



Northland Community Design Studio

Visioning a Connected Community

Northland Visioning a Connected Community

Professor: Jesus J Lara, PhD.
Associate Professor

Authors + Graphic Designers: Brian Kinninger + Nicki Martin

CITY AND REGIONAL PLANNING



KNOWLTON SCHOOL

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Table of Contents

Table of Contents	i	Chapter 03: Community Engagement + Case Studies	063
Studio Members	ii	Community Outreach	064
Acknowledgments	iii	Case Studies	065
Project Introduction	v	Haimerl Center Meeting	066
Chapter 01: Visual Survey, Analysis + Asset Diagramming	003	YMCA + Gillie Center	066
Context	004	Midterm Review	068
History	006	Final Review	070
Amenities of Built Environment	008	Davis, California	072
Land Use	010	Takoma Park, Maryland	074
Connections + Circulation	012	High Point, Washington	076
Social Infrastructure	014	Shoreline, Washington	078
Institutions	016	Chapter 4: Program Planning + Network Analysis	081
Cultural Influences	018	Introduction	082
Business Inventory + Diversity	020	The Local Hub	086
Aesthetics + Psychological Perceptions	022	The Gateway Hub	088
Alum Creek Corridor	024	The Regional Hub	090
Open Space	026	Green-way Network	092
Storm Water Management	028	Lateral Green-ways	094
Chapter 02: Community Data, Analysis + Mapping	031	Conclusion	096
Introduction	032	Works Cited	098
Population Trends + Age	034	Other Sources	099
Race + Community Trends	036	Appendix A - GIS Projects	100
Income	038	New Recreation Center Opportunities	102
Educational Attainment	039	Analysis of COTA Service to Northland Residents	104
Travel Time to Work + Opportunity Index	040	Finding an Alternative Multi-Use Path Option	106
Urban Cycle	042	Bazaar and Community Center Development	108
Developable Land	044	New Park Opportunities	110
Zoning + Land Use	046		
Recreation	050		
Hazard Sites + Traffic Counts	052		
Business Environment	054		
Walkability	056		
Healthcare Access	058		
Fresh Food Access	060		



Community Design Team Spring 2014



Brian Kinninger

Graduate
City + Regional Planning



Nicki Martin

Undergraduate
City + Regional Planning



Kai Kleer

Undergraduate
City + Regional Planning



Brian Glassner

Undergraduate
City + Regional Planning



Stuart Davidovich

Graduate
City + Regional Planning



Terel Howard

Undergraduate
City + Regional Planning



Matt Jenks

Undergraduate
City + Regional Planning



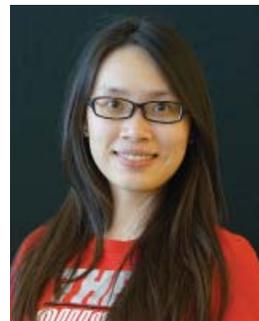
Evan Bunner

Undergraduate
City + Regional Planning



Mark Glover

Graduate
City + Regional Planning



Jiamin Yin

Graduate
City + Regional Planning



Jesus J. Lara PhD

Associate Professor
City + Regional Planning

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The strategic visioning of the Morse Road has been a rewarding and challenging educational exercise. It has taught us the importance of qualitative observation, qualitative research, community outreach and engagement, and finally synthesizing information to create a comprehensive vision. We learned how to work in teams, communicate effectively and complete tasks in a deadline based setting. We also gained experience with writing, graphics and public presentation of materials.

It has been rewarding to get to know members of the Northland Community. We would like to thank the Northland residents and Helping Hands for welcoming us to the neighborhood. We would also like to thank United Way of Central Ohio and The Columbus Foundation for being great supporters of the Northland community and our student studio.

We would like to recognize all the guest speakers who have come to our class to share their expertise with us. Their knowledge, input and feedback were invaluable. We truly appreciate your time:

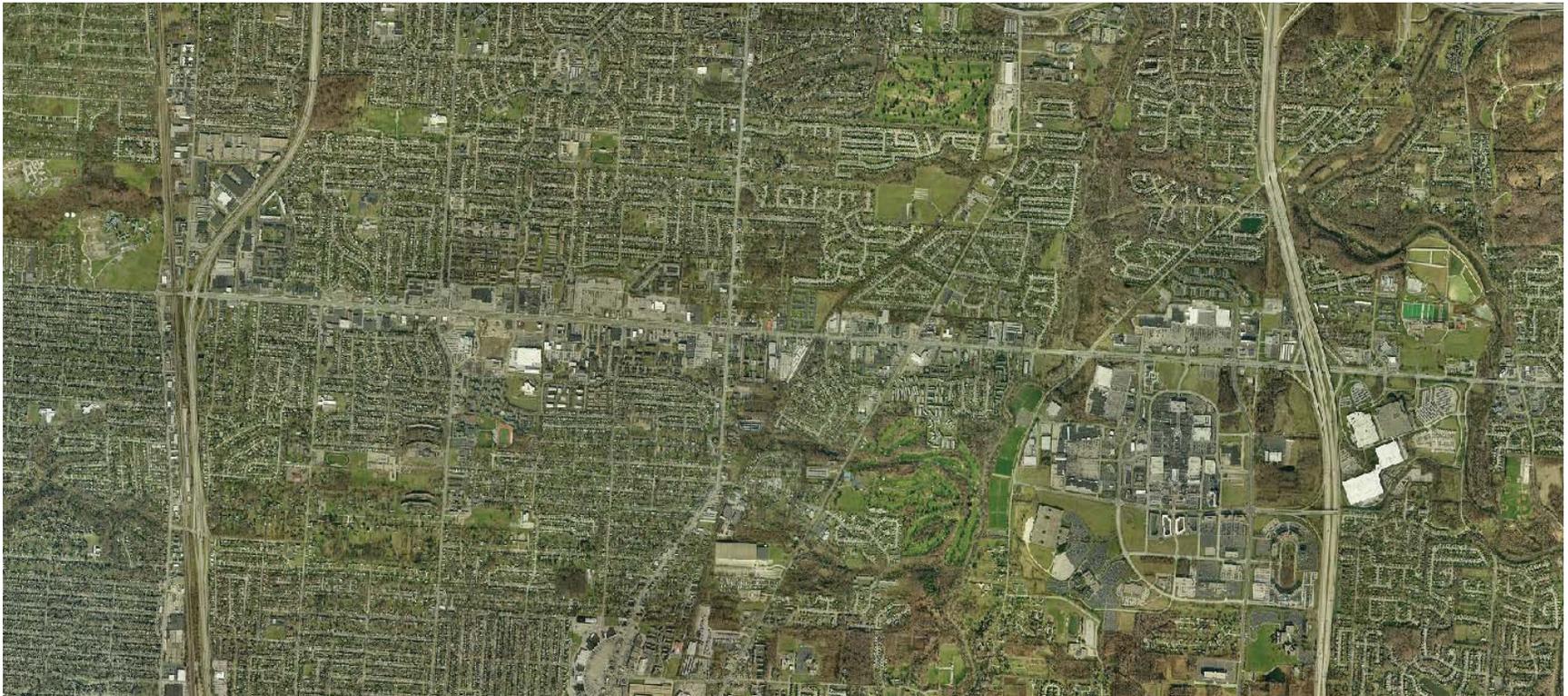
Joyce Bourgault, Northland Civic Association (community partner/Client)
Christine Palmer, Neighborhood Planner City of Columbus
Tony Slanec, Director of Planning and Urban Design, OHM
Anthony Johnson, Economic Development, City of Gahanna
Gregory B. Comfort, Past President, EMHT
Conrad Kickert PhD, Assistant Professor, University of Cincinnati
Kelly Greggs, Adjunct Professor, University of Cincinnati
Christy Rogers PhD, Outreach Director, Kirwan Institute
Ryan Edwards, United Way Central Ohio

Nadeane Howard, Foundation Development, The Ohio State University

We would like to recognize our professor Jesus J. Lara PhD for his dedication to helping us create the best project for the Northland residents we can. Without his guidance and help our project would not be the success it has been. Finally, we would like to thank our classmates for all their hard work. A successful project is never truly finished. For understanding this and continuing to work hard we really appreciate you!

-Brian Kinninger and Nicki Martin

Visioning a Connected Community



Project Introduction

Scale: Urban/Suburban Network

Scope: Infrastructural Program; metropolitan/regional context

Learning objectives:

Site assessment, planning and design strategies in relation to urban/regional infrastructural systems such as greenways, open spaces systems, transit.

1. Analysis: Working as a studio, the class will explore social and physical aspects of the neighborhood through maps, demographics, diagrams, photographs, and physical models. The analysis provides an opportunity for you to learn about the community. More importantly, effective representation of conditions sets the frame for a future. Analysis is the foundation upon which urban design and development proposals are grounded.
2. Urban Design Framework: The students will transform issues and objectives into a unified vision for their projects with a series of strategies and an urban design framework. The urban design framework will establish a vision for future projects.
3. Urban Design Project: In the final phase, students will focus on detailed, placemaking and representation of urban projects along the Camp Chase Rails with Trails Path.

Project areas will require in depth analysis of heritage, historical development, land use, economic opportunities, housing types, environmental issues, and demographic analysis. In addition, the integration of each of the study sites with the larger systems and opportunities in adjacent cities as well as adjacent neighborhoods of Columbus and with the developments at the local community scale will be an essential part of the projects.

The outcomes of the Urban Design studio are to be included: in depth analysis of issues and planning for the study area, In addition to initial reporting of fact-finding early in the quarter, there are formal presentations and feed-back mid-quarter and final presentations.

Chapter 01 focuses on Analysis and Mapping done with a hands-on approach by the students.

Chapter 02 is about the Quantitative research done by the students.

Chapter 03 is about the community involvement and students precedent research.

Chapter 04 is broken into defining three major networks and student's site specific designs



Morse Road at Westerville Road

01

Visual Survey, Analysis + Asset Diagramming

1.1 Context Studies

1.2 Physical Infrastructure

1.3 Social Infrastructure

1.4 Economic Conditions

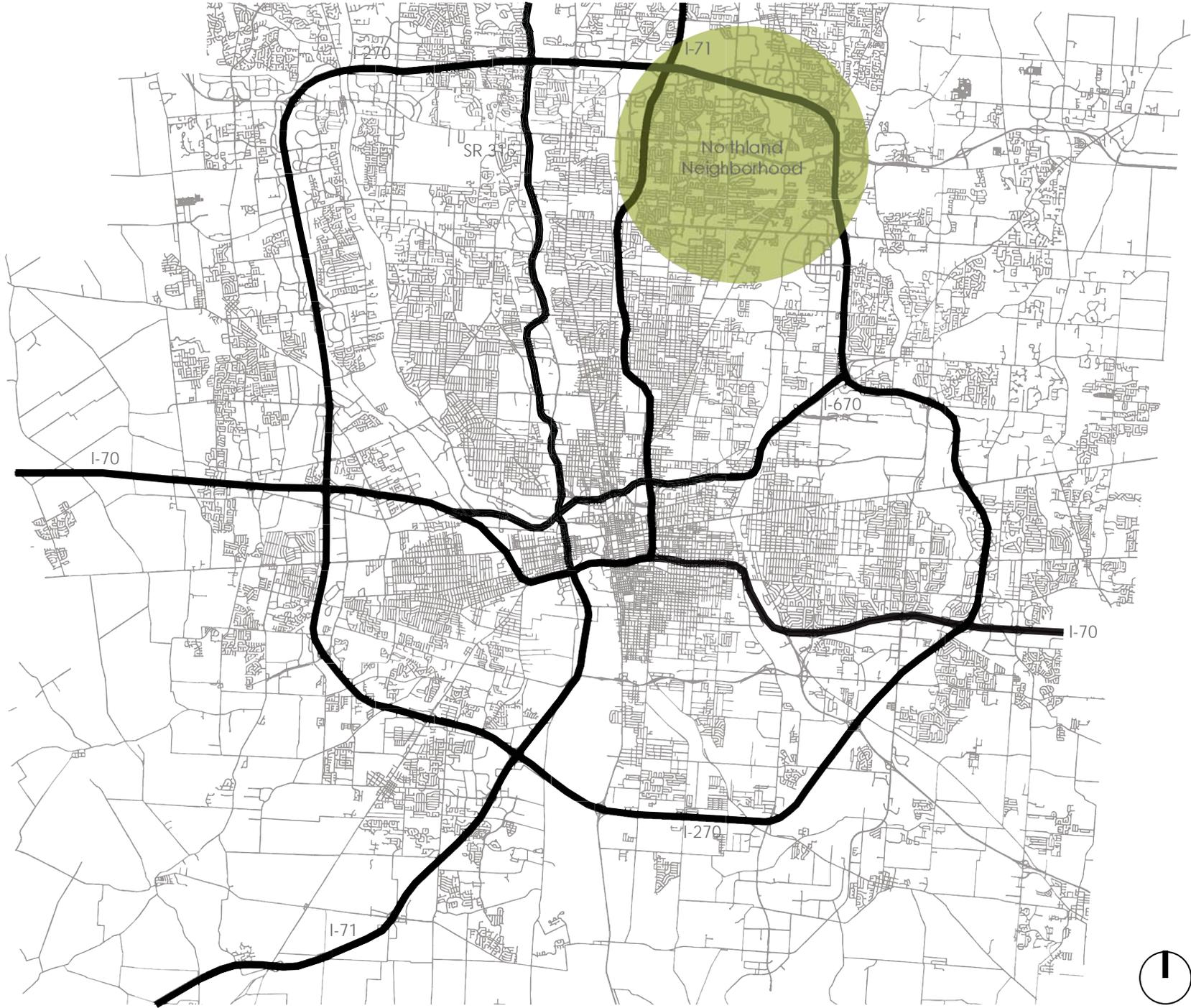
1.5 Environmental Conditions

Context

The city of Columbus is centrally located within the state of Ohio. In the northeast corner of the city is the Northland Community. The area is defined by I-270 to the north and east, the CSX Railroad and the City of Westerville borders to the west, and Morse Road, Cooke Road, and Ferris Road to the south. In the Northland community, there are two main arterial streets, Dublin-Granville Road (State Route 161) and Morse Road. Both roads are commercially oriented with multiple lanes and large business setbacks. These arterial roads hold the majority of west and eastbound traffic within the community, creating unsafe pedestrian conditions for those living in Northland.

The Northland community was once the crown jewel of Columbus. The Northland Mall was the first mall in Columbus that drew in thousands of people from around the city and the state. However, over that past several decades, the mall fell into decline when Easton Towne Center and Polaris Fashion Place opened up. With its closing in 2002, the Northland area went into decline with the loss of jobs that the mall provided. Our task is to provide a vision that remedies the downturn and revitalizes the Northland Community.

Understanding the context of the area is crucial to providing solutions in the research and design of the site. As the study progresses, the context will influence design opportunities, link disconnected spaces, and address social dynamics.



History

When surveying the history of the Morse Road corridor and Northland area, it is important to view history through the lens of the Cultural Landscape. Seeing the landscape holistically means looking for relationships – between buildings and open spaces, between building and building, between the cultural and the natural landscapes, between commercial and residential areas, and between old and new. Studying change over time in the cultural landscape invites consideration of migration patterns, the opening and closing of transportation routes, evolving architectural fashions, and the displacement of older commercial districts by new shopping malls.

The 1842 Franklin County maps show a vast sea of farms, villages, and township communities encircling Columbus, all joined together by an evolving street and roadway system. Many new thoroughfares, such as Morse Road, Lane Avenue, Maize Avenue, and Neil Avenue were named for Franklin County's "first" families and became major components in the establishment of a county-wide network of contiguous roadways. The oldest road in the area is Westerville Pike, which becomes the old 3C Highway which connected Cincinnati to Cleveland via Columbus. In addition to being a north/south dividing line separating Sharon and Clinton townships, Morse Road serves as a west-east link connecting Granville, Ohio all the way to High Street, the main artery of Columbus. Nearby sits historic Worthington, Ohio settled in 1803 as the second oldest town in Franklin County. The Cleveland, Columbus & Cincinnati Railroad (CC&C RR) was chartered in 1836 and opened in 1851 as the second oldest railroad line to enter Columbus. Worthington's Train Station was built in 1851. Today this railroad is known as the Big Four Railroad.

The Northland area was originally the Maize family farm. Clinton Township pioneer Samuel Maize settled there in the mid 19th century. His son, William M. Maize served as a Columbus City Councilman from 1889-1891. Minerva Park Casino operated in the area as one of Columbus' first amusement parks from 1895-1902. An electric street railway opened in 1895 connecting downtown Columbus with Westerville, Ohio and Minerva Park. Streetcars operated in Columbus for 60 years from 1888-1948. The oldest building still standing today in the neighborhood is the Fishing Lodge (665 Dublin-Granville Rd.) built in the 1920s.

The Northland area retained mostly rural agricultural farmland until the end of World War II, when ranch style single family housing and the earliest developments were first built at this time period. When we look at the Building Timeline, we are identifying time points on the cycle of construction, abandonment, conversion, and demolition. In the 1960s, suburban style housing subdivisions were built en masse. Northland High School was first established in 1965 as the neighborhood began experiencing much growth. In 1964, Northland Mall opened as the first and for several years the only shopping mall in Columbus. As the first of a new generation of shopping malls, Northland Mall anchored the northern part of Columbus as an important economic and cultural center.

In 2002, Northland Mall closed, as the formerly prospering neighborhood had begun to decline during the 1990s. Easton Towne Center pulled commerce to the northeast I-270 outer-belt, while Polaris Fashion Place attracted former Northland customers and residents as shoppers migrated to adjacent suburban areas. The Mall was demolished in 2004, and now the site awaits further redevelopment.

Upon the dawn of the 21st century, many neighborhoods located along the Morse Road corridor including Beaumont and Minerva Park within the Northland area developed a new identity as diverse multi-cultural ethnic districts of Columbus. These neighborhoods have been reborn as Immigrant Gateway Districts in a distinctive form of urban renewal. The cultural landscape also offers evidence of neighborhood or regional differences.

Today, there are approximately 90 Somali-owned businesses throughout the Morse Road corridor, along with the offices of the Somali-American Chamber of Commerce. The Somali population is the largest official immigrant population in Columbus. A significant cluster of Immigrant Resource Centers (including the Department of Jobs & Family Services) in the Northland area specialize in education and translation services for international immigrants. There exists a large presence of Somali and Mexican immigrants residing throughout the Northland area neighborhood, evenly split among renters and home-owners. Many community residents have established roots in Northland, as the average tenure of each resident is approximately 15 years. In fact, 85% of all international immigrants currently living in the Northland area arrived after 1990. The area experienced a particularly big wave of immigration between the years 2000-2009 when 56% of the international immigrants settled into Northland neighborhoods helping create the diverse community we know today.

Amenities of Built Environment

Physical infrastructure is central to understanding how people use space. Inventory of the physical infrastructure along Morse Road allows us to gain insight into the challenges and opportunities present along the corridor. Space scaled toward the automobile is a central challenge surrounding the physical infrastructure of Morse Road. The automobile orientation has produced an environment hostile to walking and lacking connectivity. Opportunities for residents and business owners are limited by a built environment that champions cars over people on foot. Residents who live in the area and to whom Morse Road functions as a neighborhood center may find that opportunities to walk to school, retail, jobs, and transit stops are limited by the physical infrastructure. Nevertheless, there are key assets that represent opportunities for future transformation.

Good urban design, in the form of street furniture, can revitalize commercial strips and stabilize neighborhoods by making walking safer and more enticing for residents. Upon review of Morse Road, we see patterns emerging where new construction of quality development is arising around areas with recently improved streetscapes. Two major areas in particular include Northland Village and Easton Towne Center.

Not coincidentally, both sites have made significant investments towards improving their streetscape. Easton is a model for successful urban design. Although it comprises an indoor shopping mall, the entire development is centered around outdoor public space complete with high-quality amenities including benches, trees, flower pots, landscaped medians, street lights, and informational signage. The popularity of Easton might suggest that people value a walkable, amenity-rich environment.

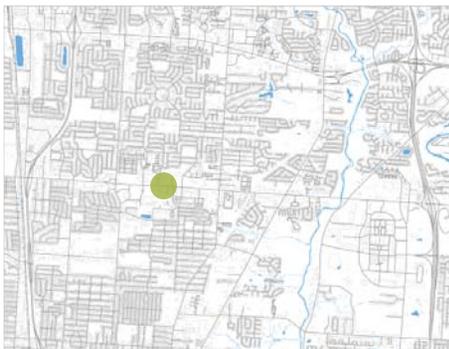
Along the Morse Road corridor itself, similar streetscape improvements were installed in 2008 as part the neighborhood's special improvement district. New development has already begun sprouting along the stretch where urban design improvements were made. The new developments include: a renovated BP gas station at North 4th St.; a new Telio Bank at Tamarack Boulevard; a new Tim Horton's, Chipotle, AT&T store at Northland Village; a new Turkey Hill gas station and convenience store at Heaton Road, and a new KFC, new Taco Bell, and a renovated Wendy's. When evaluating the entire Morse Road corridor, it is accurate to say that not enough time has gone by (only 5 years) since the improvements were made to fairly evaluate the success of the streetscape investment. More time is needed to see influences on business environment as a result of the improved urban design.



Even though crosswalks are present on Morse Road, vehicular traffic do not pay heed to them, often blocking them. These creates unsafe crossings for pedestrians and motorists.



Lack of improvements at bus stops and unsafe walking conditions can create an unsafe environment for pedestrians on Morse Road.



Median infrastructure installed as part of 2008 Special Improvement District improvements to Morse Road.

Land Use

Infrastructure historically oriented to the automobile also manifests itself in the interaction between the primary land uses along the corridor. The relationship of each land use to one another illustrates the challenges and assets of the physical infrastructure. The corridor and the neighborhoods surrounding it are characterized by single use zoning, segregating single family and multifamily residential areas from retail and job zones. Strict separation of uses may have been considered an asset in the past but is now a challenge to the current population, which is increasingly made up of foreign-born and minority residents . In particular, circulation between these single use zones is hampered by physical barriers.

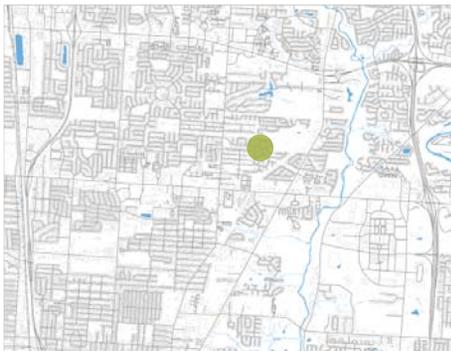
Along the corridor itself, use can be characterized as primarily strip retail. Large warehouse scaled building footprints are set back far from the road by oversized parking lots, which themselves have their own vehicle circulation systems. People on foot must cross large parking lots to get from place to place. The massive setbacks and low slung commercial structures do a poor job of defining space along the street. Buildings facing one another on opposite sides of Morse Road can be separated by as much as two-hundred yards. In his book *Great Streets*, Allan Jacobs (1993) suggests an ideal building-to-street height-to-width ratio as 4:1 so as to create the adequate feeling of enclosure necessary to define space. Morse Road's excessive width (to accommodate many lanes of traffic) and setbacks (to accommodate many parking spaces), contribute to a weak sense of space.



Typical strip malls dominate the commercial corridor of Morse Road. The large retail spaces and expansive parking lots cater to large corporations and the inadvertent alienation of small businesses.



Some small businesses have tried to reuse some of these big box stores. Here a child care center has taken up residence in a former restaurant.



The majority of the residential areas along the Morse Road corridor are single family homes built in the 1960's. Each has their own lot and driveway.

Connections + Circulation

Retail destinations—many of which supply essential services to area residents—do not connect to one another with logical walking paths. While wide sidewalks and bike lanes are present along some of Morse Road itself, it does not make sense to walk along the sidewalk to get from shop to shop. To walk from a retail destination, back to the sidewalk along the road, and back up a parking lot to the next destination can be a long and circuitous route for a person on foot. The dimensions of these spaces were designed with the automobile in mind.

Accessing the corridor from nearby residential areas presents another challenge. While large, moderately dense residential areas are close by, getting from these areas to Morse Road can be a long and uncomfortable journey on foot. Access in and out of residential areas is primarily by collector roads such as Tamarack and Karl. Many residential streets themselves are cul-de-sacs and have only one way in and out. There are no defined footpaths independent of vehicular rights-of-way, so pedestrians cannot take shortcuts. Typically, a $\frac{1}{4}$ mile radius is used to define reasonable walking distance. In the residential areas, street patterns are characterized by long blocks, frequent dead ends, and few intersections. What could in theory be a five minute journey to a destination within a quarter mile could take much longer for Morse Corridor area residents who walk.

In spite of these challenges, on the ground observations indicate that many residents continue to walk to and along the Morse Road Corridor, whether by choice or necessity. Neighborhood business that provide needed services to residents appear to be thriving. Some commercial space has been converted to new uses such as schools. The Northland Mall site is being redeveloped as an employment destination. The close

proximity of a diverse housing stock, employment centers, and intense neighborhood and regional retail represent a key asset of the Corridor, distinguishing it from other parts of Columbus.

