

LANSING KANSAS



February 2020

ACTIVATE LANSING 2030 PARKS AND RECREATION MASTER PLAN



RESOLUTION B-1-2020

A RESOLUTION ADOPTING THE 2020 PARKS MASTER PLAN FOR THE CITY OF LANSING, KANSAS; AND ESTABLISHING FUTURE RECOMMENDATIONS FOR THE PHYSICAL DEVELOPMENT OF THE PARK LAND IN THE CITY OF LANSING, KANSAS.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF LANSING, KANSAS:

SECTION 1. TITLE. This Resolution shall adopt the 2020 Parks Master Plan.

SECTION 2. ADOPTION. Whereas the Lansing Parks and Recreation Department surveyed the citizens of Lansing, published notices and held public input sessions on September 13, 2019, September 14, 2019 and October 12, 2019, to seek the comments of the general public for the 2020 Parks Master Plan. The Governing Body of the City of Lansing, Leavenworth County, Kansas, hereby approves the 2020 Parks Master Plan.


SECTION 3. NUMBER OF COPIES. There shall be not less than one (1) copy of the officially adopted 2020 Parks Master Plan kept on file in the office of the City Clerk and made available for inspection by the public at all reasonable hours. The file copy of the Parks Master Plan shall be marked or stamped, "Official Copy of the City of Lansing, Kansas."

SECTION 4. REPEAL. That all sections of Resolutions or portions thereof in conflict herewith be, and the same are hereby, repealed.


SECTION 5. EFFECTIVE DATE. This Resolution shall be in effect upon passage and approval of the governing body of the City of Lansing, Kansas.

PASSED AND APPROVED by the governing body of the City of Lansing, County of Leavenworth, State of Kansas, this 20th day of February 2020.

CITY OF LANSING


Michael W. Smith, Mayor

ATTEST:


Sarah Bodensteiner, City Clerk

{SEAL}



ACKNOWLEDGMENTS

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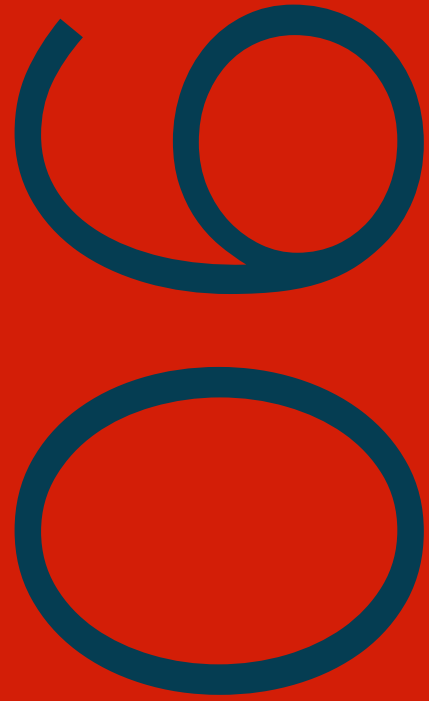
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INTRODUCTION

its parks to meet the needs of current and future residents.

The Plan guides future development and management efforts for the City of Lansing's park system over the next 10 years. Specifically, the Plan:

- Creates a community profile of Lansing and its residents;
- Provides an inventory of existing parks and an analysis of each site;
- Identifies current and future park needs using input from the community as well as stakeholder groups;
- Includes a conceptual design layout for key parks within the system;
- Proposes an updated city-wide trail plan;
- Provides a maintenance plan for stream-lining maintenance practices; and
- Details an implementation plan for achieving all of the goals identified in this plan.

Executive Summary

The City of Lansing is growing. As development occurs and the population expands, new residents will create additional demand for parks and recreation facilities. The City of Lansing Parks Master Plan, Activate Lansing 2030, is intended to guide development of the municipal parks system for the period between 2019 and 2030. A parks and recreation master plan is a long-term vision and plan of action for a community's park system. Currently, the City of Lansing has 7 park facilities. Five of them have been developed to some capacity and 2 have not been developed at all. This master plan provides recommendations for 5 of Lansing's parks. This plan identifies strategies and techniques for improving and updating the operation facilities of parks, better and updated facilities and even distribution of improvements throughout the community. Through this plan, the City of Lansing intends to continue improving the level and quality of



Purpose of the Master Plan

The purpose of the Parks & Recreation Master Plan is to be a modern planning document to serve as a guide to address capital improvement projects, funding strategies, maintenance standards, and a framework for evaluating future park expansion, programs, uses and recreational needs in the community for the next 10 years.

The most recent discussions of the parks and recreation long range plan was completed in 2014 as part of the City of Lansing's Comprehensive Plan. Although insightful, it did not directly address parks and recreation's mission with complete clarity, or in great detail. Implementing an independent Parks Master Plan assists in achieving the following objectives:

- Determine values and priorities through citizen engagement strategies
- Work with City Parks & Recreation staff and other internal stakeholders to identify needs and issues
- Develop an updated Master Plan, complete with project priorities, timelines, maps, and detailed

opinions of probable costs

- Develop and recommend city policies regarding parks, recreation, open space, and trails
- Evaluate and prioritize the expenditure of public funds for possible land acquisition, development, and maintenance for recreational lands and facilities
- Identify and prioritize potential improvements in existing parks
- Serve as the primary planning document for City of Lansing's Department of Parks and Recreation for the next 10 years
- Evaluate and audit conditions of existing park facilities
- Identify future funding sources

Lansing Master Plan Goals/Guiding Principles

This master plan establishes long-term goals for Lansing's park system beginning with guiding principles that capture what the park system strives to be in the future. These goals and guiding principles are important to keep in mind while making decisions that impact a community's access to green space.

Every community is different and has unique needs, which are identified in this master plan, which these principals specifically address. These were referenced when any design, or recommendation was being made in this master plan. These have been identified as the best possible goals and guiding principles for Lansing's park system and its community.

Access to parks, green space, and public space is a right for all members of the community; therefore, all park space should be inclusive, all park improvements, or decisions should be made based on the needs of the people and be as equitable as possible. That is the main purpose for these goals and guiding principles and, ultimately, this master plan.

Guiding principles are constant and articulate the core ideals that guide the master plan and the agency direction over the plan's 10-year time window. The following are our guiding principles:



Inspire a Passion for Parks

Respond to changing needs and trends; proactively manage facilities and program assets; engage and listen to the community.

Meet Changing Recreation Needs

Provide focused, high quality programs and services; maintain system quality and condition; embrace, lead and implement new ideas and best practices; integrate technology, and measure performance.

Advance Park System Excellence

Collaborate with schools and public agencies and non-profits; surrounding communities, programs and services with others; expand relationships with the private sector; contribute to the local economy; empower volunteers and the community.

Strengthen and Foster Partnerships

Provide quality facilities, programs and services to all communities; balance the distribution of parks, programs and facilities; ensure these are accessible and affordable.

Be Equitable and Inclusive

Integrate stewardship and sustainability and ethics in all our plans and actions; raise awareness and appreciation for natural and cultural resources; serve as a model for nature conservation; protect and actively manage natural and cultural resources; be committed to responsible management.

Be Great Stewards

Provide facilities and programs for all ages to promote life-long activity and wellness; improve park access; expand our trail system connections; provide an opportunity to connect with nature.

Planning Process Overview

The planning process for this Parks & Recreation Master Plan is extensive. To create a comprehensive, equitable plan for future park expansion and improvements, many factors need to be considered. The master plan contains four basic areas of data gathering and production, which make up the core of the document:

- Existing Conditions
- Community Input
- Site Analysis
- Designs and Recommendations

Existing conditions are essential to creating any master plan document. It consists of gathering data on the City of Lansing, its history, culture, and the current population/demographics of the city. This allows the design team to plan specifically for the needs of Lansing and its community.

Community input is the most essential component to creating a master plan. It allows the design team to discuss and document all of the needs community members might have when it comes to green space, recreation, and public space. From this, the design team is able to gather a list of specific types of facilities and amenities that the community in Lansing would like to see and create park designs and plans from that feedback.

Site analysis is done prior to the design and recommendation phase, it's essentially an existing condition analysis for each of the parks in the Lansing parks system. The elements that are noted are typically existing structures, tree coverage, slopes, and areas for improvement and circulation. This helps guide the future design and improvement recommendations for each of the parks.

After taking all of these factors into account, the final **designs and recommendations** are made for each of the parks, as well as overall system improvements. This planning process helps ensure that the Parks & Recreation Master Plan is done equitably and meets all of the needs of the community in the City of Lansing.



Plan Review

Lansing, KS Comprehensive Plan

Adopted in 2014



The current comprehensive plan, adopted in 2014, provides visions and goals set to serve the City of Lansing through the year 2030. This master plan will also serve as a guidebook until 2030, as well. With that in mind, the comprehensive plan provides a lot of recent data and analysis that is important to guiding this master plan, where this parks and recreation master plan seeks to fulfill many of the goals and recommendations that were proposed for Parks and Recreation in the comprehensive plan.

Overall, this plan was heavily referenced when creating this master plan, to stay in accordance with goals and recommendations created as part of the comprehensive planning process. Most

particularly, sections referenced were the city-wide trail map, expansion recommendations and maintenance recommendations. The trail map provided in the comprehensive plan went through heavy revision with staff and residents, therefore great care was taken to making any changes to the new trails plan. Both of the sections referring to expansion and maintenance recommendations, were thoroughly analyzed and considered when making the recommendations in this master plan. This consideration was also taken when designing park spaces and suggesting new maintenance practices. This master plan follows all pertinent information from the comprehensive plan, with small changes based on community input.

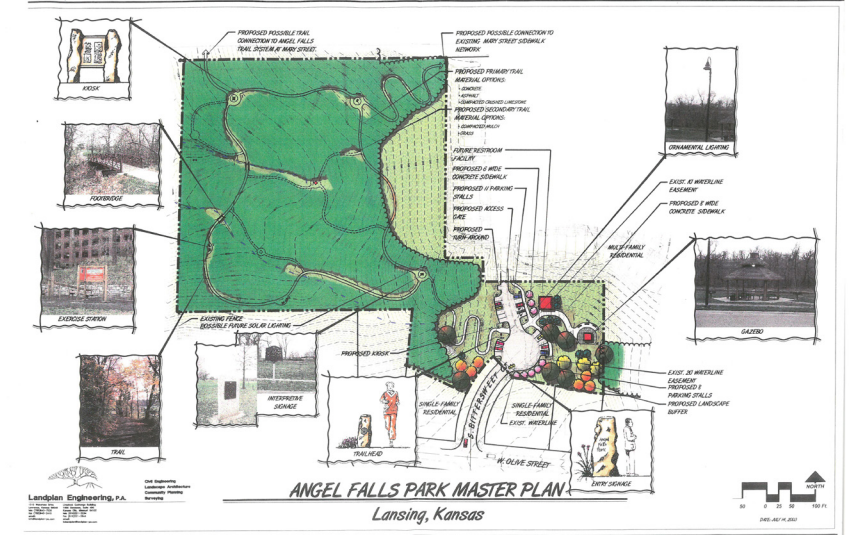
Kenneth W. Bernard Community Park Master Plan

Adopted in 2005



Angel Falls Park/ Bittersweet Park Master Plan

Adopted in 2003



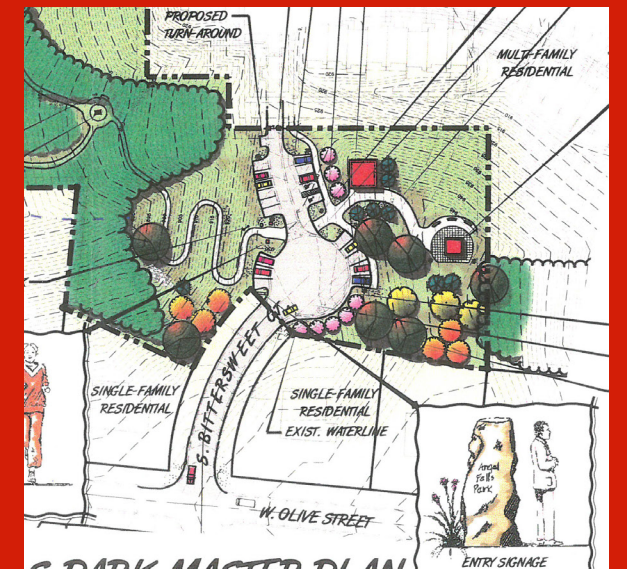
This master plan was completed in 2005 and still holds many sound design decisions in terms of which amenities to relocate or add to Bernard Park. The design team is very familiar with this master plan, as one of the original authors is now a part of the current design team. This gave the team a lot of insight into the previous master plan.

people of all ages, which follows the same guidelines as the previous master plan. Along with those design recommendations, many of the studies done on the park (sewer, electrical, etc.) are still valid and accurate and, therefore, referenced when creating the updated design and plan.

Overall, the needs of this park are relatively the same, with minor changes. Bernard Park remains to be Lansing's biggest piece of park land and is still mostly undeveloped, even after phase one of development from the previous master plan. The previous design and current uses for Bernard Park heavily influenced the new park design and master plan. This park space still holds enough acreage to be the new location for all of Lansing's sports facilities, as well as many other activities for



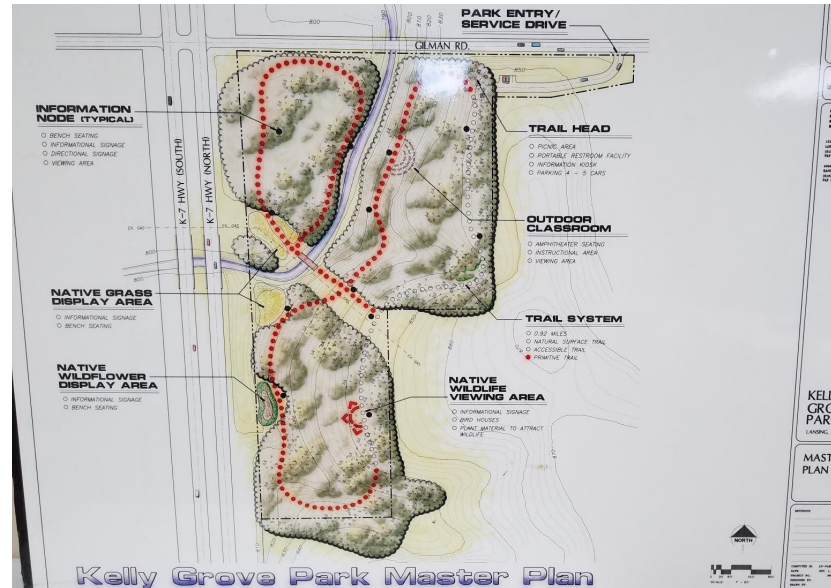
The name of this park property changes to Bittersweet Park in this document, as not to be confused with the Angel Falls Trail, a separate park property. This park is very unique in that the far Eastern edge has an outlook over the whole city, and the other 80% of the park consists of dense trees and steep slopes. With these characteristics, the park is not easily developable, which makes for a great nature park with a trail. The previous master plan recommends just that, as well as emphasizing the overlook area. Based on the nature of the park, which hasn't changed since this master plan was adopted in 2003, these design recommendations are still very much valid. The previous master plan was reviewed and used to guide the new design for the park, while making improvements and new suggestions.



Lansing's History and Culture

Kelly Grove Park Master Plan

Adopted in 1996



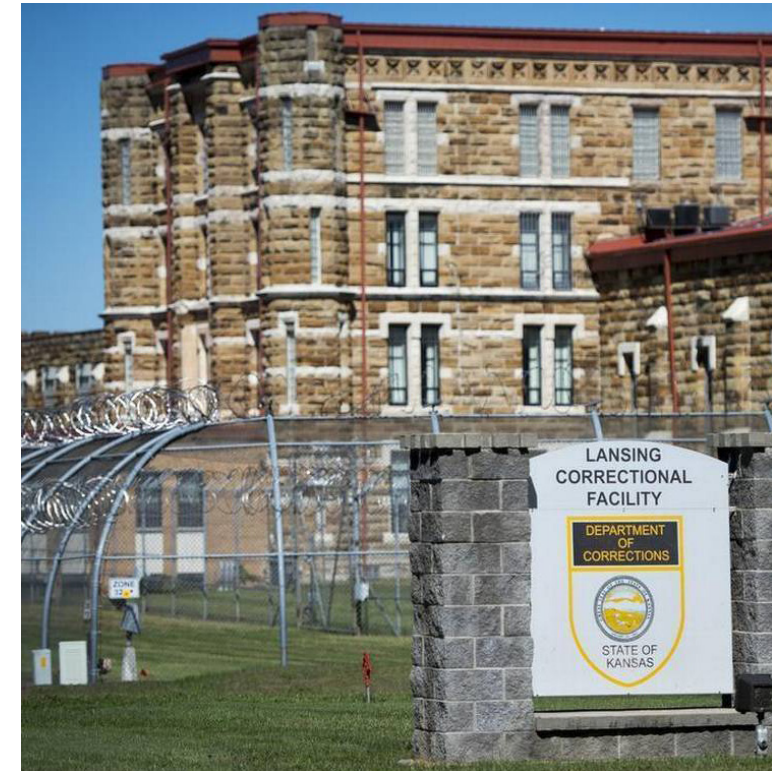
The previous master plan provides good direction on how to design this park. To date, Kelly Grove Park doesn't have paved parking, or any paved trails. This park is located in floodplain, which makes it difficult to use during parts of the year and after major rain events. The 1996 master plan doesn't account for use of the park during flooding conditions, which was noted when creating the new plan for the park.

With that being said, the slope of the park and the dense tree coverage make creating a paved trail very difficult and expensive. The design team looked at alternatives to making an ADA accessible area of the park that allowed for prolonged use. As this park is classified as a nature preserve, the uses of the park were kept non-intrusive; only adding trails and native elements.

Lansing is a city of approximately 11,771 people, located on the far Eastern side of Leavenworth County. Lansing also lies along the Missouri River, and with it, the Missouri-Kansas State Border; making it in close proximity to the Kansas City International Airport. Lansing got its name from James Lansing, who was a pioneering settler. His name was formerly William Lansing Taylor, who changed his name when he enlisted in 1862 as a hospital steward in the 7th Kansas Calvary. Post Civil War, he began working in the new Kansas State Prison, from which he later resigned and opened a general store. This housed a post office and an apothecary in the area called "Town of Progress". Lansing and a friend, John C. Schmidt, co-bought 90 acres of land that were then platted into city lots in 1878. It was called the "Town of Lansing", but wasn't officially incorporated until 1959.

In 1990, the Kansas State Prison was renamed the Lansing Correctional Facility. To date, it is Kansas' largest and oldest detention center for the rehabilitation of male adult felons.

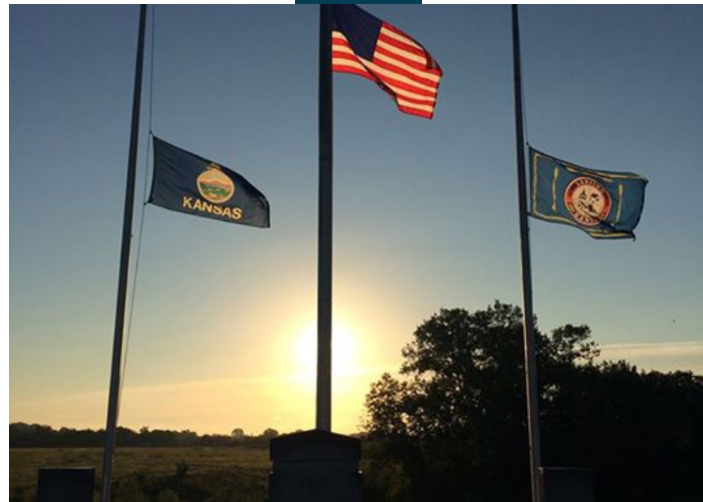
Source: City of Lansing



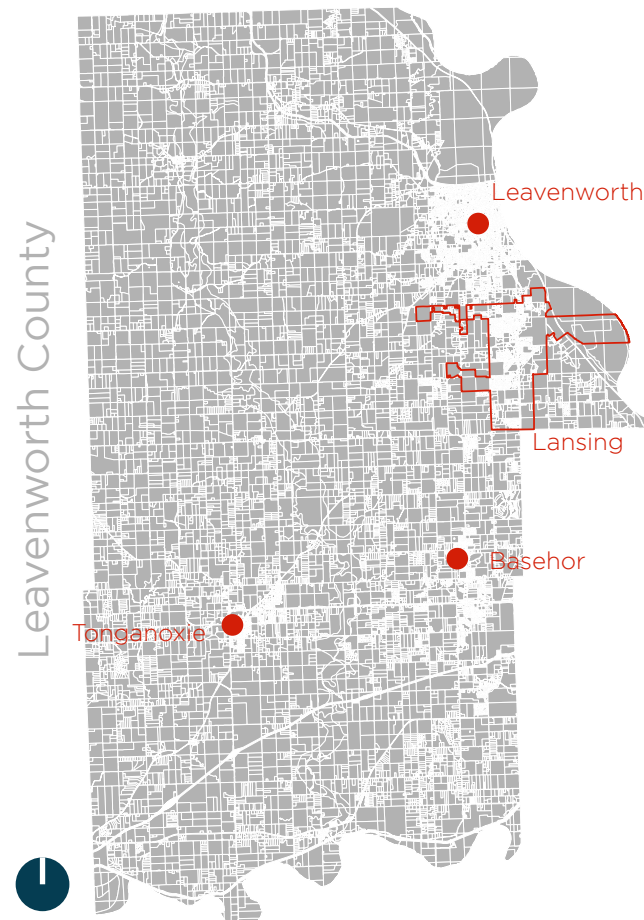
Over the years, Lansing has grown and evolved consistently, from growing in population, to shifting the main industries that employ residents of Lansing. In 2002, the industries that employed the most residents were: educational services (23.5%), manufacturing (15.8%), and health care and social assistance (12.7%). The top three industries that employed the most Lansing residents in 2017 shifted to: public administration (28.4%), educational services (20.3%), and accommodation and food services (15.7%). This shows the changes in the city landscape with new businesses, offices and restaurants, versus the land being used for production.

Outside of the workplace, Lansing has its own unique culture. Lansing holds many events for the entire City to participate in, as well as neighboring communities. These include Lansing Daze, the Fishing Derby, the 4th of July Celebration, BBQ competitions and many others. These are all organized through the City and from a place of pride for Lansing. In addition, Lansing also hosts many sporting events and teams for soccer, baseball, softball, as well as programs through the schools. Community schools are a big part of Lansing's identity and sense of community. This plan seeks to allow Lansing's culture of city and school pride to further flourish in the coming years.

Source: City of Lansing

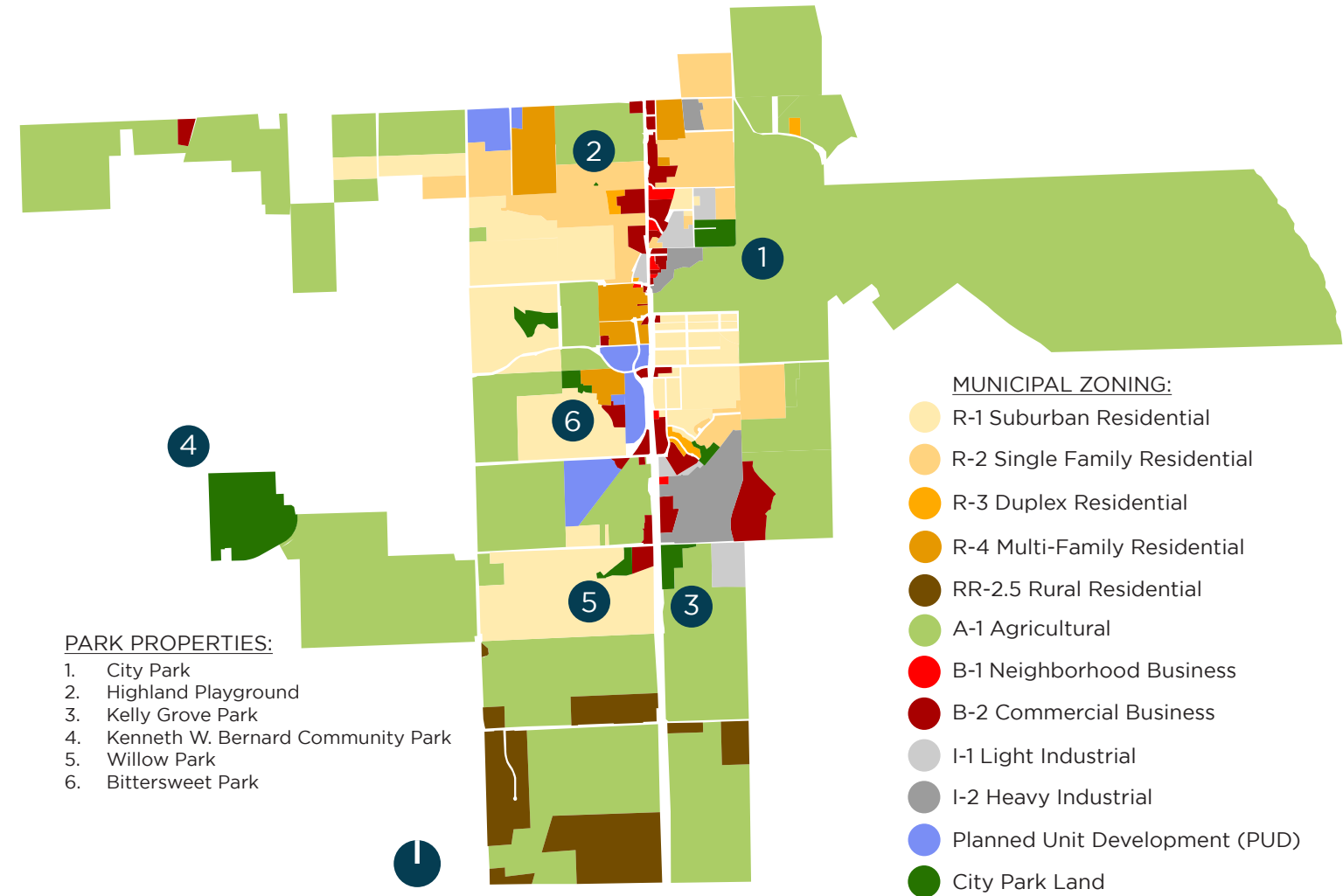


SITE INVENTORY & ANALYSIS



Context Map

Lansing is the second largest city in Leavenworth County, Kansas, with the first being Leavenworth. Lansing is located directly South of Leavenworth and they share a North/South border with each other. The next largest cities in Leavenworth County are Basehor and Tonganoxie. Leavenworth County is bordered by the Missouri River on the North East and by the Kansas River to the South. Lansing is a part of the Kansas City Metropolitan Statistical Area and borders on Kansas City, Kansas to the South, making it very close to both the Kansas City International Airport and the Kansas Speedway.



