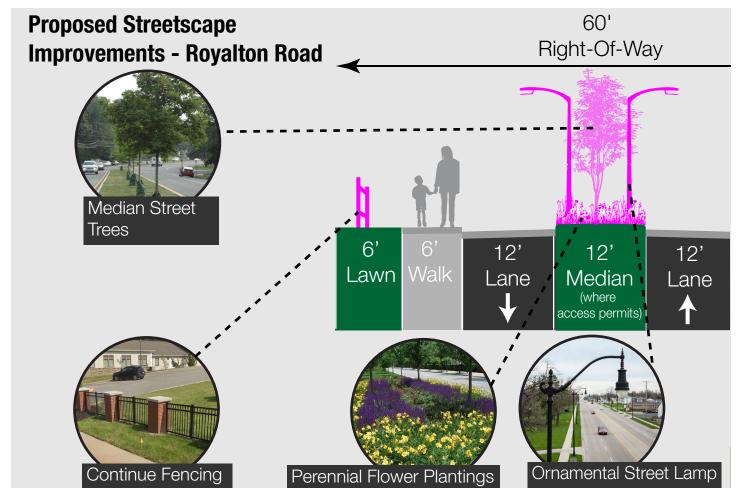


Placemaking Strategies

as pedestrian scaled street lighting, planters, decorative fencing and signage. Through discussions with the steering committee, a particular interest in encouraging walkabilty emerged and an overall "small town" theme must be conveyed. This district should incorporate themed entrance and wayfinding signage to let users know that have arrived. The City should continue to work with private property owners along Royalton Road when redevelopment occurs to construct the decorative fencing that lines portions of the corridor (see picture to the right). Consideration should be given to creating streetscaping design standards within the beautification district boundaries to formally

establish and detail streetscaping elements. Below are ideas to consider when determining future streetscape amenities along Royalton Road.





Placemaking Strategies

Create access management standards along commercial corridors to limit driveway access points and improve traffic flow.

Traffic circulation is always important when planning for development or redevelopment. The traffic demands that are created by development along major roadways can be dramatically affected by multiple curb cuts and uncoordinated access points. Access management involves planning and coordinating the location, design and operation of driveways together with internal roadway design features. Access management techniques such as driveway spacing requirements, shared access drives, cross access easements, right in/right out

only access, frontage roads, and medians can provide automobile access to businesses along the corridor in a safe and efficient way. These techniques can also help maintain capacity of the roadways and drastically improve safety. Some communities adopt access management as a separate part of the zoning or subdivision ordinance that applies to all roadways within the community. Several state departments of transportation and local county engineer offices have additional standards for access management which can also be consulted.





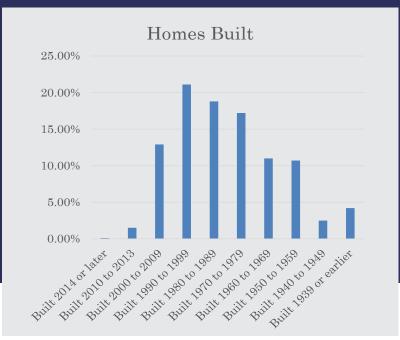
Housing Assessment

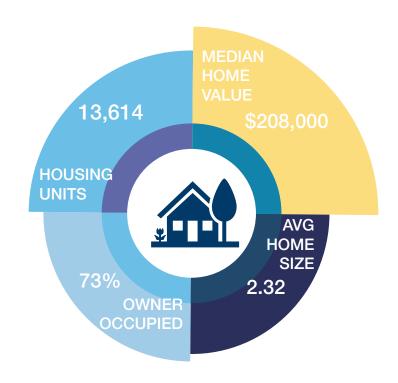
The City of North Royalton boasts a diverse housing stock with various housing options available including small and large single-family homes, apartments, condos, townhomes, senior living communities, and large rural homes.

70%

of homes built between 1970 and 2010

There are 13,614 housing units within the City according to the 2019 American Community Survey which is a slight increase (1.6%) over the total housing units in 2010. The City experienced a housing boom from 1970 through 2010 in which roughly 70% of all housing units were constructed. Due to the housing recession in 2008, housing starts have slowed considerably within the City. Annual single family housing starts since 2014 are shown on Page 90. Single-family housing starts range from 16 to 43 annually. Due to the relatively recent housing expansion in the City, North Royalton has one of the youngest median household ages in the County. It should be noted that though the housing stock is newer, a vast majority of homes within the City will begin to





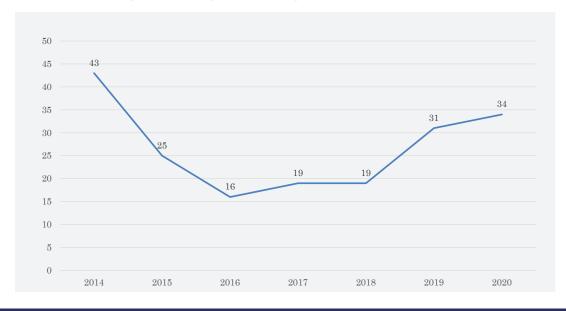
Housing Assessment

need extensive maintenance in the coming years. Considerations to creating and enforcing a housing maintenance code may me necessary to maintain quality housing stock.