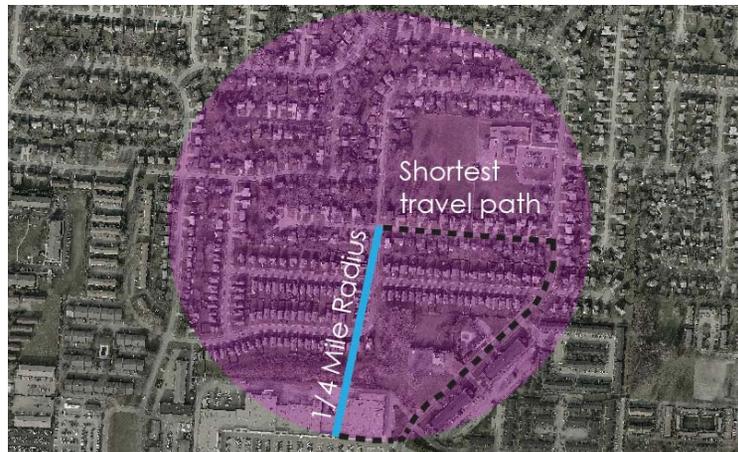
The Morse Road Corridor is located in a strategic location poised for future growth. Easy access to Interstate highways bookend each end of the corridor and provide good connectivity to the rest of the city. Perhaps the largest opportunity existing within the neighborhood is redevelopment of the former Northland Mall site. Several new streets (Northland Ridge Blvd., Northland Park Ave., and Tamarack Blvd.) were recently constructed with improved streetscapes (benches, trash cans, trees, street lights, brick crosswalks) and designed with high quality street furniture in mind.



Homes on Hartwell Road are just feet from neighborhood retail on Morse Road but have no direct access.



The sidewalks at Midvale Road are fenced off from nearby retail.



A resident who lives within a quarter mile of shopping has to take a path that more than doubles the length of the route, from 0.25 miles to 0.7 miles.

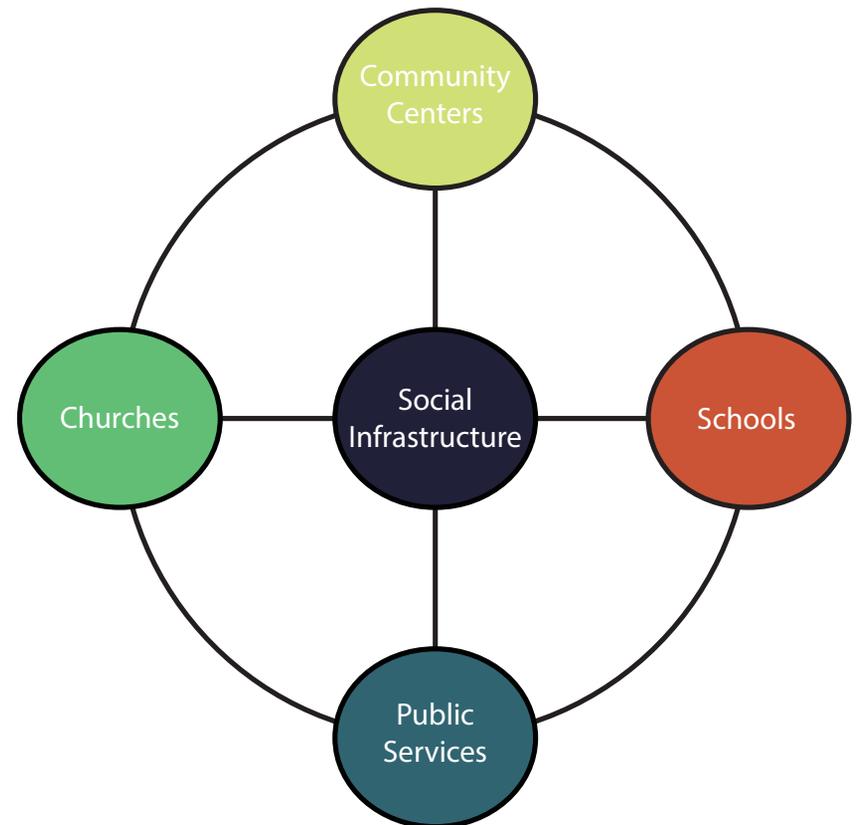
Key Findings

- A diverse housing stock provides options in the area for a mix of incomes and household types.
- Residential areas are within close proximity of jobs and services

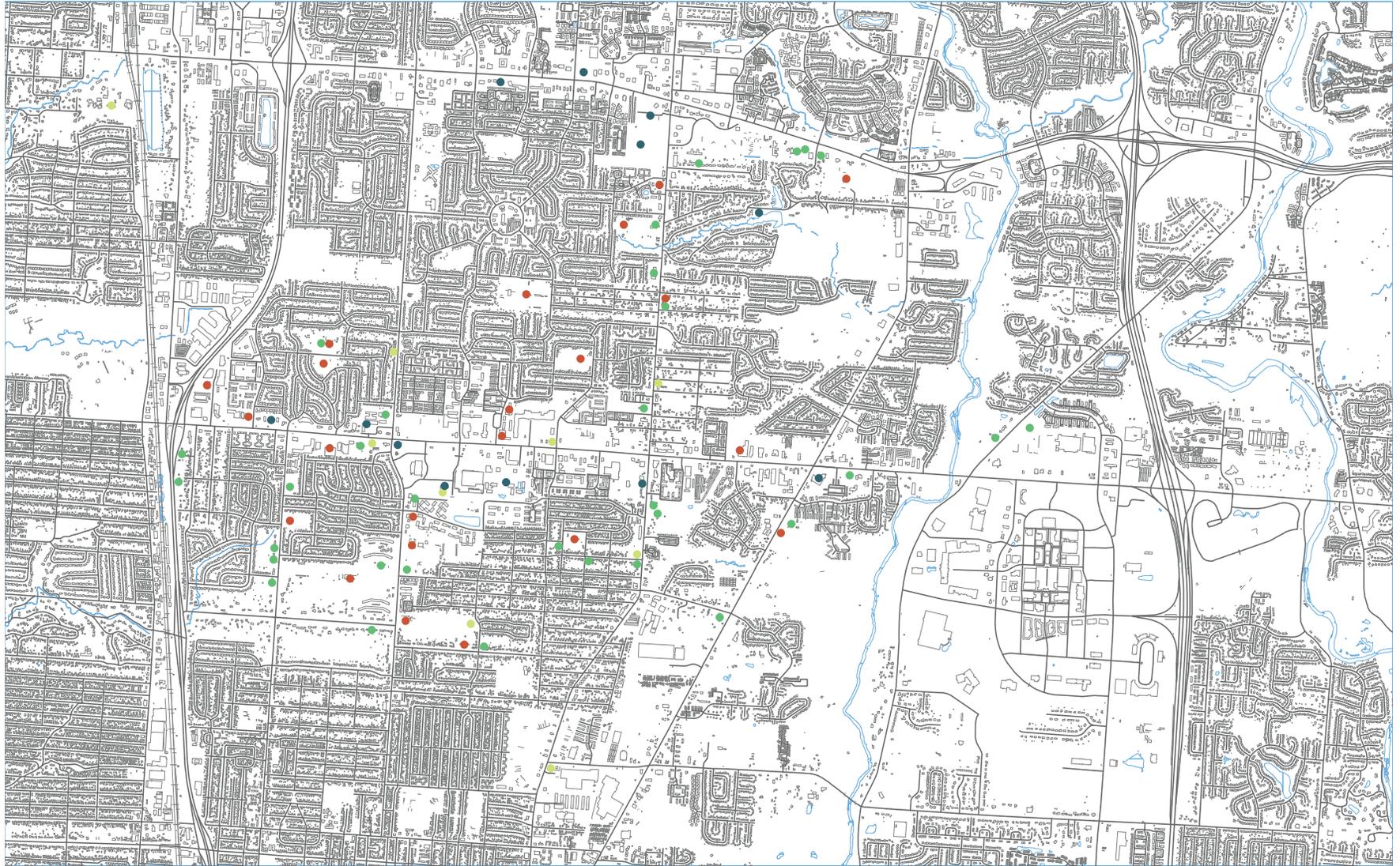
Social Infrastructure

Understanding the community is an important part of any urban design project. This information can help guide the design process in a productive direction that strengthens the present community while planning for future needs. To better understand the inner workings and framework of the local community we looked at two different aspects; The Social and Ethnic Infrastructure of the area.

The social infrastructure is made up of schools, churches, community centers, and public services. Schools are a base for every community because they provide education to the youngest generation, which is the future of the community. If the schools are not successful then the community will most likely suffer because of it. Churches are normally a large supporter of their surrounding communities and it is important to understand how involved they are. Public services are made up of government agencies which are an important pillar of the community because they provide protection, stability, and assistance to residents. Community centers include actual community centers, recreational centers, libraries, and food pantries. These locations provide a space where residents can connect and the overall health and wellness of a community can be maintained.



Social Infrastructure Map



- Schools
- Churches
- Community Centers
- Public Services

Institutions

The area is well covered by schools, both public and private. Ratings for the school are poor with most of them achieving a C or below rating from the Ohio Department of Education. There is a large population under five years old in the area. If the schools do not start performing at a higher level there is a chance of losing residents to areas with better schools.

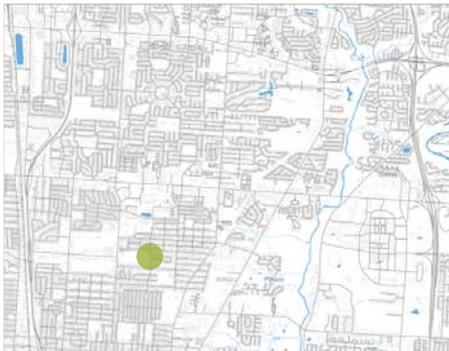
Churches are involved with the area through outreach programs. Although there is an opportunity for increased involvement. Churches are a major pillar of the community and their involvement is representative of how much pride people have in their community. There are a handful of churches that are heavily involved in the community, most of them have ties with the Helping Hands Health Clinic.

The community centers include such buildings as the Northside Food Pantry, a nonprofit food pantry run by Vineyard Columbus. This food pantry provides food for those living in the surrounding area codes. By working with the Ohio Benefit bank, assistance is provided through Medicaid, food stamps and income tax assistance. Counselors are also provided to assist community members. This serves the community immensely, giving all equal access to nourishment. The Northern Lights Public Library is one of the most utilized libraries in all of Columbus. This library provides a multitude of activities and services including a job help center, English as a second language class, and a general education development class. Due to the number of services provided, it is a heavily used community center in which the community has ample opportunities to be enriched.

Public services such as Franklin County Jobs and Families Services Center provides a unique set of opportunities for residents. It houses services such as job training, vocational training, and refugee services. The refugee services include vocational English for speakers of other languages, child care services, as well as public assistance including Medicaid and food services. With the large immigrant population in this area, these places provide vital assistances to the community.



Ascension Lutheran Church is one of the most active churches in the area. It works on getting involved in the community and creating a social center for the Morse Road area.



The Feddersen Recreational Center is a part of the Columbus Recreation & Parks Department. This is a free community center that offers a variety of activities and opportunities for the community to maintain an active lifestyle. The center also allows for residents to connect with other people in the area.



St. Francis De Sales High School is a Catholic school and one of many private schools located within the Morse Road area.

Key Findings

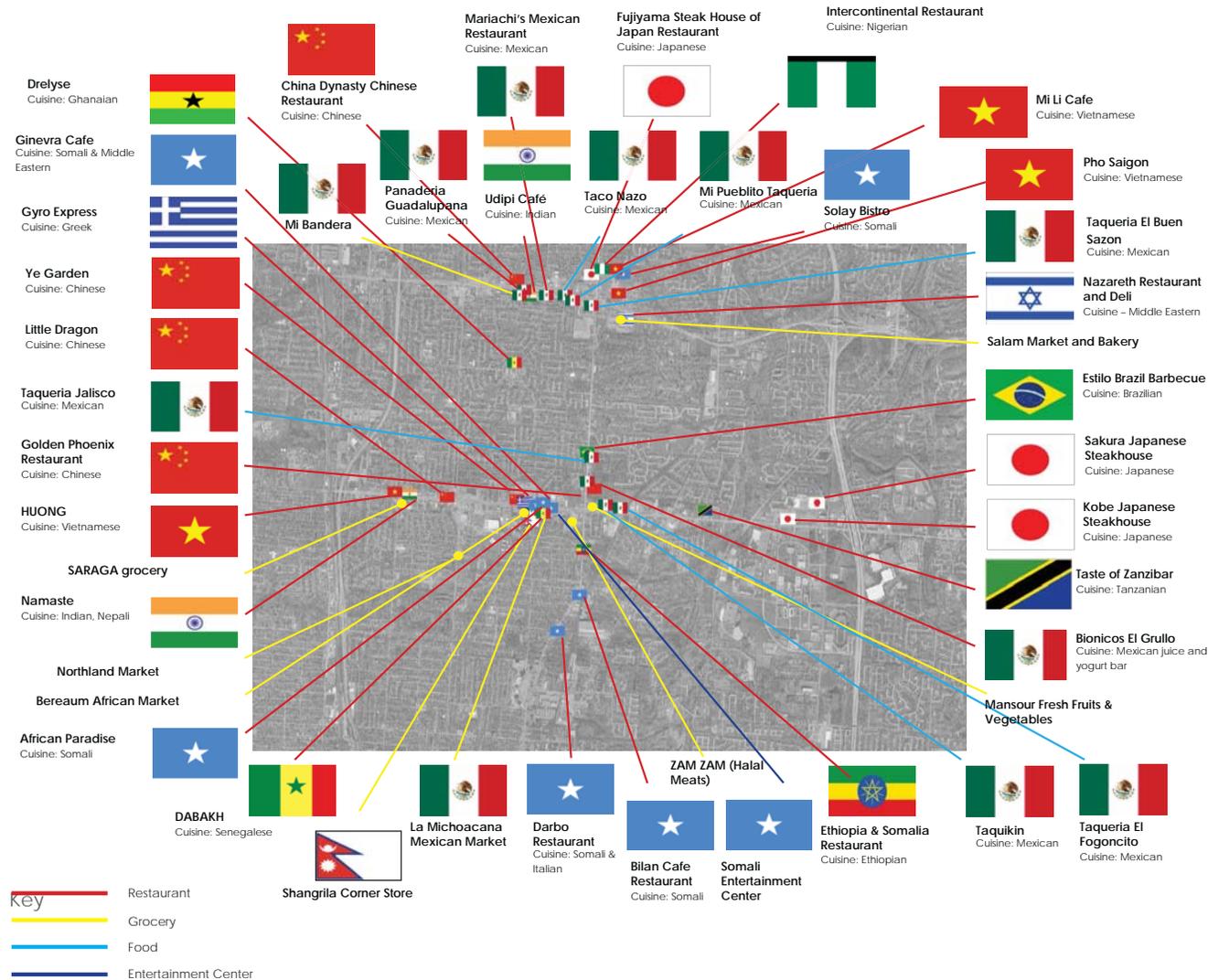
- *There are a lot of churches with the ability to improve their efforts in the community, creating a more involved and prideful community.*

Cultural Influences

The cultural infrastructure has a large impact on the site. Morse Road is the most ethnically diverse area in the city and that will have a large effect on the site. Thanks to its affordable housing, the Morse Road corridor attracts immigrants and has become one of the most appealing choices for them to settle down and start a new life. With the demolition of anchor stores, the Morse Road corridor is being faced with an increase in vacant land. However, over the past few years, the growing immigrant population brought new hope to the declining area by introducing their culture to the area through the development of businesses. Therefore, the underutilized space is being reused and the vacant land is refilled. Restaurants, groceries and food trucks are the most important components of the ethnic business, where immigrants can present their unique culinary tradition to customers. Together, they build up a complex food network, which not only serves homemade food and local products but has also turned into a cohesive center that brings people together. The variety of cultures will create a unique community that must be well understood for future plans to be successful.

Based on the food network map, a big portion of restaurants and groceries are concentrated in two locations. The first is the intersection of Cleveland Avenue and Morse Road; the second is the intersection of East Dublin-Granville Road and Cleveland Avenue. There are 28 ethnic restaurants, 9 groceries, and 6 food trucks along the Morse Corridor. The most abundant cuisines are Chinese, Japanese, Mexican, Somali and Vietnamese. The abundance of culture in the Morse Road corridor provides the residents of Northland, and of Columbus as a whole, a unique opportunity to experience multiple cultures within a manageable travel distance.

Ethnic Food Options Along Morse Road Corridor



Key Findings

- There is a great potential to market the area an ethnic center of the city and of the state
- The food network is an important opportunity for the revitalization of economy of that area

Business Inventory + Diversity

The economic analysis considered several factors when identifying the market identity: physical built environment, aesthetics, social demography, and psychological perceptions. Morse Road contains 319 establishments of both retail and government facilities. The top four industries in this area are: automobile / gas stations, eating and drinking establishments, miscellaneous retail, and apparel/accessory stores.

The business density is extremely high relative to the corridor's length. The calculated business density is 86.21 businesses per square mile. In comparison, according to the Martin Prosperity Institute, New York City metro area is rated at 79 per square mile (Florida, 2012). The businesses are important because of the jobs that they create. Alone, the Department of Natural Resources employs 540 people. These businesses along the corridor serve both a local and regional scale with automotive and retail establishments. The advantage of the density and the diversity of services is that they help pull people from a larger area. Currently, there is a missed opportunity to keep people in the area once they arrive. By focusing on this asset it could further economic opportunities for future success along the corridor.

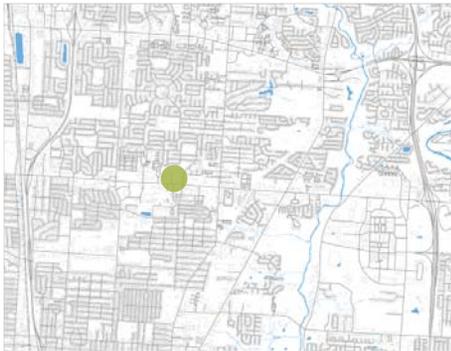
Social aspects and ethnicity are a growing potential that the Morse Road corridor is not capitalizing on. In the last 10 years, according to United States Census Data, many of the ethnic populations have doubled in size. The area provides cheap housing and low rent business space that attracts foreign entrepreneurs. In the Morse Road / Cleveland Avenue area there is a total of 11 different ethnicities and 12

food trucks represented within a 3.5 mile radius. Currently, this multitude of ethnicity is not present anywhere else Columbus. While ethnic restaurants are an asset to the area they are not growing and attracting people like they should.

Furthermore, poor marketing and community relations with ethnic populations are contributing to a weak ethnic business community, which could be used as part of a significant regional pull the area already has. Right now Columbus Food Adventures provides the only service that helps bring recognition to these businesses by providing tours of 5 different ethnic restaurants on State Route 161 and Cleveland Ave. In a recent interview with Bethia Woolf from Columbus Food Adventures she stated, "C.F.A. tours the area about 45 times a year with groups ranging from 4-14 people". This amount of positive publicity is fantastic for the area but is seriously lacking the involvement from community officials and organizations.



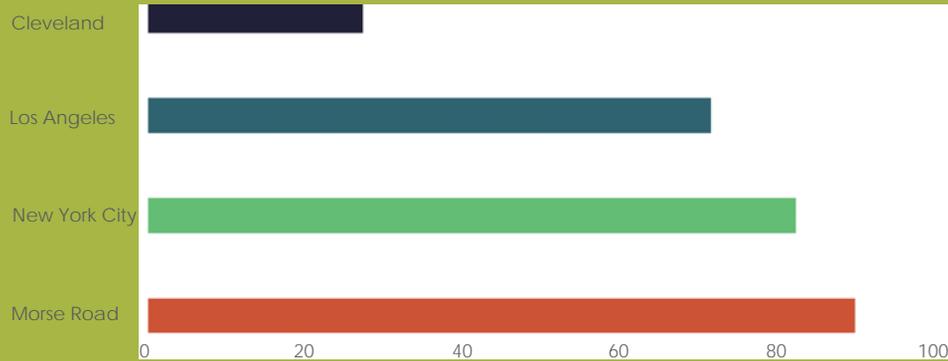
The high concentration of businesses along the Morse Road corridor provide for a healthy diversity of shopping experiences for the Northland community.



At the same time, most of these businesses are located in strip malls with large setbacks. These features create a sea of parking and create a car centric atmosphere that discourages pedestrian interaction.

Key Finding

Business per Square Mile



Aesthetics + Psychological Perceptions

Aesthetically the Morse Road corridor is a combination of aging strip malls, lightly punctuated by recently built retail and government buildings. The area is dominated by parking lots and accommodates primarily automobile activity. Structures are almost all single-use and some unique to their respective chain restaurant or big box retailer. Street setbacks vary per structure and signage is inconsistent often being hardly visible

Morse Road has a significant lack of maintenance, more specifically, litter. Litter creates a sense of neglect or the idea that there is a lack of control from the city or authorities. Litter contributes to an idea of deterioration in the area and from an economic perspective creates less incentive for business owners to reinvest in their community or property. The negative standard this creates for the entire area leads to what is called "Broken Window Theory". This theory was published by social scientists in 1982 and states that in a disordered environment containing litter, graffiti, or "broken windows" it sends a signal that the area is not being monitored and that criminal activity can happen with little chance of getting caught. Sensing this, social activity felt uncomfortable and discouraged throughout the corridor that ultimately limits the amount of retail exploration that might otherwise take place.

Largely, aesthetics are extremely important when identifying a community's satisfaction and economic climate. Good urban design and maintenance encourages consumers to step out of their car or house and interact with an establishment. A recent study concluded that for a community that satisfies its residents it must: provide abundant opportunities for social interaction, be well kept, and perceived as

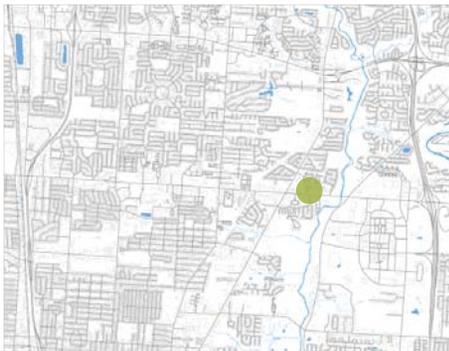
aesthetically pleasing (Richard, Charlotta & Kevin, 2009). Noting this, there is adequate room for better design and maintenance so that pedestrians and motorist to step out of their car to stimulate economic advancement.

The psychological perception on Morse Road strongly determines how pedestrians are exploring their surroundings. Moving by foot felt unsafe and vulnerable persuading people to drive instead of walk. Pedestrian sidewalk traffic was limited to necessary interactions between bus stops and stores. Recording of a larger than normal amount of pedestrian interaction occurred at the intersection of Morse Road and Cleveland Avenue. It was also noted that this area is primarily a hub of transportation between Downtown and Crosstown bus lines.

Psychologically, safety is always a great concern to help social interaction exist in places around the city. The perception that an area is safe helps encourage the possibility of human interaction within Morse Road's dense retail corridor. Urban activist Jane Jacobs states that without eyes on the street, the sense of community diminishes and those areas can become unfriendly to the presence of pedestrians. Furthermore, successful implementation of the "Broken Windows Theory" in New York City showed that interactions and community involvement would happen more frequently as the previously stated psychological barriers are overcome. A more active role in urban corridors sets expectations of residents and visitors and encourages additional support from local shops, restaurants, and markets.



Aesthetics of commercial buildings greatly influence the amount of business that takes place at each store.



The signage of commercial stores are the main attractors of customers to a site. If the signage is poor, business will suffer.

Key Findings

- *Business density*
- *Overall aesthetics need improvement*
- *Range of ethnic establishments could be the driving economic force for this area*
- *Negative psychological perception makes it challenging for social interactions and events to occur which limits customers and limits economic potential*

Alum Creek Corridor

The Morse Road corridor is a very auto centric environment. Very few people would even realize how environmentally important the area is. The majority of the corridor sits in the Alum Creek Watershed, one of Columbus' five main rivers. The watershed is an overarching key for the area that some may not even realize can affect them.

Alum Creek begins in Morrow County to the North and empties into the Blacklick Creek just South of Columbus. The watershed encompasses 200 square miles, roughly the same square mileage as Columbus. The length of the creek itself is 56 miles. The Alum Creek watershed is split into the Upper Watershed, which covers Morrow County and the Northern portions of Delaware County, and the Lower Watershed which covers the Alum Creek reservoir area and all of Franklin County. The Lower Watershed covers 257,000 homes, which is where the Northland Area resides.

Analyses have been performed on the Creek over that past and the health impacts the Creek provides are extremely beneficial for the area. Environmentally, the creek provides an expansive ecosystem for fauna and animals to thrive. An analysis of the Creek in 2005 showed that 14 different species of trees were indigenous to the corridor, not to mention the shrubs and perennials that also reside in the corridor. Also, the study showed that 15 species of frogs, 37 species of fish, and 10 species of mammals could be found living in or near the Creek. These findings show that the Alum Creek corridor is providing a healthy ecosystem for plants and animals.

In terms of human health, the Alum Creek corridor provides many ways for residents of Northland and Columbus to get out and maintain a healthy lifestyle. The Alum Creek Bike Trail, located in the corridor, provides a great place for us to connect to the expansive park system in the Columbus area. Also the corridor provides open space for all to relax in and enjoy.

Unfortunately, residents are not able to connect to the Alum Creek Corridor in the Northland area. Over 75% of the Community lives outside of a half mile radius of the trail. When amenities are located over a half mile away, people are very unlikely to walk to them. Also, the bike lane along Morse Road ends a half a mile away from the Alum Creek connection, dwindling the population of bikers down considerably due to the high speeds and unsafe conditions on the road. This leaves many people having to drive to the parks. However, there is minimal parking for the community to use. Proper infrastructure has to be provided for those living in the Northland area.



Lack of infrastructure for parking and access to the Alum Creek Bike Trail contribute to low participation levels on the Trail.



Lack of improvements at bus stops and unsafe walking conditions can create an unsafe environment for pedestrians on Morse Road.



Over 75% of the Northland community is located outside of reasonable walking distance to the Alum Creek corridor.