Introduction

This section contains the existing conditions of Lansing, the park system, and the analysis of how these conditions affect park spaces. There were many different factors that were considered in this analysis. The main factors that are represented in this section are: zoning, population, natural resources, accessibility and park service coverage. These factors were chosen based on how they specifically impact parks, the nature of that impact and the implications for the future. These factors then played an important role in the overall analysis of Lansing and its parks because each new piece of information, or dataset, allows the design team to more accurately plan and design for the future of Lansing.

All of the maps were created using GIS (geographical information system) and the data was either created, or provided by, the City of Lansing, Leavenworth County, or Landworks Studio.

The layers used in the maps and illustrations include:

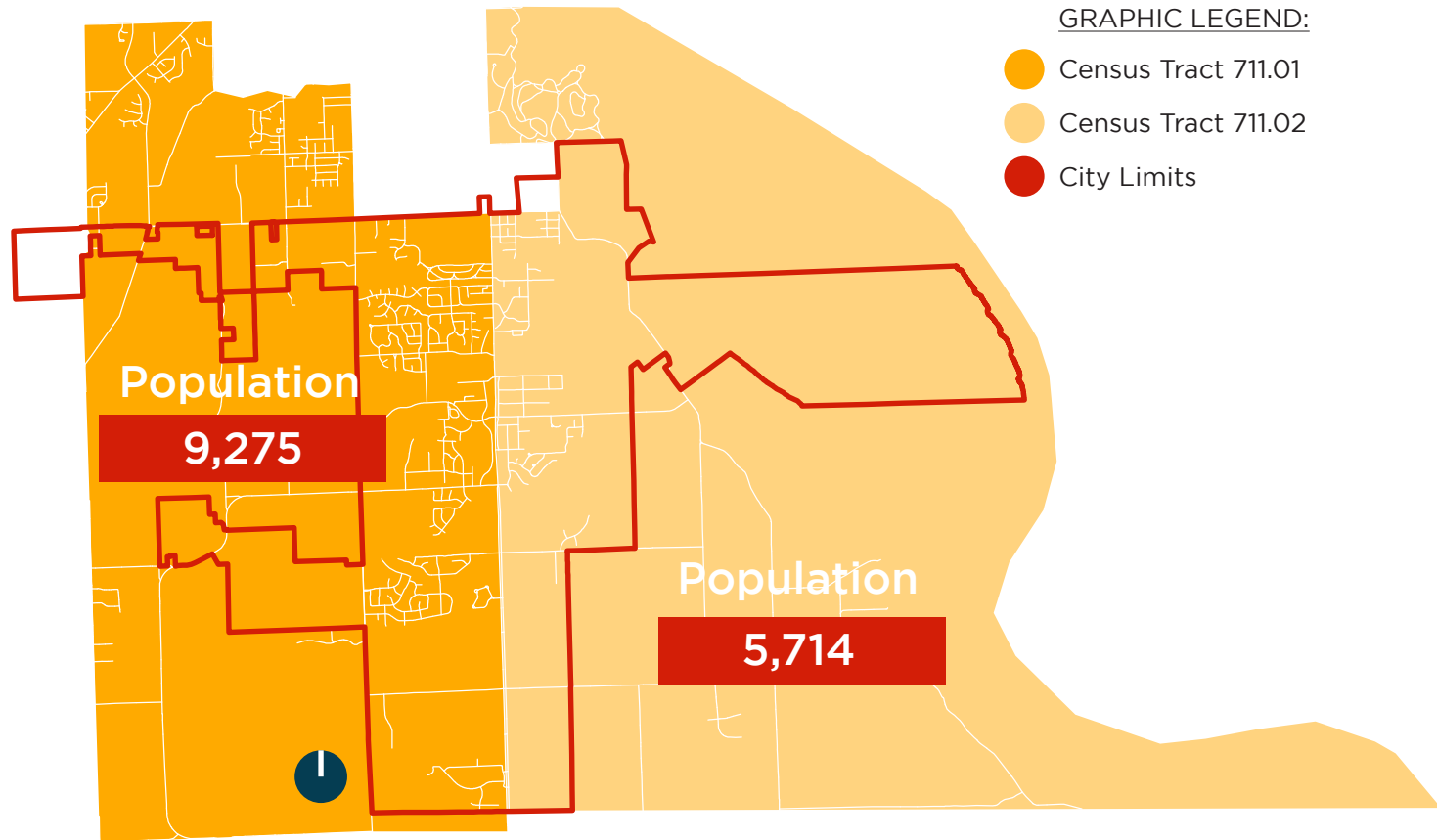
- Parcels
- Road Centerline
- Parks
- Floodplain
- Zoning
- Census Tracts
- Urban Land Cover
- Roads
- Sidewalks
- City Boundaries
- Topography

Zoning and Parks

The city-wide zoning shown above allows us to see what development is allowed where, and most importantly, what is allowed to be built next to each other. Lansing's park properties are shown in dark green and are identified above. If each park is looked at individually, most parks aren't surrounded by "undesirable development".

"Undesirable development" is characterized as being non-conducive of recreational activities. For example, industrial zoning, which is typically categorized as having extensive pavement, unattractive exteriors and minor street activity. The only park property adjacent to industrial development is City Park. This property is challenged to encourage residents to feel comfortable using the park throughout the day, and also challenged with accessibility by modes of transportation other

than car. The ideal conditions for parks are: to be in a safe environment with eyes on the street, have them be accessible within walking distance for residents, and preserve open space. This typically means close proximity to residential populations. Most of the other parks in the park system are surrounded by agricultural and this can have two connotations. One being that it is surrounded by other open space and the landscape is being preserved, two being that the park is disconnected from the rest of the city because of distance, or lack of connectivity. In this case, agricultural development might be hindering the use of parks because of the distance from the center of Lansing. This is especially true for Bernard Park, which is both the biggest and the farthest from the city. The actual connectivity of the parks will be addressed later on.



Population

The map above shows Lansing's city limits and the two census tracts that are associated with Lansing's demographic data. The U.S Census draws boundaries to use when collecting demographic information about cities and populations. The census also has smaller boundaries called block groups that more accurately show where age groups, or most of the population lies. However, Lansing only has census tracts. While there is Lansing specific data, pulled from within the depicted city limits, this doesn't necessarily show where most of the population in

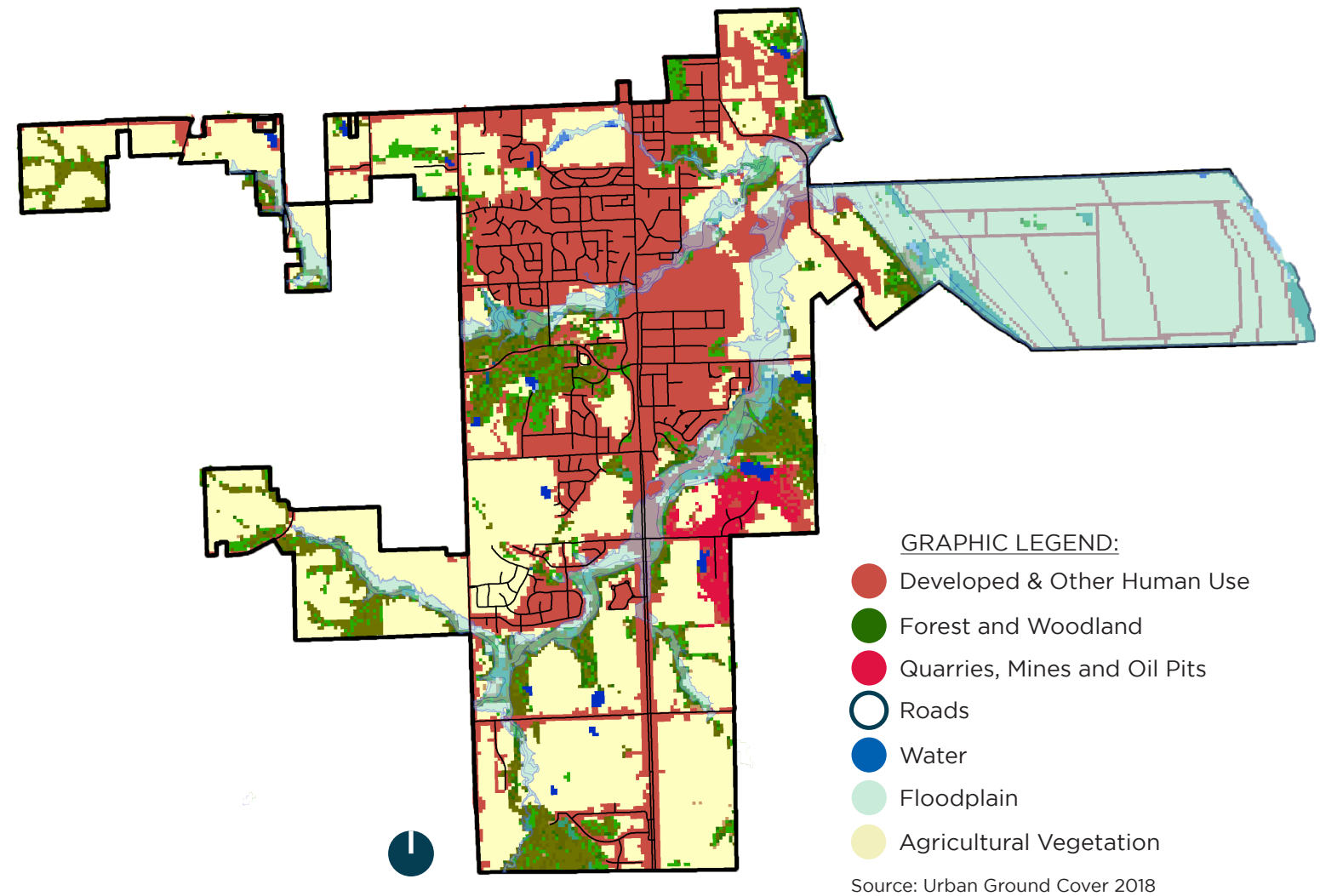
Lansing lives. The map above gives a better understanding of where most of the population lives in and around Lansing. The West side, with Highway 7 being the dividing line, has a greater population than the East side, near the Missouri River. This shows that most of the population is growing on the West side of Lansing, rather than the East, allowing the prediction to be made that there will need to be more park service on the more populated side of Lansing. The population data that was used is the 2017 ACS.

Resources

Natural

Lansing's proximity to the Missouri River, as well as having Sevenmile and Ninemile Creek running through the City, means that there are many natural resources to take note of. Being aware of and preserving natural resources helps maintain natural ecosystems, plant and animal life, as well as open the door to possible grants, or funding to help preserve these resources. The map below shows that the majority of the center of Lansing is developed, paved and built upon, while most of the surrounding areas are classified as agricultural vegetation. It's important to note that the surrounding river and the two

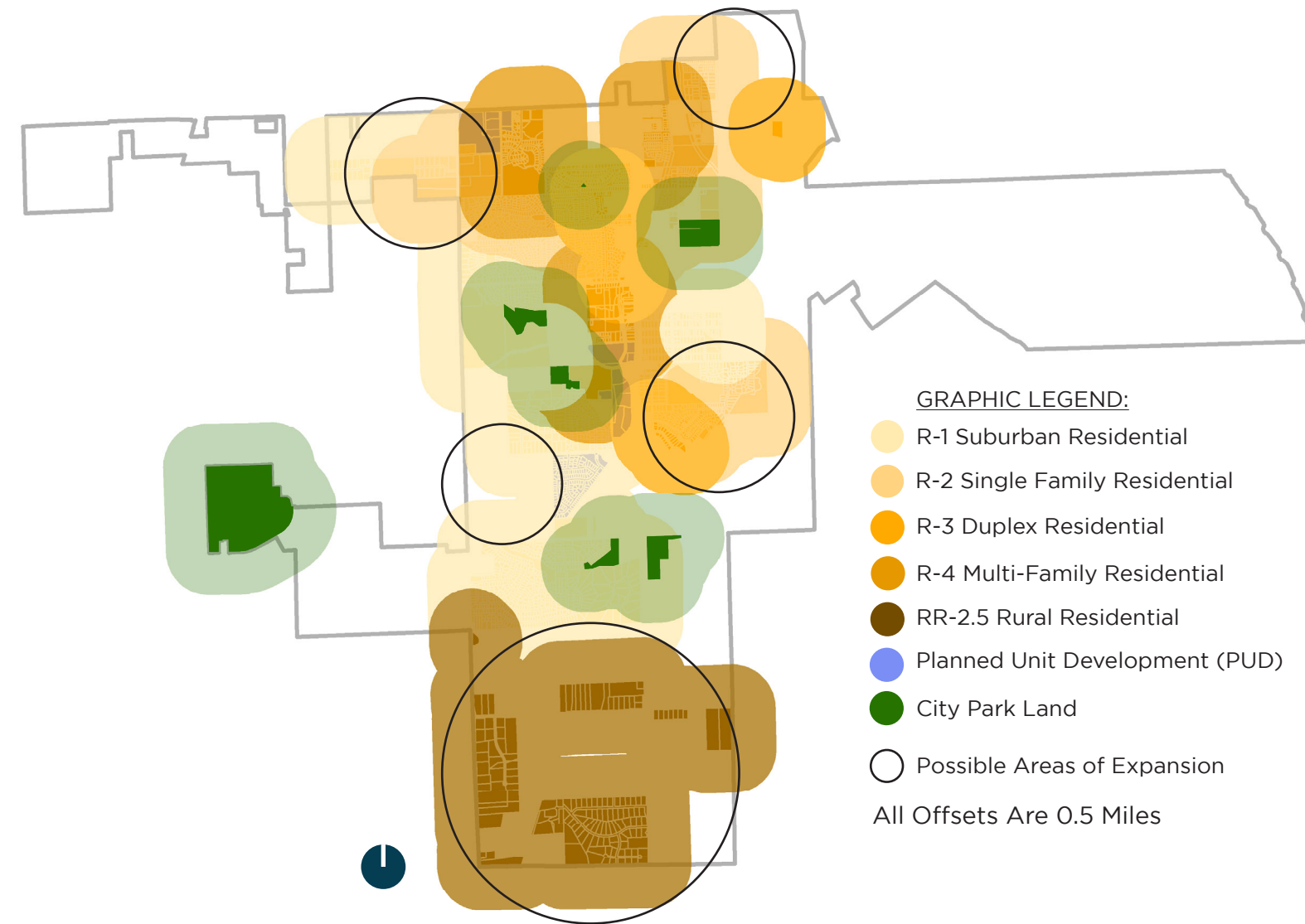
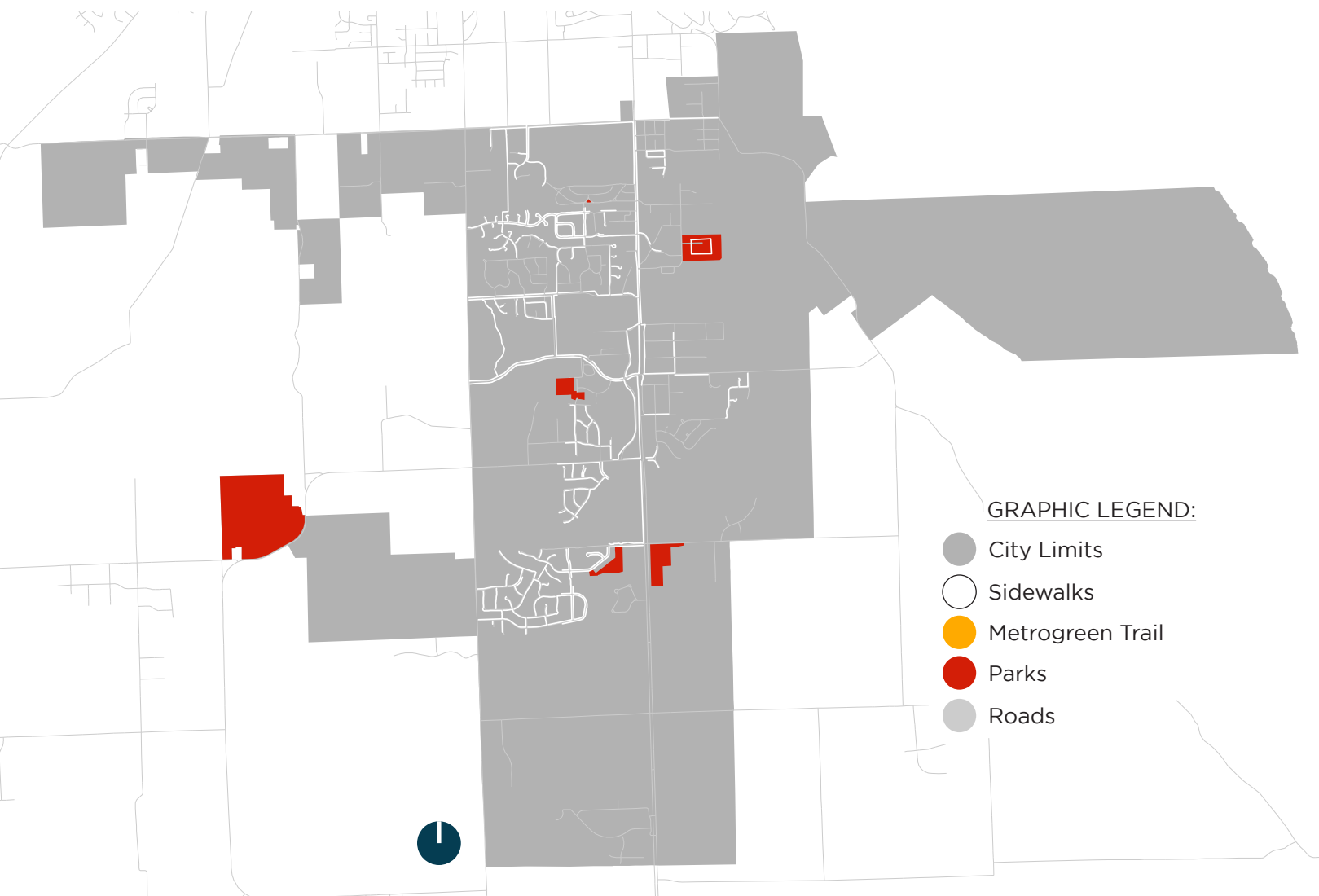
creeks running through Lansing, have floodplains associated with them. This includes both frequent and infrequent flooding. These areas in the floodplain should be considered wetlands, and are not developable. These wetlands are particularly sensitive areas and should be preserved to hold excess water volume, filter pollutants, and create contiguous habitat for critical species. This habitat can dually be used for recreation and fishing land. Other areas are shown as forest and woodland, which should be approached with preservation in mind as well, for similar reasons.



Accessibility

One of the main goals not only of this parks and recreation master plan, but of a parks system as a whole, is being accessible to residents. The map below shows Lansing's parks in red and existing sidewalks in white. Many of the older Lansing neighborhoods were developed without sidewalks as was typical in that time and place for subdivisions. Conversely, the newer developments have added sidewalks. This has created a gap in the overall sidewalk network. Beyond

subdivisions, Lansing has made an effort to add trail width sidewalks, or 8ft sidewalks, along major corridors to help improve connectivity. However, many parks are still not accessible for pedestrians. This is especially true for Bernard Park, Kelly Grove Park, City Park, and Highland Playground. These parks have the least amount of sidewalk access and were heavily considered when making connectivity recommendations.



Gap Analysis

The goal of a gap analysis, in this case, is to show the gaps in park service in terms of walking distance for residents. The standard, universally accessible walking distance is a half mile, which is shown around the parks and each type of residential, indicating which residents are within walking distance of a park.

This map is specifically showing the accessibility of parks within a certain distance,

not the actual means to get there, unlike the previous map. The gaps in park accessibility are identified on the map as possible areas for expansion, where it's suggested that new parks be placed to serve the most residents within a walking distance. Filling these gaps would greatly increase park accessibility for neighborhoods and residents, creating a more equitable distribution of park space.

NRPA Park Classifications

The National Recreation and Park Association (NRPA) has national Park, Open Space, and Greenway Guidelines that provide a template for classifying parks, the number of acres a system should have, and the recommended service levels based on population. Strictly intended as guidelines, these do not consider the unique character of each community. Local trends and popularity of some activities often dictate a greater need for particular facilities. The guidelines, however, serve as a good baseline for determining a minimum standard of service. Written in 1995, they are still used today. These guidelines paired with input received from the community, participation numbers for various activities, and comparisons to similar communities were used to develop service standards for the City of Lansing. For public park providers, the NRPA guidelines suggest, "A park system, at a minimum, should be composed of a 'core' system of park lands, with a total of 6.25 to 10.5 acres of developed open space per 1,000 population" (Mertes, 1995).

Critical to the service delivery system of any department is the provision of the four basic park categories: mini, neighborhood, community and regional. Beyond these four basic park types are special-use parks, natural areas/preserves, greenways, school playgrounds and private parks/recreation facilities. Each is classified differently based upon the types of amenities, size, service area and how access is gained to the facility.



MINI PARK

The smallest type of park, a mini park, is typically a site less than five acres. Another term, "pocket park", has been used in some instances to identify a mini park. It is designed primarily to attract residents who live within a quarter mile of the park. Generally, a walk-to type park, mini parks will not have parking facilities available for vehicles. Mini parks' service levels are .25 to .5 acres per 1000 residents. Size normally prescribes these parks to be passive, limited-activity park facilities. Common elements include benches, playgrounds and tables in an attractively landscaped setting. The parks are sometimes themed to blend in with the surrounding neighborhood. Designs sometimes match the existing homes, fencing, sidewalk pavers, etc.

NEIGHBORHOOD PARK

Neighborhood parks are found in most city and county systems. These parks typically have 5 to 20 acres and serve a population living within a half mile of the park. Conceptually, neighborhood parks concentrate intense recreation activities and facilities into a limited amount of space. Facilities typical to this park include: play fields, playgrounds, and shelters. Parking is not necessary for this type of facility due to its scope of activities and size because most visitors are local residents. However, the standard for parking is a minimum of seven spaces for the first ten acres and one additional space for each additional acre. This may vary based upon the activities and appeal of the programs. If team sports facilities or special features such as swimming pools are included, parking spaces in the range of 40 per field, or greater, will be needed. Although the park is classified as a neighborhood park, the scope of people served can vary based upon densities and the number of other parks available. Typically, one neighborhood park should serve between 1,000 to 2,000 residents, or one to two acres per 1,000 people.

COMMUNITY PARK

Community parks are needed within a system to ensure that all users' recreational needs and interests are addressed and included. This type of park expands beyond a local neighborhood and may sometimes include several

neighborhoods. The concept behind community parks is to provide an all-inclusive facility for recreation users. It should include a mix of active and passive activities and attract users of all ages. From sports fields to a community center, the park should provide as many recreation and support services as possible. A park of this size and scope commonly consists of 20 to 75 acres; 60 acres is considered a good size for such expansive activities. Community parks have both day and night activities. Large facilities, such as a large indoor fitness/recreation center or a multi-field sports complex, can be placed in such a facility because of the amount of space available and the ability to buffer from the surrounding community. The service area for such a facility can vary based upon the size and scope of activities offered; however, a facility of this type may serve anywhere from 5,000 to 8,000 people, or 5 to 8 acres per 1,000 people. User analyses are often based upon a service radius, while others in more urban areas may be based upon drive times.

REGIONAL PARK

The largest park typically found within a system is a regional park. These parks are normally found in large park systems. The size of a regional park varies from 50 to 250 acres depending on the type of activities and the amount of use. The service radius for this type of facility is based upon drive time and is typically within an hour's drive of most residents. Conceptually, the regional park is to provide large natural areas that can be accessed through a variety of means, from roadways to hiking and biking. Based upon the locale, it can have unique recreation areas, such as a water park or an equestrian facility coupled with natural areas. Note: Regional parks are unique to the general area. Prototypical or preferred amenities vary.

SPECIAL-USE PARK

Special-use parks are designed to meet the needs of a specific user group. An example of a special-use park would be an aquatic center, golf course, zoo or a museum. A typical feature of these parks is their ability to be good revenue generators. If maintained and properly staffed, they can provide a

substantial cash flow. These facilities can vary in size according to user demand. For example, a regulation size (par 72) golf course would need at least 140 acres, while an executive style (par 60) layout may only require 100 to 120 acres, based upon amenities such as driving range and practice facilities.

SPORTS PARK

Sports parks are parks that are dominated by athletic facilities. Most sports parks will have a small amount of support facilities such as a walking track, playground and picnic facilities, but the primary function of the park is to facilitate sports activities.

NATURAL RESOURCE AREA / PRESERVE

According to the NRPA, natural resource areas are defined as “lands set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering.” Acquisition of natural resource areas and preserves serves to enhance the quality of the community by maintaining a portion of its natural amenities.

These lands consist of:

- Individual sites exhibiting natural resources
- Lands unsuitable for development but offering natural resource potential (e.g.: parcels with steep slopes and natural vegetation, drainage ways and ravines, surface water management areas and utility easements)
- Protected land, such as wetlands, lowlands and shorelines along waterways, lakes, and ponds

GREENWAYS

Greenways have become one of the most popular family recreation activities across the country. The value of greenways in terms of recreation, education and resource protection is invaluable. Greenways serve as linkages between cities, parks, schools, commercial areas and neighborhoods. They provide a safe mode of transportation that preserves the

environment. Greenways often include paved trails. Typically, trails can vary from 6 to 12 feet in width and can be paved or maintain a natural surface. When developing a greenway system, corridors should be identified where pedestrians will access the area easily and connect elements within the community and incorporate all the characteristics of the natural resource areas. Greenway corridors should be no less than 50 feet in width except in neighborhoods, where 25 feet may be acceptable. In his article published in 1995, Julius Fabos, a former professor of Landscape Architecture at the University of Massachusetts, divides greenways into three categories: ecological, recreational and cultural. Greenways can be located in a variety of settings and can be utilized for active and passive recreation activities. They are typically located along natural environments such as rivers, ridge lines and coastal areas. These trails provide connections to nature, protect and maintain biodiversity, minimize development, and provide for wildlife migration across natural and man-made boundaries. Recreational greenways commonly link elements that have diverse and significant landscapes. Many greenways link rural areas to more urban locales and range from local trails to larger systems. Another type of greenway is the cultural trail, which connects areas of significant historic value and culture. Economic benefits from these types of trails may be significant if linkages can be directed toward areas of commerce to provide an infrastructure for commuting.