Home values in the City are strong as the median home value is \$208,600. 73% of the housing units in the City are owner occupied. Particularly for a suburban community, this speaks to the City's housing diversity in offering many rental options for young couples or the elderly to "step in" or "step down" within the community.



Single Family Housing Starts 2014 - 2020





Continued Senior Housing Demand

There have been multiple additions to the senior housing stock in the City with both Traditions and the Omni developments coming online in 2021. Though senior housing options are being added to the City's housing stock, both regional and local trends suggest that an increasing numbers of seniors desire to "age in place". Projections by both the County and the State suggest that there will be a continued increase in senior housing demand over the next 20 to 30 years.

Housing Strategies

1. Continue to provide a diverse offering of various housing types including "step in" and "step down" housing options within the City.

Maintain rural residential zoning south of Ohio Turnpike to preserve the City's rural character.

The theme of maintaining a rural setting was expressed throughout the community survey. Write-in comments centered around this topic.

"North Royalton is a small quiet community. Any changes or developments should attempt to keep it that way."

Rural residential zoning represents 3,277 acres and roughly 26% percent of the City's total land area. Multiple farms and farmer's markets are located in this area and contribute to the City's "small town" feel.



Focus denser housing options around nodes of activity that have adequate infrastructure and ample amenities.

Providing denser housing options around locations with existing amenities and infrastructure provides direct community benefits including more walkable neighborhoods, more affordable housing options, lower infrastructure costs, and lower tax rates. Denser housing options on smaller lot sizes appeal to young adults as well as seniors. The City should consider allowing denser housing options around these locations including the Town Center District, Wallings/State intersection, and the York and Sprague intersection area

Housing Strategies

Look to expand senior housing options when practical as regional trends continue to suggest a growing number of seniors are looking to "age in place".

The need for seniors to be able to age in place within North Royalton was discussed at multiple steering committee meetings. This local desire is consistent with nationwide housing trends as Baby Boomers age into their senior years. Despite this living preference physical and non-physical barriers may make it difficult for seniors to do so. Senior living options can span a wide variety of needs, from active seniors who desire less household maintenance, to assisted living arrangements, to nursing homes. Though the recent additional of Traditions and the Omni developments have expanded the City's senior living options, smaller, townhome style homes should also be encouraged. Another potential strategy to facilitate aging in place is encouraging "universal design" elements and visitability (see below) in the construction/rehabilitation of single-family homes.





Omni Senior Living - North Royalton

Universal Design and Visitability

Universal design is generally defined as including those features that enable people of all ages and abilities to enjoy a product. For housing, universal design features typically include elements such as lever faucets and door handles, rollunder sinks in kitchens and bathrooms, and wider doorways. A home designed with visitability offers a more modest set of features for the main level of a detached home. These include at least one zero-step entrance and a bathroom and bedroom on the main level. Visitability features make homes easier for people who develop a mobility impairment to visit friends and extended family so that they do not have to turn down invitations, or not be invited at all. These features also provide a basic shell of access to permit formerly non-disabled people to remain in their homes if they develop a disability.

Visitability features are not difficult to build into new homes, and homes built with universal design features look much like other homes. Many residents (and their friends and family) do not recognize the importance of such features until they find themselves physically impaired in some way.

Some communities incentivize the provision of visitability in new home construction through property tax abatements.

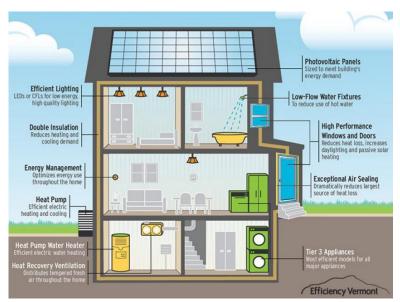
Housing Strategies

2. Ensure new housing developments incorporate green technologies.

Consider adopting green building design standards within subdivision regulations where practical.

The City has an opportunity to become a leader in setting policies and practicing service delivery innovations that promote environmental sustainability. Implementing green building provisions into the City's development regulations would promote a sustainable future that meets today's needs of a stable, diverse and equitable economy without compromising the ability of future generations to meet their needs by protecting the quality of the air, water, land and other natural resources.

Green buildings have been shown to improve the bottom line for property owners as energy cost savings translate to increases in occupancy rates, rents, building values, and return on investments. Municipal benefits include a reduced demand for utility infrastructure such as water supply, storm sewers, and transportation development and roadway maintenance burden.



Source: Efficiency Vermont

The City should consider establishing a green building program that:

- Improves the economic and environmental health of the City through measurable objectives;
- Tracks and analyzes key indices to measure performance and monitor success;
- Commits the jurisdiction to achieve benchmark targets;
- Educates the community of benefits of green building from a triple bottom line perspective that results in cost savings and increased values for property owners;
- Provides incentives for voluntary compliance; and
- Establishes a long-term phased approach for adoption of mandatory compliance.