Open Space

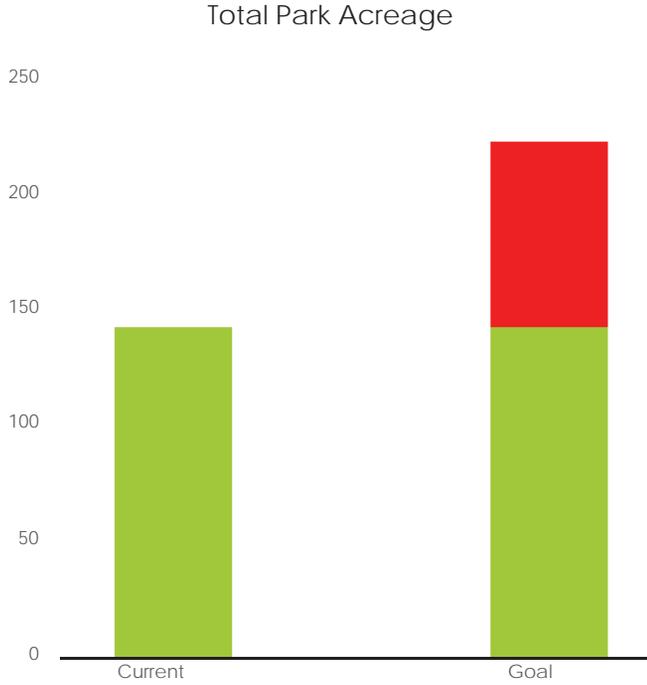
Most would likely consider the available park space surrounding the Morse Road corridor to be adequate. However, when compared to successful areas and cities that have a successful percentage of park space the Morse Road corridor is at a deficit.

Parks can be accessed by walking, biking, nearby bus stops and of course by car. What is important however, is that the typical walking or biking distance between the parks with the greatest gap is 1.6 miles and the shortest distance being 0.4 miles.

Access is complemented in the Morse Road corridor by the existing bike-ways and paths located around Woodward Park. However there are obstacles to walking and biking between these parks safely. While all routes between the parks are through residential neighborhoods, there are incomplete sidewalks and traffic often traveling too fast to safely share the road with pedestrians and cyclists.

After performing an inventory of equipment at the parks there seems to be a strong suit – all but one of the parks offers at least two recreational equipment features.

Park Acreage	
Woodward Park	49.92
Northtowne Park	3.62
Forest Park East	4.00
Walden Park	5.15
Granville Park	5.14
Strawberry Farms Park	23.40
Parkridge Park	43.28
Cooke Park	9.36
Total Parks Area	143.87
Morse Rd. Corridor	4480.00
Recreational Area	3.211384 %



With only 3.21% of the Morse Road area being open for recreation, 81.98 acres is needed for the community to have the proper amount of open space.

Storm Water Management

Storm water management refers to the act of controlling rainfall. It is important to control rainfall for environmental, social and physical reasons. Environmentally, in storm run-off from hard surfaces like roads and parking lots can quickly enter storm drains, overflowing their capacity, causing storm water and raw sewage to empty into fresh water bodies. Socially, controlling rainfall is important for safety reasons. In a storm, water running off a road can make driving, biking and walking conditions hazardous. Finally, it is physically important to control rainfall to ensure homes and businesses remain intact and free of water damage. Keep in mind, on average approximately 39" of rain falls in Central Ohio per year.

To keep rainfall from having negative impacts on environmental, social and physical aspects of the community it is essential to increase the time it takes for water to re-enter the fresh water bodies; simply put, the water must be slowed down!

An effective method of slowing water is to increase the amount of pervious surfaces. Pervious surfaces are capable of absorbing water temporarily. Impervious surfaces are not capable of absorbing water and therefore water runs-off them. Examples of pervious surfaces are grass, mulch, gravel, and sand while examples of impervious surfaces are asphalt or concrete.

To determine the potential for improvement of storm water management along the Morse Road corridor we compared percentage of pervious surfaces versus impervious surfaces for a typical commercial setting and a typical residential setting. To determine the percentages of the estimations an ESRI ArcGIS base map was used to take measurements. The commercial and residential districts are the same area to allow for a fair comparison. In the commercial area which is characterized by large set backs with ample parking we found the percentage of pervious surfaces to be only 9.5%. In the residential district despite small lot sizes, approximately .2 acre according the Franklin County Auditor, the percentage of pervious surfaces was much higher near 80%.

The estimated percentage of impervious surfaces in the Morse Road commercial corridor (90.5%) is higher than the percentage of impervious surfaces for a typical commercial land use over the whole City of Columbus (85%). The community has an opportunity to more effectively handle storm water as the City of Columbus looks into implementing new techniques for "eliminating sanitary sewer overflows while also investing in our neighborhoods and our local economy" according to the City of Columbus Department of Public Utilities.

Commercial Lot Analysis

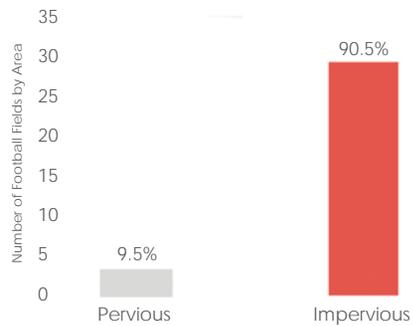


Residential Lot Analysis



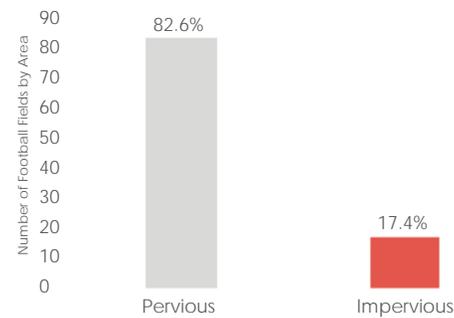
Commercial Surface Area Makeup

Commercial lots have an excess of impervious materials putting strain on the infrastructure and driving up maintenance costs



Residential Surface Area Makeup

The residential districts have plenty of permeable areas for water to percolate back into the water table



Key Findings

- Lack of infrastructure for those wanting to connect to local parks or the Alum Creek Bike Trail can be a major deterrent.
- The current park system does not meet the needs of the community but there is ample space to grow the park system.
- The ability to create connections to the Alum Creek Trail and the surrounding parks would be a great benefit to the community

NORTHTOWNE CENTRE

O'Reilly

AUTO
PARTS



CATHERINES
PLUS SIZES

GOLD'S GYM
EXPRESS

Northtowne Shopping Center

02

Community

Data, Mapping +

Analysis

2.1 Demographics

2.2 Land Use

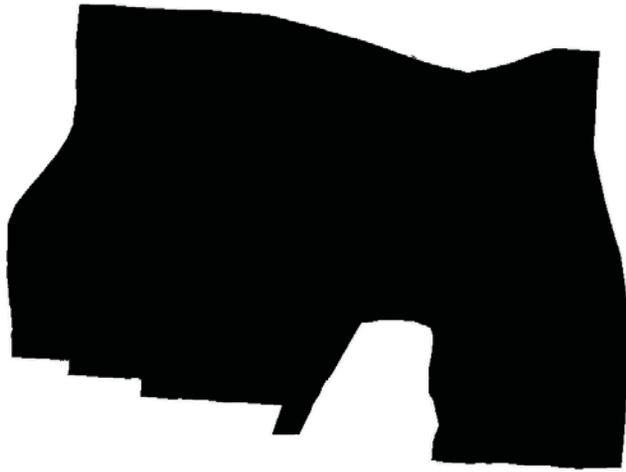
2.3 Health, Environment + Business

Introduction

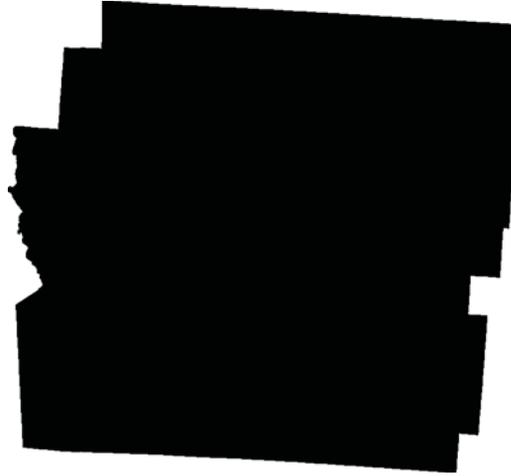
We analyzed 13 census tracts surrounding Morse Road between Interstate 71 and Alum Creek show evidence of a changing population since 1990.

To draw conclusions on the data that we compile, we decided to select areas of comparison. These areas allow us to see how Morse road is doing on a regional or national scale. This is important because without comparing certain sections of data there is no way to judge what the data is telling us. The first area of comparison is Bethel Road. Bethel Road is located at the same distance from downtown and has a similar level of diversity in its population. The second area of comparison is Franklin County which represents what is going on in the entire city of Columbus. The third area of comparison is the state of Ohio, this shows us how Morse Road compares to the region. The fourth area of comparison is the entire country which shows us how Morse Road is stacking up to the nation as a whole.

Morse Road Study Area



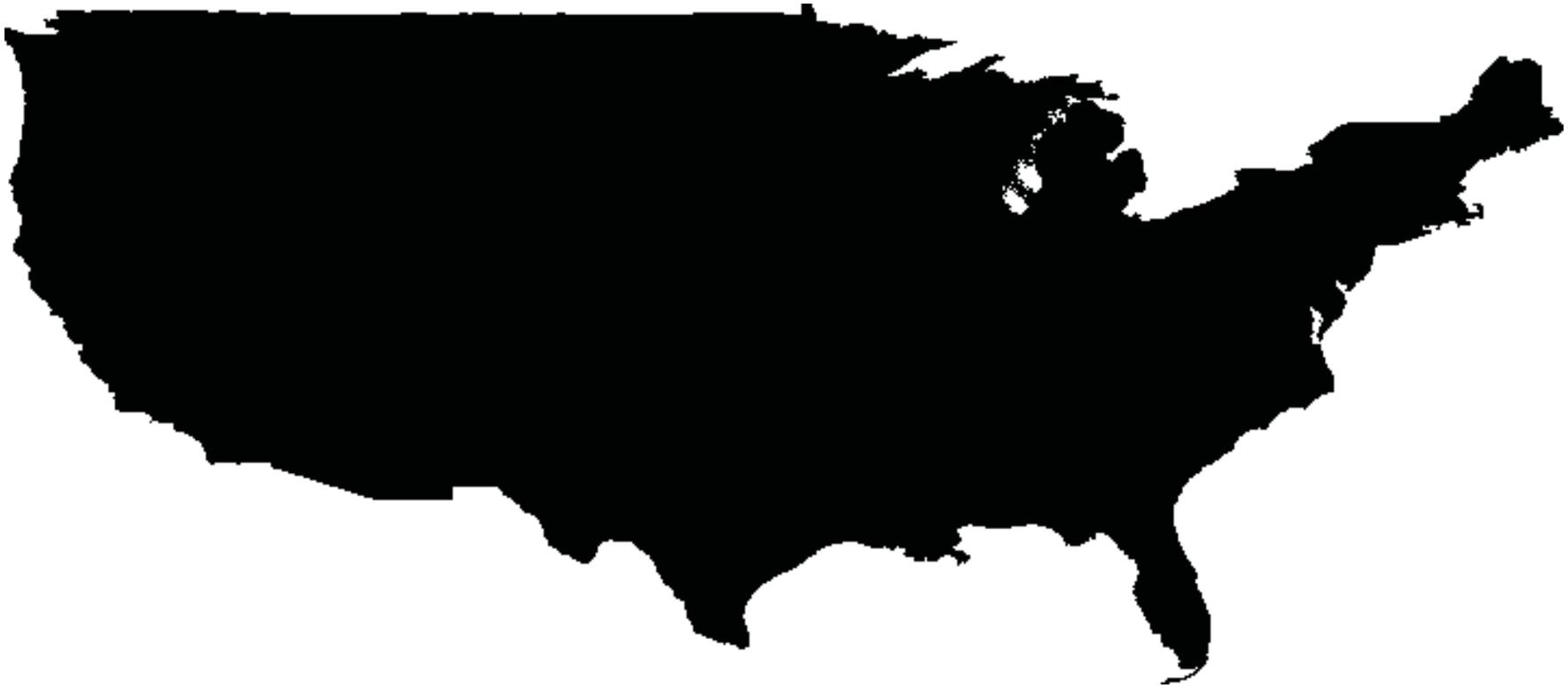
Franklin County



Ohio



United States of America

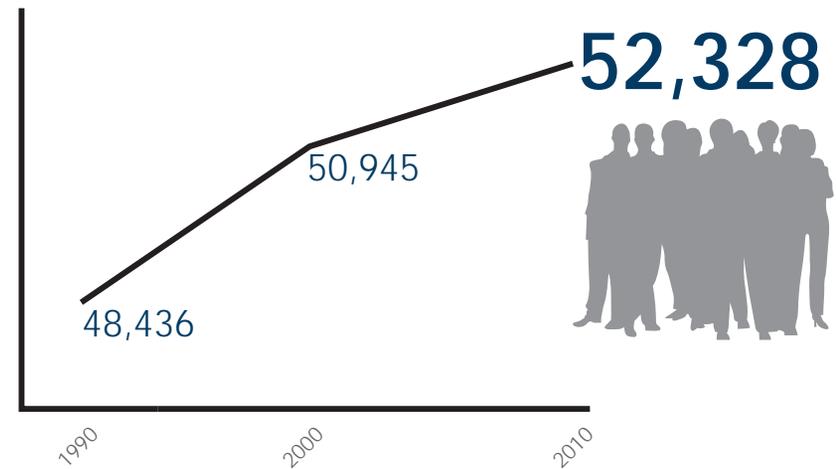


Population Trends + Age

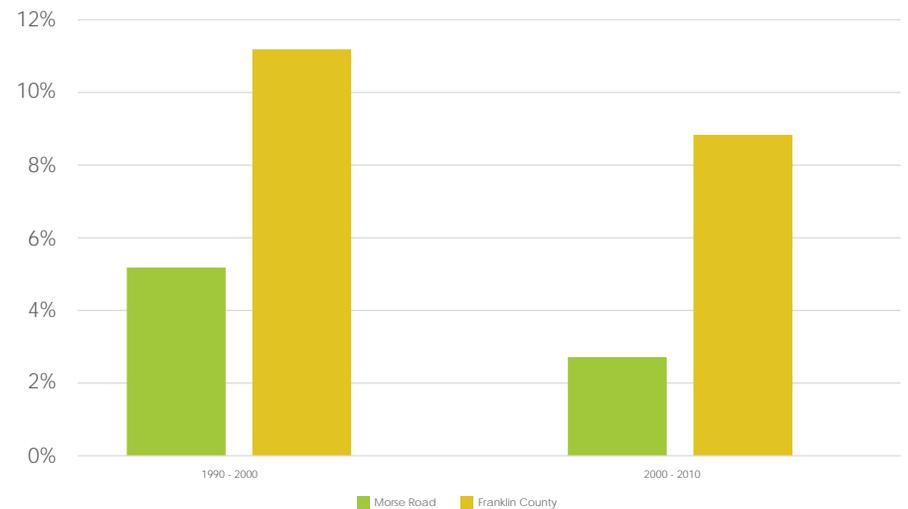
The Morse Corridor Study Area has shown a moderate population gain in the last two decades. A total population of over 48,000 in 1990 increased to over 50,000 residents by 2000, and then to over 52,000 by 2010. However, the growth rate – 5% in the 1990s and 3% in the 2000 – lagged behind Franklin County as a whole. The county saw growth rates of 11% and 9% respectively during those decades.

An aging population is an emerging issue across the nation as the Baby Boomer generation reaches retirement age and families are having fewer children than in the past. The aging Baby Boomer cohort is similarly going to drive up the number of elderly residents in the Morse Corridor area. At the same time, the large proportion of immigrant newcomers is driving the median age in this area downward. At 34 years of age, the median age is consistent with Franklin County but younger than the State and national median age by a few years. There is a large cohort of young children in the area, consistent with immigrant families having a higher birthrate than the national average.

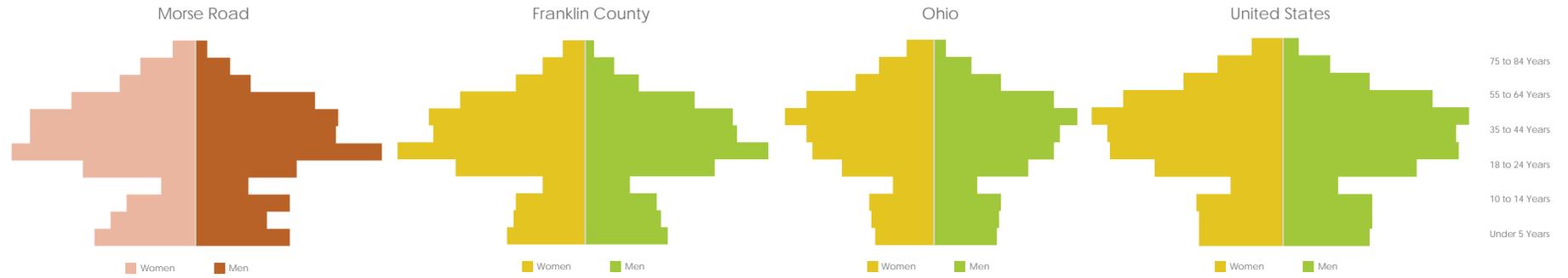
Morse Road Corridor Population Growth



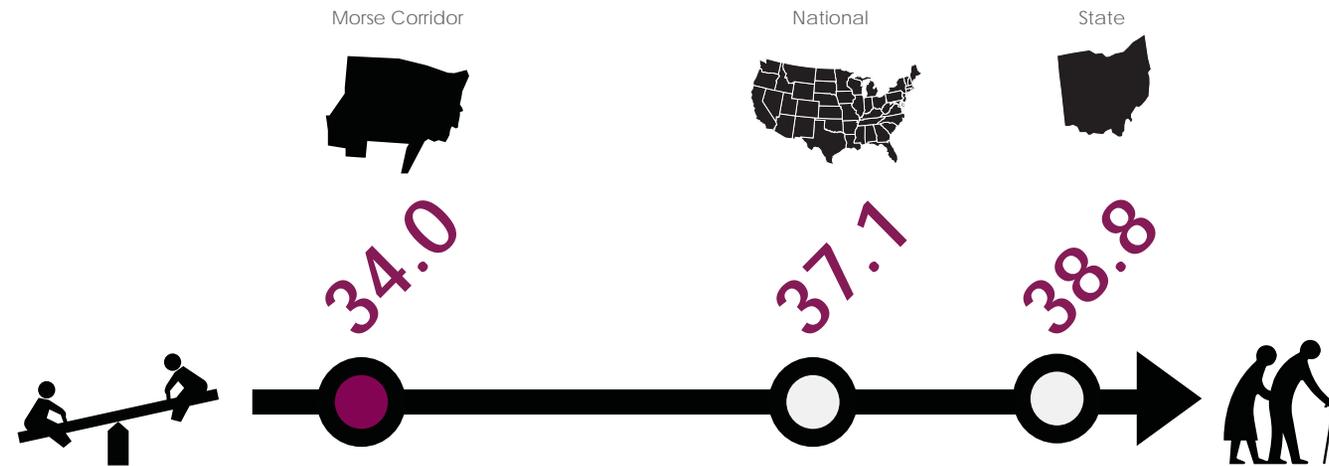
Growth Rate by Decade - Morse Road Corridor and Franklin County



Population by Age and Sex



Median Age

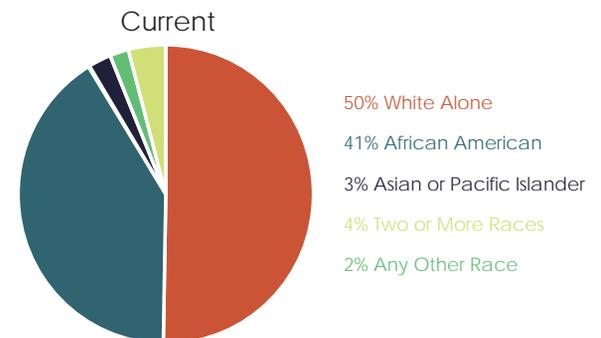
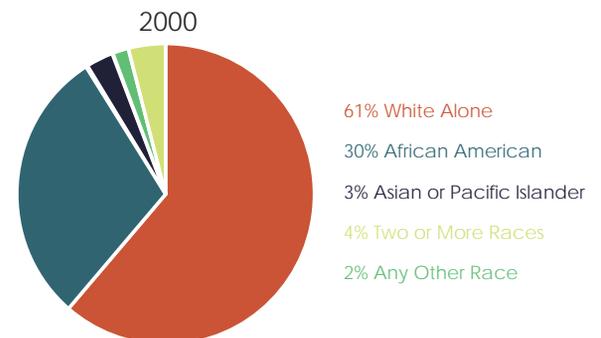
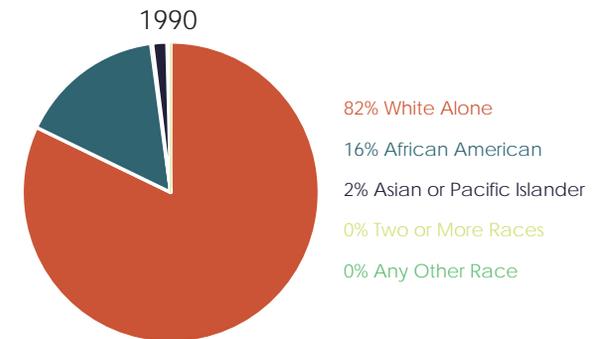


Race Percentages

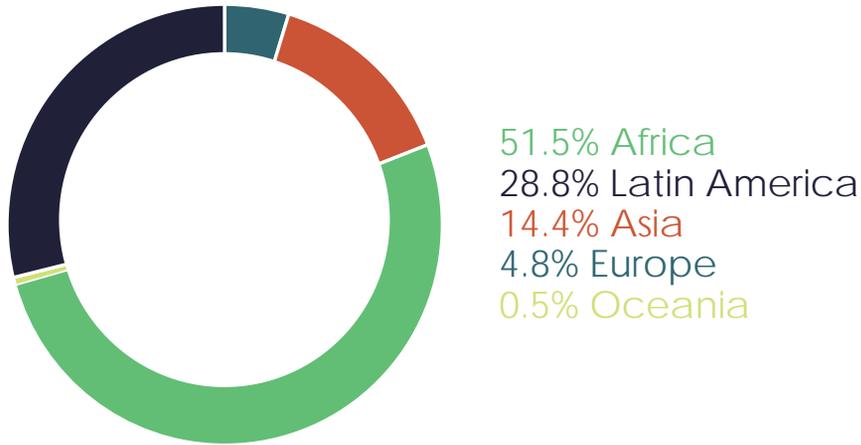
Race + Community Trends

A clear trend since 1990 is a decline in the white population and a rise in the proportion of minorities. The White-alone population has declined to just over 50% (which includes White Latinos). The area can thus be called a Minority-majority district. Meanwhile, the African American population, which includes native-born blacks as well as African immigrants, has continued to rise, and is now on the verge of overtaking the White-alone population.

The large proportion of immigrant oriented businesses along the corridor tell a story of a community with a high immigrant population. Census data reveal a relatively high foreign born population of 16.1 percent; a full 64 percent of this population are non-citizen legal residents. More than half of foreign born residents arrived in the country between 2000 and 2009, with another 23 percent arriving during the 1990s. Clearly, the high rates of immigration to this area are a recent phenomenon. Only 11 percent of foreign born residents arrived before 1990. Nevertheless, the native-born population remains a clear majority at over 80 percent. Another important finding is the origin of foreign born residents. More than half come from somewhere in Africa, which is consistent with the large Somali population known to have settled here. Nearly 30 percent are from Latin America, consistent with a rising Latino population.