SCHOOL PARK

School park sites are an excellent way to combine resources and provide accessible recreation amenities to the community. Depending on the school type (i.e. elementary, middle or high school) the size of the park will be dictated by the available land adjacent to the school. Typically, middle and high schools are constructed with youth athletic fields to support team sports. These facilities provide the basis for developing a community park or, at a minimum, youth athletic fields for recreation programs. The selection of school sites is determined by the school district and the

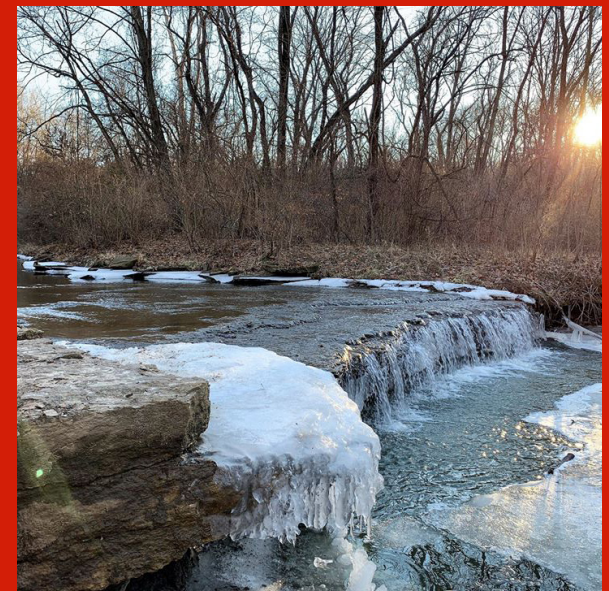
county-wide or city-wide distribution of students. The school site selection criteria may or may not meet the needs for parkland distribution. When development of school parks is possible, guidelines for neighborhood /community parks should be followed to meet the needs of residents. When joint developments occur, features common to other parks in the city (e.g., signs, site furnishings) should be used to identify the property as a public facility.

PRIVATE PARK/RECREATION FACILITY

A private park and recreation facility, as described by the NRPA, meets one of the two following characteristics:

- Facilities within a residential area - such as swimming pools, golf courses, tennis courts and party houses, developed for the exclusive use of residents and maintained through a neighborhood association
- For-profit enterprises - such as health and fitness clubs, golf courses, water parks, amusement parks and sports facilities

These facility types can be entirely private or, in many cases, be a joint venture between a public entity and a private organization. Partnerships of this kind allow for the provision of facilities and programs at a reduced cost to the public sector. Private parks and recreation facilities are not a substitute for public recreation space.



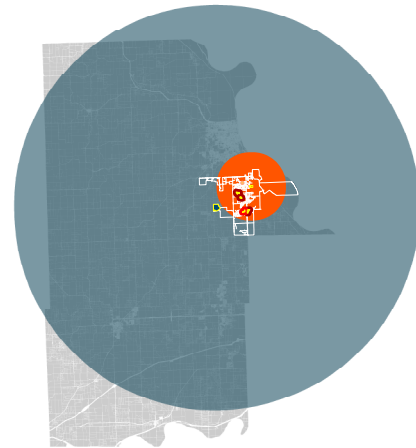
Thus far, infrastructure accessibility and accessibility within a set distance have been discussed. Now, a third type of accessibility, service level, will be analyzed. Service level refers to the number of amenities present within a park to serve a certain number of people.

Each of the parks in the park system have been given classifications depending on the type of amenities present, how large the park is and what the main use is. Each of these classifications come with standards for how many people the park serves, which can be referenced in the NRPA Park Classifications section.

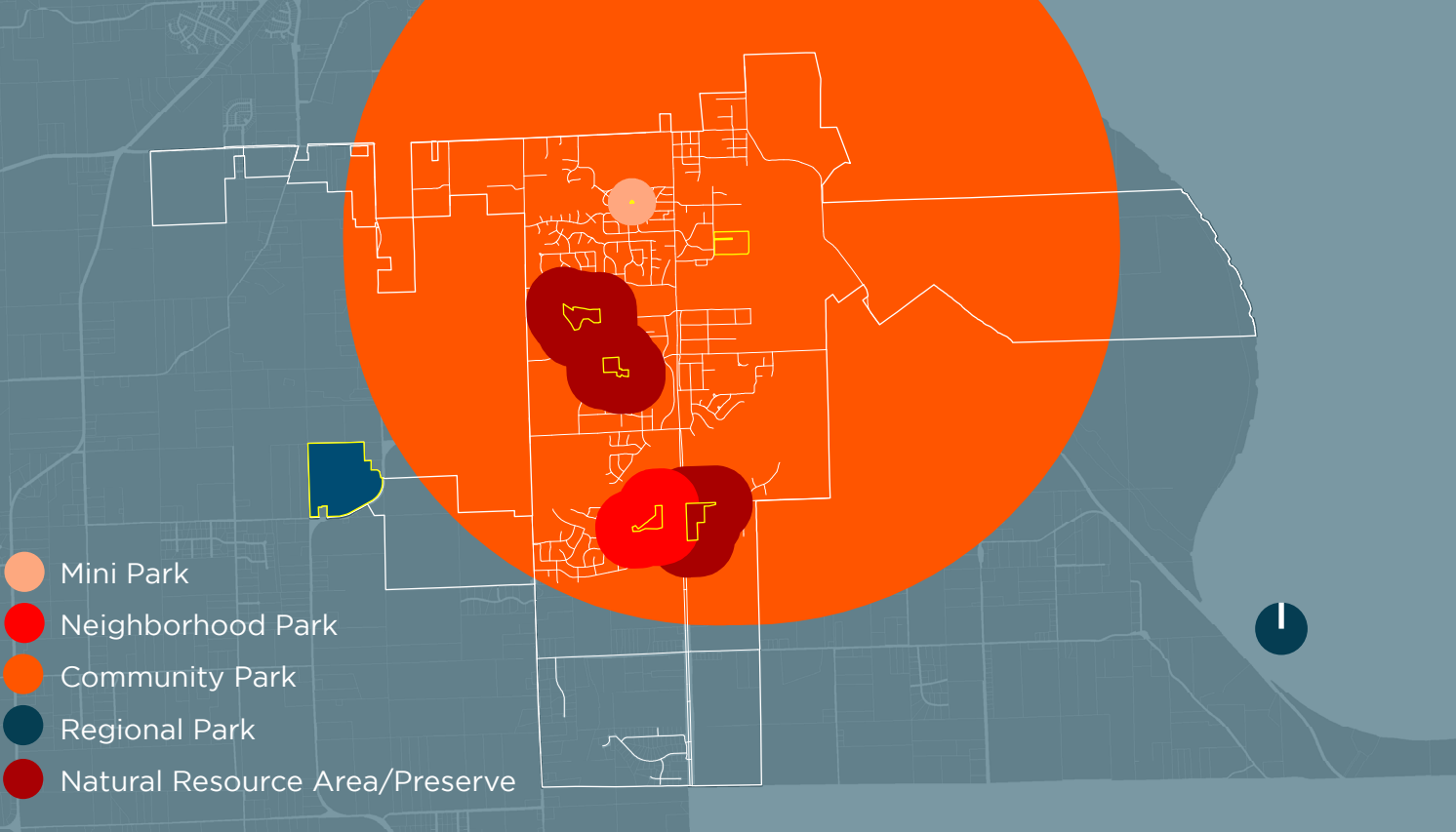
The map below visually represents the service radius around each of the parks based on their classification. Mini Parks have the smallest service area with a 0.25 mi radius and the largest being Regional Parks with a 10 mi radius. Based on these classifications, Lansing has more Nat-

ural Resource Area/Preserves than any other park. This is not surprising considering the amount of natural resources present.

When considering expansion and recommended amenities, special consideration should be taken to diversifying the types of parks serving the Lansing population.



Lansing's Level of Service



Site Analysis Drawings

The previous maps aimed to provide contextual analysis and observation of Lansing and its parks system as a whole, where the following illustrations aim to provide in-depth observations and insights on each individual park property. The following site analysis drawings contain six layers of analysis: Infrastructure and Viewsheds, Circulation, Vegetative Cover, Hydrology, Soils, and Topographic Slope Analysis.

Each of these layers provides necessary information to contextualize and design for public park spaces. All of these factors, combined with on-site analysis, allowed the design team to comprehensively analyze each park space. These site analysis drawings provide an essential step to designing for the future; while understanding the present.

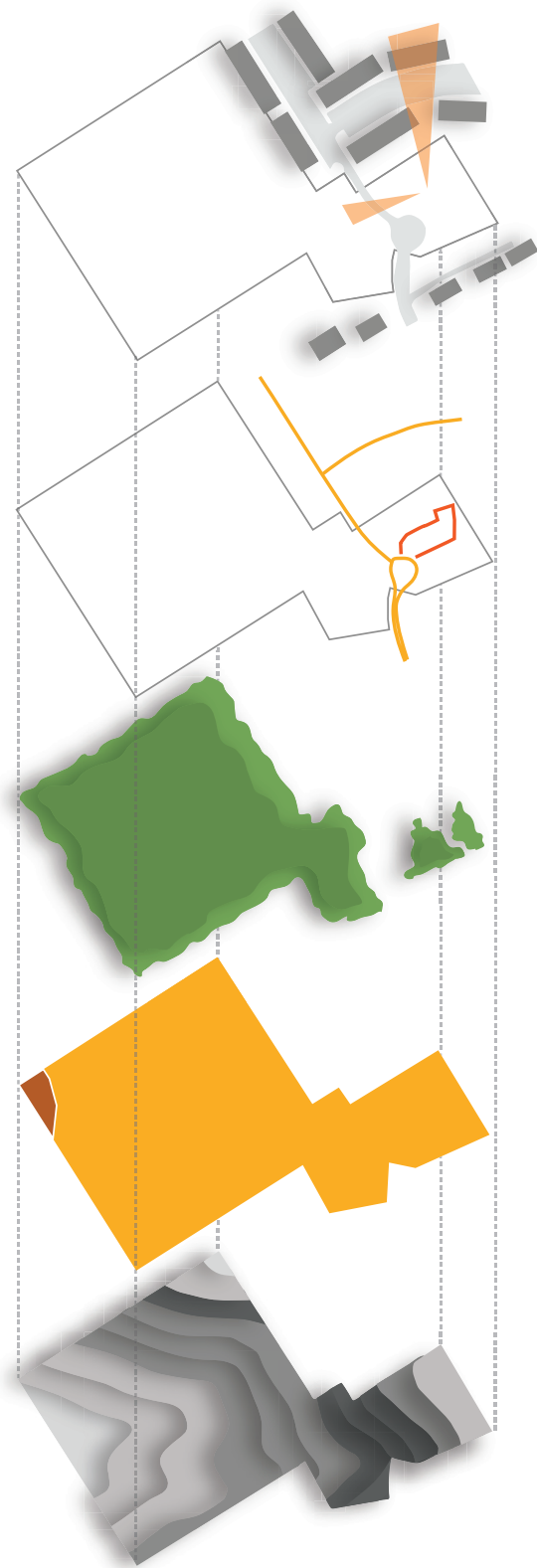
Each park in Lansing's park system has a site analysis drawing, site pictures, the acreage of the park, the class of the park and a list of amenities currently in the park. The amenities are color-coded and can be found in the legend to the right.

Park Amenity Key

- Restroom Facility
- Portable Restroom
- Playground
- Trails
- Shelters
- Water Feature
- Baseball Fields
- Soccer Fields
- Parking

Bittersweet Park

This park is nestled next to both a single-family neighborhood to the South and a multi-family apartment complex to the North. If it wasn't for the undeveloped nature of the park, it would be classified as a neighborhood park. Bittersweet Park was ultimately master planned in 2003, but the design hasn't been implemented to date. This park features a hill on the Southeast side of the property that overlooks the city, as well as the apartment complex. This poses a unique opportunity to highlight the overlook, as well as screen the hilltop and visitors from the apartment complex below. Split by a cul-de-sac and gate into the apartment complex, the rest of the park continues to have dramatic topography, as well as being covered by dense trees and underbrush. The lack of built amenities, the natural features and challenging developmental environment of this park have it classified as a Natural Resource Area.



Infrastructure and Viewsheds

- Pavement
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Vegetative Cover

- Tree Cover
- Densest Tree Cover

Soils

- Basehor Complex
- Gosport Complex

Topographic Slope

- 0-7% Slope
- 8-16% Slope
- 17-30% Slope



Class
Natural Resource



Acres
8.67



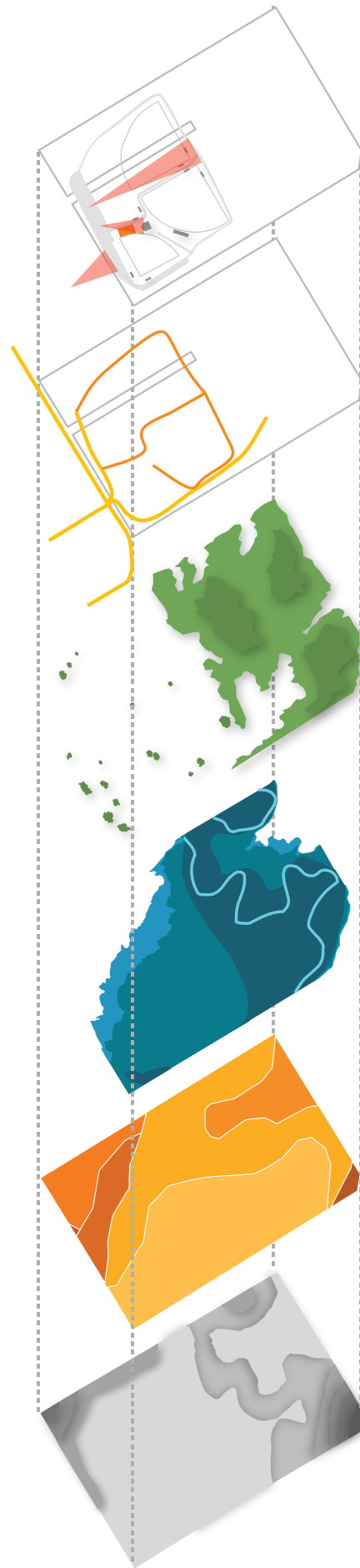
Amenities



City Park

This park is the current home of Lansing's baseball, softball and tee-ball facilities. City Park is tucked away behind light industrial buildings to the West, which is the City's maintenance facility, and a trailer park to the South. This park is the only one in the park system that has a built restroom facility, which is located in the center of the park; however, staff has to keep it closed outside of events due to vandalism. Other features include two full sized baseball fields and two small fields, with a concrete walking path around the perimeter and through the center. All of these built elements need upgrades.

Situated to the West of the restroom facility is a playground that is also in need of upgrading. Currently, only half of the park is being utilized. The other half is covered in vegetation and Sevenmile Creek runs through the park. The area around the creek, and the majority of the Eastern portion of the park, is in the floodplain. The parking lot on the West side of the park has drainage issues, where water collects at the entrance and is at full parking capacity during games.



Infrastructure and Viewsheds

- Pavement
- Built Amenity
- Sports Field
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Vegetative Cover

- Tree Cover
- Densest Tree Cover

Hydrology

- Creek
- Rarely Flooded
- Occasionally Flooded
- Frequently Flooded

Soils

- Judson Silt Loam
- Knox Silt Loam
- Kennebec Silt Loam
- Kennebec Silt Loam

Topographic Slope

- 0-1% Slope
- 3-8% Slope
- 8-12% Slope



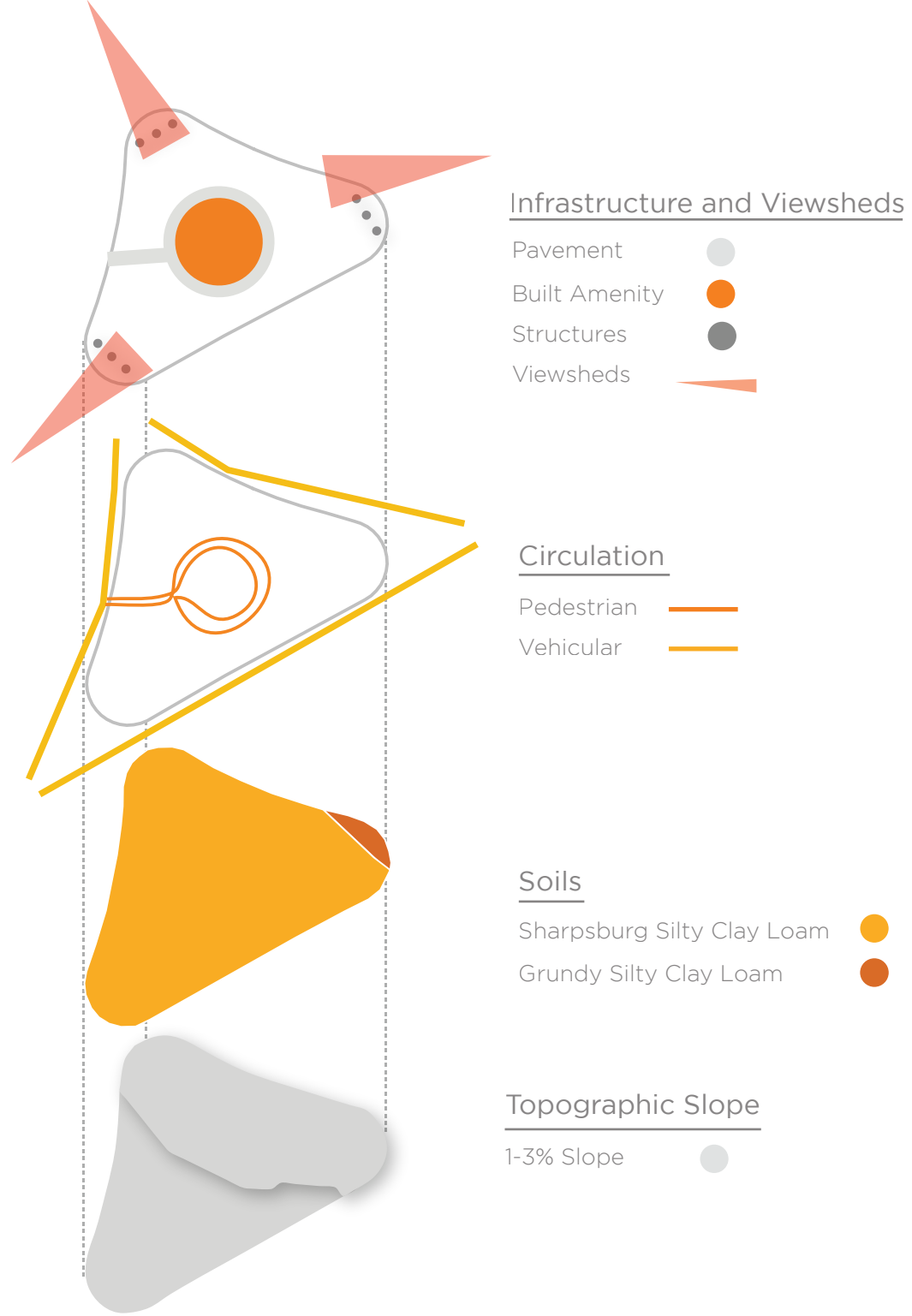
Class
Community

Acres
22



Amenities





Highland Playground

Highland Playground is the smallest park in Lansing’s park system with just 0.2 acres. Within the last year, the old playground equipment has been taken out and replaced with a single play structure shown to the right. A fence and benches were added around the perimeter, as well as wooden bollards at all three corners. This park space acts as the island in an intersection in a neighborhood, which means traffic is flowing around the playground on all sides. The surrounding neighborhood doesn’t have sidewalks, therefore, safe connections to the surrounding residents is lacking around this park and should be improved.

Amenities

Class
Mini

Acres
0.2

Kelly Grove Park

This park lies just off of Highway 7 and E Gilman Road. These major thoroughfares run along the West and North sides of Kelly Grove Park; farmland lies to the East. Parking is difficult with few spaces available at the Northeastern most edge of the property. The designated area isn't paved but has gravel and offers about four spaces. Included in this area is also a small sign about the park. Kelly Grove Park was donated to the City with requirements that it remain a nature park, therefore it has a classification of a Natural Resource Preserve. This classification prohibits the park from further development other than adding walking trails and nature-oriented activities. The existing trail through the park is not paved, and the lower portions in the floodplain are frequently flooded. This makes traversing the park very difficult and none of the facilities are currently ADA accessible. The riparian corridor through the park is starting to erode as well, which poses a problem long-term for being able to create an accessible trail network.



Infrastructure and Viewsheds

- Pavement ●
- Viewsheds ▲

Circulation

- Pedestrian —
- Vehicular —

Vegetative Cover

- Tree Cover ●
- Densest Tree Cover ●

Hydrology

- Creek —
- Rarely Flooded ●
- Occasionally Flooded ●
- Frequently Flooded ●

Soils

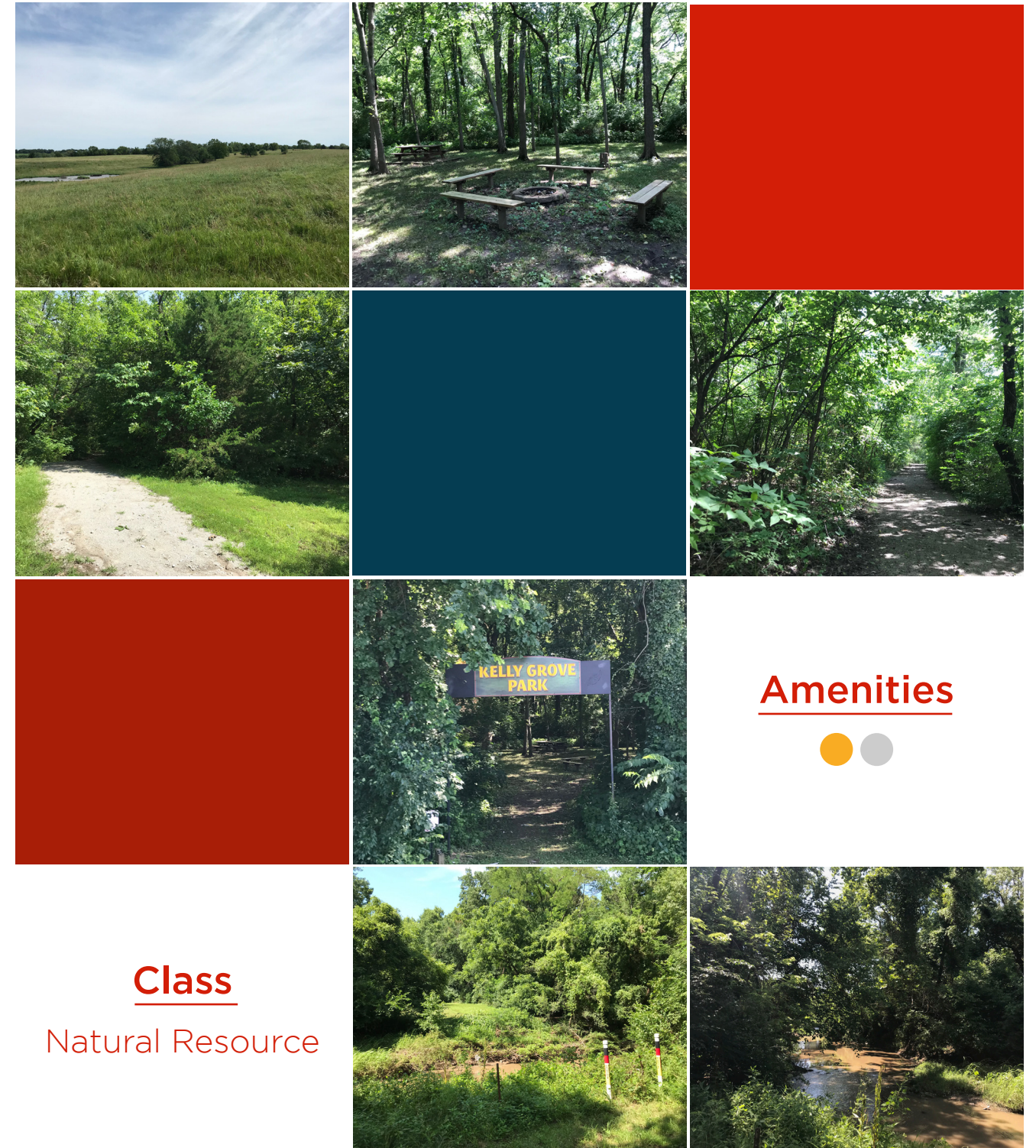
- Ladoga Silt Loam ●
- Armster Clay Loam ●
- Kennebec Silt Loam ●
- Kennebec Silt Loam ●
- Gosport-Sogn complex ●

Topographic Slope

- 0-1% Slope ●
- 3-8% Slope ●
- 8-12% Slope ●

Acres

16.4



Amenities



Class

Natural Resource

Kenneth W. Bernard Community Park

This park is the largest in Lansing's park system at 128 acres. This park was also previously master planned and has had some development in the last 15 years. That development brought the park a paved parking lot, a central gathering space with picnic tables, a shelter and playground, as well as soccer fields. This development was minor compared to the previous master plan design and offers great foundation to build out the rest of the park. All features in the park, besides the existing shelter, need to be upgraded due to age. The park does contain a sizeable trail network that runs throughout the park. None of these trails are paved, therefore are not ADA accessible, but they are mown trails that are maintained by City Staff. This particular park property has significant changes in topography, which will be a challenge developing the park through the master plan.