05.

Implementation

Implementation Strategy

It is important to understand that the Master Plan is only a starting point in the identification of various improvements and initiatives that will each undergo their own respective project development processes.

While each project is unique, most if not all will require additional study and refinement. Most importantly, as feasible projects are confirmed and advanced, the public will be reengaged in the iterative

process of determining a final course of action. For capital improvements this means input on proposed details such as project limits, accessibility, and design features. For a zoning amendment this would include an opportunity to share feedback on proposed regulations relative to permitted/conditional uses, district boundaries, and density.

As the City moves forward in implementing the vision,

projects will be developed based on current priorities and financial considerations. Ultimately, the Master Plan will serve as a guiding document that Administration and City Council can reference and leverage as they continue to maintain and enhance North Royalton as one of the premier communities in the Greater Cleveland region.



Prioritize Investments

Administration and City
Council should meet after
adoption of the Plan to review
the implementation matrix
and reprioritize near-term and
longerterm projects based on
current financial considerations,
funding opportunities, market
demand, and partner interest if
necessary.



Leverage

Each month Planning
Commission should have
a recurring agenda item to
discuss Plan Implementation
and capitalize on the latest
opportunities to advance
strategic initiatives and leverage
public-private investment.



Monitor & Recalibrate

Administration should conduct annual reviews of progress made towards implementing the Plan. The following questions should frame this discussion:

- Did we achieve the goals we set out to?
- What were the challenges?
- Should improvements be made and how?

Based on the quarterly reviews, reprioritization of projects and adjustments to implementation strategies may be necessary.

Capital Improvement Projects

Below is a listing of the proposed capital improvement projects discussed within this plan. The table summarized potential partners and funding sources.

Project	Potential Partners	Funding Sources
Abbey Road Sewer and Roadway Improvements (North of Turnpike)	Northeast Ohio Regional Sewer District	OPWC Funding, Tax Increment Financing, 629 Roadwork Development Funds
York Theta Extension	Adjacent Private Property Owners	Tax Increment Financing, 629 Roadwork Development Funds
High Speed Broadband Expansion (to industrial parks)	Medina County Fiber Network, ODOT	American Rescue Plan Funding (COVID Relief)
York Road Sidewalks (Royalton to Parkway)	Cuyahoga County Public Works, Cleveland Metroparks, Ohio Turnpike	NOACA TLCI Implementation Funds, ODOT Safe Routes to School, Transportation Alternatives Funds
Wallings Road Sidewalks (State to Soccer Fields)	Cuyahoga County Public Works	NOACA TLCI Implementation Funds, ODOT Safe Routes to School, Transportation Alternatives Funds
Royalton Road Sidewalk – Fill gap in Strongsville	City of Strongsville, ODOT	NOACA TLCI Implementation Funds, ODOT Safe Routes to School, Transportation Alternatives Funds
State Road Bike Lanes (Parkway to Bunker)	ODOT, Cleveland Metroparks	NOACA TLCI Implementation Funds, Transportation Alternatives Funds
Streetscaping Improvements (Along Royalton, Ridge & State Roads)	Private Businesses	Transportation Alternatives Funds

Zoning Updates

This plan conducted a detailed analysis of the Town Center District (TCD) zoning regulations. The TCD's zoning has remained generally unchanged from its creation in 2004. Development trends and the overall retail economy has changed drastically over the past 17 years. Recommendations for TCD zoning changes within this plan are critical to encouraging future development that reflects the City's goals and current economic conditions. The City should prioritize zoning code updates within the TCD ahead of other zoning related recommendations within this plan.

06.

Proposed Zoning Changes

Proposed Zoning Changes

Below is a listing of the proposed zoning changes. A map illustrating these changes is on the following page.

•		
Map Number	Proposed Zoning Change	Parcels Impacts
1	Adjust zoning from Research Office (RO) to One Family Residential (R1-B) within the Harley Hills Development.	48227004, 48227055, 48227009 through 48227048
2	Adjust zoning from General Business along the east side of the York Road Corridor, north of Traditions and south of Wallings Road to Research Office.	48227005 and 48227006
3	Change zoning from RM-D to R1-B as this is more consistent with surrounding uses.	48228001
4	Update zoning of recently acquired Cleveland Metroparks properties to Public Facilities (PF) Zoning.	48406001, 48407001, 48408034 through 48408037, 48409009 through 48409012, 48409015, 48410007 through 48410011, 48411005, 48411006, 48512001, 48703019, 48523001 through 48523003, 48526017, 48525006, 48626003, 48625006, 48625008, 48626002, 48627001
	Alter Research Office Zoning permitted uses Remove the following permitted use as it is no longer applicable. (5) Single family cluster developments, to a maximum overall density of 2.4 units per acre and otherwise pursuant to the requirements of Section 1270.33 shall be the only uses permitted in the portion of a Research Office District that is within 500 feet of the rear lot lines of the lots, existing at the time of the adoption of this amendment, that have frontage on the south side of Woodridge Drive.	