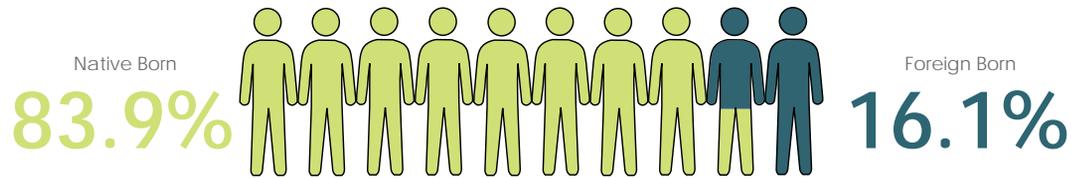
Place of Birth for Foreign Born Population



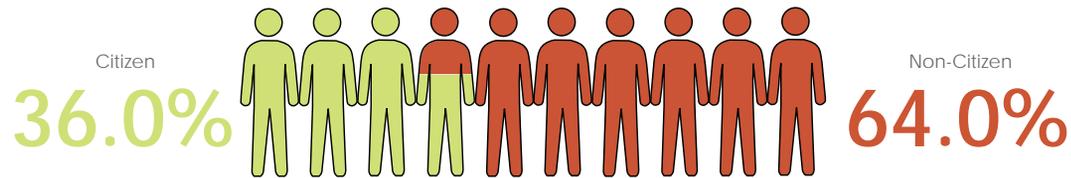
Year of Entry for Foreign Born Residents



Native vs. Foreign Born Population



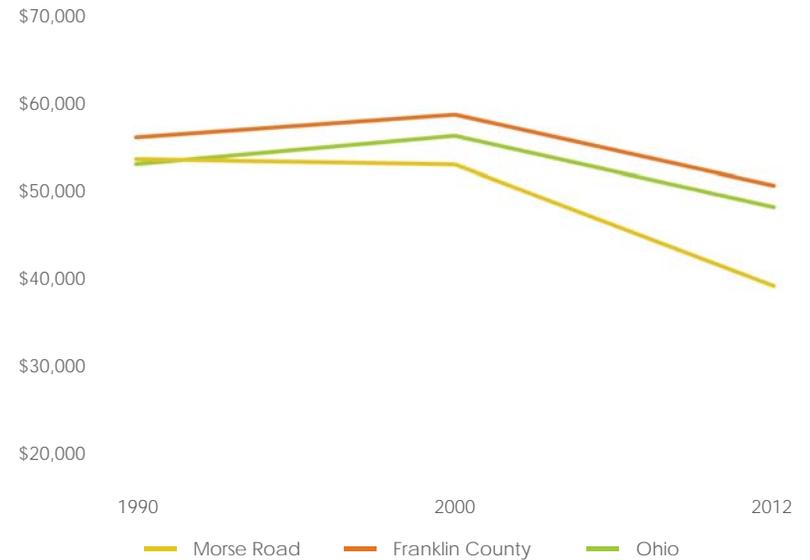
Citizenship of the Foreign Born Population



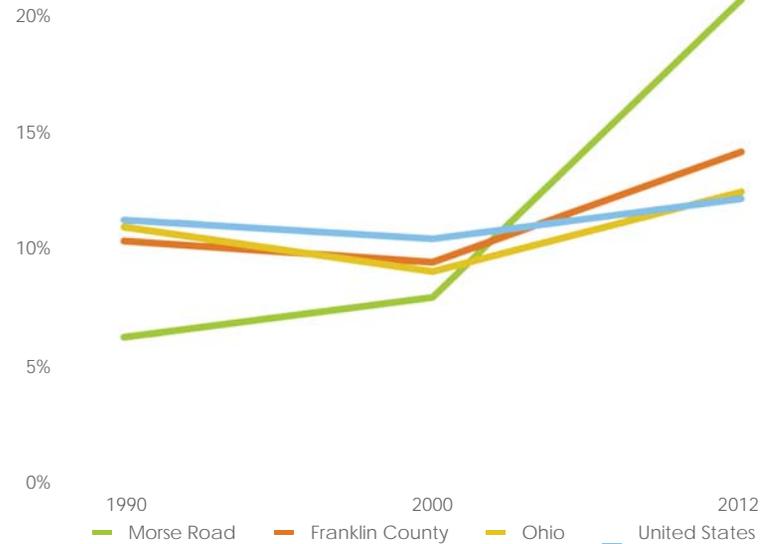
Income

Income and poverty trends paint a picture of an overall population that is less wealthy than it was in 1990, though it is not necessarily the same population. Less wealthy immigrants and other newcomers appear to be replacing a population that is aging or moving to other parts of the city. Median incomes, adjusted for inflation, dropped slightly over the 1990s, while incomes for the county and state grew overall. In the 2000s, median income declined in both the county and the state, but along Morse Road, declined at an even steeper rate by over \$10,000. Over the same two decades, the poverty rate here grew from 5 percent to nearly 20 percent today, a much steeper rate than the rise in poverty statewide and nationally. Unemployment trends provide a more nuanced picture. The trend line over the 1990s show declining unemployment rates over the decade as a whole, for the county, state, and nation. At the same time, Morse Corridor area unemployment rose overall. In the 2000s, unemployment overall rose in all areas – the corridor, the county, the state, and the nation. Significantly however, Morse Corridor’s overall unemployment average rose slower than the county, state and nation, ending off with the lowest unemployment rate of the five geographies. Unemployment appears to be no greater a problem along Morse Road than in other parts of Columbus.

Median Income

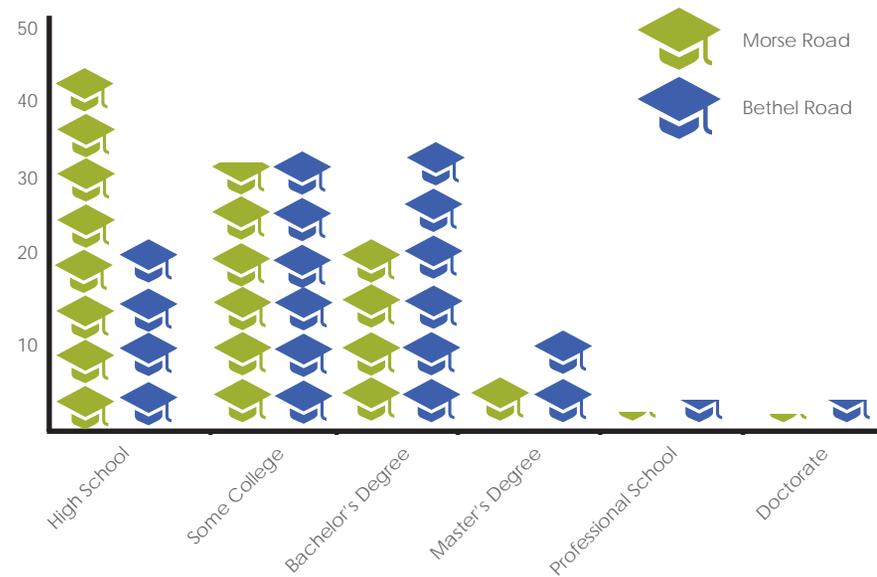


Poverty Rates



Educational Attainment

Educational attainment shows a lower rate of college educated individuals than the comparable Bethel Road corridor, whose population appears to be more affluent. This alludes to the need for more educational opportunity. With an improved school system, residents would be able to gain better employment in turn improving the economic status of the area. To do this, programs aimed at getting residents to college would greatly help. Whether it be high school students or immigrants, serving the citizens of this area would be key for the future sustainability. With resources around the area such as the Northern Lights Library and Franklin County Jobs and Family Services, the Morse Rd corridor is prime to house an extensive effort towards educational reform. With things such as simple as programs to raise awareness on college, to actually providing classes, there is numerous opportunities available to better the community.



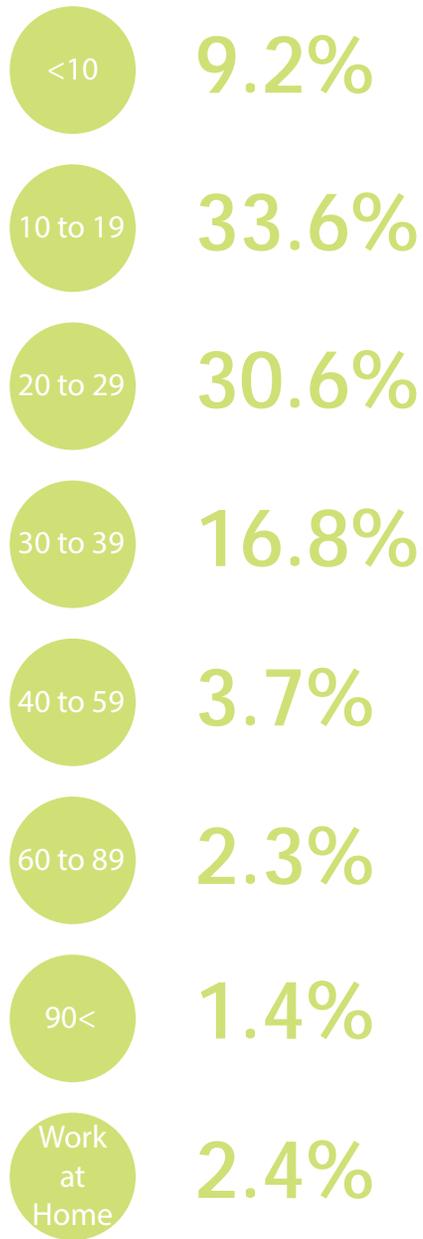
Travel to Work + Opportunity Index

We examined travel to work trends as reported by the Census Bureau. A vast majority of residents - over 90 percent - drive to work. Less than 4 percent use public transit, and very few walk, perhaps because work is not within walking distance. Travel times to work is consistent with the rest of the city at between 10 and 30 minutes.

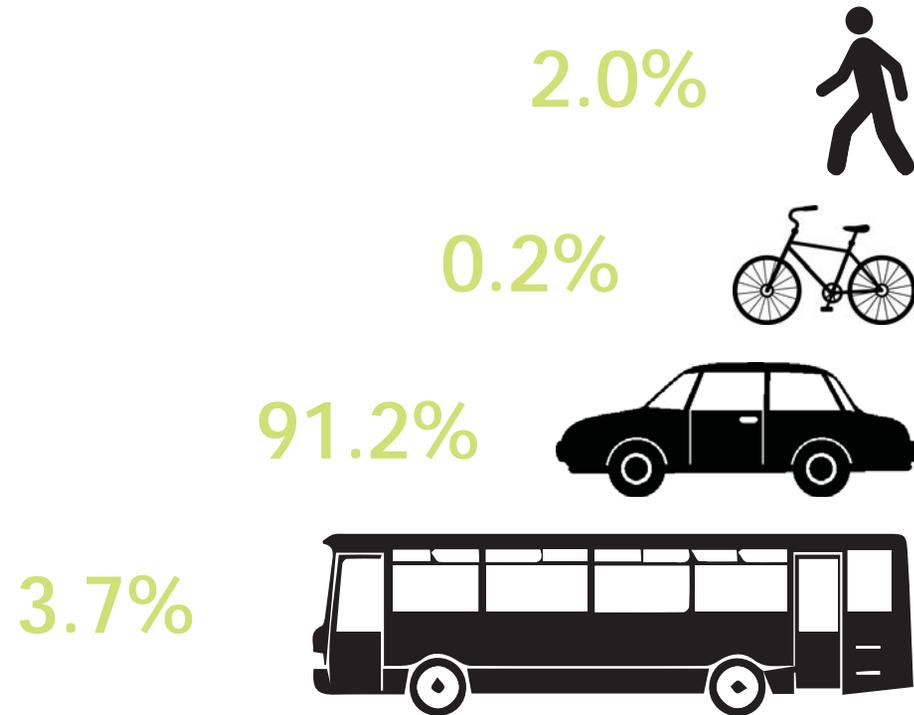
In 2012, the Community Development Collaborative of Greater Columbus commissioned the Kirwan Institute for the Study of Race and Ethnicity to assess trends that have shaped community conditions and affected community development in Franklin County. As part of the assessment, researchers created an opportunity index for each of Columbus's neighborhoods. The opportunity index is based upon indicators across four categories: Housing and neighborhood, transportation and employment, health and safety, and education. Each neighborhood is rated on an index of opportunity scale from very low, low, moderate, high, to very high. The neighborhoods along Morse Road were rated from very low to moderate. As compared to the rest of the city, this area has been found to be of lower opportunity.

This demographic analysis shows that the population of the Morse Corridor area has changed vastly over the last two decades. Indicators paint a picture of an overall population that is more diverse but less wealthy than it was in 1990. Some evidence, such as the Opportunity Index, show the area lagging behind other parts of the city, while others, such as unemployment trends, show a more resilient population. These changes are likely to cause reverberations that last for many years. The growing numbers of both the elderly and the very young may be an ongoing concern. The area will likely persist as a magnet for East African and Latin American immigrants for years to come, driving a local economy boosted by immigrant oriented businesses. Future planning and development will need to take these changes and trends into consideration.

Travel Time To Work



Means of Transportation to Work



Source: US Census Bureau; Census 1990, Census 2000, American Community Survey 5 Year Estimate 2008-2012

Urban Cycle

Cities regulate the use of land for a variety of reasons which typically address economic development, recreational space/parks, quality of life and environmental/wildlife protection. The following study summarizes these three main sections: the urban cycle, developable land and zoning. Understanding the historical shifts of demographics in Morse Corridor and the process of urban cycle provide the background to better understand the current. Since zoning is an important and efficient method in land use regulations, analyzing the present zoning condition can help strengthen the community and provide the potential for future land use change. Ultimately, this analysis will show that the present zoning conditions on Morse Road and surrounding areas is stale and has remained unchanged for many years. These current zoning conditions also have a lack of mix use development which keeps many residential areas isolated from the corridor and hinders community involvement.

A survey of the cultural landscape shows the nature and extent of change over time. In urban areas there is a common appearing cycle of: 1) Construction, 2) Abandonment, 3) Conversion, 4) Re-Abandonment, 5) Demolition, and 6) New Construction. Sometimes the cycle skips a phase, but its' essential motion of building recycling persists.

The Urban Cycle presents an opportunity in blighted areas and rundown businesses for immigrant investment to re-create a vibrant urban

landscape. They accomplish this through converting abandoned spaces into new businesses. International immigrants possess a self-motivating entrepreneurial spirit which drives their hard-work ethic, as first generation arrivals to the United States they benefit from a true hunger for success and a desire to live the American Dream. Immigrants find ways to re-invest/re-use vacant commercial spaces. In recent years, immigrant entrepreneurs have opened stores and restaurants in vacant buildings, culturally and economically spurring urban revitalization

Immigrants can revitalize blighted neighborhoods affected by disinvestment. Immigrant owned businesses have played a major role in reviving commerce along the Morse Road corridor: a Latino merchant bought the former Sun TV building located on Morse Road west of Cleveland Ave., and converted it into a Mexican restaurant and grocery destination. He employs 45 full-time people at his Morse Road store. Across the street, a group of Somali immigrants operate the Global Mall, a community-based mall of over 20 small shops including clothing stores, a photography studio, an African foods store, a barber shop, a tailor, and a jewelry-repair shop all located within a former department store. Started with funds from family relatives or community investors, it is owned and operated by Somali immigrant and entrepreneur Ahmed D. Mohamed. The influx of many new shops and stores to open recently on Morse Road are individually owned immigrant businesses.



Former home converted into a tax business.



Former Kentucky Fried Chicken turned into a Chinese restaurant.

Developable Land

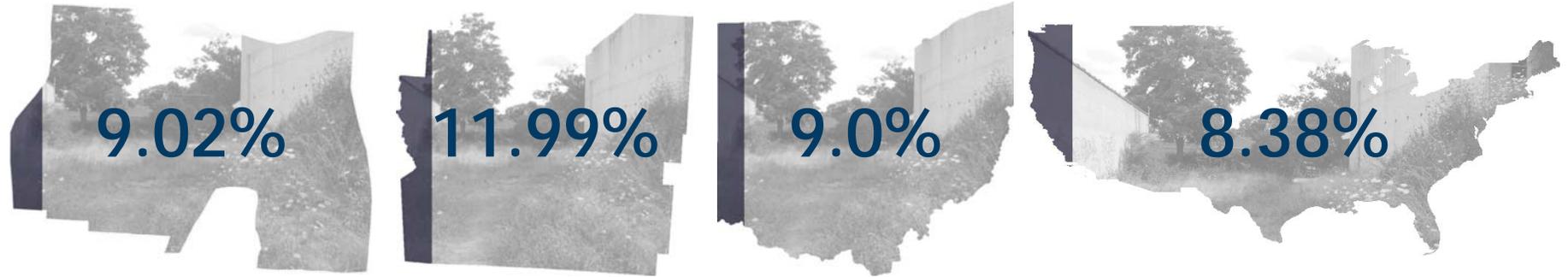
As the urban cycle continues, the abandoned and demolished buildings leave city lots of vacant land that become a potential for local businesses and residents.

Unkempt land has a negative influence and connotation on the overall community, such as crime, adjacent property value and quality of life. Vacant land is sometimes considered as the eyesore of the city. Thus, addressing the vacancy situation provides us opportunities for redevelopment and reinvestment which can bring the vitality to city life.

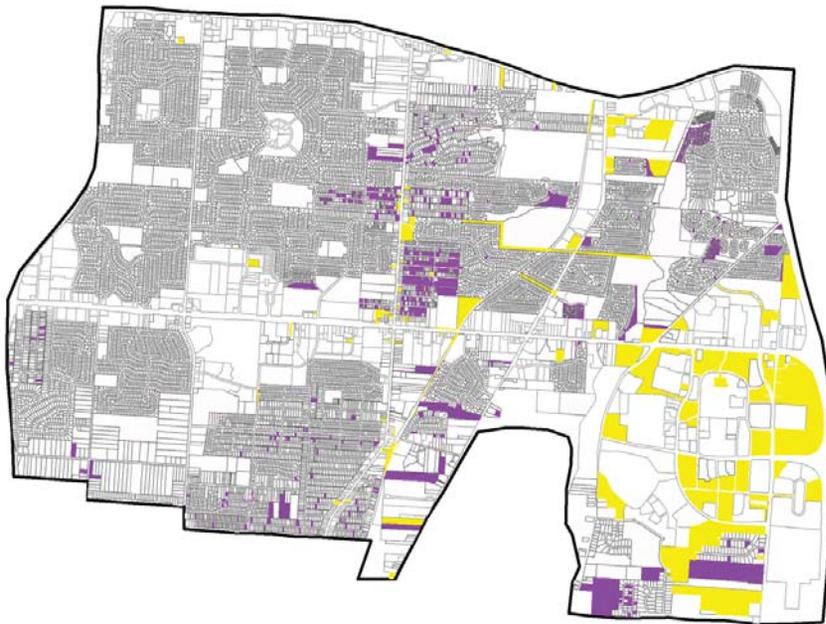
Through the course of our investigation, we found that the area around the Morse corridor did not have considerable building vacancies, but land vacancies were dominant around certain areas of Morse Road, Cleveland Avenue, and Easton. The following analysis uses Geographic Information System (GIS) parcel data and is divided into three categories: industrial vacancy, commercial vacancy and vacant land. It is worth noting that the study only focuses on empty underutilized land that does not include unoccupied land with existing structures. Therefore industrial vacancy and commercial vacancy refers to vacant land zoned for either industry or commercial while vacant land refers to vacant land zoned for residential or tax exempt properties.

To gain a better understanding of vacant property around Morse Corridor, a comparison was made with Franklin County. In 2013, the total vacant land area in Morse Corridor was 571.49 acres, which makes up 9% of its whole area (6336.54 acres). Comparatively, in Franklin County there was 33751.4 acres of vacant land that accounts for 12% of its whole area (281467.38 acres). It might be hard to visualize how much 571 acres is, but if we compare it to the 873 acre site of Polaris Fashion Place, that 571 acres equates to 65% of the Polaris site.

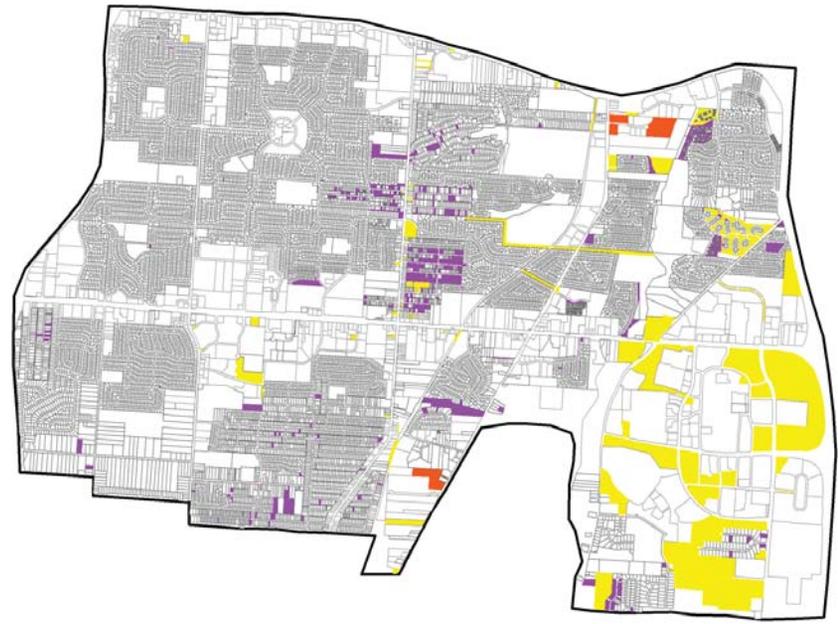
Developable Land Percentages



Northland Developable Land 2004



Northland Developable Land 2013



Key Findings

- *Vacant land is mainly clustered together along Morse Corridor, Cleveland Avenue and Easton.*
- *Embracing the vacancy situation provides the potential land use transformation into parks or usable public space.*
- *Changes in current zoning can also encourage surrounding vacancies to benefit.*

Zoning + Land Use

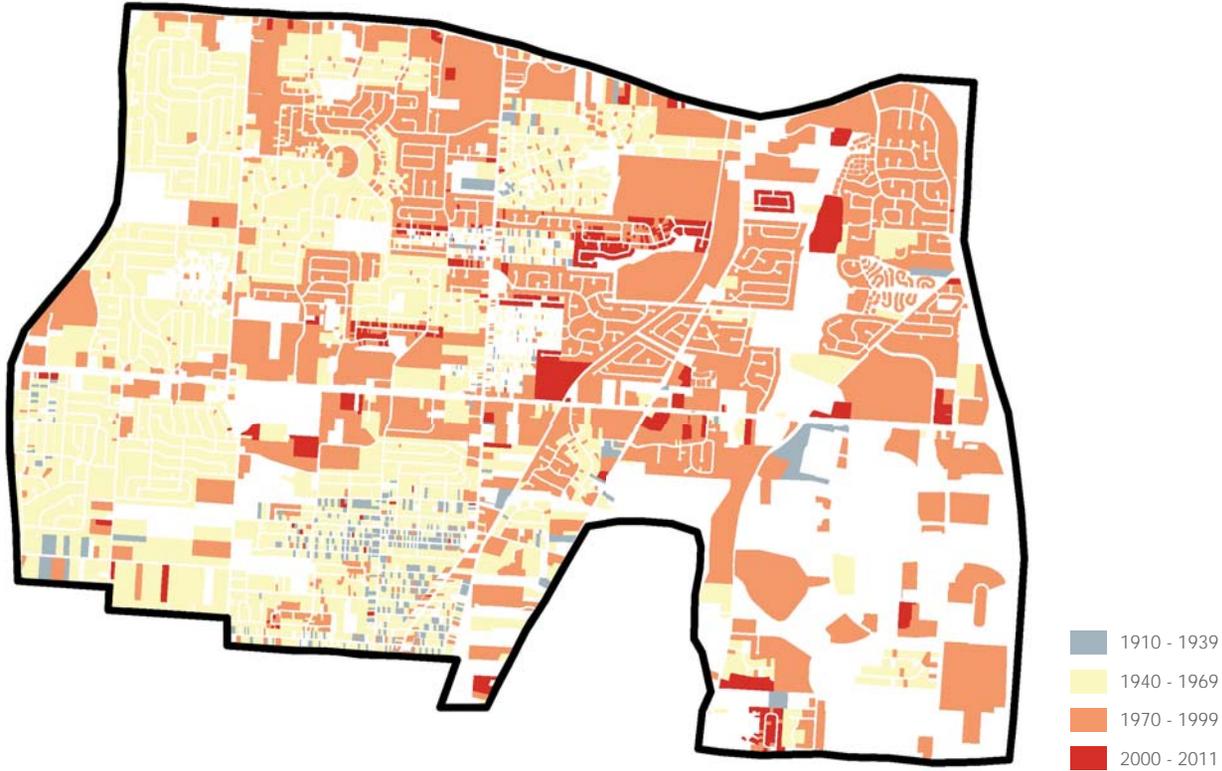
Zoning is a tool used for improving and shaping cities and communities for the future. Typically, zoning is used to address economic development issues, green/open space, overall quality of life and environmental protection. Zoning is also used to place restriction on development in certain areas, such as segregating industrial sites from residential areas. As well as development restrictions, zoning can put restriction on number of floors a building has (building code) and zoning can have effect on drainage, public streets, pedestrian walk space and overall population density. Zoning must be used as a tool if cities and communities want to improve and make changes for the future. Planners, political leaders and stakeholders should think about social, safety and physiological needs for a community before changing zoning laws. This also means that political leaders and stakeholders need to understand the weaknesses and strengths of their communities. By truly understanding the community's needs, leaders can use zoning to solve problems such as crime and lack of green space. Zoning is not a quick fix tool, but one that must be utilized for overcoming problems in the near and distant future.

Morse Road is characterized by single use zoning. Building age data shows that the primary age of housing and businesses were established in the 1960's. Morse Road also follows development trends of Franklin County over the last 100 years peaking in 1960 and leveling off for a short amount of time in 1990's. Columbus classifies this area as a Neighborhood Business District, where land abutting Morse Road is commercial single-use zoning.

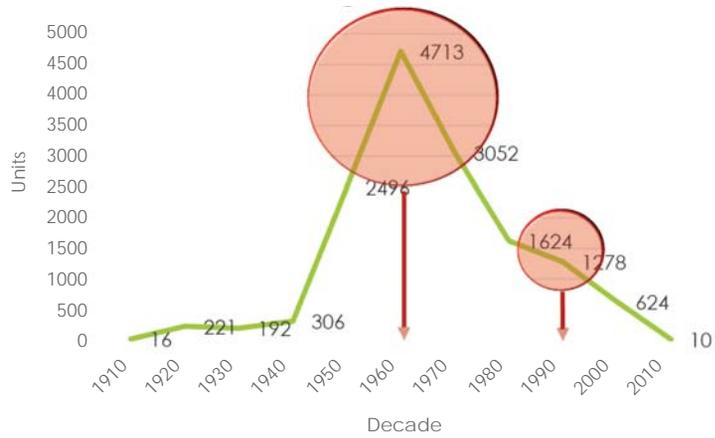
Critical analysis of zoning maps and GIS structure data revealed that zoning has remained largely unchanged for over 50 years. In the 1980's Morse Road corridor was dominated largely by unique restaurant chains, all of which are mostly gone. Although structures have changed due to typical urban cycles, land use has not.

Collectively data suggests that zoning does not address the changing demographic this area has experienced in the last nine years. Of which, the African community has doubled and the Latino Community has grown significantly. As a projected influx of entrepreneurial immigrants enter the area, zoning restrictions must change to accommodate greater economic progress within the area.