Infrastructure and Viewsheds

- Pavement
- Built Amenity
- Sports Field
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Vegetative Cover

- Tree Cover
- Densest Tree Cover

Soils

- Alluvial Land
- Ladoga Silt Loam 4%-7%
- Sharpsburg Silty Loam 1%-4%
- Shelby Loam 4%-8%
- Shelby Loam 8%-12%
- Shelby-Pawnee Complex 4%-8%

Topographic Slope

- 1-4% Slope
- 5-8% Slope
- 9-11% Slope
- >12% Slope

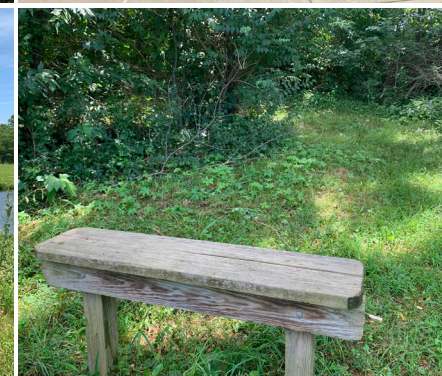


Acres

128

Class

Regional

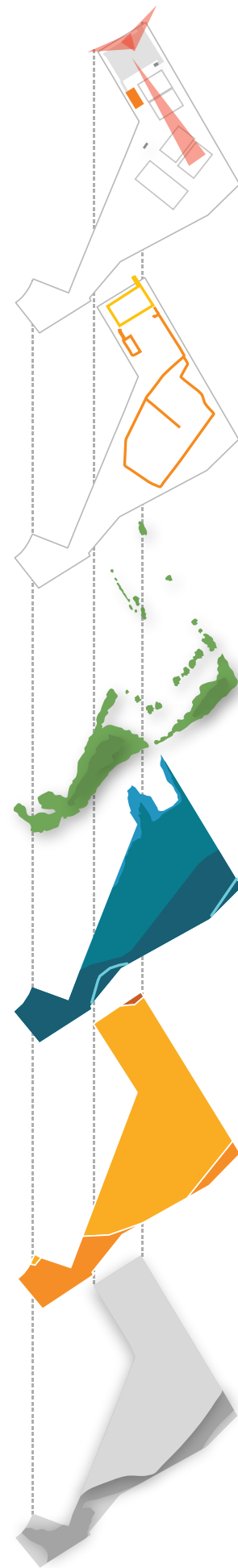


Amenities



Willow Park

Willow Park exists in the heart of a single-family neighborhood and contains Lansing's game-ready soccer fields that are utilized by all age groups. Along with the soccer fields, this park has a small playground with a post and platform play structure, along with a swing set. The playground is fenced, separating the playground from the soccer fields, and provides benches for seating. However, the playground equipment is outdated and needs an upgrade. Willow Park also has a storage structure that doubles as a containment structure for a portable restroom. The Southern portion of the park, near Ninemile Creek, is relatively unused and remains as open space. It also offers great views and privacy from neighboring houses, making it ideal for development with an active use.



Infrastructure and Viewsheds

- Pavement ●
- Built Amenity ●
- Sports Field
- Structures ●
- Viewsheds ▸

Circulation

- Pedestrian —
- Vehicular —

Vegetative Cover

- Tree Cover ●
- Densest Tree Cover ●

Hydrology

- Creek —
- Rarely Flooded ●
- Occasionally Flooded ●
- Frequently Flooded ●

Soils

- Kennebec Silt Loam ●
- Ladoga Silt Loam ●
- Judson Silt Loam ●

Topographic Slope

- 0-1% Slope ●
- 3-8% Slope ●



Acres
8.77



Class
Neighborhood



Amenities

● ● ●



Community Profile

The community profile seeks to provide a current picture of Lansing's demographics and city-wide amenities to provide a base of understanding for future planning efforts. This section also compares Lansing with other local and national communities to identify benchmarks to aid future growth. As part of the existing conditions analysis, the previous section examined Lansing based on current land use and how adjacent land use affects each park individually and as a whole. This section conducts analysis based on information about the residents of Lansing and the amenities that serve them.



COMMUNITY PROFILE AND BENCHMARKING

All of the data used in this section is from the U.S. Census from 1990-2010 and the 2017 ACS was used for all of the 2017 data. All projections were created using linear regression and are estimates.

Currently, the City of Lansing has almost 12,000 people with 3,322 households, which indicates that Lansing has a lot of families. This is paired with a median age of 38.7, which is slightly older than that of Kansas with a median age of 36.2.

Lansing's median household income is \$84,183, which is also higher than that of Kansas. Lansing is the second largest city in Leavenworth County, after the City of Leavenworth.



2017 Population

11,771



2017 Households

3,322



2017 Median Age

38.7



2017 Median Household Income

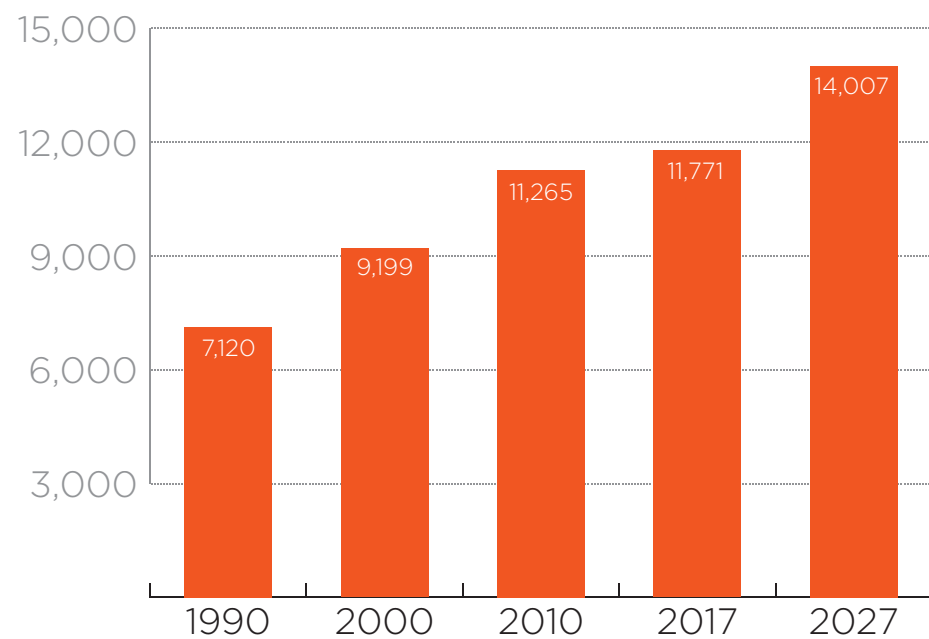
\$84,183

Population

The population in Lansing has been steadily rising since the 1990s, with a few thousand people added every 10 years. Between 2010 to 2017, the steady growth appears to taper off. The population only grew about 506 people in 7 years, rather than the usual 2,500 in 10 years. Linear regression was used to predict the population numbers in Lansing 10 years from the last reported Census information, which is 2017; making the predictions for 2027. Linear regression takes the average growth from each year and applies it to the same time period, in this case, 10 years. This is purely an estimate based on previ-

ous growth. While this formula uses an average growth, it doesn't consider that the growth rate of Lansing is slowing, as well as all of the other factors that go into population growth. These factors include, housing stock availability, job centers and availability, schools, City amenities, and so on. This makes predicting future population growth challenging. Analyzing population trends allows the design team to understand how Lansing's population has changed and will change to more accurately plan and design for the future of Lansing.

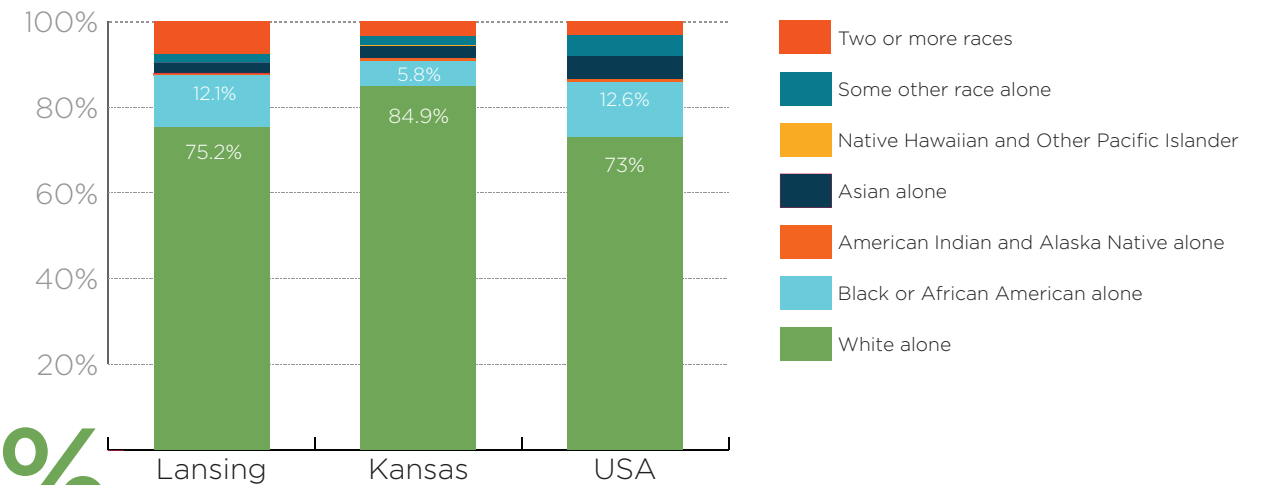
Population Trends 1990-2027



Lansing's Population Grew by **506** From 2010-2017

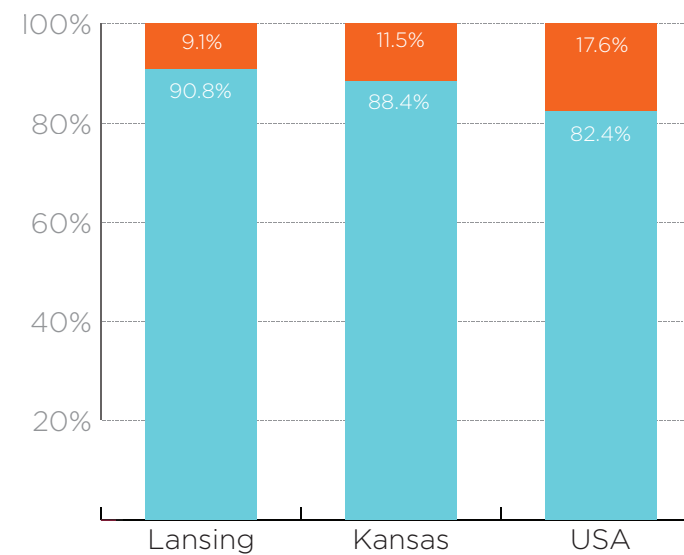
Race/Ethnicity

2017 Racial Diversity Comparison



6.3% Higher Black or African American Population than Kansas

2017 Hispanic or Latino Comparison



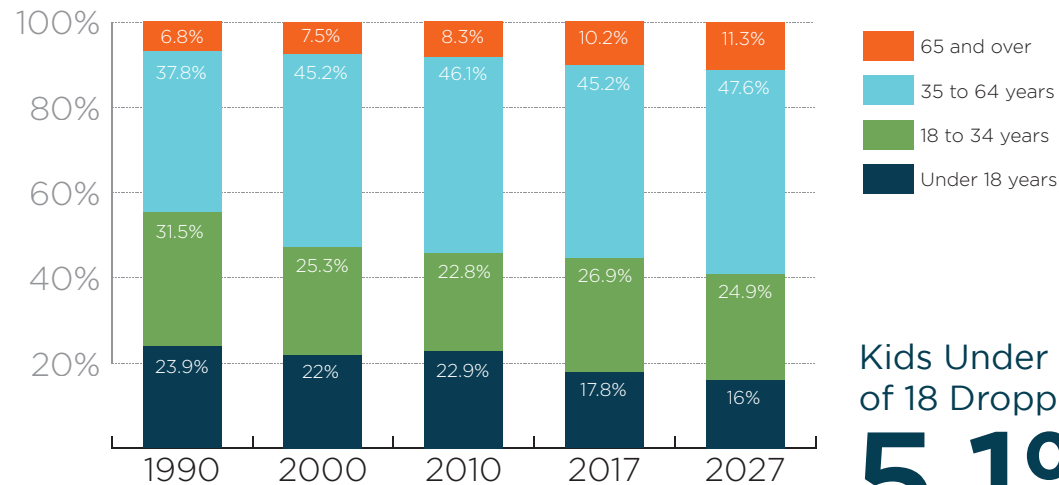
8.5% Lower Hispanic or Latino Population than the U.S.

The most predominant race of Lansing is mostly White alone consisting of 75.2% of the population. The second most predominant race is Black or African American being 12.1% of the population. When compared to Kansas, Lansing is more racially diverse with fewer residents that are in the White alone category, more Black or African American residents and more Two or More Races. However, when compared to the U.S as a whole, Lansing's racial diversity is quite similar except for having more residents that are Two or More Races.

Ethnicity is different than race; where race refers to biology, ethnicity refers to culture from a specific region. In this case, the U.S Census collects information on the Hispanic and Latino populations of cities. Lansing's Hispanic or Latino population is 9.1% of the total population, which when compared regionally and nationally, is lower than both. The most significant difference is national, with an 8.5% lower ethnic diversity than the U.S.

Age Groups

Age Group Trends 1990-2027

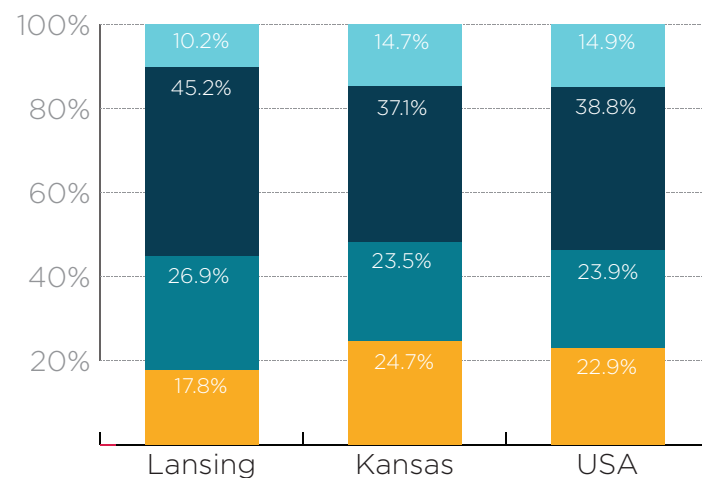


Kids Under the Age of 18 Dropped By **5.1%** From 2000-2017

Lansing's median age is 38.7, but that doesn't shed very much light on which age groups in Lansing need to be planned and designed for. The graph above shows the individual age groups in Lansing and the changes over time from 1990 to the projected 2027. This shows which age groups have grown over the last almost 30 years and will grow over the next almost 10 years. The percentage of people under 18 has been decreasing over time, except for 2000-2010, where it increased by .9% and is projected to decrease more by 2027. The predominant age group in Lansing is 35-64, which is increasing, along with the 65 and over group. Lansing's older populations are increasing, and younger populations are decreasing, which affects the types of activities and amenities that are needed to serve residents.

The age group comparison in the chart to the right shows the regional and national proportions of the same age groups listed above. This indicates that Lansing has a significantly higher 35-64 age group than that of Kansas and the U.S., as well as having a higher 18 to 34 age group. Lansing also has a lower percentage of 65 and over residents when compared to these geographies. These age groups must be taken into more consideration when designing park spaces.

2017 Age Group Comparison

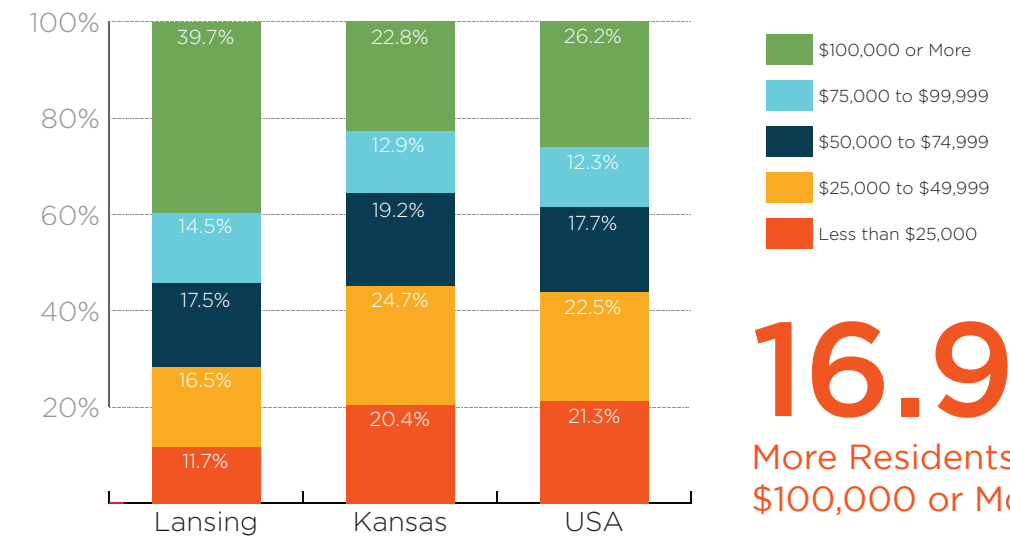


7% Larger 35-64 Age Group

- 65 and Over
- 35 to 64 Years
- 18 to 34 Years
- Under 18 Years

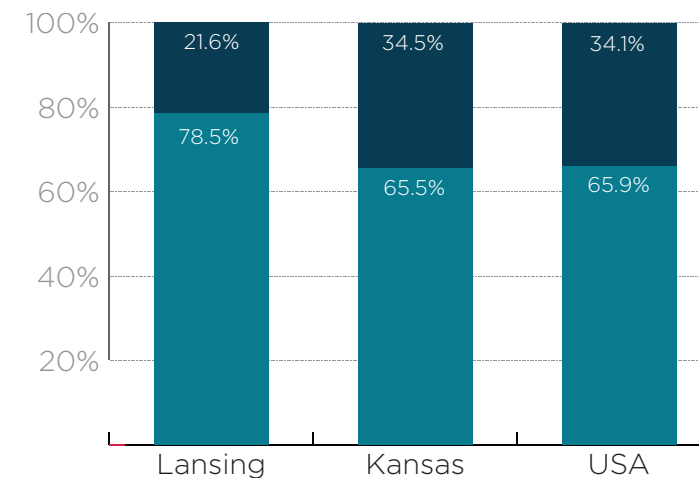
Households

2017 Median Household Income Comparison



16.9% More Residents that Make \$100,000 or More A Year

2017 Household Type Comparison



78.5% Of Households are Families

- Nonfamily Households
- Family Households

Lansing does not match the regional and national average standard when it comes to median-household income. Lansing has far fewer residents making less than \$25,000 and far more that are making \$100,000 and above. Because of this, Lansing has a smaller middle class making \$25,000-\$49,999. Every city needs a balance of incomes to create vibrant, inclusive spaces. Park expansions should be considered in lower-income areas to ensure that resources are being distributed equitably and to encourage income diversity within Lansing.

Lansing also has a higher amount of family households than that of Kansas and the U.S. However, based on the age distribution, kids tend to be older than 18. This correlates with the majority of adults being between the ages of 35-64. The percentage of family households is high, but with the proximity to Fort Leavenworth, military families operate as a non-family household with only one available parent. Park recommendations should take into account the needs of both family and non-family households to make Lansing parks usable and enjoyable by all.

Lansing Summary:

Population

506

People In Recent Growth (2010 - 2017)

Race

6.3%

Higher Black or African American Population than Kansas

Ethnicity

8.5%

Lower Hispanic or Latino Population than the U.S

Age

7%

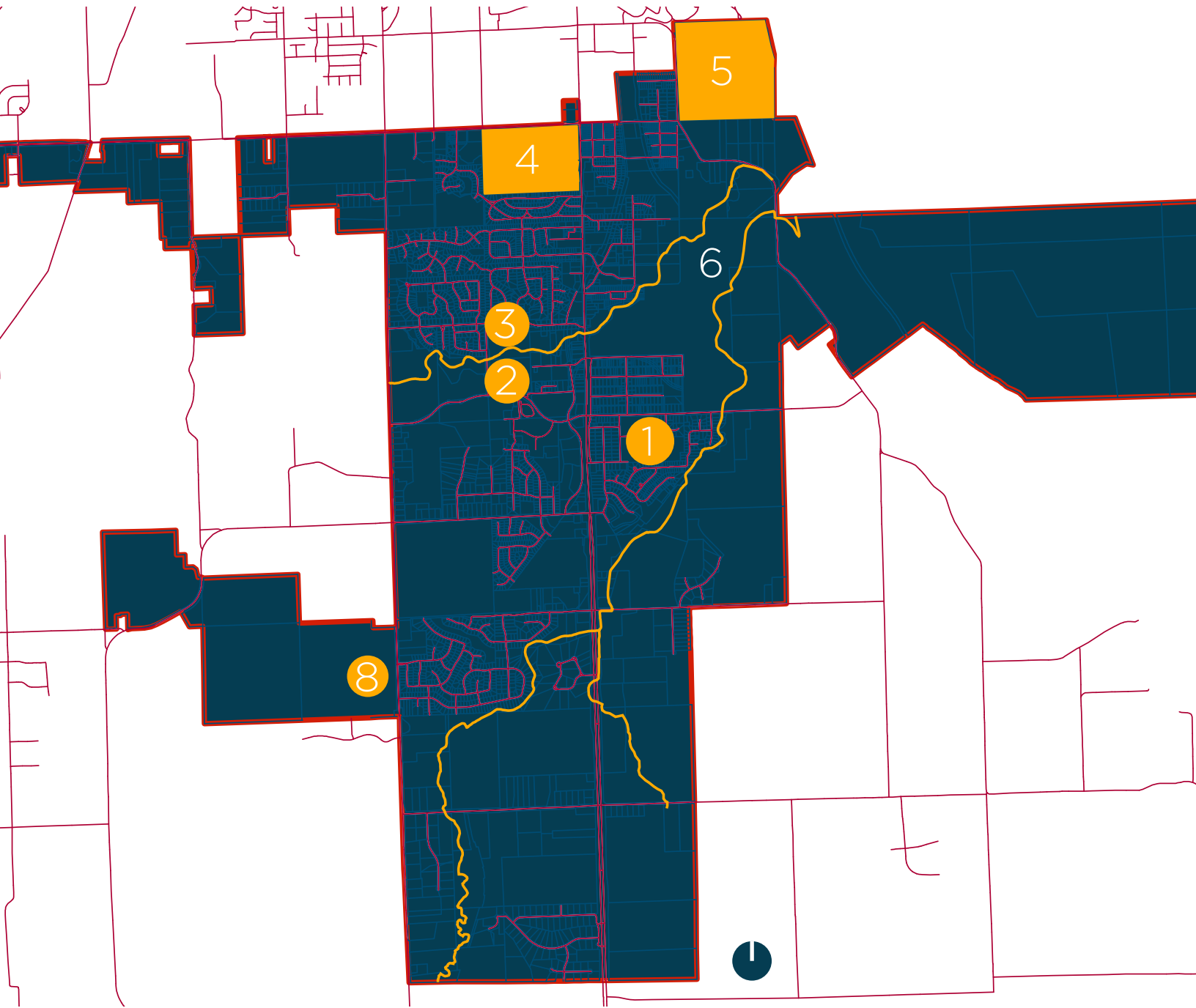
Larger 35-64 Age Group Than Kansas and the U.S

Households

78.5%

Of Households are Families

Community Amenities



1. Lansing Middle School
2. Lansing Elementary School
3. Lansing Intermediate School
4. Leavenworth Country Club and Golf Course
5. Leavenworth National Cemetery and Mt Muncie Cemetery
6. Sevenmile Creek
7. Ninemile Creek
8. Lansing High School

Schools

This master plan has discussed city parks as amenities, as well as natural resources, but there are many different types of amenities within a community; a very important one is schools. These are not only one of the most important factors when moving to a city, but also green spaces in nature. Lansing's schools have undergone improvements in recent years and have updated their green space. Even though these are on school property, the playgrounds and trails are amenities to the entire community, which is often overlooked. These spaces should be cultivated, not only for the children attending but for the surrounding community.

Greenspace

As schools can function as community green space, other types of community green space should be considered amenities. Lansing also has the Leavenworth Country Club and Golf Course, Mt Muncie Cemetery and the Leavenworth National Cemetery just outside the City limits. These offer recreation, social and natural opportunities to the City of Lansing, and should be taken into consideration when evaluating amenities for residents within Lansing.

Creeks

Although the value of natural resources was discussed earlier, it's important to note the specific importance of creeks within a community. Water plays a big role in Lansing, with both the Ninemile and Sevenmile Creek's running through the city, it's also adjacent to the Missouri River. This has created a substantial floodplain, and although this might seem like a bad thing, it can be an asset and amenity. Rivers, creeks, and floodplains create natural wetland environments, which act as small ecosystems for native plants and animals. Many communities are restoring wetlands and receive grants to do so. The same goes for creeks. Many communities are restoring creekbanks and improving the water quality that contributes to the surrounding environment. When these areas are preserved and improved, trails can be added around them and can serve as educational opportunities to learn about local habitat and sustainability. As another form of green space, creeks are just as important as park space.

Comparable Communities

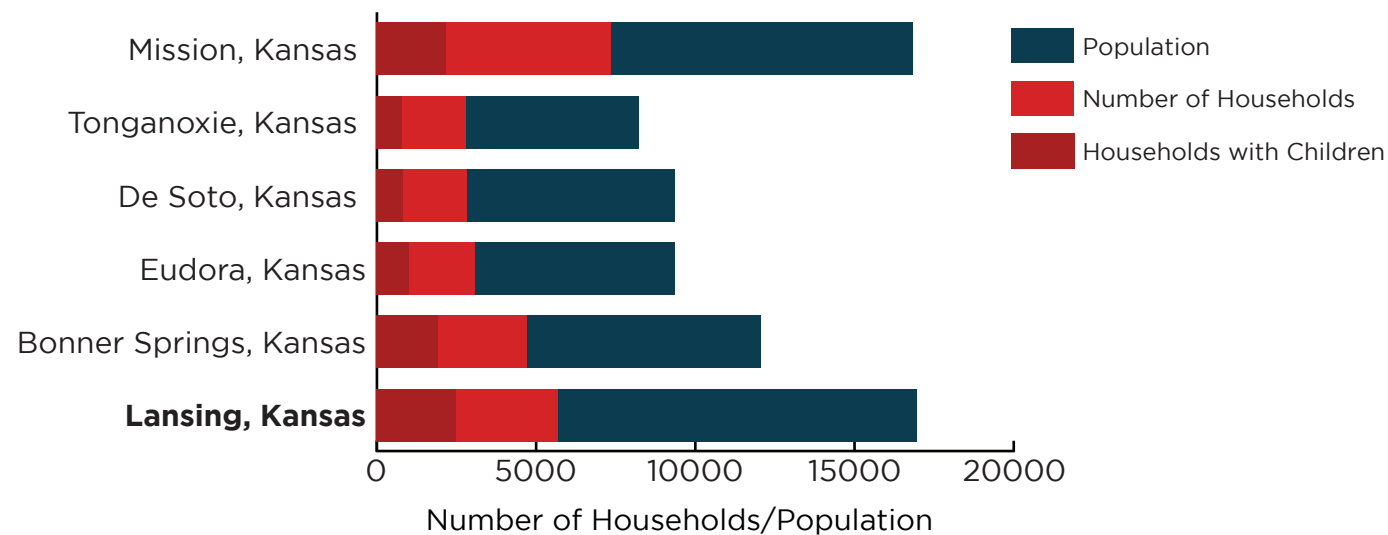
The last two sections began benchmarking Lansing regionally and nationally based on demographics and covered citywide, general amenities. This section digs deeper into Lansing's parks and recreation amenities in a more detailed capacity by comparing them to other, similar sized communities.

revealed any gaps in the number of amenities Lansing might have, or if Lansing has a surplus in certain categories. This allows very detailed, targeted recommendations to be made to address any shortcomings in amenities that Lansing might have, or not to expand certain amenities due to over-saturation.

Five local communities within the state of Kansas that are comparable in population size, were chosen by City Staff to benchmark Lansing's parks and recreation amenities against similar communities. This process

The following data was collected from the Parks and Recreation Directors from each of the cities listed. What is shown is believed to be accurate, at the time of this master plan's approval.

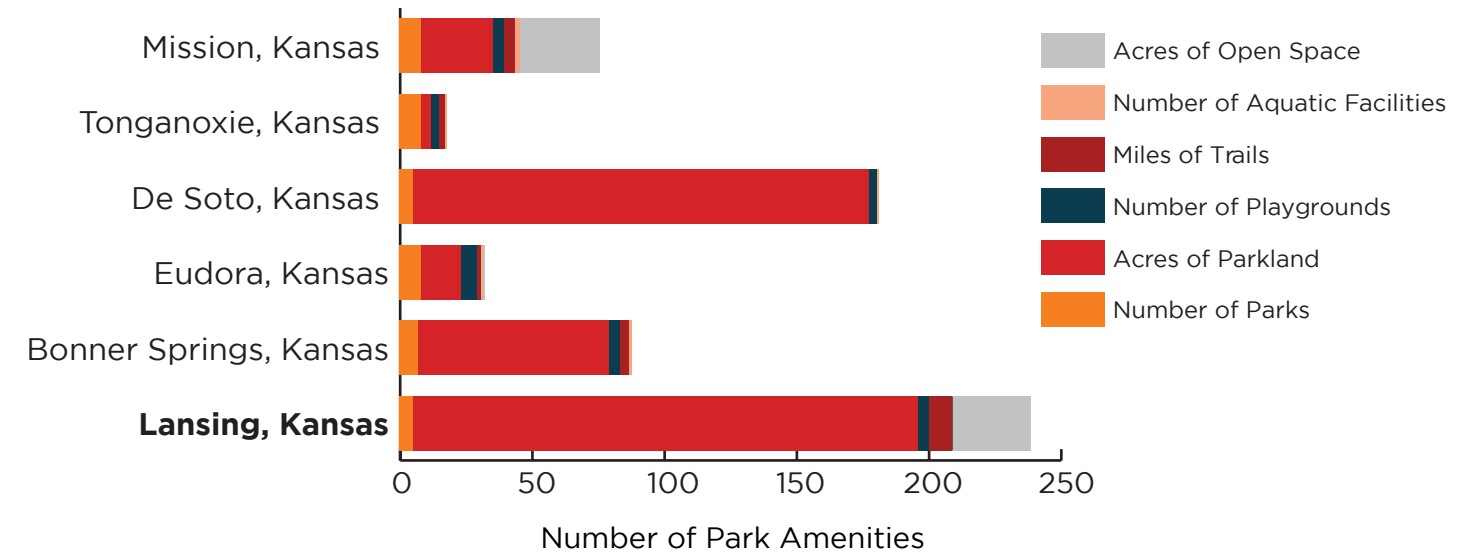
City Information



The graph above shows a collection of demographic information from all of the cities. Lansing and Mission have the highest population, with Mission having the highest number of households. Lansing has a higher than average number of family households, which is reflected here by a

larger number of households with children than that of Mission and all of the other cities. With Mission having more households and a lower population than Lansing, this indicates that more non-family households exist in Mission than any of the other cities that were examined.

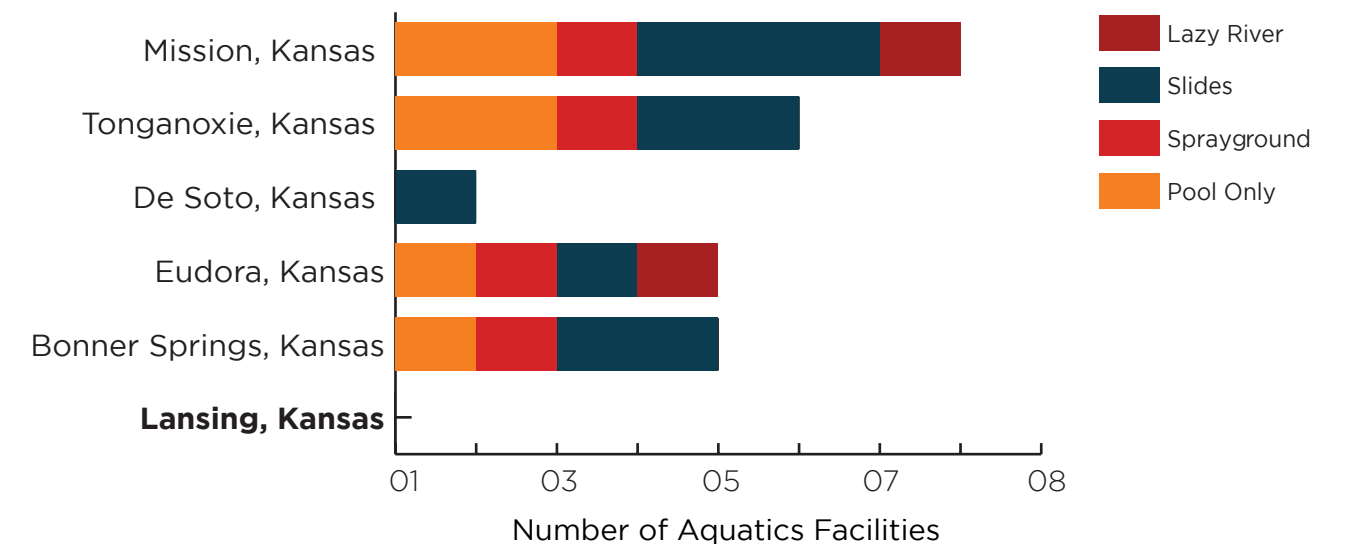
Parks Information



The graph shown above shows general park system numbers for each community that exist to date. Lansing has the most parkland and miles of trails than any of the other compared cities. However, Lansing has the second fewest number of

parks, with only De Soto having less. With having the most acreage and trails, Lansing holds the most maintenance responsibilities, which can be difficult for a municipality to maintain long term.

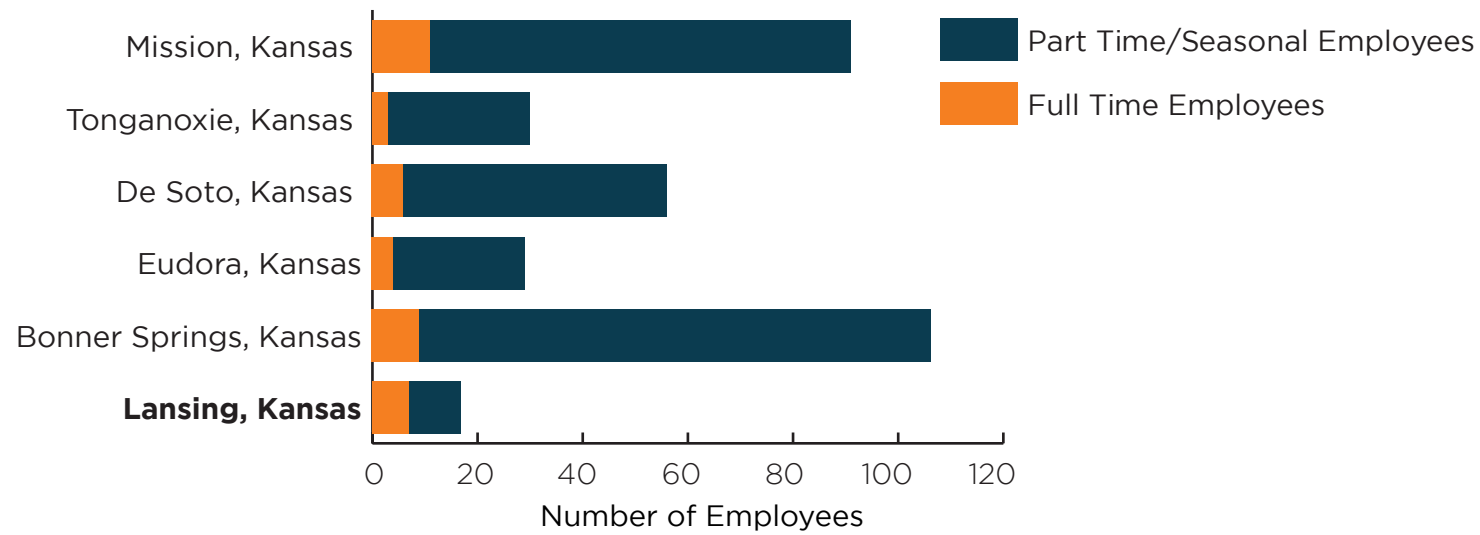
Aquatics Information



This section requested that cities provide all of the aquatics information that pertains to only what the city owns and maintains. With this in mind, Lansing doesn't have any information for aquatics because the only pool available within the community is owned by the school district and resides in the high school.

All of the other communities have at least one pool, with Mission having the most aquatics facilities. Lansing has a nice pool facility, but early public use times make it difficult for residents to take advantage of this amenity. This will be discussed in a later section.

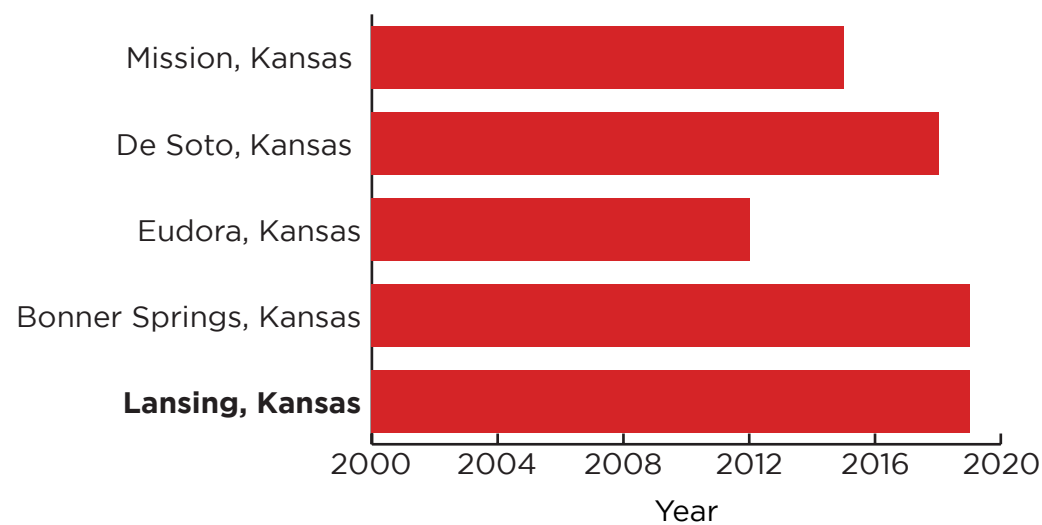
Employee Information



The graph above shows the number of part time/seasonal and full-time employees that each community has in their Parks and Recreation Department. These employees are responsible for maintenance and coordination of park spaces within these communities. If this employee information is compared with the park information graph, Lansing is operating the most park space with

the least number of employees. Whereas, Bonner Springs has the most employees with far less park space. Having so few employees available in Lansing's Parks and Recreation Department poses a real challenge for both the employee's well-being and the park maintenance itself. Recommendations for this challenge will be addressed in a later section.

Latest Parks Master Plan



This section aims to illustrate when each community's parks and recreation master plan was last updated. This puts into perspective the investment going into each community and if Lansing is staying competitive within this chosen group of cities.

Bonner Springs updated their parks master plan within this past year and De Soto within the past few years, while Eudora has not updated theirs since 2012.

Summary

In conclusion, after taking into consideration city parks, aquatics, and parks master plan information, Lansing is staying very competitive with all of the chosen communities. Lansing has the largest population, with the most park space and the least number of Parks and Recreation employees, but still has been able to fully maintain all City owned property without neglect. However, working within these numbers has created challenges that will need to be overcome to improve conditions for workers and maintenance overall.

The only category that Lansing doesn't compete in, is the aquatics section. With aquatics being a major amenity, it poses a real challenge for Lansing to compete in this area. Without aquatics in Lansing, residents will travel to other communities for this resource, rather than staying local. To this point, Lansing is missing a recreational market, currently, by not having a more accessible interactive water resource.

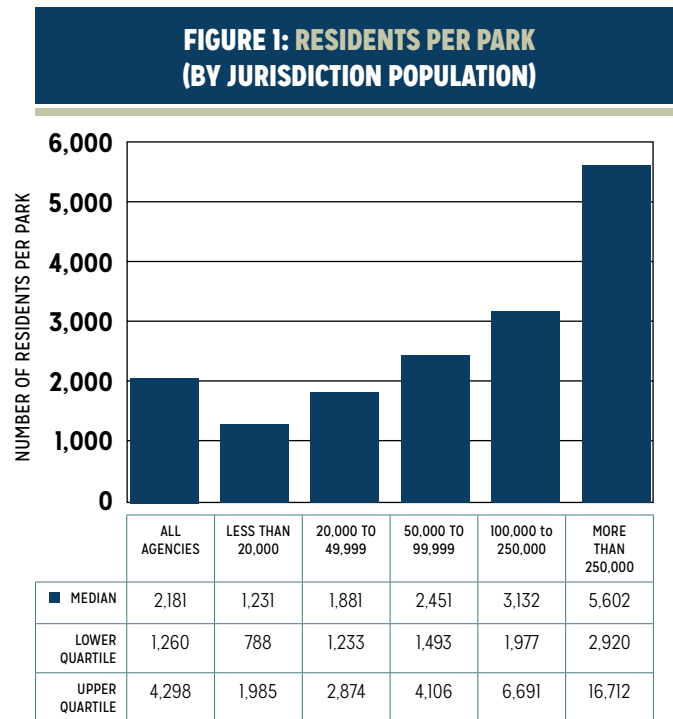
In all of these categories, Lansing has excelled with what has been available to them, but there are several areas that could be improved. The recommendations for these issues will be addressed in the Park and Facility Recommendations section and the Maintenance section.

NRPA Benchmarking

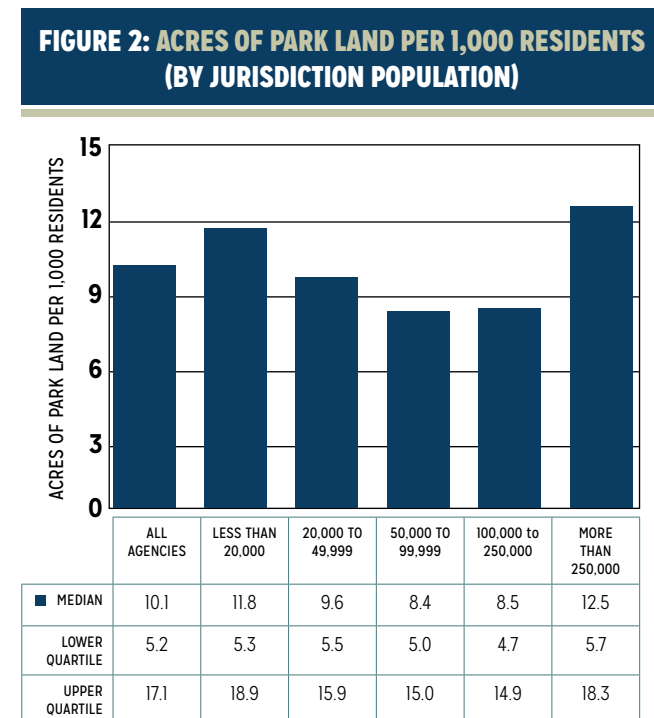
Earlier in section 2, the NRPA Park Classifications were used to categorize each of the parks in Lansing. In this section, the 2019 NRPA Agency Performance Review will be used as a national benchmarking tool for Lansing’s park system as a whole. The 2019 NRPA Agency Performance Review is a collection of data from 1,075 different park and recreation agencies all across the U.S. from 2016-2018. This performance review creates national medians and benchmarks for communities of all sizes to base their park and recreation numbers against. However, these numbers are not all encompassing, and each community is run differently with different factors to consider; therefore, changes shouldn’t be made just based on this information, but merely used as a tool to make broad, national comparisons to other communities.

There are three areas of comparison that provide a general set of benchmarks for Lansing’s park system that are beneficial to this master plan. Figure 1, on the right, is showing the median number of residents per park across all communities, as well as in the lower and upper quartile. Lansing would fall into the “Less than 20,000” category where the median is 1,231. Lansing has 6 parks in its system with 11,771 residents, according to the 2017 ACS, which means Lansing has 1,961 residents per park. This number is closer to that of a 20,000-40,000 resident community than that of its actual category. This suggests that the number of parks could be greater to allow residents more options within Lansing.

Figure 2 outlines the median number of acres of park land available per 1,000 people. Lansing’s 6 parks combined is a total of 190.56 acres, and based on 11,771 residents, Lansing has 17.32 acres per 1,000 residents. That number would fall into the upper quartile median across all agencies. This suggests that Lansing has an adequate number of acres per 1,000 residents. Compared to the assessment above, Lansing could benefit from spreading out that acreage across the city, rather than a few large parks.



Source: 2019 NRPA Agency Performance Review



Source: 2019 NRPA Agency Performance Review

Figure 3 breaks down the most frequently used parks and recreation facilities across all of the communities that were surveyed in this review, and shows what percentage of communities actually had them. Lansing currently has about half of these facilities currently in their park system. All of these facilities are specifically outdoor and only owned by Parks and Recreation. Some of the facilities that Lansing doesn’t currently have are very frequently used in other communities. These facilities include: basketball courts, tennis courts and dog parks. There is typically a ratio of people per facility, some facilities are repeated more frequently throughout the community, others stand alone and are destination activities, which is shown on the right side of the graph below. Lansing has approximately 900 people per square mile. Not all of these amenities will work in every community. For example, ice rinks are only present in 16.7% of cities, which might indicate that Lansing doesn’t necessarily require an ice

rink to provide a variety of activities. A list has been made of all of the facilities that Lansing currently doesn’t have, however, this should just be used as a reference and not a set of recommendations.

Facilities not in Lansing:

- Basketball courts
- Tennis courts
- Dog park
- Outdoor Swimming Pool
- Community Gardens
- Multi-Purpose Courts
- Skate Park
- Multi-Purpose Synthetic Field
- Ice Rink
- Multi-Purpose Rectangular Fields

FIGURE 3: OUTDOOR PARK AND RECREATION FACILITIES—POPULATION PER FACILITY (BY PREVALENCE AND POPULATION PER FACILITY)

	% of Agencies	Median Number of Residents per Facility				
		All Agencies	Residents per Square Mile			
			Less than 500	500 to 1,500	1,501 to 2,500	More than 2,500
Playgrounds	94.4%	3,706	7,334	3,397	3,163	3,586
Basketball courts	86.1	7,375	10,048	7,260	5,971	7,400
Tennis courts (outdoor only)	79.7	4,803	5,462	5,217	4,296	4,858
Diamond fields: baseball - youth	77.9	6,608	6,890	5,574	6,597	7,369
Diamond fields: softball fields - adult	66.5	12,619	16,298	9,494	12,527	15,000
Rectangular fields: multi-purpose	66.1	7,878	7,812	7,398	7,469	9,000
Diamond fields: softball fields - youth	60.9	11,160	12,000	8,216	11,917	13,773
Dog park	59.3	44,330	45,751	37,500	47,000	55,675
Diamond fields: baseball - adult	54.7	20,412	16,184	16,360	20,033	25,834
Swimming pools (outdoor only)	52.3	36,266	43,500	26,474	34,035	41,495
Totlots	48.1	12,226	20,563	10,789	14,000	10,542
Rectangular fields: soccer field - youth	48.1	6,883	7,656	5,262	7,000	8,784
Community gardens	46.3	29,750	20,502	27,167	34,170	29,548
Multiuse courts - basketball, volleyball	42.0	17,667	27,482	17,536	17,167	16,250
Rectangular fields: soccer field - adult	40.9	13,031	12,767	9,930	13,173	15,000
Rectangular fields: football field	38.0	26,783	19,235	20,398	25,320	35,572
Skate park	26.2	49,250	20,000	41,148	44,000	62,325
Multipurpose synthetic field	19.1	43,149	27,375	33,441	41,938	49,862
Ice rink (outdoor only)	16.7	18,500	12,162	10,574	16,989	29,392
Rectangular fields: lacrosse field	11.7	25,566	15,250	17,750	23,500	31,965
Rectangular fields: cricket field	9.2	126,945	200,250	301,215	126,945	78,714
Overlay field	7.5	15,819	8,570	8,600	24,770	19,881
Rectangular fields: field hockey field	4.0	33,112	20,893	40,797	13,334	44,310

Source: 2019 NRPA Agency Performance Review



COMMUNITY NEEDS ASSESSMENT

Public Engagement Strategy

With any master plan, it's important to engage the community early in the process and often throughout. Parks and Recreation Master Plans are meant to offer planning and design recommendations for future growth to better meet the needs of the community, and to effectively accomplish that, a public engagement strategy was developed. This strategy was created with City Staff from the very first kick-off meeting. The public engagement strategy had several different types of engagement platforms built-in that accomplished different goals. It was important to incorporate both online and in-person outreach to make sure that all groups of citizens were able to give feedback on the project and the recommendations were tailored to the specific needs of the community.

Online

It was established very early-on to incorporate an online survey. This allows everyone with access to and the knowledge of a computer to be able to give feedback. The questions were developed to gather specific information about the types of amenities that the community felt were currently lacking in Lansing and what amenities they would like to see added. However, an online survey by itself doesn't get everyone very involved in a project, so a broader strategy was developed to create a branding package as well as a website to bolster the project's online presence. Activate Lansing 2030 was created to give the project a name and create excitement around the process, as well as

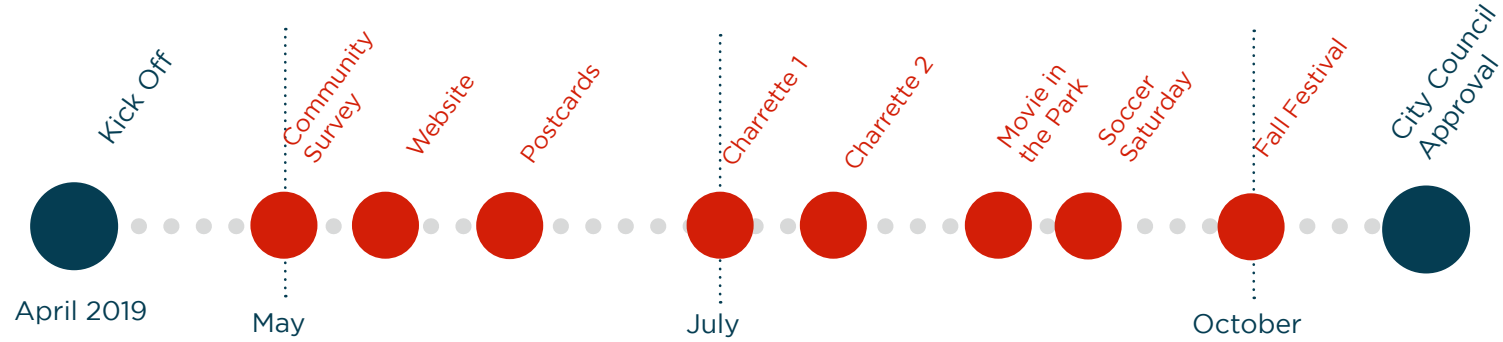
a logo that was added to all of the engagement materials, creating unity in the project. The website was built to be a landing page for the survey, and included the project background, a calendar of all of the events that were going to be held, and updates on the project along the way. A notification list was also created from this to be able to send out event reminders and major milestone dates. The design team coordinated with City Staff to create social media materials to promote the project, as well as provide the survey link on another platform.

In-Person and Physical Media

The design team coordinated with City Staff to create a postcard that was mailed to every resident of Lansing, which provided the website address and the survey link, and notified them about the project. The website and survey were combined with several different types of in-person charrettes and reaction sessions. Early in the process, a key stakeholder group was formed with recommendations from City Staff to be the charrette group, or the group that was part of the review process for the actual designs for each of the parks. Reaction sessions were scheduled during events at three different parks to bring the reviewed park designs, to the public, for input. This was a two-step process that allowed City Staff to review and give input on the City's goals for the parks, and to present approved designs to the public for any suggestions they might have. A final piece to the



Timeline



public engagement strategy was to provide a detailed outline and explanation of this process, as well as the outcomes in the final master plan to be as transparent as possible.

The timeline above shows when all of the major public engagement milestones happened throughout the process. By providing documentation in this master plan, it creates transparency between the design team and the public to ensure that an objective public engagement strategy was used, as well as keeping the community engaged all the way through the process. The public engagement strategy was created with City Staff very early on, which set the major engagement objectives for the project. The survey, website and postcards were all

drafted and sent to City Staff to review and launch once approved. Once the survey was closed and the existing conditions analysis was performed; two, two-day charrettes were completed with the stakeholder group. These charrettes occurred in July and August 2019. Three engagement events were planned after the charrettes, toward the end of the project, to bring the park designs to the public for review and suggestions. These three events were on different weekends and held in three different parks in Lansing. The goal was to engage the most people as possible, with the last event being Lansing's Fall Festival. This allowed the public to be involved all the way through the process of the master plan. The following pages will provide more detail about each of these engagement activities.