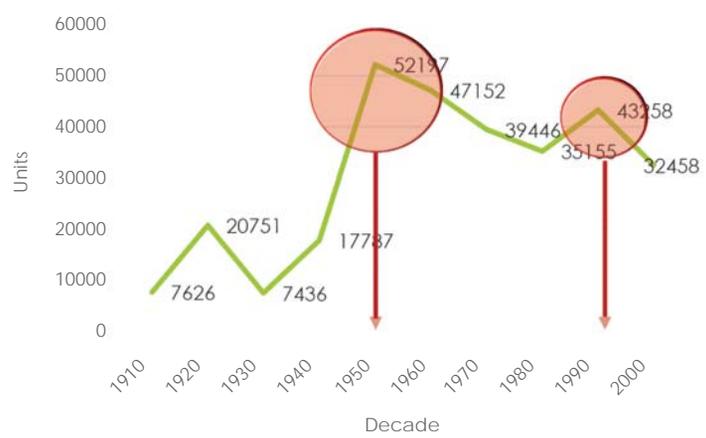
Building Age



Morse Road Corridor Building Demographics



Franklin County Building Demographics

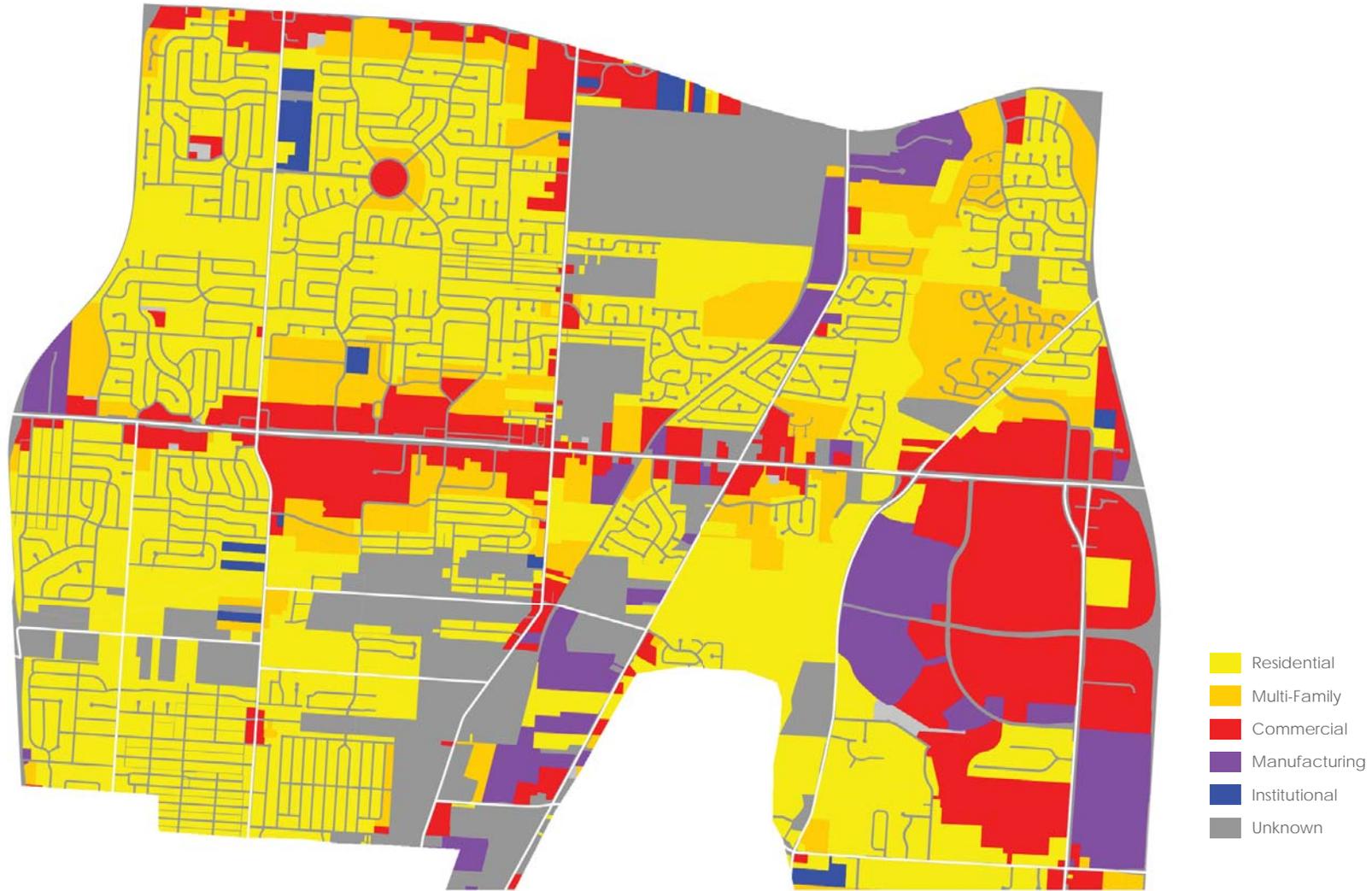


Zoning + Land Use

This zoning analysis paired with the vacant land study concluded select areas as potential for land use change. Previously identified vacancies can complement by changing land use so that each space might link strongly to one another.

As part of research, an undercover police officer identified a high amount of crime and drugs plaguing apartment complexes around Cleveland Avenue, Belcher Drive, and Tamarack Boulevard. With a comparison of land vacancy and crime it is hypothesized that the increase in uncared for land vacancies may be directly linked to crimes happening in these areas. Research shows that there is a lower risk of crime around vacant land that is well cared for. The psychology is that if vacant spaces look well cared for it portrays an image that people are invested in the area and that an individual will be more likely caught if committing a crime. Further analysis shows that areas North of Morse Road (Tamarack Circle) is currently underutilized and current commercial zoning can be modified to allow more diverse use.

Current Zoning Map



Key Findings

- *Zoning has not changed significantly in 50 years*
- *As demographics continue to change land-use and zoning is not changing to accommodate future economic development.*
- *Deficiencies have been identified with current zoning code, vacancies, and land use: all effecting quality of life and community health.*

Recreation

As the previous analysis revealed a deficit in park space, the Phase II analysis has brought other open (non-park) space to light as a part of the complete recreational inventory. The second phase analysis has furthered the inventory aspect for parks, recreation and open space areas. The Morse Road corridor has several parks, but also a series of “open spaces” and “stream buffers” has been identified.

After taking an inventory of features in the park, the Morse Road corridor parks have shown to be true assets to the community. While features vary, this is usually a correlation to the size of the park. However, parks with 5 acres or less still offer an array of features for local residents.

Walkability is also very strong in the area. The map above shows all green spaces with a half mile radius boundary from the center of each park. While the corridor has a strong, closely grouped park system throughout, the area does have discrepancies. Such as the center of the site and almost all of the lower half. While the park-to-park distances are near excellent, the connections themselves need improvement. Safety levels are low, fast moving traffic can discourage biking, and there are often times not complete sidewalks or pathways between these points.

While furthering the inventory of the recreational components and assets in the area, the “green space” category was discovered. What makes green space different than conventional park space is the lack of maintenance from the city. Typical open green spaces in this category also lack the above mentioned park features. This analysis revealed 36.04 acres.

Adding in the green space to the gap analysis shows that there is still a deficit of 44.09 acres. Fortunately, the corridor offers a third form of recreational space – stream buffers. Streams are highly prevalent in the eastern areas of the focus area. With approximately 3 miles of streams and creeks there is a huge potential for improving the recreational space. If set at a constant width of 150 feet from end to end, this would add roughly 40 acres to the inventory. Additional benefits of stream buffers are their ability to provide safe and relaxing walking areas through the residential cores of the corridor. Vacancy could also prove to offer a solution for the corridor’s recreational space.

Half Mile Radius Around Parks

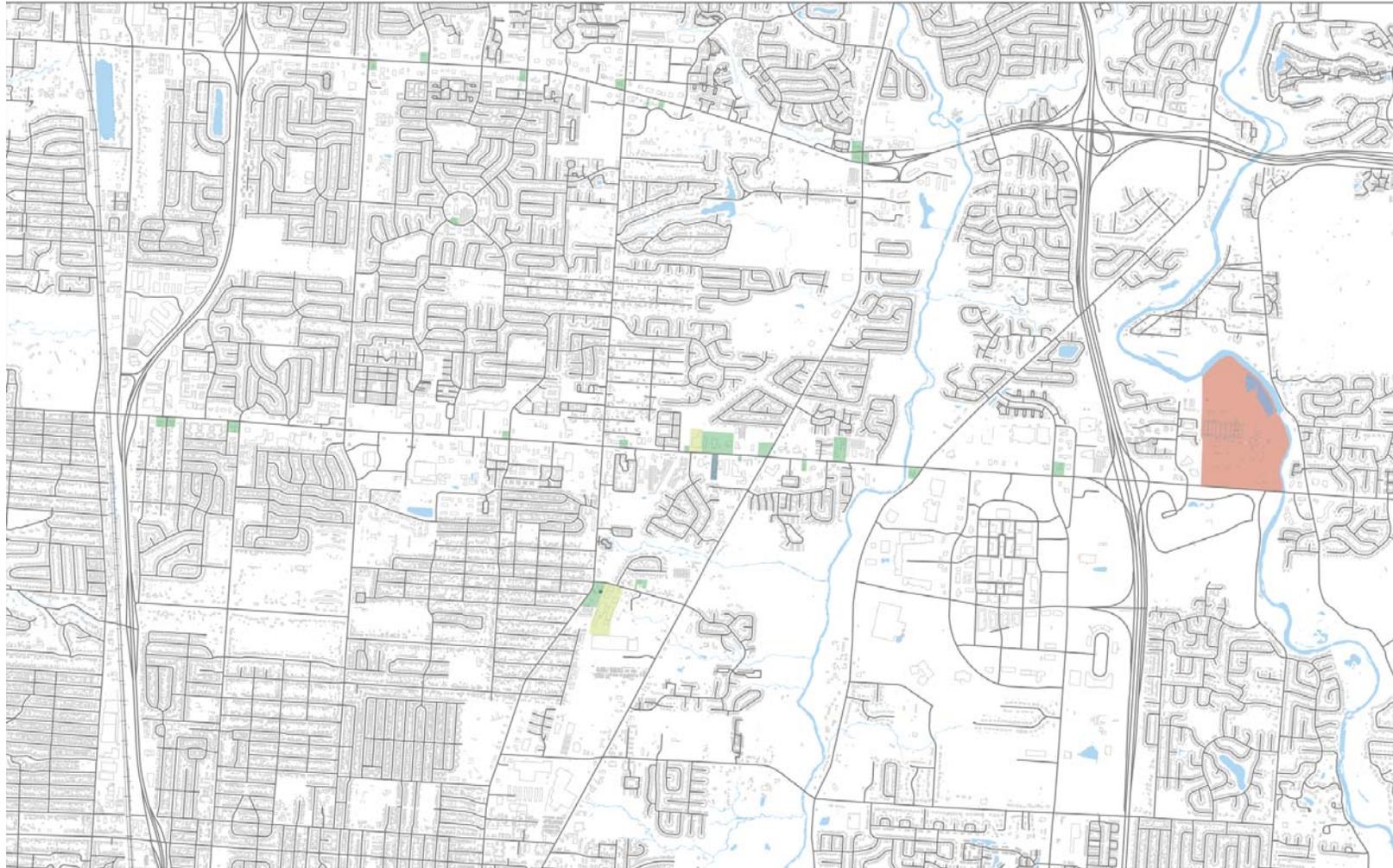


Hazard Sites + Traffic Counts

A healthy community not only focuses on the health of an individual but also on the health of the system that surrounds that individual. One of the indicators of healthy community is how many potential sites can be hazardous to a community's health. It is vital to diagnosis these sites so the residents can be made aware of how their health could be impacted. In the Northland community, there are very few hazard sites for the community to worry about. Most of the potential sites are automotive related, such as oil change stations, gas stations, and a tire-recycling center. There is also a water treatment facility for the City of Columbus located just outside of I-270. However, the main focus for the community would be the Ohio Steel Industries plant located on Ferris Road and Cleveland Avenue. The manufacturing plant could potentially release hazardous chemicals and polluted water into the water table polluting the water system for the area. With all of this being said, the Northland community has very few potential hazard sites, which is very beneficial.

Morse Road is very heavily designed to accommodate the automobile, and it is easy to see why. The road connects two major interstates, I-71 and I-270, as well as a major state route in Cleveland Avenue. It comes as no surprise that this corridor is very heavily trafficked by the automobile. To determine how many cars actually travel this road per day, data extrapolation was required since ODOT does not perform traffic counts on Morse Road. Looking at the counters at the intersections of Morse Road and Interstates 71 and 270, and Cleveland Avenue, we could determine that almost 43,000 cars per day travel along this road. This is a positive and negative asset for the corridor. The amount of traffic along the corridor is great for current and potential businesses that could move to the corridor. The amount of potential customers on the corridor is a great asset for these businesses. At the same time, the high volume of traffic combined with speeds over 45 miles per hour create unsafe conditions for pedestrians along the corridor.

Potential Hazard Sites

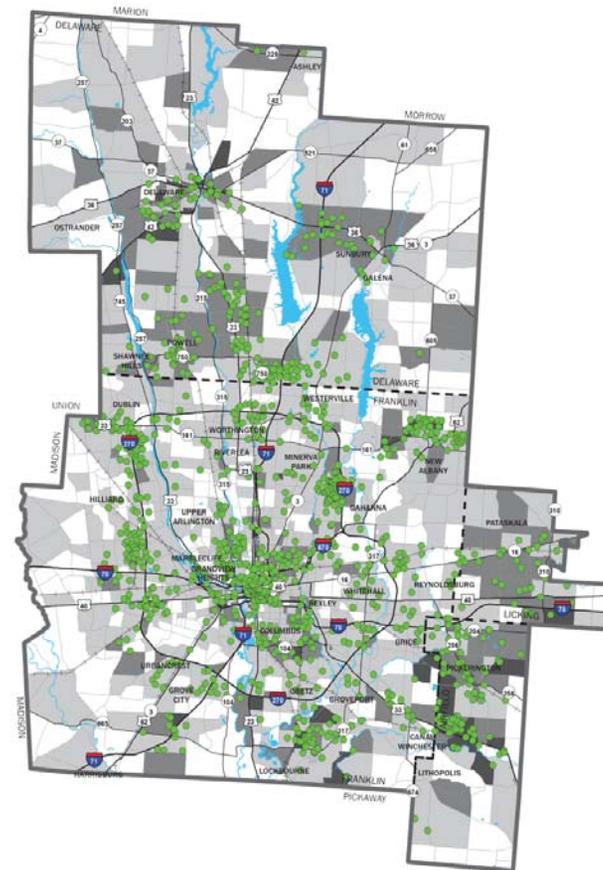


- Water Treatment Facility
- Storm Sewer Overflow
- Manufacturing Plant
- Automobile Businesses
- Electronics Drop-off

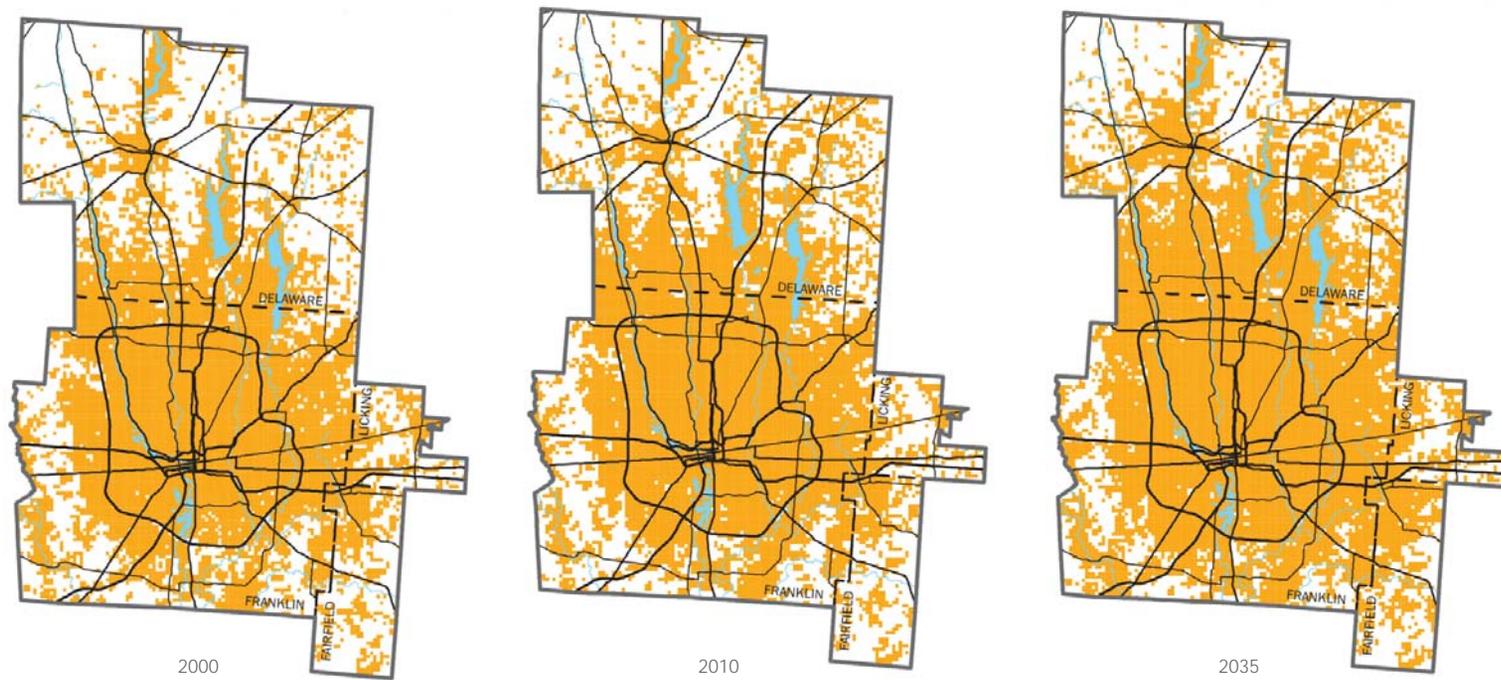
Business Environment

Almost 43,000 cars per day travel along Morse Road. That amount of traffic creates a climate for good business along the corridor. A business count along the corridor showed a very skewed market toward the service industries. Of the 300 plus businesses on the corridor, over half are in the food and automobile sector. This is not good for the Northland community because of the lack of diversity that this creates. The overall lack of office jobs, factory jobs, and other types of service jobs, create a very strict dichotomy of jobs for the community. With the strict nature of Morse Road being a commercial corridor, this area should attract a multitude of different jobs for a diverse community.

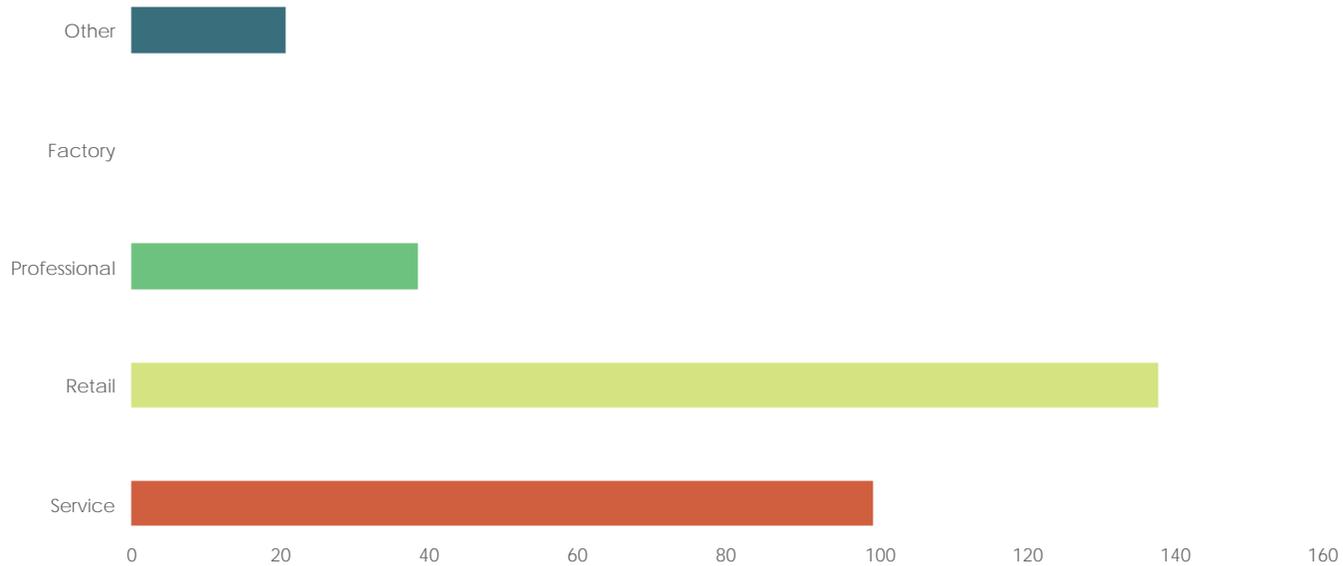
With that being said, the overall growth patterns of Columbus over the next 20 years present another problem for the Northland community. MORPC's transportation plan for Columbus for 2012-2035 has found some very interesting and potentially problematic trends for communities within the Columbus area. Over the next 20 years, over 96 square miles of agricultural land will be developed. Most of this development is forecasted to take place around the Delaware and Pickerington areas. This presents a problem for the Northland community. Even with the accounted growth of the Northland community during this time period, the expected jobs for the area are not expected to grow by much at all. These potential jobs are moving to places of growing population, specifically Delaware and Pickerington. This will create a problem for the Northland community. The growing population and the stagnant job market will lead to more people having to commute to work and potentially leaving the area because of the lack of jobs.



Developed Land Since 2000



Morse Road Industry By Type



Walkability

In addition to the environmental and economic health of an area the physical health of an area is also very important. Physical health can be affected by walkability, healthcare access and fresh food access.

The walkability of an area is influenced by safety, infrastructure and access to attractions. Safety is an important component especially from the resident's perspective. Crime, the perception of crime, and speeding traffic are just a few examples of factors that can lead to a diminished sense of safety and therefore less walking. Neighborhood infrastructure also plays a role in the overall walkability of an area. In a walk audit completed by the City of Columbus in collaboration with local residents sidewalk condition and cleanliness were cited as major issues especially for the youngest and oldest member of the community. Finally, amenities are also very important to walkability. People must have places they want to go. Walk Score is an on-line tool that uses statistical data to determine a walkability score for an area out of 100. The area around Morse Road scores on average a 50/100, which is higher than the City of Columbus at 40/100, but still, leaves plenty of room for improvement. The walkability of an area is critically important to creating a healthy community because walkable neighborhoods are economically healthier and the residents are physically healthier.

Northland Community Walkscores



Residents crossing Morse Road.

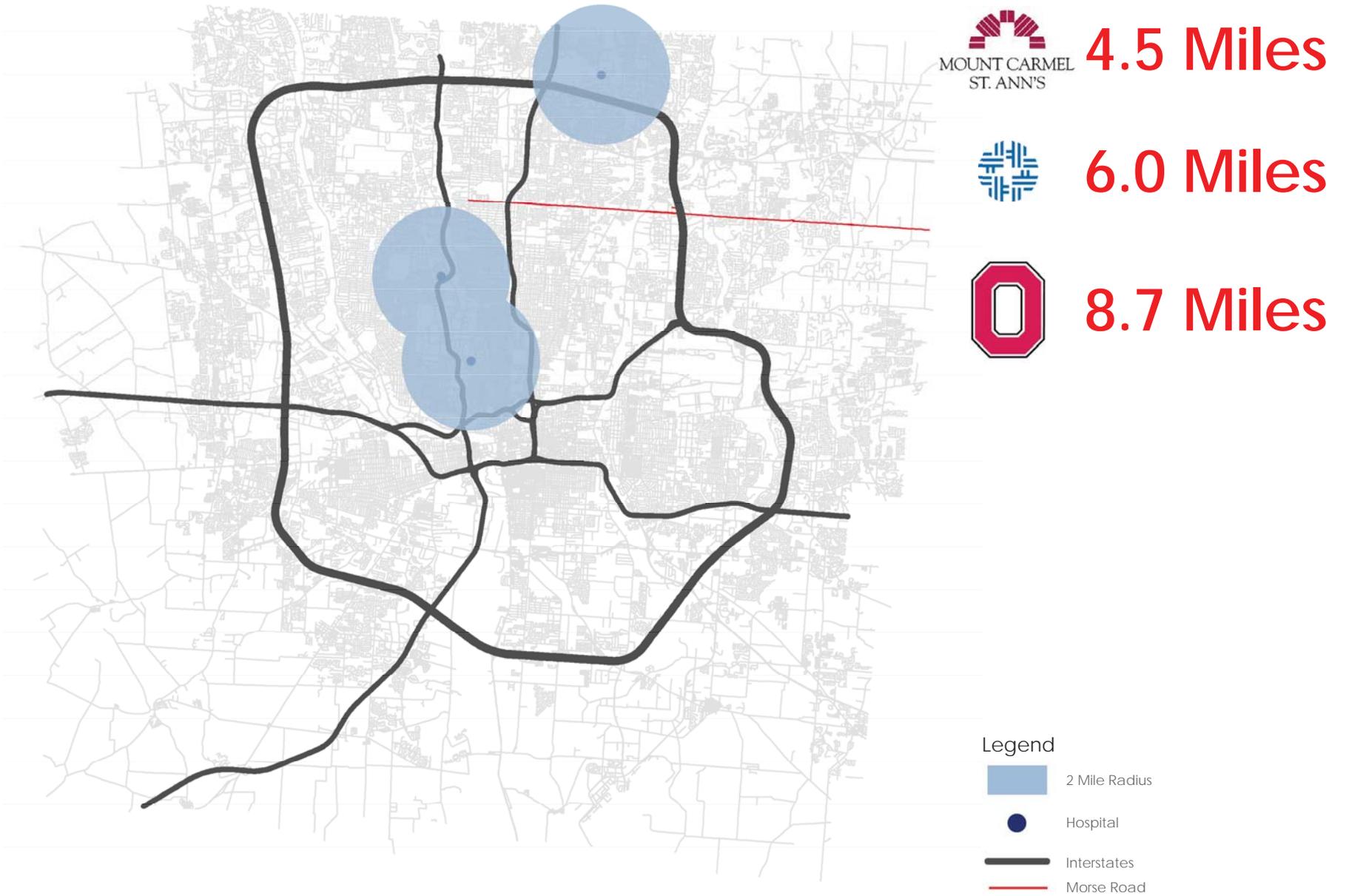
3204 Morse Road	34
4062 Burnell Road	37
1829 Ferris Road	40
4836 Karl Road	48
4863 Almont Drive	57
2619 Morse Road	63
2189 Belcher Drive	65
1161 Morse Road	66

Healthcare Access

Access to healthcare plays a more obvious role in the health of a community. The effectiveness of healthcare provided is affected by availability, afford-ability and acceptability. Availability refers to access to healthcare providers, afford-ability refers to access to health insurance or costs without insurance, and acceptability refers to general understanding of the healthcare system. Acceptability is hard to gauge, but is generally lower in communities with high immigrant populations. Along Morse Road we focused on access to healthcare along the corridor and found an opportunity to increase access and potentially to increase acceptance of the healthcare system. Currently the closest hospital to Morse Road Mt. Carmel St. Ann's which is 4.5 miles away. The two next closest hospitals are Riverside Methodist and The Ohio State University Wexner Medical Center. There is a lack of primary care, which is supplemented by urgent care service in the area. There are also chiropractic and dental services in the area, which residents may or may not be using due to afford-ability of the services. Helping Hands Free Clinic is an important provider of health care services in the area.