Source: City of Lansing

Community Survey

Survey Design

The survey was drafted to collect information about what was currently working and what could be improved, or added, in Lansing. The goal was to gather information on specific amenities that the community would like to see in Lansing, as well as get feedback on amenity suggestions proposed by the design team. Each question was crafted to be objective in intent and all entries were anonymous so no personal information was collected in the survey. Surveys were not limited by household but were collected per individual. Based on conversation with City Staff, there were several controversial topics when it came to City-provided amenities, which the design team wished to address, and not ignore, but in the most appropriate way. These topics were mostly based around aquatics and funding of these amenities in Lansing. Both of these were brought up in the survey but phrased as possible solutions. Questions were asked about including splash pads, or features, rather than a pool and possibly adding destination play areas that would help generate revenue to offset costs. The survey was designed to take no longer than 10

minutes to complete and was open for about a month, allowing the most people possible to give their input on the project. Almost every question included an "Other" option to capture comments, or other suggestions that might not have been included. Using the SurveyMonkey platform, information from the survey was exported (both comments and tabulated answers) and used to create a wish list for amenities. The survey was designed to create this list, which ensured that when the design charrettes began, the community's chosen amenities were incorporated into the design for each park. The survey results in their entirety are located in the appendix, as well as discussed in the following pages.



Source: City of Lansing

Survey Results

470
Survey Responses

The following pages have selected graphs from the survey results, not the entire survey. The whole survey is located in the appendix. These few graphs have been pulled out to be used for discussion purposes of the results. The question results that were chosen for this section were the key questions that helped inform the recommended amenities list. The survey had a total of 470 respondents, which makes the survey statistically valid. Question 1 outlines the top-voted options for amenities, which are:

- More Restrooms
- Link and Expand Trails
- Bike Trails and Courses
- Picnic Shelters/Shade Structures
- Splash Parks
- Aquatics Features

These amenities received the most votes out of any other category and were included at the top of the amenities list, shown on the following pages.

Questions 2-4 asked specifically about what Lansing's priorities should be when it comes to trails, open space and funding. This allowed the design team to analyze what the community's overall motivations

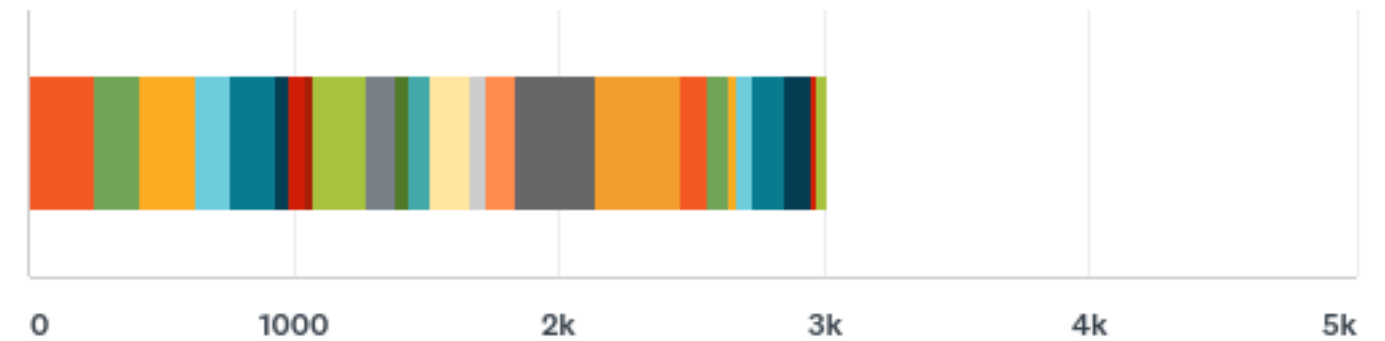
or wants might be for these general categories. These included:

- Fill in the trail gaps between residents and parks and recreation centers
- Create large competitive sports parks to help keep children playing locally
- Fund a commercial style pool/splash park

The final question shown was a targeted question about aquatics. These types of questions were spurred based on the heavy push from residents to build an aquatics feature. This question asked how many times the resident would actually use the facility if it was funded, and the majority said they would use it several times per week, the most frequent choice provided.

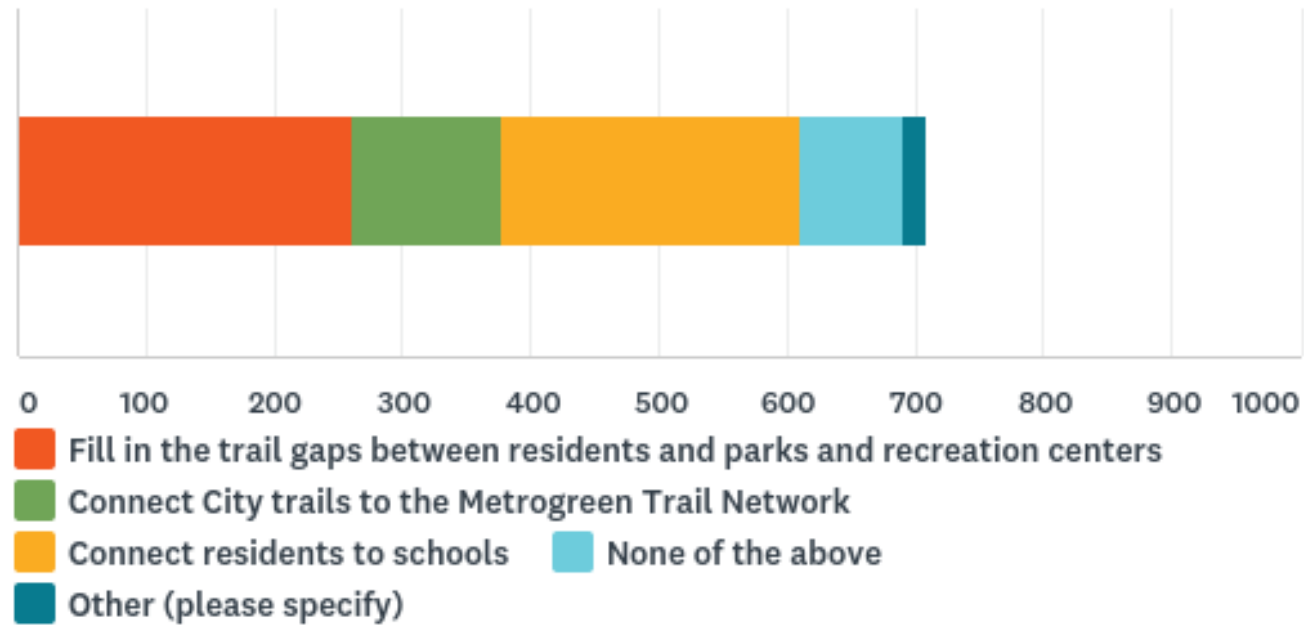
These questions and many more helped create the preliminary list of improvements shown on page 70. This list was brought to City Staff to then gather their input on what would be realistic for the City to accomplish, which created the prioritized list of improvements. This list is what was used in the design charrette process to design the parks and make overall design recommendations.

Question 1: Which of these elements do you think that Lansing needs more of in their parks?

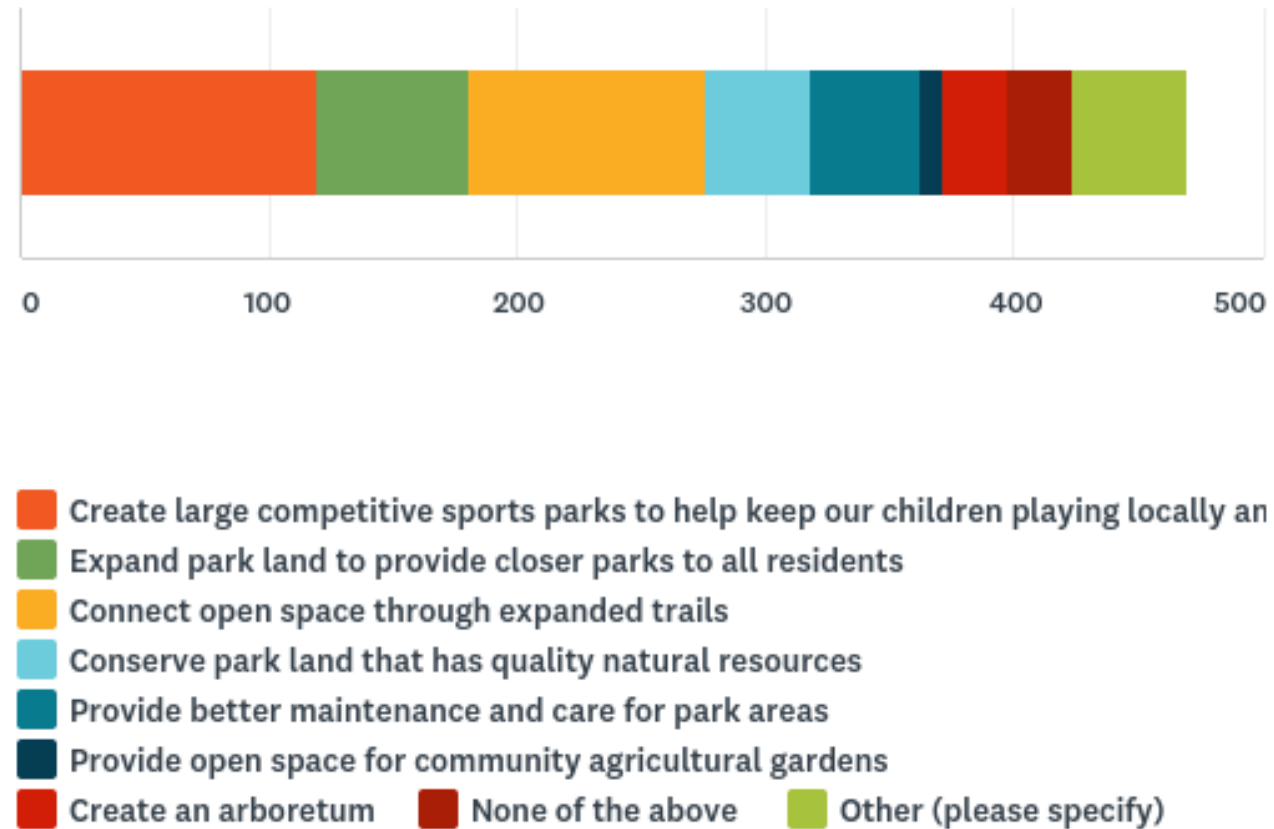


- More restrooms
- Link and expand trails
- Bike trails and courses
- Challenge courses
- Picnic Shelters/Shade Structures
- Information signs/kiosks
- Off leash areas for dogs
- Gathering spaces, outdoor seating
- Sand Volleyball Courts
- Police presence/security
- All of the above
- Large central farmer's market
- Fitness loops
- Skate, skateboard courses
- Parkour courses
- Nature, vegetation, trees, gardens
- Outdoor fitness equipment
- Public art
- Splash parks
- Aquatics features
- Competitive sports facilities
- Signage
- Adventure park/play
- Arboretums
- None of the above
- Other (please specify)

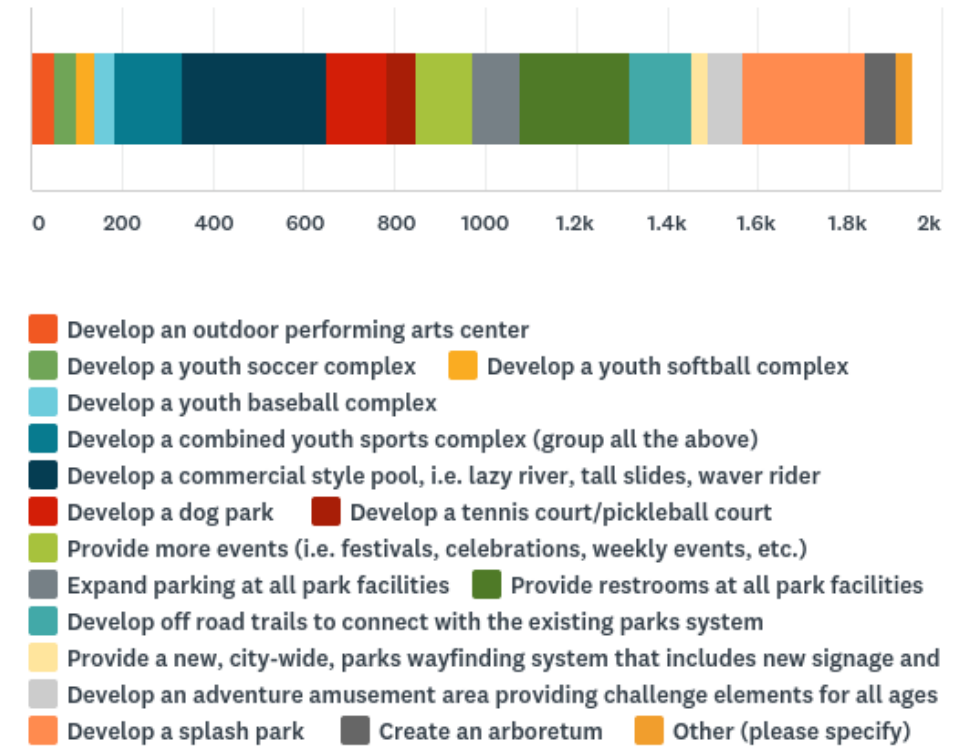
Question 2: Which recreational trail gaps should be a priority to complete?



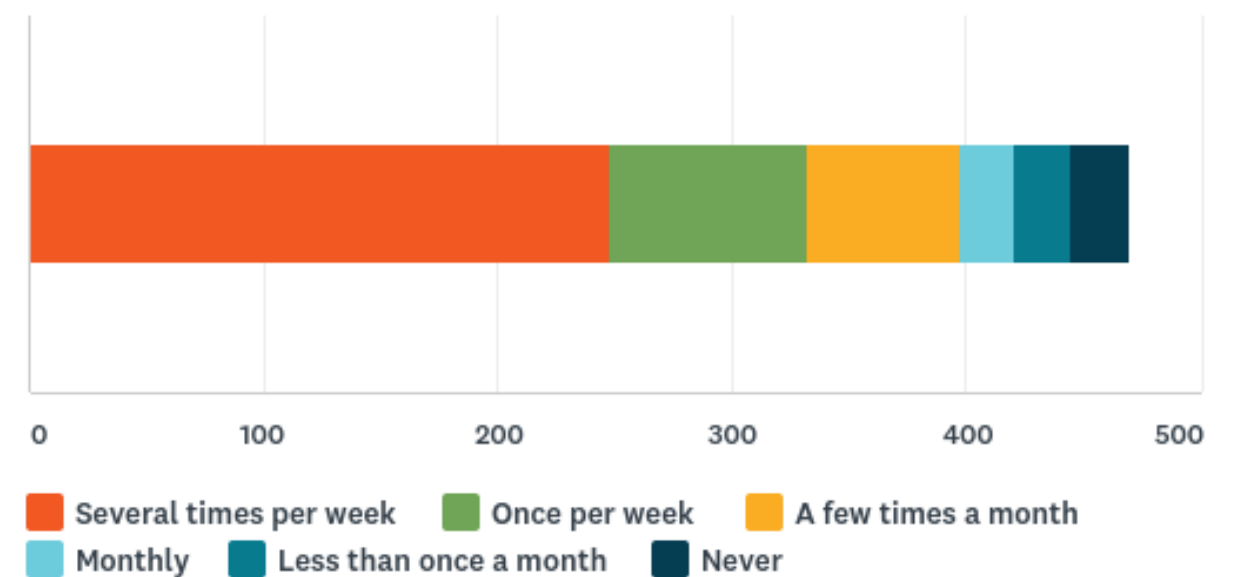
Question 3: What should be Lansing's open space priorities?



Question 4: Please indicate what specific facilities Lansing needs to consider building and/or funding.



Question 5: If the City of Lansing builds a new outdoor aquatic facility with the features you prefer, which ONE of the following statements represents how often you or other members of your household would visit the facility?

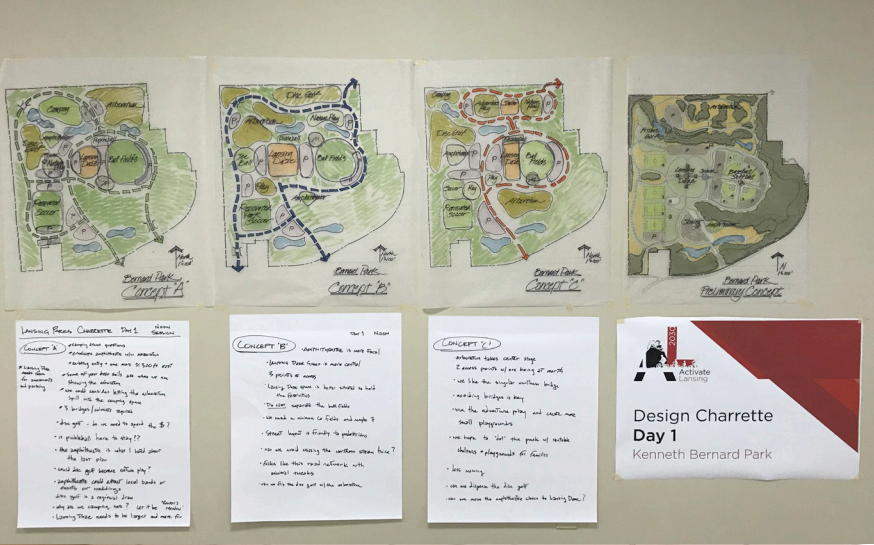


Preliminary List of Improvements

1. Outdoor pools and aquatic areas
2. Splash pad
3. Walking and biking trails
4. Restrooms
5. Playground equipment and play areas
6. Nature trails
7. Park shelters and picnic areas
8. Baseball and softball fields
9. Fishing pond/lake
10. Outdoor running/walking track (paved)
11. Soccer fields
12. Longer walking/biking trails
13. Outdoor amphitheater
14. Disc golf
15. Indoor pool
16. Pedestrian lighting
17. Parking for sports events
18. Farmer's market
19. Shade structures

Prioritized List of Improvements

1. Aquatics/Splash feature
2. Upgraded sports fields, soccer/baseball
3. Variety of walking and biking trails, paved/unpaved
4. Combined restroom and park shelters
5. Longer walking/biking trails
6. Updated playground equipment and play areas
7. Shade structures
8. More parking for sports events
9. Upgrading existing fishing pond
10. Disc golf
11. Outdoor amphitheater
12. Pedestrian lighting
13. Indoor/outdoor pool
14. Farmer's Market



A design charrette is done after all of the existing conditions analysis and needs assessments are completed. After the survey is closed, the demographics research is conducted, the site analysis drawings are created, and the prioritized list of improvements is made. All of these materials are used and taken into consideration when conducting a design charrette. A charrette is an intense period of design and planning between a group of designers and stakeholders to address a design problem. In this case, the design team and the chosen stakeholder group (made up of various board members, council members and City Staff) met for two days to go from a multitude of concepts down to one proposed concept for each of the parks.

The first charrette focused on Bernard Park and the second charrette focused on the four other parks. The days were scheduled to be in phases. The first phase was the presentation of facts about the park(s), where relevant demographics, site conditions and the prioritized list of improvements were shared with the group. The second phase was getting feedback from the stakeholders about the needs of the particular park. Phase three, bubble diagrams were created and shared with the group as preliminary concepts. This phase is where the design team took all of the information provided and began to assign uses, or programs to different parts of the park, showing how the space might be used. These were taken and refined in the final phase of the charrette with the outcome of having one proposed concept for each park.

Both days of the charrettes were held similarly to open houses, where the members of the stakeholder group could come and go as the design team worked on the concept(s) with periodic review sessions. This allowed the stakeholders to be a part of the design process all the way through to the final proposed concept for each park.



Charrette One

Kenneth W. Bernard Park

Charrette Two

All Other Parks



Charrette One

Both charrette days were from 8am-5pm and the first one focused on Bernard Park, due to how large it is. The feedback gathered from the stakeholder group about Bernard Park was to bring all of the other sports facilities, such as the soccer fields from Willow Park, and the baseball fields from City Park, and relocate them in Bernard Park; creating a sports park/complex. This allows the other parks to be used for other activities, such as implementing some of the other prioritized improvements on the pre-established list. The Bernard Park charrette went through three bubble diagrams, or concepts, with different uses, placements, road/pedestrian circulation, etc., where the best components of each were chosen and refined into the final proposed concept. Each was discussed until a consensus was formed on the final concept.

Charrette Two

The second charrette addressed four of the other parks to be designed in this master plan; Bittersweet Park, City Park, Kelly Grove Park, and Willow Park. This charrette process was conducted the same way as the first, but each park only had one bubble diagram concept to refine from, due to time constraints. Several parks were chosen to have aquatics features and all of them had walking/biking trails added, as well as restrooms, shelters and updated parking. The final designs for the parks can be found in Section 6 Park and Facilities Recommendations. At the end of the charrette process, all of the amenities on the prioritized list of improvements were addressed and are included in this master plan.

The Charrette Process

4 Days
Of Charrettes with Stakeholders



Reaction Sessions

150
Conversations

Meeting with the Community

The final proposed concepts that were reviewed and agreed upon at the end of the charrettes were then presented to the community at three engagement events, or “reaction sessions”. These three events were chosen in coordination with City Staff on what events might have the greatest attendance of people to gather feedback from. These events included setting up a booth at: Movie in the Park at Bernard Park, Soccer Saturday at Willow Park, and Fall Festival at the Angel Falls Trail. These events were chosen to gather a broad spectrum of the community, including people of different ages, backgrounds, income levels, etc.

Session one had a great turn out with kids of many age ranges with parents that were very interested in the drawings for each of the parks. The recommendation to add a dog park into one of the parks was made by one of the parents, but the majority of comments were very positive,

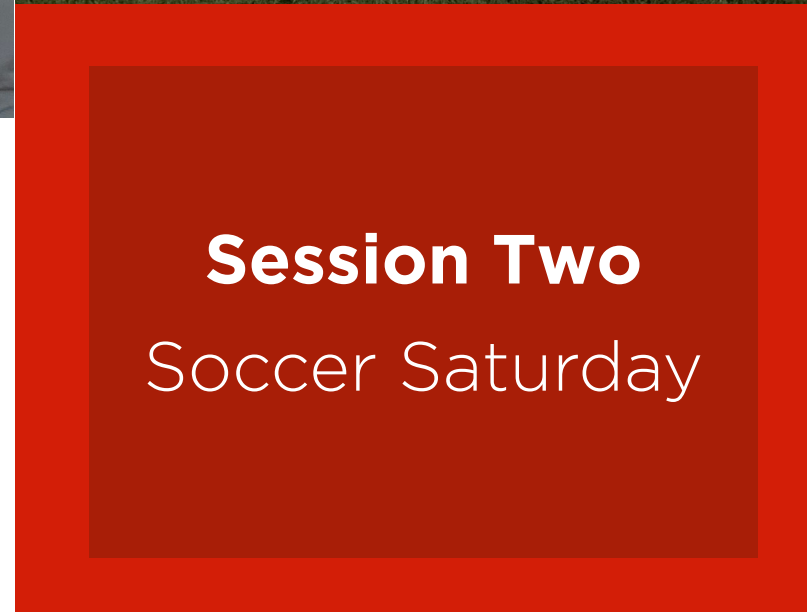
and the drawings included everything they could think of.

Session two, which took place on a Soccer Saturday in Willow Park, was also very successful. The design team received a lot of feedback from parents watching on the sidelines and were able to have longer conversations with families that use more of the sports facilities. The majority of the feedback was that the plan for Bernard Park would satisfy the sports needs of the community and add more capacity.

Session three, held at Angel Falls Trail, engaged a different group of people, most of whom didn't live in Lansing. This spurred interesting conversations about the park plans bringing in people from all over to use them, which was a resounding yes. Many of the surrounding communities don't have the diversity of activities being proposed and these activities would be very popular in the immediate region.



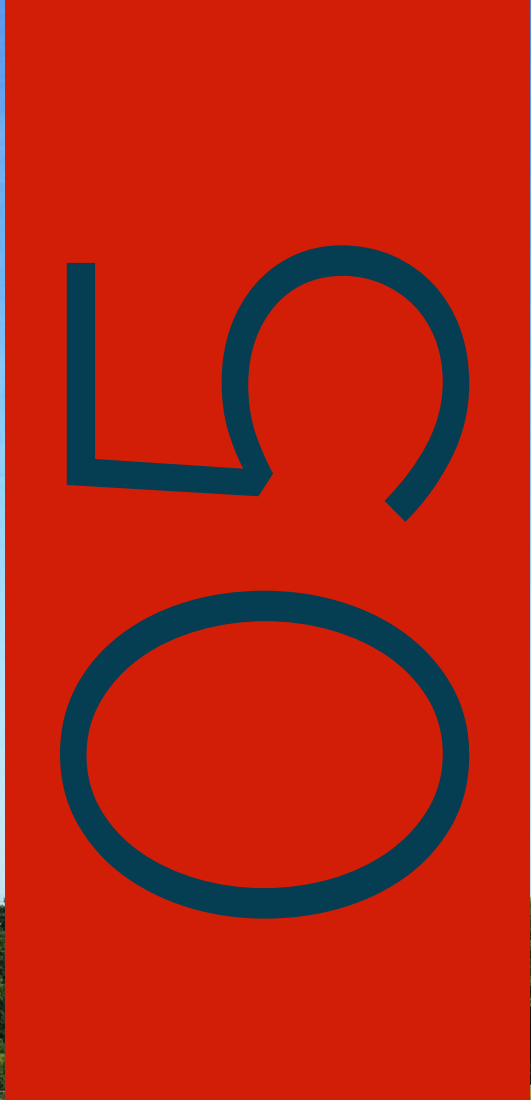
Session One
Movie in the Park



Session Two
Soccer Saturday



Session Three
Fall Festival



PARK FACILITIES AND PROGRAMS



Introduction

All of the sections previous to this one: history, demographics, existing conditions, park analysis and a review of the public engagement, helped shape this master plan and its recommendations. The rest of the document, starting with this section, contain recommendations for the City of Lansing and its park system. The objective of the recommendations are to help grow and shape the future of Lansing's Parks and Recreation amenities. These recommendations are the product of all of the information shown in the previous sections of this master plan. The recommendations that are made include proposed park designs to improve the parks in Lansing (these can be found in Section 6), as well as a list of recommended programs that should be included in Lansing's list of programs offered. The park designs offer recommendations for the built environment, as well as the landscapes that accompany them. It should be noted that a park, or a facility, doesn't function at it's fullest potential unless it's programmed with the design of the park in mind. Programming is important to park spaces because it creates activities within a park that wouldn't otherwise be available to the public on a regular basis.