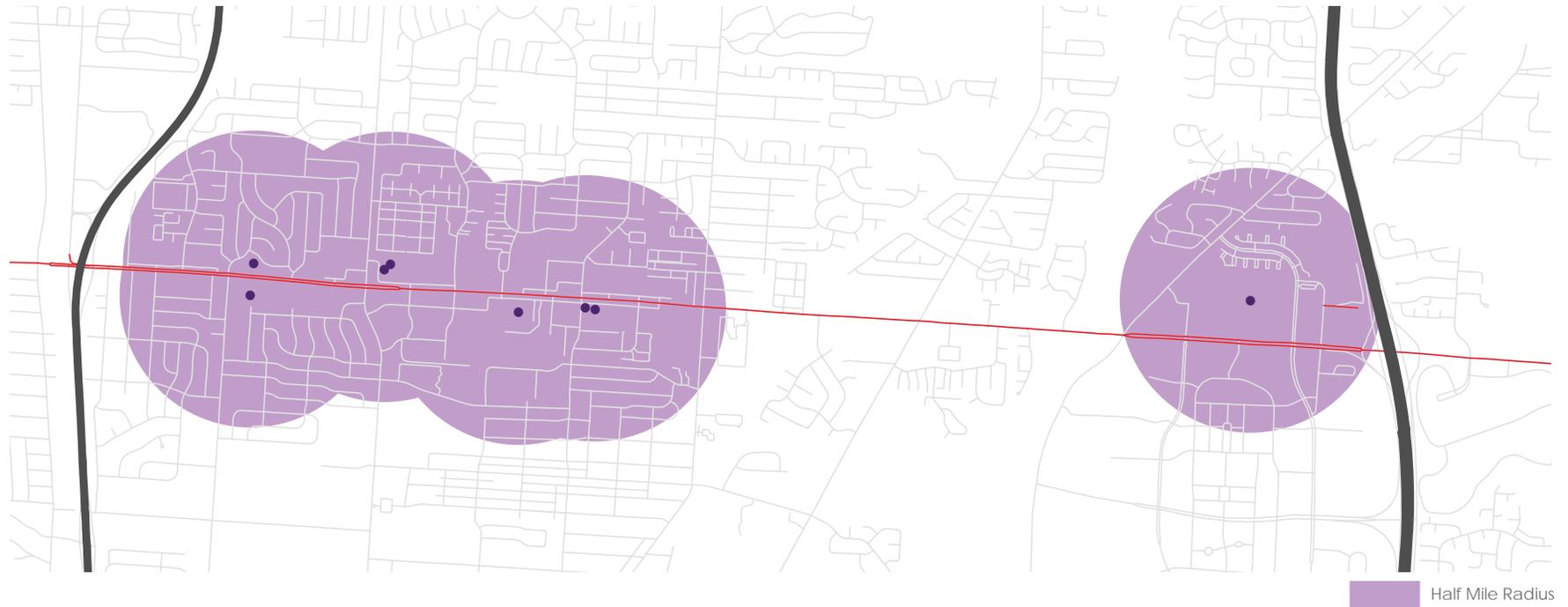
Hospitals Near Northland Community



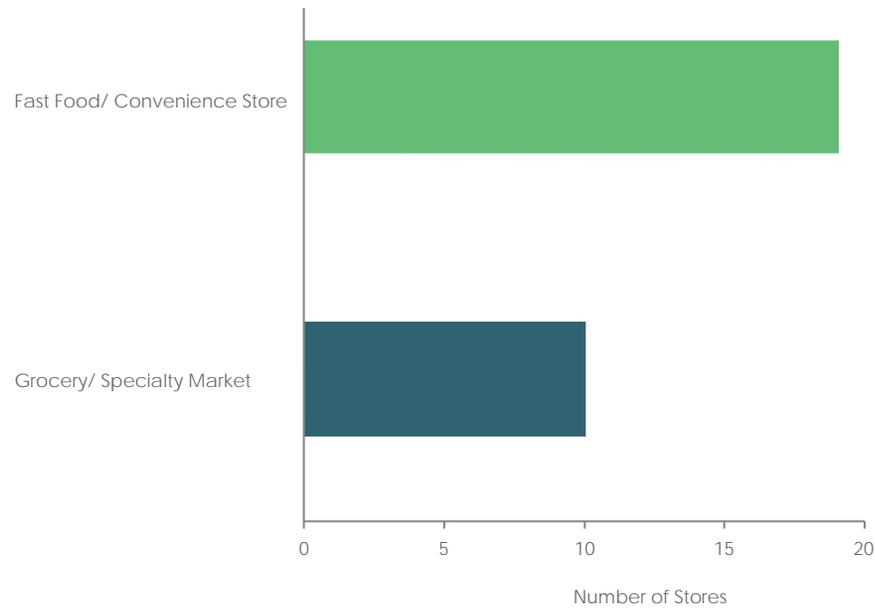
Fresh Food Access

In addition to regular access to a physician, access to healthy foods can affect the overall health of the community. Eating healthy can impact day-to-day quality of life as well as risk for long-term disease. A food desert is a place with poor access to fresh food and high access to low-cost, high-calories fast foods. Luckily the Morse Road Corridor has access to a diverse range of healthy, fresh foods. Morse Road has 8 grocery stores and 3 specialty markets. The grocery stores range from chain stores like Save-A-Lot to ethnic stores like La Michocana. While there is plenty of access to fresh foods and the fresh food access is a community asset there is still plenty of access to fast food and convenience stores, which pose a hurdle for community health if residents choose prepared food over fresh food.

Fresh Food Access Along Morse Road Corridor



Types of Food Choices



Key Findings: Areas of Opportunity

- Stream buffer areas
- Vacancies to decrease green space deficiency
- Low pollution in area allows for a healthy ecosystem and neighborhood
- Great potential for business expansion (more diversity) on Morse Road
- Capitalize on access to fresh food
- Potential for increased availability, acceptability of healthcare in the area



Community Engagement Event at Haimler Center

03

Community Engagement + Case Studies

3.1 Introduction

3.2 Community Engagement

3.3 Case Studies

Community Outreach

Outreach and engagement is important because our studio is not a resident of the community. The community is more aware of important wants and needs that both a qualitative or quantitative analysis could identify. It is also important to gain resident input so the overall vision reflects the wants, needs, and future wishes of the community. A proposal that reflects the community is more likely to be supported and implemented.

In order to execute a successful community meeting we used connections with community leaders to distribute information based off of a set agenda. The agenda included an introduction to student research of the neighborhood, survey with discussion, and mapping exercise. Overall, the meeting was a success, gaining valuable input and feedback from residents and stakeholders.



Community residents and stakeholders engage with students

Case Studies

Case studies are a critically important aspect when studying place. A case study is the synopsis of all aspects of a project. A case study can include physical, social, environmental and economic elements of a project. This section details best practices and learning lessons that can inform design along Morse Road. The class was tasked with finding case studies that are applicable to the Morse Road corridor and the Northland neighborhood. The case studies focus on healthy neighborhoods, prosperous corridors, and mixed-use neighborhoods. The class examined:

- Davis, California
- Tacoma Park, Maryland
- High Point, Washington
- Shoreline, Washington



High Point, WA is a sustainable, healthy, happy community

Haimerl Center Meeting

The community outreach meeting began with a synopsis of student work to date. The community residents and stakeholders at the meeting were asked to participate in two activities: Think-Pair-Share and SOAR. The Think-Pair-Share is a survey followed by discussion in small groups and then sharing ideas with the larger group. The SOAR activity, or Strengths, Opportunities, Aspirations, Results allowed participants to discuss what they think about their community within the framework of these four categories. Participants also had the opportunity to place color coded stickers on a map of the community to help us discern areas of consensus. The colored dots help to identify what works well in the community, where there is opportunity for improvement, what the community aspires to be, and what results change could bring.



Community members congregate with students before the meeting.

YMCA + Gillie Senior Center

During the Neighborhood Design Workshop, a group of students visited the YMCA on Karl Road and Gillie Senior Center on Morse Road in order to gain further perspective from those who may not have been able to attend the meeting. Many of the people at the YMCA were older or dropping off children for school. The older citizens were excited to participate. Most residents we talked to had lived in the neighborhood for more than 30 years. Overall, safety and crime were common concerns. They believed that the apartment complexes and traffic volume along corridor contributed to the lack of sense of safety. Keeping in mind their concerns we will be able to assemble a vision to best fit the needs of the residents.



OSU students give instructions for the meeting's activities.



Community members present their concerns.



Community members fill out surveys.



Community members discuss their ideas for improvements in the area.



OSU students answer a community member's question.

Mid-term Review

The purpose of the activity was for the students to help the community prioritize its' needs. Since community involvement is an essential component in any project, the students were eager to hear from residents.

The OSU students began their presentation by reviewing the primary and secondary phases of work in their project, the Qualitative and Quantitative Analysis respectively.

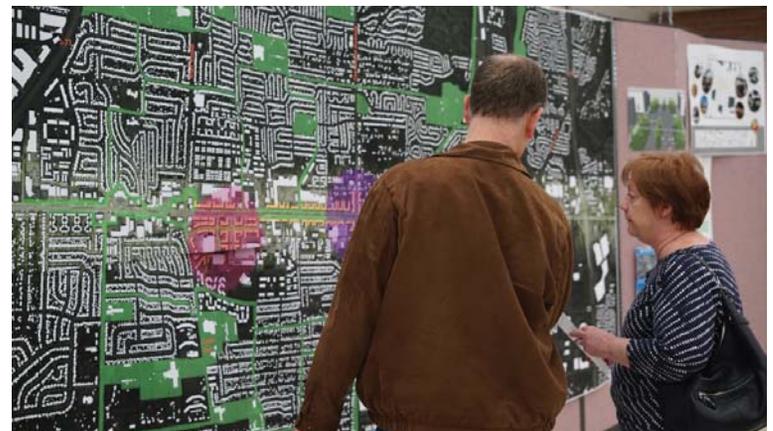
The community outreach and engagement component involved Think, Pair, Share surveys and SOAR activities for residents to actively participate in this reflective process and make their voices heard. Findings from that meeting included understanding the Menards, housing Stock, and libraries to be among the community's strengths; while key aspirations involved: a community center, improved connections and access, more recreational green spaces, and a stronger community identity.

Key Findings

- Need for a community center
- Concerns about safety and walkability
- Desire for more recreation space and better neighborhood connectivity



Draft of final document is on display for residents to review



Residents review a corridor wide vision of Morse Road



Student introduces the Hubs vision for Morse Road



Community member engage as students present work



Student presents the project site to residents



Residents have an opportunity to ask questions and provide feedback to students

Final Review

The final review is an opportunity for students to share the final long term vision with the community. The strategic vision builds on the community input as well as the qualitative and quantitative analysis phases. Based on community input calling for a community center where people can come together, a safer more walkable neighborhood and more recreation options the student began to create visions for the future of Northland. The visions include hubs of activity, and green-way connectors.

Key findings:

Issues and concerns of the audience from the midterm review were addressed to provide a cohesive vision for the Northland Community.

The final review provided a constructive learning environment between the public and the students, inspiring a cohesive plan for the potential growth and revitalization of the site.



Professor Lara introduces the project to community members.



Community members listen intently to students presenting the Northland Vision.



Community members listen to the visioning process.



Student presents the details of the Gateway Hub.



Student presents the overview of the Regional Hub.



Students and community members congregate during an informal poster session.

Davis, California

Inclusionary Zoning is a land use technique for developing diverse mixed-income communities by requiring each new residential development make a percentage of the new units affordable to targeted incomes. In 2012, there were approximately 145 jurisdictions in California adopting inclusionary zoning for housing programs. Among them, the City of Davis, which is a suburban city in Yolo County, has employed this policy for more mixed-used development since 1987. The notion of inclusionary zoning is that combining low-income and high-income families will create more opportunities for low-income and better access to social services and resources. By implementing an inclusionary zoning policy, it can help the local economy as well as improve the overall quality of life for people with lower incomes. For example, developers receive non-monetary compensation in the form of density bonuses, zoning variances, and/or expedited permits that reduce construction costs in return for designating affordable units. The case study examines the effectiveness of inclusionary zoning in the City of Davis by researching whether the policy enhances the economic and racial integration and equitable access to social services or not.

Using tract-level Census data from 1980 to 2000, the author illustrated the impact of inclusionary zoning by comparing quality of life before and after the adoption of the policy. After that, he mapped his analysis of affordable housing locations and demographics in ArcGIS and overlapped that with a map of social service facilities which include substance abuse, mental and health care, food assistance, job training, employment support, child care, and family welfare with a .5 mile buffer to show the walkable distance.

The results reveal that there is a correlation between inclusionary zoning and social equity in City of Davis. It seems the inclusionary zoning policy has a great impact on the integration of non-White, Hispanic, Asian, African-American, but a minor impact for low-income and very low-income groups as well as no impact for the Native American population.

This case study has a strong relationship with Morse Corridor which has experienced tremendous demographics changes in the last few decades (doubled African-American population as well as an increase of Hispanics). With the increasing immigrant population, the Morse Corridor is lacking a similar policy. Over the past fifty years, the zoning code for the Morse Corridor hasn't changed significantly and has not taken into account the changing demographics. So far, the biggest challenge of the Morse Corridor is ethnic integration while maintaining various cultural identities. Similarly, the City of Davis is very diverse. The inclusionary zoning has helped create affordable housing options and more socially integrated community there.



Affordable housing in Davis, CA



High quality affordable housing



Affordable housing is near high quality mixed-use retail



Neighborhood amenities make residents proud to live in Davis, CA

Takoma Park, Maryland

Takoma Langley Crossroads is a master and sector plan for a suburban area outside Washington DC, the goal of which is to make recommendations in anticipation of a new light rail line. The recommendations focus on land use, zoning, urban design, transportation, environment, and community facilities. The area of this plan is referred to as Maryland's International Corridor because of the large number of immigrants who reside in the area, a community that has had a massive impact on the social and economic infrastructure of the area. Within the plan the primary goals are: encouraging multi-modal, transit-oriented development with improved connectivity to the region; protecting existing environmental features and improving park areas; supporting a relationship between the community and future development; providing community facilities; and ensuring development that creates a sense of place.

Takoma Langley Crossroads has much in common with the Morse Road Corridor, sharing many of the same attributes and opportunities. Pedestrian safety is a significant issue because of wide arterials that have high speeds and car volumes. Like Morse Road, Takoma Langley Crossroads is characterized by strip commercial development, aging multi-family apartment complexes, and nearby single family residential streets. This area suffers from the overarching issues of poor connectivity, whether they be between green networks, community facilities, or the built environment. Takoma Langley also benefits from many of the same opportunities that the Morse Corridor does. The most significant is the diverse immigrant population.

The impetus for these planning efforts was the anticipated construction of the Purple Line, a light rail corridor designed to connect Washington's Maryland suburbs by filling the gaps in

Washington's metro-rail system. The vision set forth in the sector plan is a "transit oriented, pedestrian-friendly community that celebrates and builds on the cultural diversity of the Crossroads community." To achieve this vision, the plan calls for mixed-use development to create a "24 hour neighborhood" and increased density to allow for the provision of affordable housing. Mixed use developments would be required to include a portion of Moderately Price Dwelling Units (MPDUs) to ensure no net loss in affordable housing. New Hampshire Avenue and University Boulevard, high speed arterials, are envisioned as multi-way boulevards designed to accommodate both high speed regional traffic as well as slower local traffic, transit, bikes, and pedestrians. Parts of these corridors would be prioritized as retail blocks with continuous sidewalk frontages. Single family areas are preserved but better connected to the corridor through improved walkability.

We believe there are several lessons that can be drawn for the Morse Corridor. Prince Georges and Montgomery Counties have responded to these challenges by identifying a coming opportunity – the Purple Line – and planning for an enhanced pedestrian environment. They have proposed specific design solutions that will preserve arterials as high speed through-ways while at the same time making them more safe and pleasant for pedestrians. They have proposed a strategy, through zoning regulations, branding, and art, to turn the existing commercial strip into a central business district for the area. They have proposed a policy for ensuring the continued diversity of businesses and housing choice by incentivizing –through the zoning code – mixed use developments that set aside space for neighborhood level businesses and affordable multifamily housing. A Morse Corridor plan might benefit from taking these principles into consideration, given the similar situation of the area and the coming Bus Rapid Transit (BRT).



Before



Proposed street section for New Hampshire Avenue



After



Proposed development

High Point, Washington

High Point is a neighborhood located in west Seattle, Washington. High Point's history began nearly 80 years ago. In the 1940s, 716 temporary housing units were built in the area. By the 1990s, the housing stock was deteriorated, and health and safety were daily challenges in the community. In 1990's, the Seattle Housing Authority began a planning process to replace the units with a healthy, sustainable, mixed-income community. The foundation of the planning process was community involvement. By involving the residents and stakeholders in the visioning process Seattle Housing Authority was able to create a replacement community that met the needs of the current community. The new High Point offers community facilities on-site, and a diversity of housing types to meet the special needs of residents. A program unique to High Point is Breathe Easy. A Breathe Easy home cost only a little more than a traditional home but offers residents with asthma a higher quality life with lower medical costs. The high quality of life that High Point has achieved through the front-porch style urban design, access to healthcare and educational resources, and access to employment through Seattle Housing Authority's Job Connection makes High Point a model for other diverse, mixed-income communities across the nation.

The Morse Road corridor is one diverse community that can learn from the process, infrastructure and programs that have been executed in Seattle. Morse Road's adjacent aging multi-family housing provides an opportunity for the community to pursue a similar course of action as High Point. While the process is involved, time consuming and costly the benefits are proven. Northland residents similar to High Point resident could benefit from centralized access to medical care, educational services and connection to jobs. The end result is a higher quality of life for the whole community.

Financing of the High Point project is a complex and diverse topic. Looking at the breakdown of investments, the largest category is private which is responsible for more than half of the total. Of critical mention is the Hope IV grant responsible for \$35M or 6.3% of the total. The Hope IV grant is only available to redevelopment projects. Hope IV grants are important for many reasons: Capital costs of major rehabilitation, new construction and other physical improvements; demolition of severely distressed public housing; acquisition of sites for off-site construction; and community and supportive service programs for residents, including those relocated as a result of revitalization efforts

The High Point master plan can act as a great guide for the Morse Road community. High Point fully integrates community and nature into the site. The High Point community is very diverse, both economically and ethnically, just like the Northland community. The integration of apartments, single family housing, and section 8 housing acts as a precedent we can follow. We can follow their example to create a more integrated community amongst different cultures. Secondly, with the lack of open space in the Morse Corridor, we can benefit from the precedent of community integration around green space. The design around green space for community use will greatly impact the Northland community.



High Point created a safe, walkable neighborhood for residents



Open space allows residents to gather in public outdoor space



High Point offers access to recreation activities



Proximity to downtown make High Point a smart location for affordable housing

Shoreline, Washington

The Aurora Corridor is an arterial business corridor located 11 miles north of Seattle, Washington. The Aurora Corridor was built in the 1960's and suffered growing pains similar to other aging suburban corridors in the United States. The project consists of a four-mile special improvement district, which addresses: traffic flow, corridor aesthetics, improved transit speed and reliability, and environmental improvements in storm water management. The project began in 1998, where the city researched design studies and employed public involvement to help develop design goals, concepts, and implementation time lines. The community identified land uses within the corridor as part of the initial problem. From the public meetings it was recorded the need to "address the strip pattern of gas stations, shopping centers, convenience stores, and auto-oriented businesses, as well as "colorful" businesses like adult clubs and tobacco and alcohol stores." The Aurora Corridor started the improvement project in 2005 with a majority of its funding coming from capital improvement program and a mix of local, state, and federal dollars. Taxpayers have only accounted for around 10% of the overall funding.

Through the community engagement and the planning process, some long term goals were established. The most prominent of these include: redevelop sprawling parking lots and dying strip malls into compact development, suburban transit-oriented development, the densification of identified nodes, and creating appealing locations where people want to live, work, and play - and reducing the cost of living by providing transit. The design also called for mixed-use office hubs, which offer many of the options that a larger city might provide: entertainment, residential, offices - but in a suburban or small town setting.

The Morse Road Corridor is in a similar situation where infrastructure improvements and land use changes can be aggressively evaluated for their contribution to the area's success. The proposed BRT system for Cleveland Avenue may be able to spur additional support for this area. The proven success of the BRT system is one of the major components and driving forces of this project. Some immediate successes measured were the amount of auto related accidents were down 28% since the project first started.



During Construction of Aurora Corridor

Aurora Corridor Project timeline



**Construction schedule is approximate and subject to contractor revision*

Timeline of Construction



After Bus Rapid Transit and infrastructure improvements were made



Pedestrian Bridge used to help connect East and West side of corridor



Design Charette with Conrad Kickert PhD + Kelly Greggs

04

Strategies for Design Implementation

4.1 Introduction

4.2 The Hubs

4.3 The Green-ways

4.4 Conclusion

4.5 Works Cited

4.6 Appendix - GIS Mapping

Introduction

After gaining more community feedback at the Midterm Review students began to refine the ideas with an increased focus on connectivity and safety. The visions are a series of hubs and interconnected green-ways.

The hubs of activity proposed include a local hub, a gateway hub and a regional hub. The idea behind all the hubs is to create areas of safety and attraction along the corridor. The first hub is the Local Hub. Located at the former Northland Mall site, this hub will be a bazaar focusing on the diverse cultures of the area. The second hub will be the Gateway Hub. At the corner of Morse Road and Cleveland Avenue, this hub will be the gateway to the area. With the new BRT Line coming through this intersection the Northland area needs a good entrance to make visitors stay and come back. The third hub will be the Regional Hub. At the corner of Morse Road and the Alum Creek Green-way, this hub will focus on attracting the nearly 500,000 bikers using the Ohio to Erie trail to come into the area and spend their money. By investing in key locations the success of these locations could spur more development and investment along the corridor.

The green-ways are another key component of the project they begin to address concerns of connectivity, safety and recreational space. By connecting Northland through a network of hubs and green-ways the area will be more attractive to business and residents alike. Creating a place that all types of people can be invested in long term is key to creating a lifelong, healthy and happy community.



Students explaining the Regional Hub to a local resident.



Students conversing with a local resident.



Local resident asking questions about the overall vision of the studio.



Students and local resident express excitement about results of the visioning process.

NORTHLAND COMMUNITY DESIGN STUDIO: VISIONING A CONNECTED COMMUNITY



Local Hub:

Local Hub: Local Hub is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

Connectivity: The Local Hub is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

Economy: The Local Hub is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

Community: The Local Hub is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

Gateway:

Gateway: Gateway is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

Connectivity: Gateway is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.

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Community: Gateway is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio. It is a central area of activity in the Northland Community Design Studio.



City Hub:
 Goal: To create a multi-use trail that makes safety, accessibility, and connectivity a greater priority in Community.
 Phasing: This Hub would be constructed at the same time as the third phase of the Green Network.

Connectivity:
 The Alum Creek Bike Trail will be the primary link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

Economy:
 The Alum Creek Bike Trail will provide a link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

Culture:
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Natural Resources:
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Regional Hub:
 Goal: To create a hub that attracts and reforms residents and travelers around the region.
 Phasing: This Hub would be constructed at the same time as the third phase of the Green Network.

Connectivity:
 The Alum Creek Bike Trail will be the primary link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

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 Goal: To create a multi-use trail that makes safety, accessibility, and connectivity a greater priority in Community.
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 The Alum Creek Bike Trail will provide a link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

Culture:
 The Alum Creek Bike Trail will provide a link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

Natural Resources:
 The Alum Creek Bike Trail will provide a link between the Alum Creek area and the rest of the city. It will provide a safe and scenic route for cyclists, joggers, and pedestrians. The trail will also provide a link to the Alum Creek area and the rest of the city.

The Local Hub

Once the pride of northeastern Columbus, the Northland Mall site represents the greatest opportunity for a physical transformation of the Morse Corridor area. The Northland Mall opened in 1964 as the first shopping mall in Columbus. The mall and the Northland neighborhood were wildly successful through the 1990s. In 2002, Northland Mall closed. It could no longer compete with newer malls like Easton and Polaris. The Morse Road corridor and Northland felt the impact economically, socially and physically. Since the demolition of the mall in 2004 redevelopment has taken place on the site. Currently, the site is not being utilized to its fullest and best use. Long time residents still associate many positive memories with the site.

We propose to reestablish this site as a community hub, characterized by compact, pedestrian-scaled development, centered on a flexible, community space. The 'Northland Community Hub' will address the residents' desire for a safe, accessible, community center area upon which the Morse Corridor can build an identity. Beginning as a simple 'pop-up market' space in the short term, the hub will evolve over time into a more permanent civic space surrounded by jobs, housing, and neighborhood businesses. As part of this hub, all of the social and business services can be located in the hub for easy access. Also the hub will allow the local businesses in the area to showcase their products to locals and to the rest of Columbus' population.

We also wanted to address the safety issues on the site especially with the anticipated increase in traffic. The proposal of five new crosswalks in-between Interstate 71 and Cleveland Avenue will allow for safer and more frequent crossings, allowing for safer passage across Morse Road and the slowing down of traffic speeds as well.



A place where social services can come together.



A safe and walkable place for the older population.



A better place for recreational activity.

Local Hub - Short Term



Figure Ground



Precedent Image



Site Before



Precedent Image



Proposed



Precedent Image



Long Term Build-out



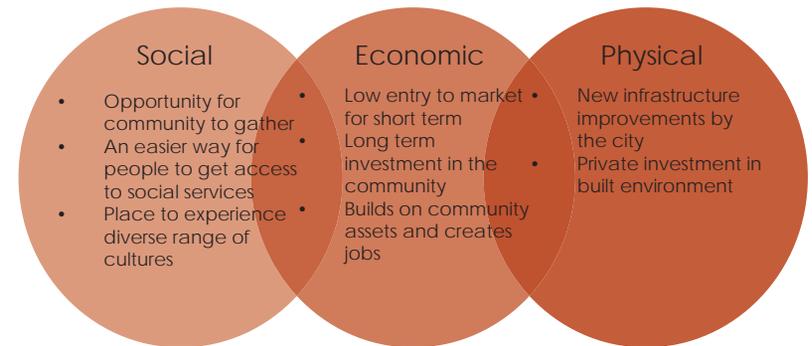
Precedent Image



Local Hub - Long Term



Return on Investment



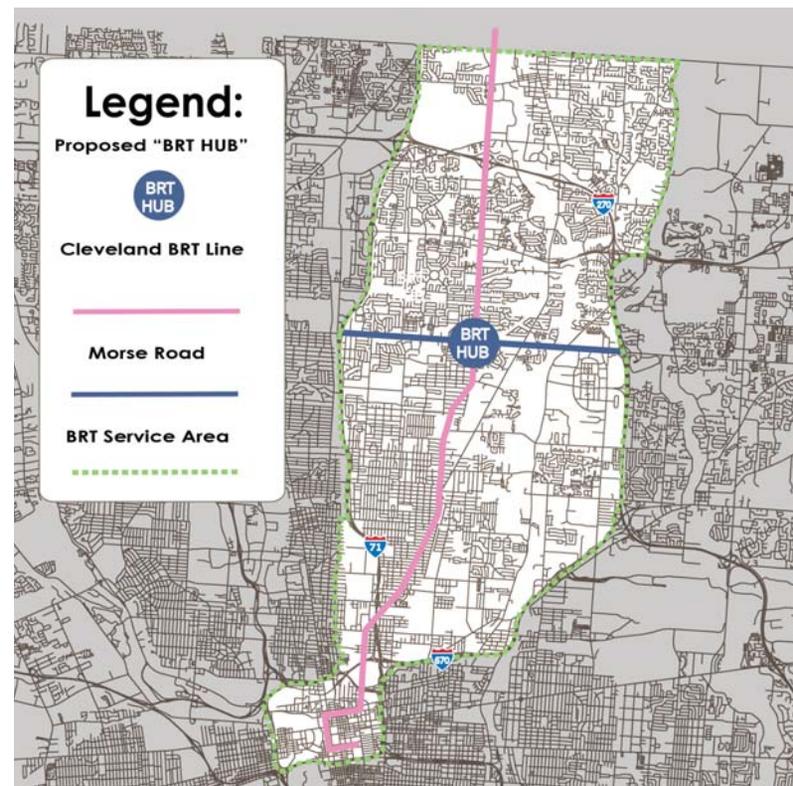
The Gateway Hub

Currently the Cleveland Avenue and Morse Road intersection is a high speed thoroughfare for automobiles. In 2013 the Mid-Ohio Regional Planning Commission conducted a study a finding Cleveland Avenue and Morse Road to be the most dangerous intersection in the Columbus region. Having the introduction of a Bus Rapid Transit service on Cleveland Avenue traffic conditions are of greater concern.

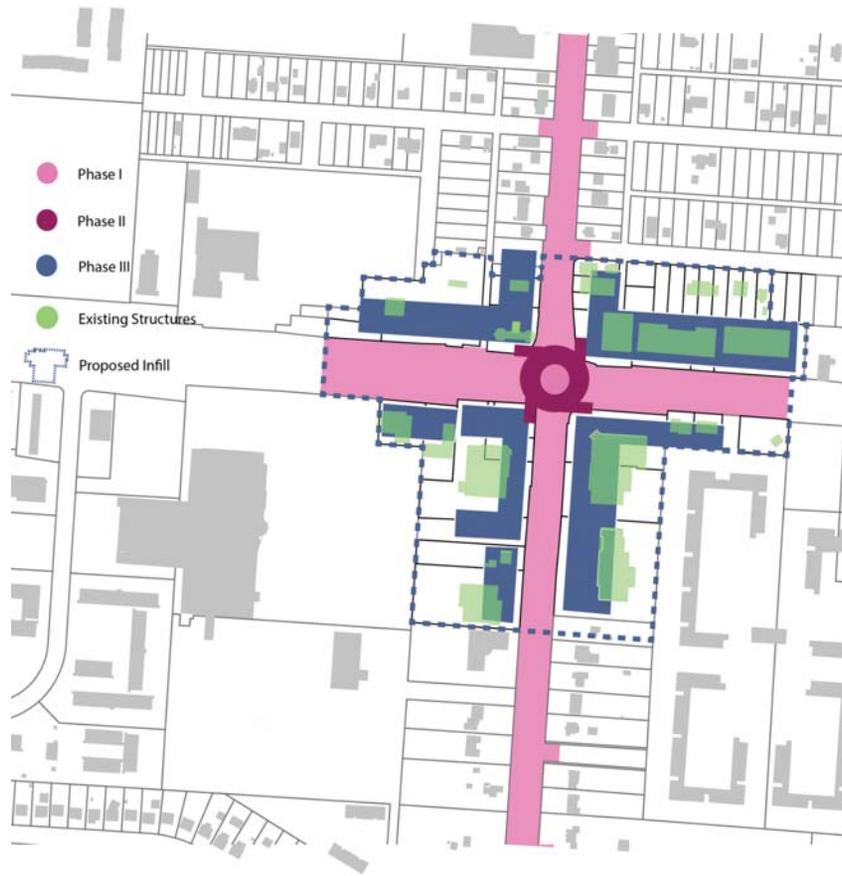
Implementation of the Bus Rapid Transit service is in progress under supervision of the Central Ohio Transit Authority. The current bus line that services the area is the second busiest in the city and provides local access from Columbus to Polaris Parkway.

Due to the development of the Columbus Bus Rapid Transit line, the Cleveland and Morse Road intersection poses as an exemplary opportunity to develop a safe multi modal interchange for pedestrians, bikes vehicles, and buses. The image below is a suspended pedestrian bridge that will not only act as a landmark, but recognizable gateway never seen before in the United States.

As Tax Incentive Financing is used to leverage this infrastructure project, it can also be used to acquire and promote development of the surrounding parcels. Currently the projected infill parcels cover over 12 acres of land and contain mixed use with a Floor Area Ratio of .5%-1.0%. Ideally these structures would contain 350,000 sq/ ft of retail, and 550,000 sq /ft of market rate real estate and senior housing. The projected land use will change, from what is currently commercial, to multi-use.



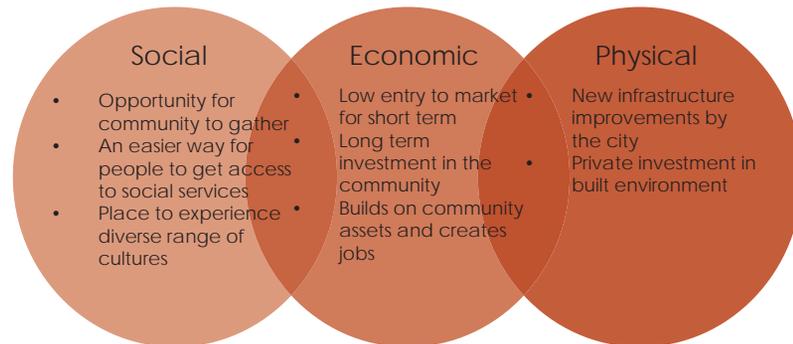
Master Plan



Possible look of Infill Development



Return on Investment



The Regional Hub

With the close proximity to the Alum Creek Green-way, there is a great need to capitalize on this asset. The Green-way is the North Entrance into Columbus for the Ohio to Erie Bike Trail, which when completed will connect Cleveland, Cincinnati, and Columbus together; it will be the longest paved path in the United States. With the possibility of up to 500,000 bikers traveling this trail every year, there is a great opportunity for the Northland community to bring in these tourists and have them be patrons of all the local business opportunities.

The Hub we are proposing is the Gateway into Northland for these bikers. The building will have two floors with the entire bottom floor dedicated to biking amenities, such as lockers, showers, storage, and repair stations. The second floor of the building will have an information desk, which will have pertinent facts about the area, and what types of businesses and cultural attracts can be found in the area. The second floor will also house informal meeting areas which can be used for community events or educational sessions.

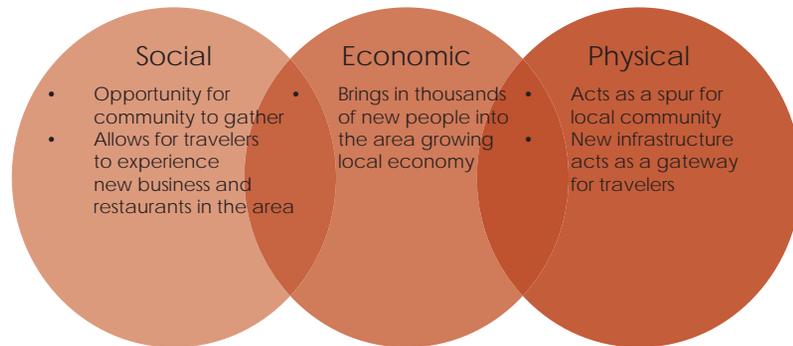
Master Plan



Entrance View of Bike Hub



Return on Investment



Courtyard View of Bike Hub



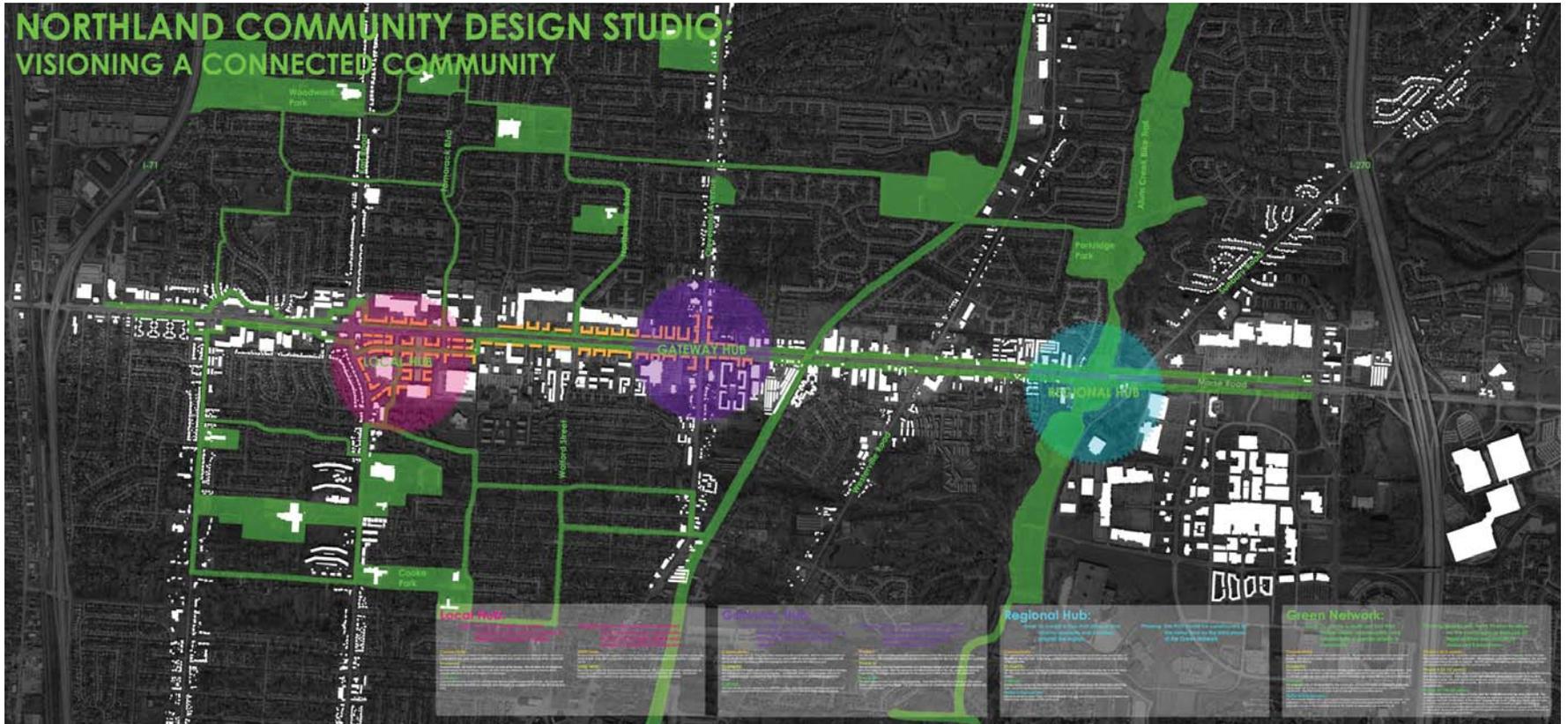
Green-way Network

Through our involvement with the community, we came to realize that the biggest concerns that community members expressed, were about connectivity and safety. To combat these issues, a green network system has been proposed. The goal of the project is to create a multi-use trail that makes safety, sustainability, and connectivity a greater priority in the community.

The trail system will be a multi-use path that enables bikers, walkers, and everyone in between to use the infrastructure safely. This path connects all of the parks, schools, and recreation centers to the residential and commercial areas in the community. From there the trail system also connects to the Alum Creek Green-way allowing access to downtown and the rest of the state. The path also provides better connections North and South of Morse Road by utilizing an abandoned railroad corridor.

The project is split into three phases. The first phase focuses purely on making Morse Road more safe for the bikers and pedestrians. To do this, the plan calls for converting all of the marginal roads into the trail system. The second phase expands into the neighborhoods connecting the schools, parks, and recreation centers with Morse Road. The third and final phase connects the community to the Alum Creek Corridor. In this phase easements need to be given to use the railroad corridor and to continue the marginal road system down Morse Road.

NORTHLAND COMMUNITY DESIGN STUDIO VISIONING A CONNECTED COMMUNITY



Local Hub:	Gateway Hub:	Regional Hub:	Green Network:
<p>Local Hub: This hub is designed to serve the immediate neighborhood, providing a central point for local activities and services. It includes a mix of residential, commercial, and recreational uses.</p> <p>Key Features:</p> <ul style="list-style-type: none"> Proximity to residential areas Local commercial and services Recreational spaces and parks 	<p>Gateway Hub: This hub is designed to serve as a central point for regional activities and services, providing a central point for regional activities and services. It includes a mix of residential, commercial, and recreational uses.</p> <p>Key Features:</p> <ul style="list-style-type: none"> Proximity to major roads and transit Regional commercial and services Recreational spaces and parks 	<p>Regional Hub: This hub is designed to serve as a central point for regional activities and services, providing a central point for regional activities and services. It includes a mix of residential, commercial, and recreational uses.</p> <p>Key Features:</p> <ul style="list-style-type: none"> Proximity to major roads and transit Regional commercial and services Recreational spaces and parks 	<p>Green Network: This network is designed to provide a continuous and interconnected system of green spaces and trails, providing a central point for regional activities and services. It includes a mix of residential, commercial, and recreational uses.</p> <p>Key Features:</p> <ul style="list-style-type: none"> Proximity to major roads and transit Regional commercial and services Recreational spaces and parks

Lateral Green-ways

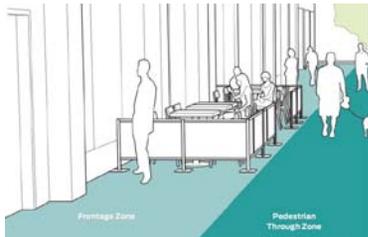
The current issue with the site is a high speed road with seven lanes. Next to the street is a fifty foot grassy and underutilized buffer that separates the streets from parallel marginal roads. This large road network foot print creates safety issues for pedestrians, hurts the appeal of the area, and damages the business revenue in the area.

The vision is to convert the existing marginal roads into multi-use paths that will give pedestrians access to future store fronts and a lateral park. The existing fifty foot grassy buffer would become a linear park that runs the entire length of Morse Road, decreasing the current park deficit in the Morse Road area. With the conversion of the marginal roads to multi-use paths and the grassy buffers to lateral park space we will ensure an aesthetically appealing green-way, encouraging walking and biking and increasing the overall safety for these modes of transportation. The improved image and increased pedestrian traffic will do nothing but help the local businesses.

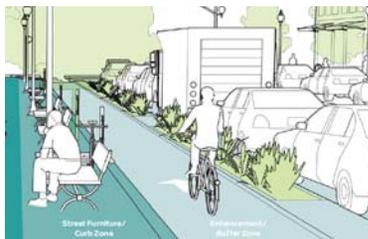
The lateral green-way will consist of the fifty foot park and the multi-use path. Within the multi-use path there are three uses; bike lane, pedestrian walkway, and store frontage. The bike lane is a six foot wide path, denoted in green, which butts up to the linear park and provides a safe space for bikers to make their way down the corridor. The pedestrian walkway is nine and a half feet wide and is located in the center of the path, giving pedestrians easy access to the park and businesses. The last section is the store frontage which is utilized by the businesses for a multitude of purposes; outdoor dining, merchandise displays, access to doorways, etc.



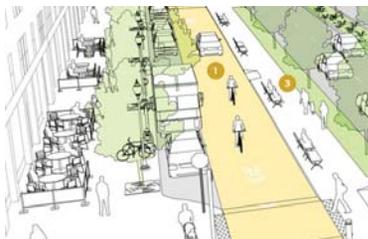
Precedent Images



This image shows human scale sidewalk life.

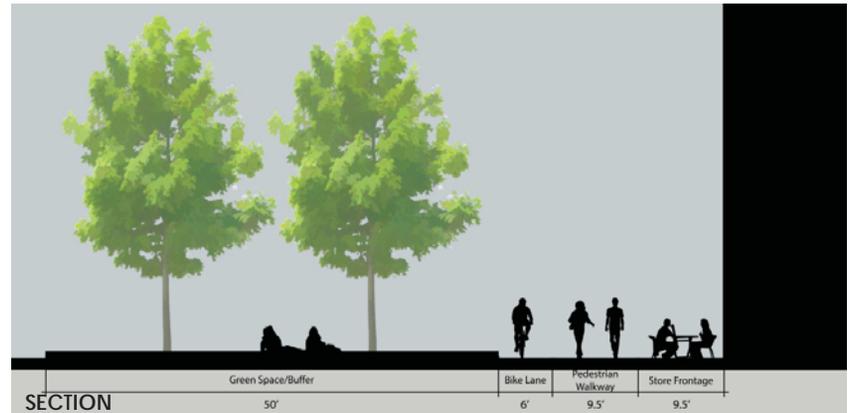


This image illustrates the separation of uses in a multi-use path. Separations include; store frontage, pedestrian walkway, seating area, and a bike lane.



This image demonstrates the way in which an existing marginal road can be converted into a more bike and pedestrian friendly area.

Visualizations of Proposed Lateral Green-ways



Conclusion

The Northland Community has many positive assets that can be expanded upon and perfected. Over the course of our project, we were able to discover the diversity and passion of the residents about their community. There is a sincere desire to improve their community and we made it our passion over this past semester.

It was necessary to divide our understanding of Northland into four phases in order to propose the best design solutions for the area. Phase 1 enlightened us as to what the key issues were in the area, as well as what opportunities were present. Through qualitative analysis, we cataloged site conditions, existing infrastructure conditions, and community assets. The importance of becoming familiar with the site was critical in putting together the best solutions for the community.

Phase 2 dove deeper into the understanding of Northland through quantitative analysis. Topics such as economics, demographics, land use strategies, and environmental statistics were computed and analyzed to get a more in-depth understanding of the area. The combination of case study research and community involvement activities comprised Phase 3. Researching domestic case studies of a similar nature informed the designs for Northland in order to create for them a more safe and connected community.

Based off of the information we had gathered from the first three phases, we began to create design solutions that would generate a revitalization of the Morse Road Corridor. We divided up our design strategies into two groups, one focusing on the hubs that act as nodes to create future development in the community and a green network that connects the community better with itself and also with the region

as a whole. Combining these two strategies created a seamless and comprehensive design strategy that will help maximize the current assets of the community and also introduce new elements that will even further the revitalization of Northland.

After the locating of these two strategies, we realized that more in-depth designing was required. These projects will help brand the Northland area as a thriving destination. It is important to note that these are student proposals to help inform future development strategies for the area.

The Northland Community is encountering a defining moment in its history. One that could forge a new identity if they choose to embrace the solutions that we have laid out over the course of this book. Our hope is that as the community moves forward with this initiative, this book will serve as a reference to further your success.



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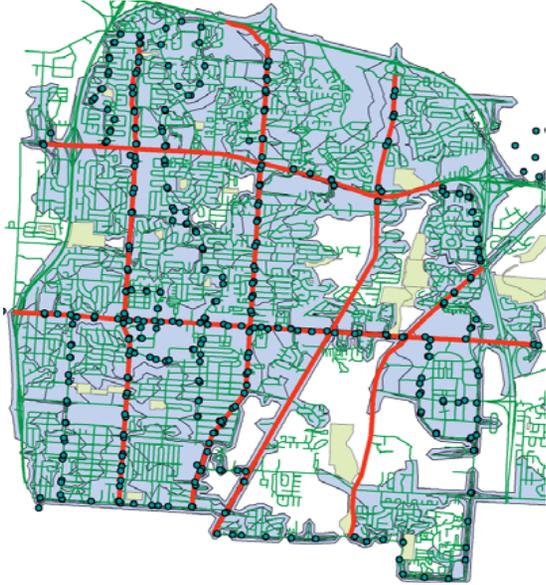
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Appendix A - GIS Projects

One of the classes that was offered this spring was an advanced Geographic Information Systems (GIS) class. As part of the class they are required to produce a final project based off of the information they have learned. This year, the projects were focused on the Northland community. Therefore, we felt it was necessary for their final projects to be included so as more information could be made available to the Northland community. The following final projects focus on a wide range of issues, including: park locations, community center locations, new recreation center locations, bus route services, and alternative trail options.



New Recreation Center Opportunities

During Community Events it was made apparent that the Northland area is in need of a new recreation center. Through GIS analysis we discovered the importance of visibility off of the major roads, the important role that COTA has within the community and connections between current recreation centers and their location to park facilities. Through GIS analysis we took a look at each of these important values and created a series of maps to explain the importance of each. The schools layer is left on throughout the analysis and pulled to the top layer to provide an additional spatial reference system.

Major road access and visibility plays a dynamic role in communities when it comes to accessibility of public facilities. In the analysis we identified the major roads within the community to be I-161, Morse Rd, Karl Rd, Cleveland Ave, Westerville Rd, and Sunbury Rd. Then taking that data we created a map to show the importance of being located along one of these road systems, Figure 1. The brighter the red tone in the buffer; the more desirable the location (based off of a maximum visual sight distance of 250ft).

Cota plays a substantial role within Northland as well, providing access throughout the entire community with a series of bus routes and stops.

We then took that data and produced a map concerning the walkability of these systems, Figure 2. The bus routes are highlighted in a cyan color, as well as the bus stops. The darker the blue tone in the buffer; the more desirable the location (based off of a 1/4, 1/2 and 1 mile walkability buffer rings).

Park data was gathered for the community identifying the parks available for Northland's study area. We also took that data and provided walkability maps concerning each park relative to the park addresses provided, Figure 3. The Parks are highlighted in the light green color. The darker the green tone in the buffer; the more desirable location (based off of a 1/4, 1/2 and 1 mile walkability buffer rings)

Current recreation center locations were also taken account for in the analysis and we were able to give these facilities a negative value in their relation to the data mentioned above to find out the optimal place to have new recreation center opportunities, Figure 4. The current recreation centers are highlighted in bright purple. The darker the purple tone in the buffer; the more desirable the location (based off of a 1/4, 1/2, 3/4 and 1 mile serviceable buffer rings).



Figure 1

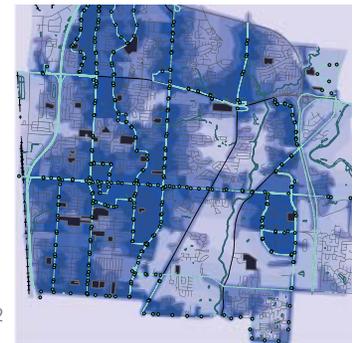


Figure 2



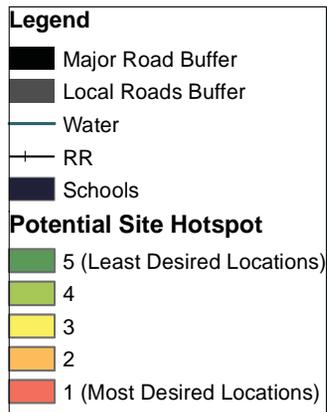
Figure 3



Figure 4

The results of combining Figures 1 - 4 together in a final analysis yielded in the results in Figure 5. Providing spatial locations of where there are possible new recreation center opportunities within the Northland area. Buffers of 40' were used to identify non-buildable areas along the Major Roads and 20' buffers along the Local Roads. The final analysis was then split off into five different colors for interpretation. Spots highlighted in red are the best desirable locations for the placement for the new recreation center; to the green highlighted areas as the least desirable locations.