This section contains a list of existing programs provided by City Staff that range from events to sports. City Staff also provided detailed information for each program, which included cost to participate, age range, location, time of year, etc. The existing program list is accompanied by both program and facility recommendations that were created by the design firm. These recommendations were made based on comments collected from the survey, City Staff recommendations, and conversations with the community. These program and facility recommendations are meant to be implemented alongside the park improvements, shown in the next section.



Existing Programs and Facilities

- 1 **FISHING DERBY- Bernard park**
The Lansing Fishing Derby is held the second Saturday of May from 9 to 11 a.m. at Kenneth W. Bernard Community Park. Prizes are awarded for winners in various categories. Participation fees can be paid the day of the event or at pre-registration for a discounted rate.
- 2 **SPOOKY CENTER- Activity Center**
This event is held the Saturday before Halloween and offers various carnival games, prizes, candy, and refreshments; all free of charge. Includes two sessions, 4-6 p.m. for youth up to 3rd grade, and 7-9 p.m. for youth in 4th through 8th grade.
- 3 **FOOTBALL- City Park/Bernard Park**
There are three age divisions offered in this program; flag football ages 6-7, tackle football - two divisions ages 8-9 and 10-11. Games start in September and run through October. A copy of the child's birth certificate is required at the time of registration. Age guidelines set forth by the NEKAA Football League.
- 4 **CHEERLEADING- City Park/Bernard Park**
Children participating in this program will cheer for the Lansing youth football program offered by Parks and Recreation. Youth ages 5 to 12 may participate. Practices begin in August. Ages of eligibility are as of August 31 of the current year.
- 5 **BASKETBALL- Activity Center and District Schools**
Children in first through sixth grades are eligible to participate. Practices begin in late November and games are typically on Saturdays, beginning in January and running through March.
- 6 **SOCCER- Willow Park, School District fields and practice at Bernard Park**
Soccer (Fall/Spring) - Spring and fall seasons are offered for soccer. Practices for spring soccer begin mid-March. Games are played typically on Saturdays from late March through May. Fall soccer begins practice in mid-August with games typically on Saturdays running September through October. For ages of eligibility please contact our office or visit our website.
- 7 **T BALL- City Park**
Open to children ages 5 and 6 as of June 1 of the current year. Practices start in April and games will begin in late May and run through July.
- 8 **BASEBALL- City Park**
Open to boys ages 7-14 as of June 1st of the current year. Practices start in April and games will begin in late May and run through July.
- 9 **SOFTBALL- City Park**
Open to girls ages 7 - 15 as of June 1 of the current year. Practices start in April and games will begin in late May and run through July.
- 10 **SWIMMING POOL - High School**
Pool hours: Mon-Fri 5:30-7:00 am and 6:30-8:00 pm. Adult Masters (USMS) Training Group Monday and Wednesday mornings from 5:30-6:30 am. Times subject to change based on swimteam practice.
- 11 **ADULT KICKBALL- City Park**
DAY CAMPS- Lansing Library

Recommended Programs and Facilities

Programs

1. **Expanding the Fishing Derby** - Offer the event more often during the summer, as suggested by popular demand.
2. **Swimming at the High School** - Recommendations include:
 - 4th grade swimming classes, field trips (during the school year)
 - Night swimming for the community (special evening events once a month or twice a month)
 - Water aerobics
 - Water therapy
 - Family and open swim times during the summer
 - Boy scout/girl scout swim days
 This would promote the use of the water resource that the City already has.
3. **Farmer's Market** - The Southern shelter at Bernard Park can serve as a perfect spot for a farmer's market, which would encourage a routine community activity and promote a local economy.
4. **Nature Education** - Tree and native plants/species day camps for kids 5-8 at Bernard Park in the arboretum would get kids involved in learning about the environment and the landscape around them. Suggestion to partner with the Tree Board.

1. Farmer's Market plan for the Southern shelter at Bernard Park. as well as have a place for the public to learn about the landscape.
2. A maintenance facility located in Bernard Park to facilitate all of the sports fields and programs.
3. A nature learning center, or kiosk to help facilitate the nature education day camps
4. Update the water banks in Bernard Park with more benches and shelters to help promote more fishing.
5. Small maintenance buildings at Willow and City Park to streamline maintenance.

Facilities



PARK AND FACILITY RECOMMENDATIONS

Park System Goals

As part of the project kick-off, City Staff, along with the design team, crafted the goals below to help develop a successful park system. Each of these goals is specifically tailored to the park system in Lansing and is designed to provide the biggest improvement to the amenities offered. These reasons and the philosophy behind each goal are explained below:

Consolidate Sports Activities to Bring Back Neighborhood Park Uses

Currently, soccer and baseball are divided between three parks: Willow Park, City Park and Bernard Park. The soccer is held at Willow and Bernard, while City Park is used for baseball. Willow and City Park are in the middle of neighborhoods, and currently don't offer many neighborhood park amenities. By consolidating the sport activities to Bernard Park, these other parks would be freed up to offer more suitable uses for their locations in proximity to where residents live.

Raise the Health, Safety and Welfare of Kids by Improving Play Experiences

This goal is to improve all of the play experiences in the park system by upgrading all play features and surfaces that aren't currently up to standard. The sports fields that are currently being used are not optimal. Many of the fields are not graded properly, which creates drainage issues and hazards for the kids playing the sport. This is also the case for several of the play-grounds, or play structures, which are outdated and need to be replaced.

Eliminate Peak Parking Draws in Neighborhoods

The goal is to add uses to the neighborhood parks that don't flood the parking lot, or the neighborhood with cars. This goal works in conjunction with the first, the consolidation of sports. By having sports activities held in neighborhood parks, it creates a peak time that cars need to park for sports games. None of the

parks currently have enough parking to accommodate all of the cars that are present during these games, which leads to cars lining neighborhood streets, blocking driveways and upsetting neighbors.

Expand Lansing's Trail System and Connect to Parks and Recreation Amenities

This goal was requested by the community and City Staff, that would also create safer routes to school. Lansing's trail system continues to grow as larger trails continue to be implemented around the City. The goal is to encourage that growth, but specifically between each of the parks. The trail system in Lansing is growing, but not necessarily connecting each of the parks, which would be a great asset for the community.

Make Park Trails More Bicycle Friendly

This goal pertains to the individual park walking trails, where most currently aren't wide enough, or aren't paved to a level that allows bicycle traffic as well as pedestrians. At the request of the community and City Staff, it is a goal in the following recommendations to make most, if not all of the trails in each of the parks, usable by bikes. This would fill an amenity gap in Lansing's parks.

Provide a Restroom at Every Park

This goal is to offer a restroom as a needed amenity to each of the parks in Lansing. Lansing currently only offers one restroom at City Park and is not open unless a game is taking place. All other parks either have a portable restroom, or none at all. This was a serious issue that was raised by the community and City Staff.

Park Recommendations

Taking the goals and addressing existing and recommended programs, the design team developed the following park master plans.

Bittersweet Park

\$500k-700k*

*If all improvements are made

Bittersweet Park is currently a piece of undeveloped park property off of Bittersweet Lane and Frances Lane, adjacent to Lansing Heights, an apartment complex and Stonecrest, a subdivision. This park is currently covered in dense vegetation. This design proposes to keep as much of the native landscape as possible. This park is also unique in having a large hill on the East side of the property, creating a lookout over the city. It was important to emphasize the unique qualities of this park within these recommendations.

This park features:

- A scenic lookout on top of the hill on the East side, designed to shield the view of the people on the lookout to the apartments below, creating more privacy. This will also include a fabric shade structure for user's comfort.
- A quarter-mile long, ADA accessible walking trail that circles the whole park property. This trail will be paved to comply with ADA standards and therefore would allow for bike usage as well.
- Benches will be placed periodically around the walking trail to offer seating and areas for nature observation.
- A small shelter placed at the beginning of the trail will allow park-goers a shelter for picnicking, family gatherings, as well as be rentable for revenue generation.
- Future connections are planned at both the Northwest and Northeast corners of the park. Future developments, or trails would be able to connect to the interior trail, creating better connectivity in the surrounding area.



Proposed Amenities

1. Scenic Lookout
2. Fabric Shade Structure
3. ADA Accessible Path
4. Small Shelter
5. Walking Trail
6. Bench
7. Future Connection to Development
8. Existing Gate

Cost Estimate

Bittersweet Park		<i>Total</i>
Landscape Architecture - Site Improvements		
Pavements / Surfacing / Ramps		\$ 121,500
Park Wide Site Furnishing		\$ 39,400
Architectural and Seating Walls		\$ 90,000
Signage & Wayfinding		\$ 15,000
Architecture - Site Improvements		
Shelters + Buildings		\$60,000
Landscaping and Irrigation		
Plants and Seed		\$ 48,000
Civil Improvements		
Demo and Removal		\$40,000
Grading		\$30,000
Total Improvements		\$ 591,536

City Park

\$4M-6M*

*If all improvements are made

City Park is located in the Northeast corner of the city, at the end of American Avenue and N 2nd Street. It's adjacent to two neighborhoods to the North and South, as well as the Lansing Correctional Facility to the Southeast and light industrial uses to the West. This mix of uses creates a unique challenge for this park to appear welcoming and safe. The East side of the park is currently undeveloped due to Sevenmile Creek and the floodplain that it creates.

The recommendations for this park are:

- Have one practice baseball field, tee-ball and redirect the others to Bernard Park. This shifts the focus from sports at this park to other uses and eliminates having games at this location.
- Include a splash pad near the entrance to the park to add aquatics to this area of the City.
- Create a destination play area in the center of the park with large, unique play features to offer a variety of play equipment at the park.
- Include a basketball court and sand volleyball to the North edge of the park to provide a range of activities for people of all ages.
- An improved parking lot to facilitate the amount of people who might visit the park.
- A mile-long walking trail that loops through the entire park, utilizing the Eastern half of the park, which lies in the floodplain. Outdoor exercise equipment would be featured along the trail as well.
- A great lawn to facilitate various events and open field play.
- A main shelter and several smaller shelters scattered around the park to allow for events, or gatherings. The two largest shelters would include a restroom. These would be rentable to allow for revenue generation.
- The areas in yellow would be left as natural grass to facilitate lower maintenance cost and effort.
- The natural topography will be used on the Northwest corner of the park to be used as a sledding hill in the winter.



Cost Estimate

City Park	Total
Landscape Architecture - Site Improvements	
Pavements / Surfacing / Ramps	\$ 270,170
Park Wide Site Furnishing	\$ 96,500
Play Equipment	\$ 988,000
Aquatics/Spray Park	\$ 675,000
Sports Fields	\$ 200,000
Signage & Wayfinding	\$ 15,000
Architecture - Site Improvements	
Shelters + Buildings	\$900,000
Landscaping and Irrigation	
Plants and Seed	\$ 217,000
Civil Improvements	
Demo and Removal	\$160,780
Utilities	\$66,000
Grading	\$50,000
Parking Areas	\$441,880
Electrical Improvements	
Electrical Service	\$20,000
Total Improvements	\$ 5,501,696

Kelly Grove Park

\$400k-600k*

*If all improvements are made

Kelly Grove Park was donated to the City with requirements that it only be used as a nature park or preserve. The park currently has a mown walking trail that goes through the center of the park. This park also has Ninemile creek spanning a large portion of the property. This has created a large floodplain that affects most of the park and floods frequently, especially in the Northwestern corner, which creates some challenges.

The recommendations for this park are:

- An improved, unpaved, nature trail that loops throughout the park, connecting the Northwestern corner to the East side of the park.
- Benches will be placed periodically around the walking trail to offer seating and areas for nature observation.
- An improved low water crossing where the trail meets Ninemile creek.
- An improved fire ring, or pit set at the beginning of a circular boardwalk. This area of the park is almost always flooded and creates a wetland like environment.
- A boardwalk would allow access without interfering with the wetland on the Southwest side of the park.
- Improved parking lot and an additional 6 spaces to facilitate more visitors.
- A paved sidewalk connecting the entrance to the park to S Main Street and connecting to Lansing's proposed trail system.
- A crosswalk over E Gilman Road for improved safety.



Cost Estimate

Kelly Grove Park	Total
Landscape Architecture - Site Improvements	
Pavements / Surfacing / Ramps	\$ 168,750
Park Wide Site Furnishing	\$ 27,400
Signage & Wayfinding	\$ 15,000
Architecture - Site Improvements	
Shelters + Buildings	\$50,000
Landscaping and Irrigation	
Plants and Seed	\$ 26,825
Civil Improvements	
Demo and Removal	\$20,000
Parking Areas	\$56,130
Total Improvements	\$ 491,542

Kenneth W. Bernard Community Park

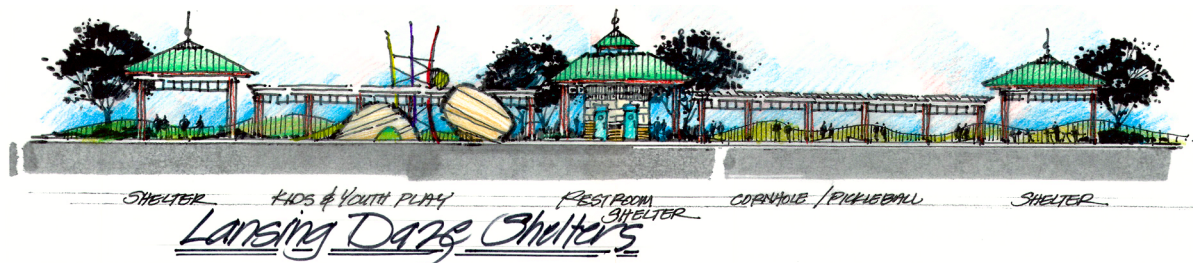
\$25M-27M*

*If all improvements are made

Bernard Park is the largest park in Lansing's park system at 128 acres. This park was previously master planned in 2005 and since then the first phase has been completed. Since the first phase has been completed, the City felt the needs had changed in the community and wanted it to be master planned again, which is shown to the right. Currently the only development in the park is the semi-circular parking lot to the South and a shelter with a playground located to the North of the parking lot. All of the trails are currently being mowed by Parks and Recreation.

The recommendations for this park are:

- House all of the soccer and baseball fields in this park. This includes four full-sized soccer fields, five full-sized baseball fields and two tee-ball fields. This allows the other parks to be used for other activities in the community. Bernard Park has the capacity and space for the parking required during games. The baseball complex includes a concession stand and restroom in the center.
- Create a large Lansing Daze shelter with several bathrooms. A drawing of this is provided below. These shelters are integrated into four different sections with different types of play for all different ages. These range from a destination play structure, to pickleball, cornhole, to climbing rocks.
- A splash pad located outside of the Lansing Daze shelter. This would include aquatics along with all of the other uses in the park.
- A large shelter and restroom off of the main parking lot. This could be rentable, as well as used for the proposed farmer's market.
- An amphitheater that could be used for performances, events, or concerts.
- An arboretum located at the North end of the park. This would be paired with a nature playground and a welcome center and restroom. This would allow visitors to learn about the surrounding nature as well as different tree types.
- A maintenance building located in the center of the park to facilitate all of the events and sports that might occur in the park.
- More fishing areas as well as more benches and shade along the ponds to encourage fishing in the park.
- A trail network that runs through the entire park, connecting to each amenity. The majority of the trails would be paved, with some nature trails in more difficult areas. The perimeter trail is 1.5 miles, while the internal network is approximately 4 miles.
- 9-hole disc golf over the more difficult topographical area in the Northwest corner of the park.
- Shelters with restrooms and seating are spread around the park to serve the most trafficked areas of the park. These would all be rentable. An approximate total of restrooms throughout this park is five.



Bernard Park	Total
Landscape Architecture - Site Improvements	
Pavements / Surfacing / Ramps	\$ 1,896,500
Park Wide Site Furnishing	\$ 156,100
Play Equipment	\$ 1,510,000
Aquatics/Spray Park	\$ 670,000
Sports Fields	\$ 3,288,943
Signage & Wayfinding	\$ 45,000
Architecture - Site Improvements	
Shelters + Buildings	\$3,210,000
Landscaping and Irrigation	
Plants and Seed	\$ 470,100

Civil Improvements	
Utilities	\$802,900
Grading	\$700,000
Parking Areas	\$3,234,600
Electrical Improvements	
Electrical Service	\$2,980,000
Total Improvements	\$ 25,601,593

Cost Estimate

Willow Park

\$2M-3M*

*If all improvements are made

Willow Park is currently the home to Lansing's soccer fields, which serves as the park's main use. The park resides off of W Gilman Road and Willow Street, in a neighborhood. The parking lot currently doesn't fit the need of the soccer games being held there.

The recommendations for this park are:

- Diversify the activities that take place in this neighborhood park by adding a splash pad, bocce ball, pickleball, gaga ball and shuffleboard in one central area. These would be clustered around the main shelter and restroom, the shelter would be rentable, allowing for people of all ages to be able to interact in one space.
- A tot play area and playground located South of the main shelter. These would be paired with climbing rocks and swings to allow for a broad range of ages to participate.
- An upper lawn, which is open to allow for events and open play.
- A lower meadow filled with native grasses to help absorb water runoff and remove mowing areas.
- An adult workout station to accompany the quarter-mile walking trail that loops the whole park.
- Two more shelters in the Southern portion of the park, which would be rentable.



Proposed Amenities

1. Main Shelter / Restroom
2. Bocce Ball
3. Splash Pad
4. Pickleball
5. Gaga Ball
6. Tot Play / Relocated Playground
7. Climbing Rocks / Swings
8. Shuffleboard
9. Upper Lawn
10. Lower Meadow
11. Adult Workout Station
12. Small Shelter
13. Walking Trail
14. Parking

Parking Total:
+/- 52

Cost Estimate

Willow Park		Total
Landscape Architecture - Site Improvements		
Pavements / Surfacing / Ramps		\$ 220,940
Park Wide Site Furnishing		\$ 91,450
Play Equipment		\$ 543,400
Aquatics/Spray Park		\$ 450,000
Sports Fields		124,000
Signage & Wayfinding		\$ 15,000
Architecture - Site Improvements		
Shelters + Buildings		\$530,000
Landscaping and Irrigation		
Plants and Seed		\$ 62,500
Civil Improvements		
Demo and Removal		\$3,325
Utilities		\$33,200
Grading		\$20,000
Parking Areas		\$47,305
Electrical Improvements		
Electrical Service		\$14,000
Total Improvements		\$ 2,574,324

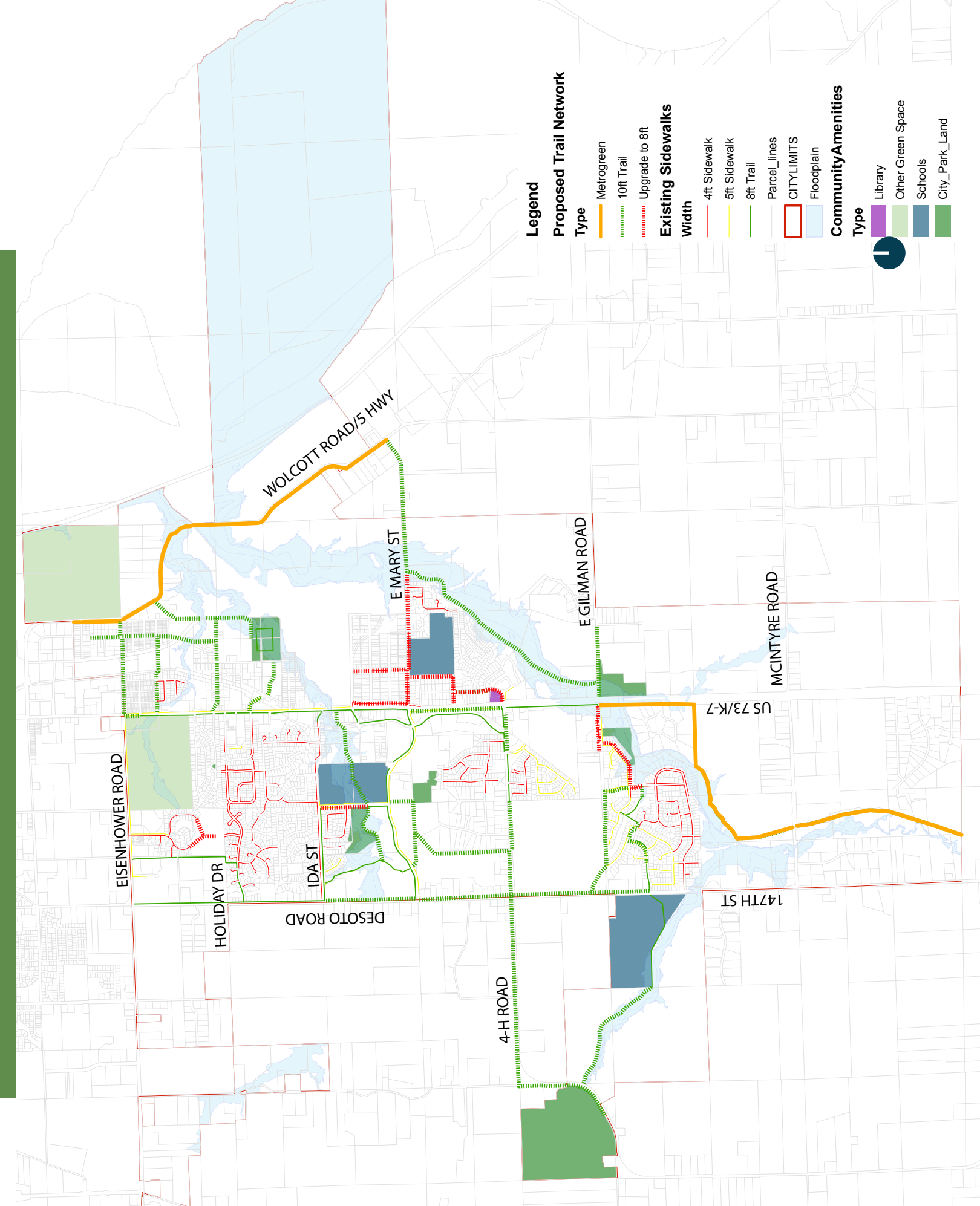
Proposed Trail Map

Lansing's most recent comprehensive plan included a proposed trail map and it has created a lot of concern amongst the community. Lansing's creeks provide optimal paths for trails to run alongside them, but unfortunately, they also run along and sometimes through property lines of residents. This has created some privacy concerns. Another issue the community has raised with Lansing's trail system has been that many trails have been added along major roadways, which has been a safety concern for residents. A goal within the community has been to create safer routes to school, as well as connect parks to one another.

The map on the right has been updated from the comprehensive plan proposed trail map with the goal of providing solutions to all of the above concerns. The additions that have been made to the Lansing Trail system since the comprehensive plan was adopted have also been incorporated in the map.

The major changes made to the map are:

- Widening sidewalks around the middle school and library.
- Adding and connecting sidewalks to the neighborhoods around the schools.
- Changing the Metrogreen trail to a simplified alignment that connects with the existing trail network.
- Adding trails along waterways as much as possible to allow for more grant funding opportunities.
- Added potential trail connections within subdivisions and added proposed connections from those developments.
- Filling the gaps within the existing trail system, focusing on connecting parks.





MAINTENANCE

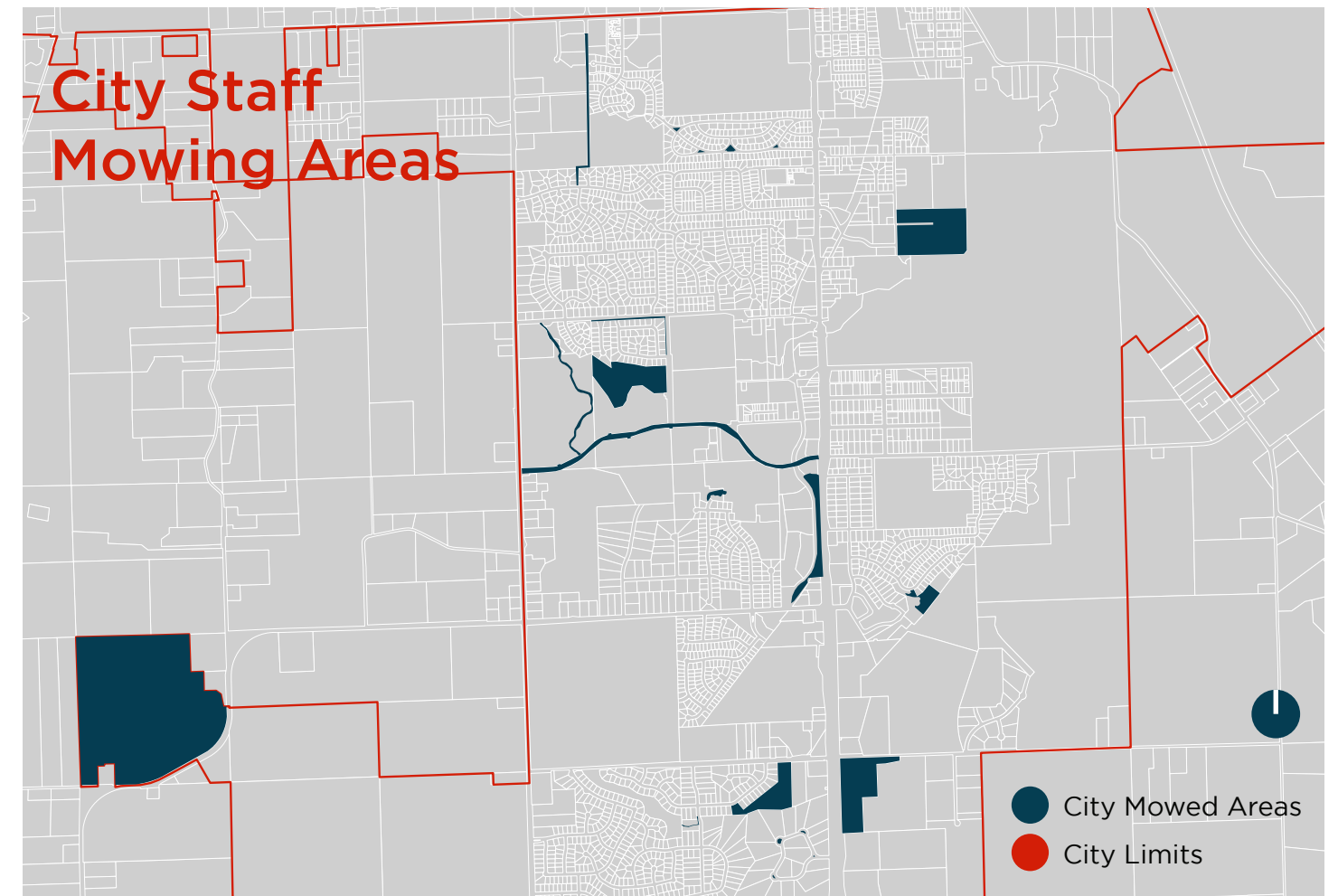


Overview

Maintenance greatly influences how desirable parks are to a community. Properly conceived landscape maintenance programs are an essential component of successful landscapes in parks. The greatest limiting factor associated with the long-term success of any landscape design is the maintenance program that carries the design concept successfully into the future. A well-kept field can make the difference between a space for kids to play and an overgrown eyesore. Lansing has many great parks that deserve care and attention.