The maps on the left hand side from top to bottom: Major Road Buffer, COTA Stops and Routes Buffer, Parks Buffer, Current Recreation Centers Buffer.
 The map to the right: Potential Future Recreation Center Site Opportunities



Potential Future Site Opportunities



Figure 5

Analysis of COTA Service to Northland Residents

The Northland Area is made up of primarily urban residential units. Upon seeing this, the question was asked- “How well is COTA serving the residents here?” To answer this question, an analysis was compiled comparing the geographic residential makeup of Northland and the location of COTA bus stops. Based on the findings, 4 recommendations are proposed to increase the accessibility of bus service to the residents.

The first step in the analysis was to identify the current system’s service area. We defined 3 distances we considered to be reasonably walkable from one’s home to the nearest bus stop: 1/4 mile, 1/2 mile, and 1 mile. In **figure 1**, these 3 distances are shown throughout the area, along with the bus stop locations (orange dots) and routes (dark lines). The lighter the purple, the farther away from the nearest bus stop a location is.

After identifying the existing service area, we defined 3 characteristics to represent the most likely users: multifamily addresses, rental addresses, and high population density. **Figure 2** shows the geographic concentrations where all 3 of these factors coincide. The darker the color, the higher the concentration. A visual analysis shows that most of Northland is well served by the current bus stops. Most areas, seen in the light green zones, have a route that runs in close proximity. The southeast corner has the highest population and density.

To take the analysis a step further, the concentrations of multifamily addresses, rental addresses, and population more than 1/2 mile away from the nearest stop were found. For many people, a mile is long walk to get to a bus stop. **Figure 3** shows these under-served areas in light green spots, including an incredibly under-served area in the southeast corner. The light green spots and red spot are locations where residents

of multifamily and/or rental units have to walk more than 1/2 mile to get to the nearest bus stop.

To alleviate this accessibility problem, 4 changes to the current bus service are suggested:

1. Add 2 stops on Route 16 to service the southeast corner where the highest density and population exists. (New route addition shown in orange, new stops are orange push pins.) See **figure 3**.
2. Add 2 stops on Route 40 along McCutcheon Road. No deviations from current route. (New stops are shown as blue push pins.) See **figure 4**.
3. Extend Route 34 down Satinwood and Rockwood, adding 2 stops. Make no other changes to this route. (Route addition shown in orange, new stops are blue push pins.) See **figure 5**.
4. Add a new route to add accessibility to the under-served areas indicated in figure 3, particularly along Westerville Rd. (New route shown as dark line.) See **figure 6**.



Figure 1

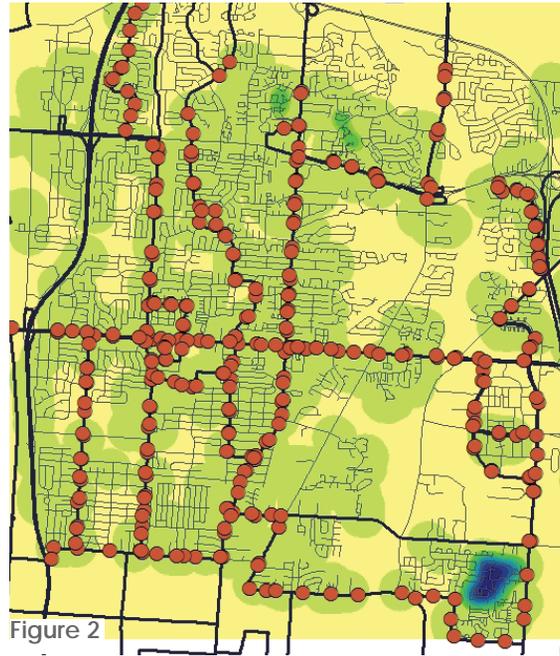


Figure 2

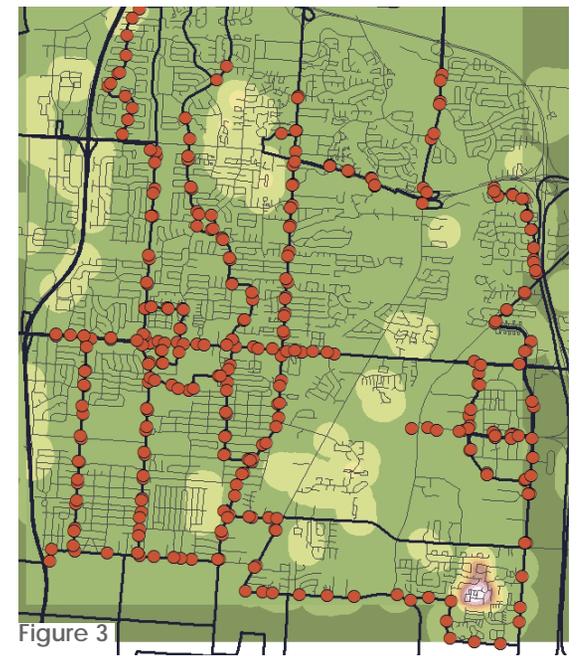


Figure 3

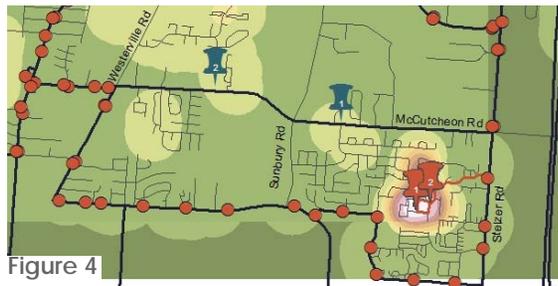


Figure 4



Figure 5

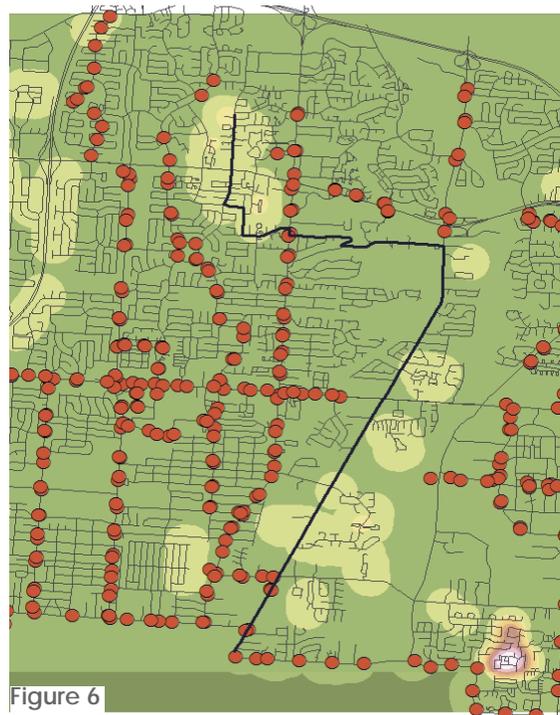
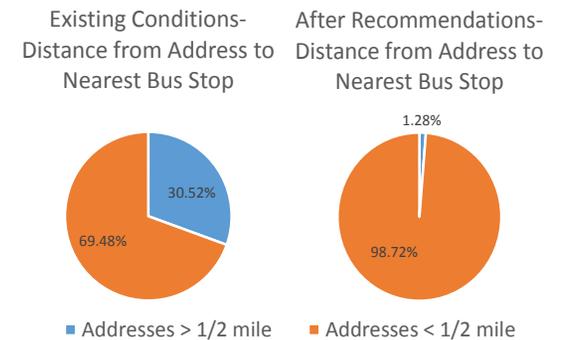


Figure 6

As it exists, the COTA's bus system services about 70% of the Northland area's most likely users within 1/2 mile of their address. While walking a distance of 1 mile to get to the nearest bus stop is feasible, it is not ideal. Implementing the recommendations in this analysis puts 98% of Northland's most likely users within 1/2 mile walking distance to the nearest bus stop. This would increase accessibility to all necessary destinations across Northland and foster a transit-friendly environment in an urban community.



Finding an Alternative Multi-Use Path Option

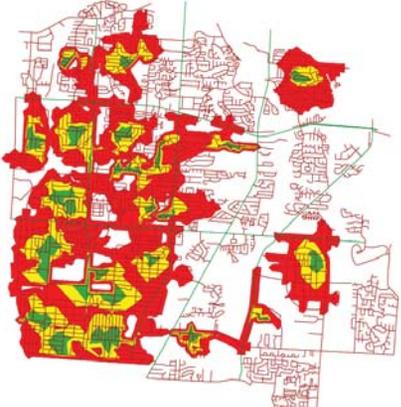
Over the course of our analysis for the Northland community, we came to realize that connectivity, safety, and access to transportation were major concerns. As part of this, the proposal of a Green Network was meant to counteract these concerns by providing safer and easier connections throughout the community. However, I also wanted to find an alternative route(s) to provide the community with more options. The following analysis is based off of on finding the best and most affordable path for the implementation of the multi-use trail.

To begin, the major points of access to the main areas of the neighborhood and their connectivity were located. The most important areas that had to be connected would be the parks, schools, and the recreation centers. Once all of these were all mapped, a map showing the walking distance from these areas was generated. A map was made showing safety areas alongside the roads to define areas of safe mobility throughout the neighborhood. By mapping the potential entrance points into the neighborhood along the Alum Creek Trail and destination points at the major parks, schools, the Northland Mall, and the intersection of Cleveland Avenue and Morse Road. An analysis was created. It shows the best paths connecting as many of the origins and destinations as possible. Combining these together, I was able to create an alternative multi-use trail option for the community.

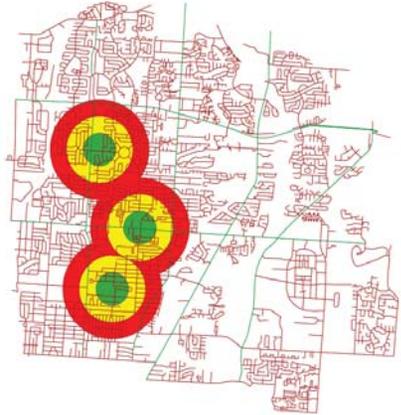
Park Buffers



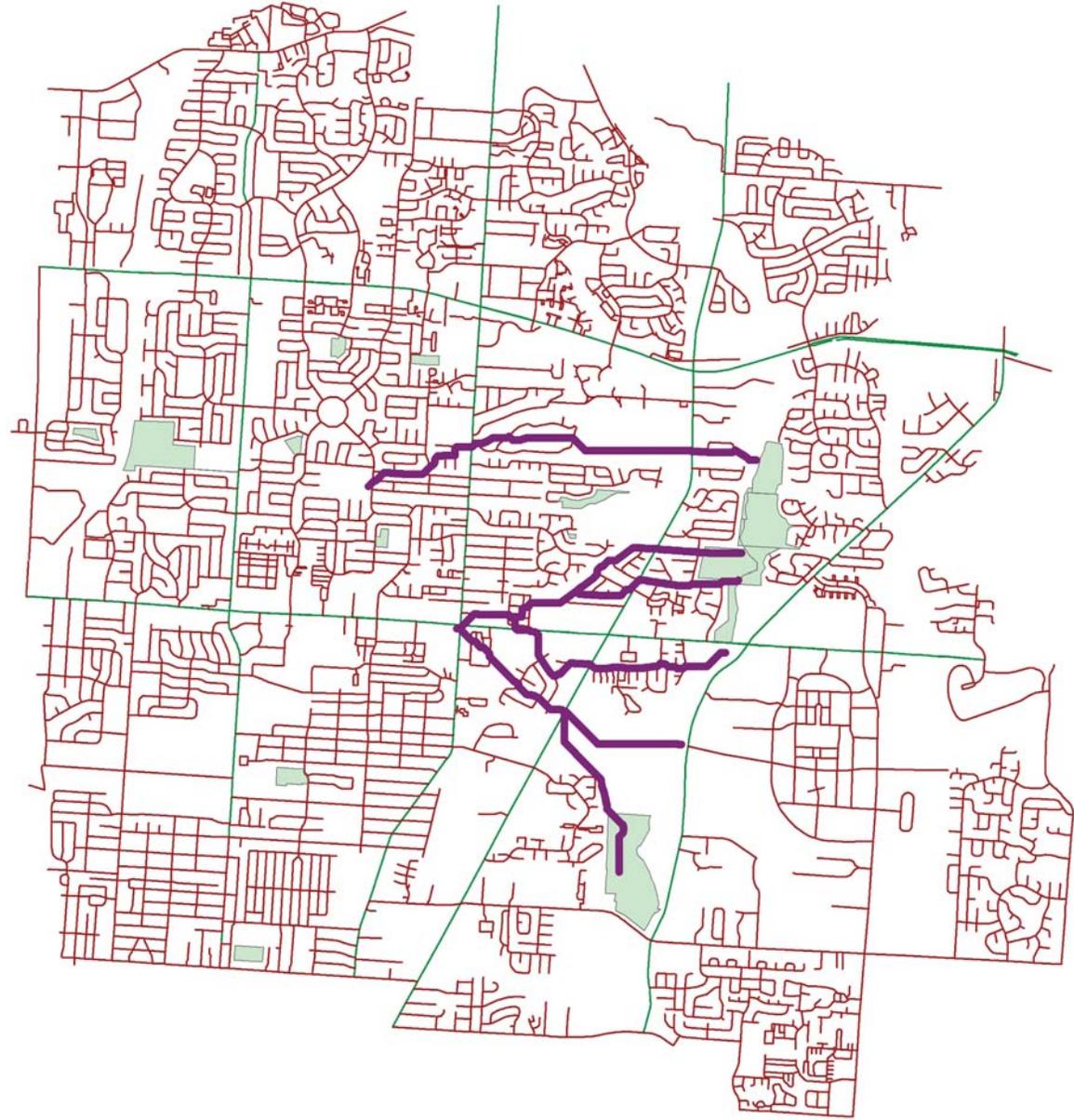
School Buffers



Recreation Center Buffers



Final Alternative Path Option



Bazaar and Community Center Development

During the community engagement meeting, community members discussed issues with the Northland area lacking identity and connectivity. Members envision that a new community center or meeting place for the public would bring the Northland area together and aid in solving the perceived identity and cultural barrier issues. A bazaar is defined as an international market with indoor and outdoor space for festivals and activities.

The first step in determining placement of a possible bazaar or community center is to map out possible areas where there is vacant or available land (Figure 1).

Criteria for potential site placement

- Housing Density
- Commercial Development
- Public Transportation access

Next, a map of the current transportation and the location of major roads in the proximity of residential and commercial addresses is generated. Major roads are identified as Morse Road, Sunbury Road, 161, Cleveland Avenue and Westerville Road. The roads also show a visibility buffer, which is a positive factor for marketing and value if the final building location is visible from main roads. The yellow buffer represents 240 feet from the road (human visibility) (Figure 2).

Location and density of housing are also important factors in determining where to place a new community center or bazaar. The density of apartment and single family homes in the Northland area can be seen as defined clusters (Figure 3a,3b).



Figure 1: Potential development

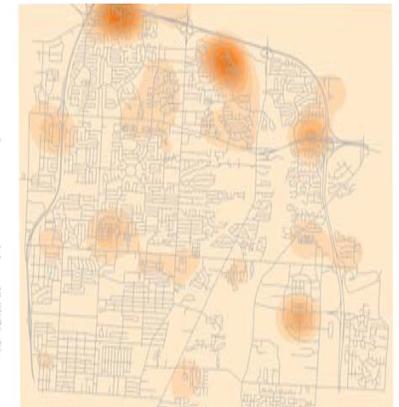


Figure 3a: Apartment Clusters

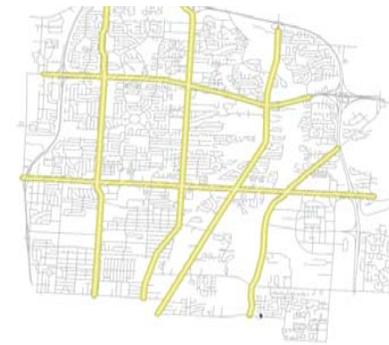


Figure 2: Major Roads

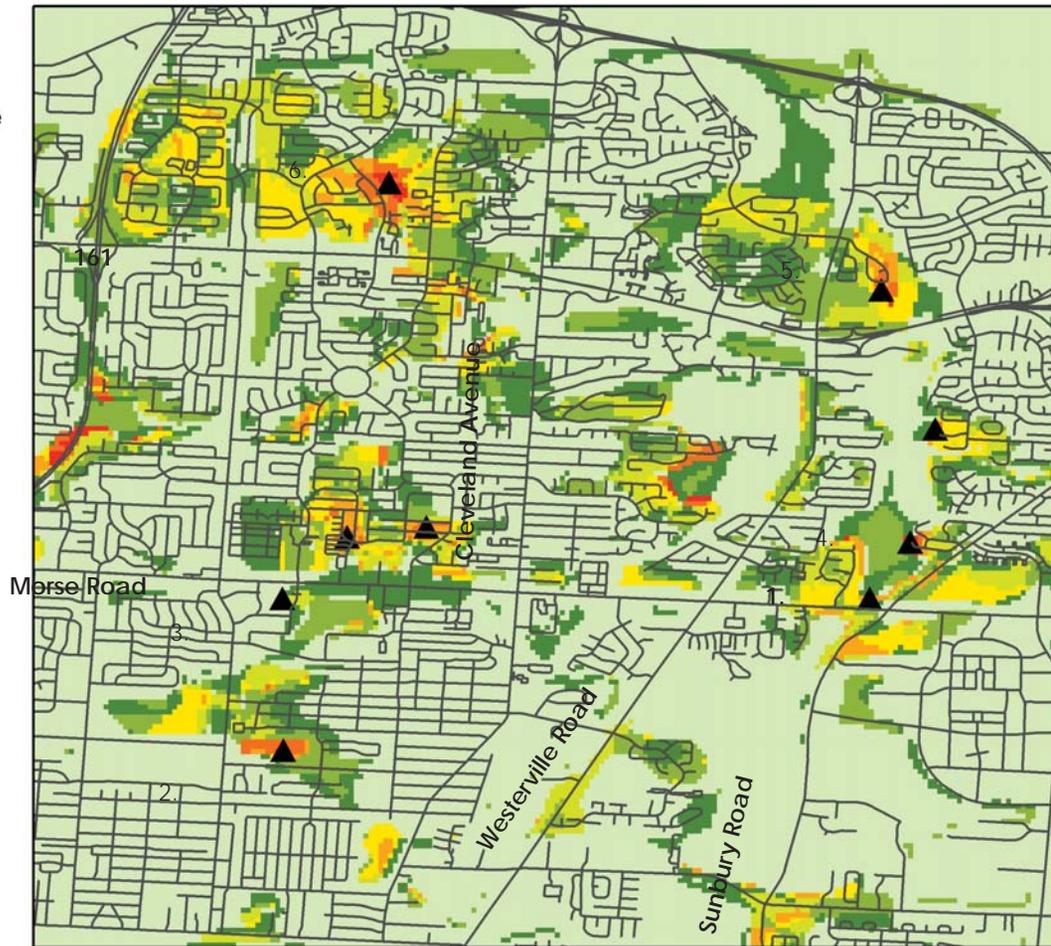


Figure 3b: Housing Clusters

Figure 4: Final Suitability Map

Legend

- Edges
 - ▲ Buildingsite
- Value**
- | |
|---|
| 1 |
| 2 |
| 3 |
| 4 |
| 5 |
| 6 |
| 7 |
| 9 |



The heat map to the left, has data analyzed and aggregated from housing density, apartment density, schools, churches and COTA stops which are positive community assets, and also negative assets- including adult themed locations. The result is a suitability map that indicates where the best development location is for a bazaar or community center. The dark red indicates the most compatible areas and the dark green indicates the least compatible. (Figure 6).

Possible Locations

1. North of Morse/Sunbury. Currently these parcels are vacant. This is a top choice because of current vacant land
2. Currently this parcel is located in Cooke park between St. Francis DeSales High School and Federson Park and Recreation center
3. This parcel is located in the old Northland Mall Site which is currently vacant. This is a strong choice because of vacant land and community enthusiasm
4. North of Morse/Sunbury Road at Alum Creek
5. Located North of 161 at Alum Creek
6. This parcel is located south from the Board of Education. Currently there is a pool located here.

New Parks Opportunities

Through GIS analysis, we found that about 12,000 addresses in the Northland area are not served by parks within a walkable distance. The goal of this analysis is to minimize the number of residential addresses that are not served by finding the best two locations to place new parks in the Northland area. To find the potential sites several factors were analyzed: the number of residential addresses served, proximity to major roads, the current use of the site, and proximity to bus stops.

The analysis began by looking at the largest residential addresses clusters compared to the potential site factors. This comparison constrained the potential areas for the location for the new park.

Accessibility was one of the refining criteria to choose the location. A preferred location would be a one that is near a major road and close to bus stops. Another criteria was the use of existing properties with compatible land-uses. The Best land-use choice is currently used as a green space so the costs can be minimized if it is turned to a recreational park.

The best possible location for new parks can be seen in Figure #1. By adding two parks 2,400 more residential addresses in the Northland Area will be served. This change allows 84.6% of in Northland area access to parks within a walking distance and increases the amount of parks space per person from 191.5 ft² to 202.7 ft².

Figure 1: Suggested parks locations with the major roads and COTA's bus stops locations.

Figure 2: A walkability map buffering of ¼, ½ & 1 mile around existing parks.

Figure 3: New walkability buffer including the new parks..

Figure 4: Remaining unserved addresses after locating the two suggested parks.

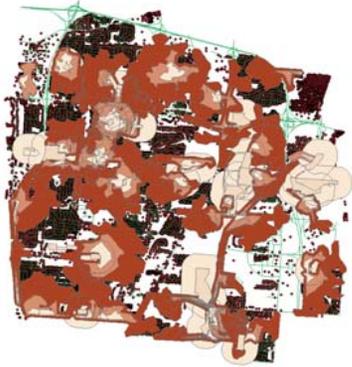


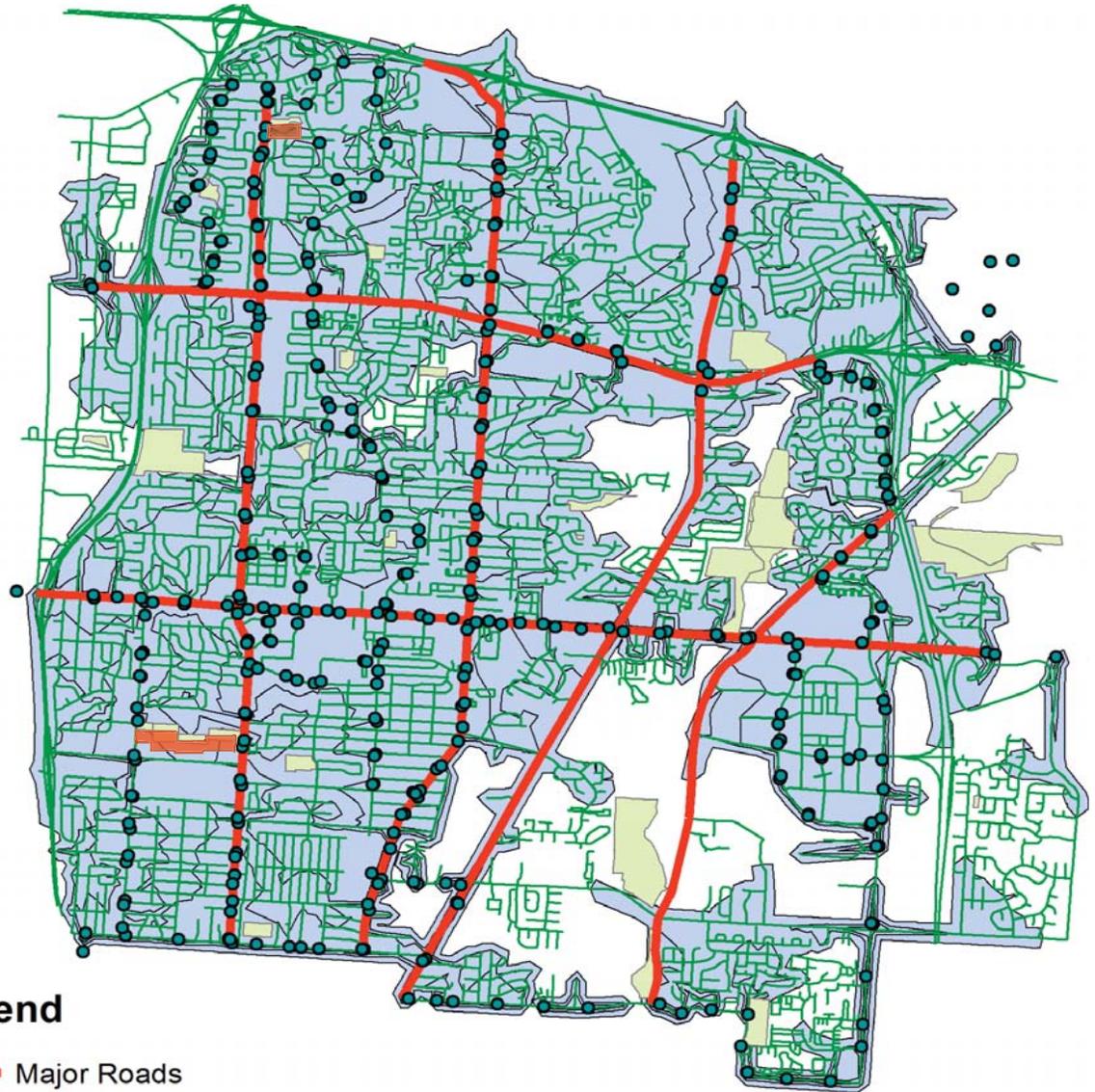
Figure 2



Figure 3



Figure 4



Legend

- Major Roads
- Parks
- Centerlines
- Bus Stop Buffer
- New Parks

Figure 1