Staffing figures will vary from city to city based on the complexity and acreage of the plant material to be maintained in the landscape, the level of performance expectation, the level of knowledge, experience and training of the maintenance staff, suitable equipment to perform maintenance tasks, and the number and types of duties

assigned to the maintenance staff that are not related to landscape care. However, the level of staffing and financial resources that the community decides to direct toward grounds and sports field maintenance will ultimately be driven by a cost benefit analysis of the perceived need. The landscape environment within the City of Lansing's parks system combines maturity, beauty, function and topographical diversity. Over 190 acres of landscape acreage is presently maintained for the enjoyment of residents, visitors and employees alike. The amount of mowing that they conduct weekly during the warm months of the year is staggering. There are 14 locations that the Parks Department currently mows and maintains. With travel and setup time included, using 1-2 staff per location they average 55 hours per week of mowing alone.



Recommendations For Improving Efficiency and Quality

Within each park design concept, the design team has incorporated the suggestion of many acres of tallgrass prairie species. The intent is to eliminate nearly half of the weekly mowing acreage. The tasks associated with park grounds and sports field maintenance can be completed in a very rapid and task-oriented fashion when little or no consideration is given to the aesthetic value of that task. When the resulting aesthetic quality of the completed task is as important as completing the task itself, more time, effort and money must be invested in order to achieve that goal. In the case of park grounds and sports field maintenance, this translates into an adequate number of dedicated, well trained staff, financially rewarded within realistic industry standards, and supported with the proper equipment and materials to complete both the quantitative and the aesthetic goals at hand. Native grasses are notoriously poor in seedling establishment. Unfortunately, that cannot be overcome by sowing more seed. Exceeding the recommended rate will not increase stand establishment.

- For small areas and broadcast seeding, the total seeding rate should be 9 to 12 pounds pure live seed per acre of the seeding mix. If a grassland drill is used, 6 to 8 pounds pure live seed per acre is adequate. In Kansas, the chances of establishment are best in April and early May after the dry-out of spring rains.
- The general rule for managing a native plant seeding is to do nothing. In the summer following seeding, the area will look like a weed patch. The tendency is to believe the native plant stand is a failure. Controlling the weeds by mowing or using a herbicide will not improve the chances for a successful seeding. Those weed control methods will likely reduce the native plant establishment.
- After seeding, old growth should be removed each spring in mid-March. Mowing and removing old growth speeds establishment of the native species. Mowing later than mid-March reduces the native forbs in the mixture. By the end of the third year, the native warm-season grasses will be the dominant plants.



Source: City of Lansing

Additional Recommendations

In addition to the previous recommendations, the design team also suggests the following recommendations if not already in place:

- The development of a twelve-month field-use calendar for Athletics and Recreation Activities and Services. Record all activities including practices, games, entertainment and all maintenance activities. Maintain calendars for all fields. This information can be used to monitor field use and overuse. This can also be used as an educational session to staff members from all coaching staffs, recreational operations, and the sports field maintenance staff. This should improve the general understanding of seasonal use and resulting turfgrass wear.
- The development of a department wide maintenance training program to enhance technical understanding, employee satisfaction and employee turnover at the utility worker level. Regularly scheduled sessions for both in-house training by qualified supervisors and outside educational seminars covering subject areas such as plant identification, general soils, plant nutrition, weed control and pesticide use is also recommended. Two of the most consistently impactful management activities are mowing and weeding. Lansing mows over 100 acres of lawn nearly once a week. This includes parkland, City owned land, and right-of-ways that the City maintains.

Summary

A properly designed and maintained parks system is one of the first things noticed within a community. The design team recommends a detailed review of current parks maintenance procedures from an agronomic and operations perspective. The intent of this review would be to balance the operations budget with the communities' expectations for level of care throughout the parks system. In order to reduce labor, turf areas that are on steep slopes or consistently wet should be replaced with tallgrasses and wildflowers. We also recommend the locating of a new storage facility within Bernard Park. This would enable easier access and the opportunity of expansion if needed in the future.

Principles and Approach

The City of Lansing's short and long-term future with respect to parks and recreation is very bright. With such great leadership and inspiration, all that is left now is to discuss the implementation plan. Using the US National Library of Medicine, National Institutes of Health Study "Public Parks and Well Being in Urban Areas of the United States" (April 2016), research has shown that public parks and green space provide a variety of physical, psychological, and social benefits to urban residents. This study examined the influence of parks on comprehensive measures of subjective wellbeing at the city level. Results suggest that expansive park networks are linked to multiple aspects of health and wellbeing in cities and positively impact urban quality of life. In

this study, a significant positive relationship was observed between park coverage and residents' sense of purpose, broadly defined as liking what you do every day and being motivated to achieve goals. Lansing is in possession of more dedicated acres of parkland than any of the compared cities, as well as above the national number of acres to number of residents. Lansing is positioned to successfully utilize the City's parkland to greatly improve the lives of all the residents in Lansing. This information coupled with historic data from the City of Lansing's Parks and Recreation improvements helps us to focus our initial efforts on the amenities that are most needed and wanted in the community.

Below is a list of the first 8 targeted parks projects improvements that are recommended with this master plan. The recommendations are prioritized in order of significance as informed by the citizen survey, public engagement, equitable distribution of improvements as defined by past projects, and GIS data. The list can be altered as needs change and funding opportunities arise.

- | | |
|--|--|
| 1. 5-field baseball/softball complex with parking at Bernard Park* | Park |
| 2. Destination splash park at City Park* | 6. Improvements at Willow Park |
| 3. New shelter at City Park* | 7. Trail improvements and connections throughout the park system |
| 4. 2 full-sized soccer field improvement at Bernard Park | 8. Improvements at Bittersweet and Kelly Grove Parks |
| 5. All other improvements at Bernard and City | |
- *Projects 1-3 are proposed to be completed in Phase 1*

As with all renovation projects, we would target improvements within each park prioritized by the needs expressed in the citizens survey as well as available funding for each park. Refer to Section 6 for park-specific improvements and opinions of probable cost. Refer to the Appendix for detailed opinion of probable cost data.

Bond Issue

We suggest starting with a \$5M Bond issue that would be a fantastic first step. That first step would be called Phase 1. Phase 1 intends to start the migration of sports field activities away from neighborhood parks and to Bernard Park. Phase 2 and 3 would follow a similar model, Detailed information about Phases 1-3 are on the following pages.

IMPLEMENTATION

Phase 1 and Schedule

Starting with Bernard Park, we recommend the development of 3 major improvements

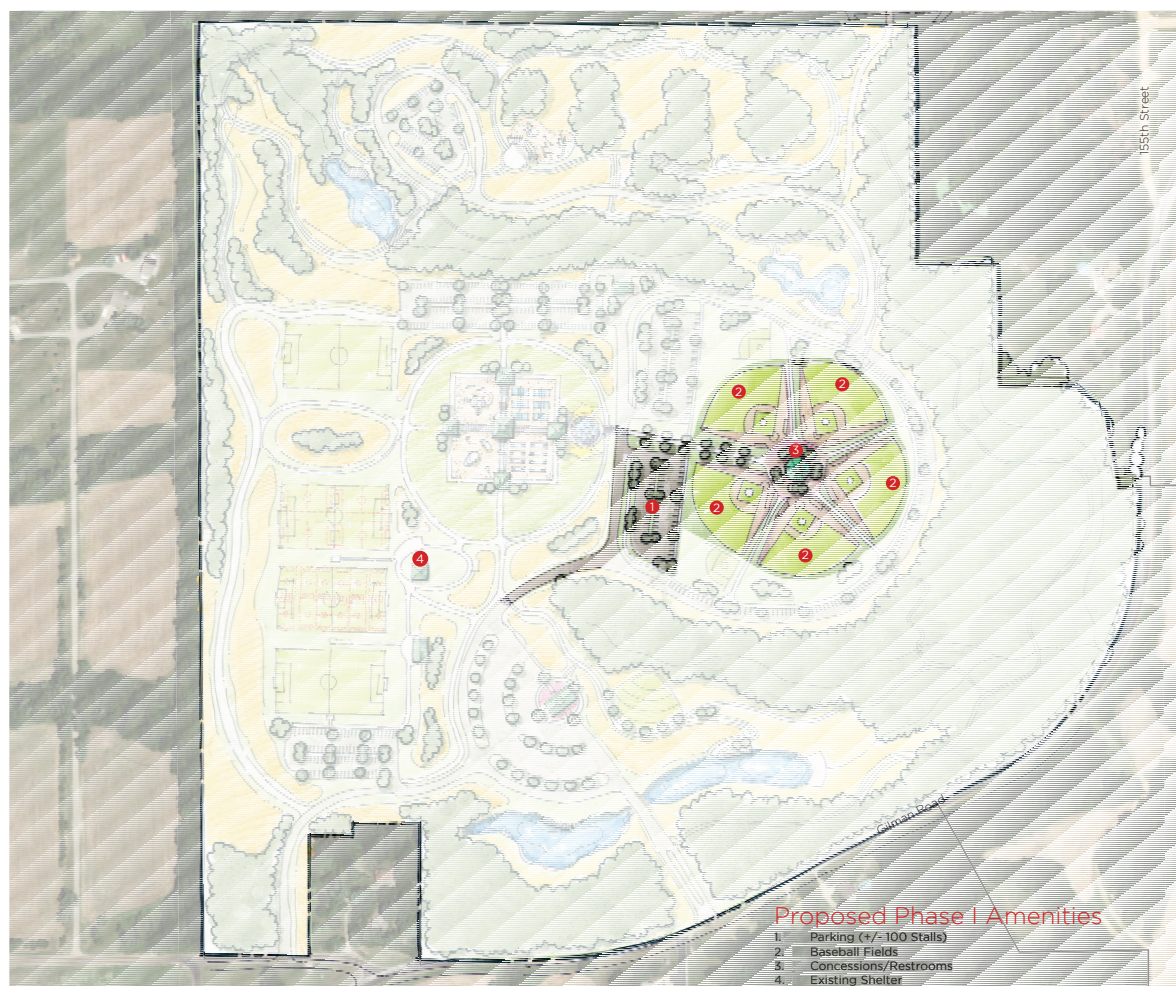
- A 5-field baseball/softball complex (native turf) with 100 +/- parking lot
- A concession/restroom/storage structure in the center of the baseball/softball complex
- A 2-field soccer improvement is recommended, but not included in this project budget

The improvements proposed for Bernard Park in Phase 1 relocate the baseball/softball activities from City Park and preferably, soccer from Willow Park. This acts as a catalyst for the other parks to be redeveloped as shown in their master plans in Section 6. Bernard Park was identified as being more suited for sports activities due to its size and not residing in a neighborhood setting. This allows for more parking availability and convenience of having all sports activities in one

location. Phase 1 in Bernard Park would ensure full functionality of baseball/softball and securing funding for soccer improvements at Bernard is highly recommended, so that use could accompany the baseball/softball complex.

Soccer Fields

Since the construction of the soccer fields is not included in the Phase 1 budget, the Parks Department can utilize simple solutions to improve their current condition. The simplest improvement is to improve cultural practices and provide more consistent maintenance. This includes frequent core aeration to promote healthy surface conditions and break up subsurface compaction. This also includes overseeding and diligent topdressing and fertilization programs to improve soil structure.



Bernard Park Phase 1

Project Budget: \$3,861,982.65 Bernard Park Phase 1

Opinion of Probable Cost | Kenneth Bernard Park

Lansing Parks and Recreation Master Plan

January - 2020

Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
Concrete trails - 6" thick	27000	SF	\$ 6.00	\$ 162,000	\$ 162,000
Park Wide Site Furnishing					
Picnic Table	6	EA	\$ 1,000.00	\$ 6,000	\$ 21,750
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250	
Trash / Recycling Receptacle	5	EA	\$ 1,000.00	\$ 5,000	
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500	
Baseball Fields					
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835	\$ 1,693,335
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000	
Dugout Benches	10	EA	\$ 250.00	\$ 2,500	
Soccer Fields					
Soccer Fields (2)	1	LS	\$ 478,804.00	\$ 478,804	\$ 654,804
Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000	
6" Water Service	1800	LF	\$ 50.00	\$ 90,000	
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000	
Soccer Fields					
Soccer Fields (2)	1	LS	\$ 478,804.00	\$ 478,804	\$ 574,804
6" Water Service	1800	LF	\$ 50.00	\$ 90,000	
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000	
Architecture - Site Improvements					
Shelters + Buildings					
Concession w/ Restroom & Storage	1	EA	\$ 300,000.00	\$ 300,000	\$ 300,000
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	12	EA	\$ 475.00	\$ 5,700	\$ 41,700
Fescue Turf - Seed	120000	SF	\$ 0.30	\$ 36,000	
Civil Improvements					
Utilities					
6" Water Service	2700	LF	\$ 50.00	\$ 135,000	\$ 175,000
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000	
Leechfield	1	EA	\$ 30,000.00	\$ 30,000	
Grading					
Allowance for Misc. General Grading	1	ALL	\$ 20,000.00	\$ 20,000	\$ 20,000
Parking Area					
Granular Subbase 4" (2 tons per 100 sf.)	1000	TONS	\$ 25.00	\$ 25,000	\$ 175,000
Asphalt parking & roads (chip & seal)	50000	SF	\$ 3.00	\$ 150,000	
Electrical Improvements					
Site Lighting					
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000	\$ 300,000
Electrical Service					
Provide Conduit and Power to Shelters/Fields	2100	LF	\$ 50.00	\$ 105,000	\$ 105,000
Total Improvements				\$ 2,993,785	\$ 1,229,608
General Conditions	10%		\$299,378.50	\$122,960.80	
Overhead	5%		\$149,689.25	\$61,480.40	
Profit	5%		\$149,689.25	\$61,480.40	
Inflation	3%		\$89,813.55	\$36,888.24	
Design Contingency	6%		\$179,627.10	\$73,776.48	

Project Budget: \$3,861,982.65

Soccer: \$1,586,194.32



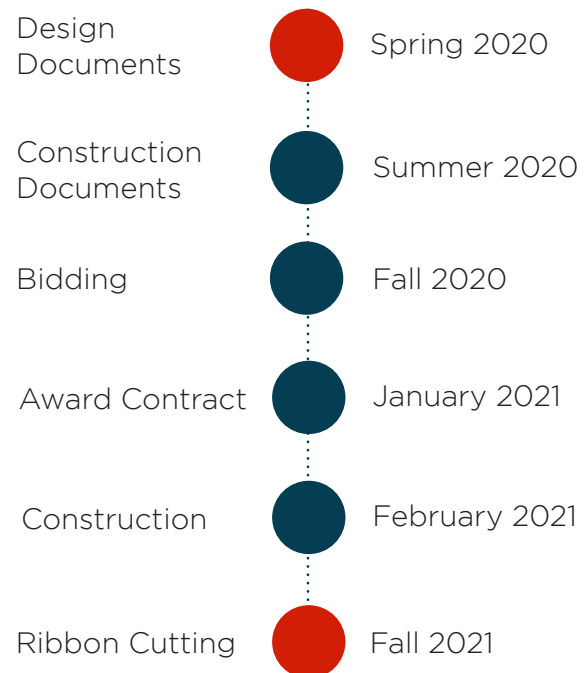
City Park Phase 1 | \$1,051,865.25

Along with the improvements at Bernard Park, City Park will also be receiving improvements. With the relocation of the baseball/softball fields to Bernard Park, we recommend using the vacated fields at City Park to create a destination-style splash park. This includes:

- A destination splash park
- A medium shelter
- The use of the existing parking lot and restroom facility

These improvements in Phase 1 will provide one of the most requested amenities in the citizen survey; aquatics. Although only a piece of the overall City Park master plan, the improvements in Phase 1 will set up the park for further improvements, while still offering a great amenity to the community. This also achieves the before-mentioned goal of bringing back neighborhood uses to Lansing's neighborhood parks. Splash parks don't generate the amount of vehicle traffic that sports games do, which changes the use to something more suitable for a neighborhood environment. There has also been a concern for vandalism in this park, specifically targeting the restroom facility. With the increased frequency of use in the park, it's believed that the vandalism will be significantly reduced.

Phase 1 Schedule



Opinion of Probable Cost | City Park Lansing Parks and Recreation Master Plan January - 2020

Demolition and Removal					
Demo and Removal					\$ 4,200
Remove Playground (In-House)	0	LS	\$ 2,000.00	-	
Remove Structures (In-House)	0	LS	\$ 12,000.00	-	
Remove Pavement	1400	SF	\$ 3.00	\$ 4,200	
Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					\$ 13,200
Concrete trail/walkways - 6" thick	2200	SF	\$ 6.00	\$ 13,200	
Park Wide Site Furnishing					\$ 18,800
Park Bench	4	EA	\$ 2,000.00	\$ 8,000	
Picnic Table	4	EA	\$ 1,000.00	\$ 4,000	
Trash / Recycling Receptacle	4	EA	\$ 1,700.00	\$ 6,800	
Play Equipment					-
Engineered Wood Fiber	0	SF	\$ 4.00	-	
Destination Play	0	LS	\$ 350,000.00	-	
Aquatics/Spray Park					\$ 675,000
Spray Ground	1	LS	\$ 675,000.00	\$ 675,000	
Architecture - Site Improvements					
Shelters + Buildings					\$ 100,000
Small Shelter	1	EA	\$ 100,000.00	\$ 100,000	
Landscaping and Irrigation					
Plants and Seed					\$ 7,475
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	5	EA	\$ 475.00	\$ 2,375	
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	3	EA	\$ 350.00	\$ 1,050	
Fescue Turf - Seed	13500	SF	\$ 0.30	\$ 4,050	
Civil Improvements					
Utilities					\$ 21,500
3" Water Service	100	LF	\$ 50.00	\$ 5,000	
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000	
6" Sanitary Service Line with main connection	100	LF	\$ 65.00	\$ 6,500	
Grading					\$ 10,000
Allowance for Misc. General Grading	1	ALL	\$ 10,000.00	\$ 10,000	
Electrical Improvements					
Electrical Service					\$ 5,000
Provide Conduit and Power to Shelter	100	LF	\$ 50.00	\$ 5,000	
Total Improvements					\$ 855,175
General Conditions	10%			\$85,517.50	
Overhead	5%			\$42,758.75	
Profit	5%			\$42,758.75	
Inflation	3%			\$25,655.25	
Design Contingency	6%			\$51,310.50	
Project Budget:					\$1,051,865.25

Phase 1 Costs:

\$3,861,982.65 Bernard Park
\$1,051,865.25 City Park

Total: \$4,913,847.90

Budget: \$5M

Phase 2

\$20M Bond Issue

We suggest a \$20M Bond issue for Phase 2. \$20M would be used to make improvements at Bernard Park, City Park, Willow Park.

Phase 1 will complete the ballfields and additional parking, as well as a road. Phase 2 proposes to make all of the improvements shown on the graphic below. These include:

- The last two soccer fields
- The amphitheater

- Fishing docks and additional detention pond
- The Lansing Daze shelter and play areas, including splash park
- Additional parking
- Disc golf
- Paved trails
- The majority of the shelters and restrooms

This would allow the park to be nearly complete, according to the master plan.

Bernard Park Phase 2 | \$13,849,708.32



Opinion of Probable Cost | Kenneth Bernard Park Lansing Parks and Recreation Master Plan January - 2020

All grey items have been completed in previous phases

Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
Concrete trails - 6" thick	157,000	SF	\$ 6.50	\$ 1,020,500
Decorative Pavement	0	SF	\$ 8.00	-
Park Wide Site Furnishing				
Park Bench	28	EA	\$ 2,000.00	\$ 56,000
Picnic Table	17	EA	\$ 1,000.00	\$ 17,000
Drinking Fountain and Bottle Filler	3	EA	\$ 3,250.00	\$ 9,750
Bike Racks	9	EA	\$ 1,500.00	\$ 13,500
Trash / Recycling Receptacle	11	EA	\$ 1,700.00	\$ 18,700
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500
Aquatics/Spray Park				
Fishing Docks	2	EA	\$ 30,000.00	\$ 60,000
Spray Ground Materials	1	LS	\$ 350,000.00	\$ 350,000
Spray Ground Installation	1	LS	\$ 200,000.00	\$ 200,000
Play Equipment				
Nature Play	0	LS	\$ 250,000.00	-
Synthetic Turf	38000	SF	\$ 20.00	\$ 760,000
Large Play	1	LS	\$ 600,000.00	\$ 600,000
Sports Fields				
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000
Dugout Benches	10	EA	\$ 250.00	\$ 2,500
Soccer Fields (2)	2	EA	\$ 239,402.00	\$ 478,804
Soccer Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000
6" Water Service	1800	LF	\$ 50.00	\$ 90,000
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000
Cornhole	8	EA	\$ 2,000.00	\$ 16,000
Disc Golf	1	EA	\$ 200,000.00	\$ 200,000
Pickleball	6	EA	\$ 40,000.00	\$ 240,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Secondary	3	EA	\$ 10,000.00	\$ 30,000
Architecture - Site Improvements				
Shelters + Buildings				
Vehicular Bridge	0	EA	\$ 500,000.00	-
Maintenance Building	1	EA	\$ 120,000.00	\$ 120,000
Restroom	1	EA	\$ 120,000.00	\$ 120,000
Pedestrian Bridge	1	EA	\$ 120,000.00	\$ 120,000
Concession w/ Restroom	1	EA	\$ 220,000.00	\$ 300,000
Amphitheater	1	EA	\$ 500,000.00	\$ 500,000
Medium Shelter w/ Restroom	1	EA	\$ 250,000.00	\$ 250,000
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Small Shelter	4	EA	\$ 120,000.00	\$ 480,000
Low Water Crossing	1	EA	\$ 50,000.00	\$ 50,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - 8&B 2" Cal - Swamp White Oak	110	EA	\$ 500.00	\$ 55,000
Deciduous Trees - 8&B 2" Cal - Emerald Sunshine Elm	150	EA	\$ 475.00	\$ 71,250
Ornamental Trees - 8&B 1.5" Cal - Eastern Redbud	100	EA	\$ 350.00	\$ 35,000
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Shrubs - 3 Gal - Flutterby Flow Lavender Butterfly Bush	40	EA	\$ 70.00	\$ 2,800
Annuals/Perennials - 1 Gal - Russian Sage	60	EA	\$ 25.00	\$ 1,500
Grasses - 1 Gal	40	EA	\$ 25.00	\$ 1,000
Fescue Turf - Seed	330000	SF	\$ 0.30	\$ 99,000
Native Blend - Seed Mix	500000	SF	\$ 0.50	\$ 250,000
Civil Improvements				
Utilities				
6" Water Service	1000	LF	\$ 50.00	\$ 50,000
Backflow preventer (double check)	5	EA	\$ 10,000.00	\$ 50,000
6" Sanitary Service Line with main connection	6460	LF	\$ 65.00	\$ 419,900
Grading				
Detention Areas	1	LS	\$ 250,000.00	\$ 250,000
Allowance for Misc. General Grading	1	ALL	\$ 100,000.00	\$ 100,000
Parking Area				
New Curb	0	LF	\$ 20.00	-
Granular Subbase 4" (2 tons per 100 sf.)	5740	TONS	\$ 25.00	\$ 143,500
Asphalt parking spaces & roads	287000	SF	\$ 4.00	\$ 1,148,000
4" White Thermoplastic	14400	LF	\$ 3.50	\$ 50,400
Handicapped Pavement Markings symbol	40	EA	\$ 50.00	\$ 2,000
ADA tactile warning strip (21' and 3')	26	EA	\$ 200.00	\$ 5,200
Electrical Improvements				
Site Lighting				
Soccer Field Lighting	4	EA	\$ 135,000.00	\$ 540,000
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000
T-ball Field Lighting	2	EA	\$ 60,000.00	\$ 120,000
Lansing Daze Lighting Allowance	1	LS	\$ 500,000.00	\$ 500,000
Electrical Service				
Provide Conduit and Power to Shelters/Fields	2300	LF	\$ 50.00	\$ 115,000
Total Improvements				\$ 10,736,208
				\$ 10,736,208
General Conditions	10%			\$1,073,620.80
Overhead	5%			\$536,810.40
Profit	5%			\$536,810.40
Inflation	3%			\$322,086.24
Design Contingency	6%			\$644,172.48
Project Budget:				\$13,849,708.32

The soccer number doubles if Phase I recommendations were not met.



Opinion of Probable Cost | City Park
Lansing Parks and Recreation Master Plan
 January - 2020

All grey items have been completed in previous phases

Demolition and Removal				
Demolition and Removal				
Remove Playground	1	LS	\$ 2,000.00	\$ 2,000
Remove Structures	1	LS	\$ 12,000.00	\$ 12,000
Remove Pavement	40860	SF	\$ 3.00	\$ 122,580
Clearing and Grubbing	1	LS	\$ 20,000.00	\$ 20,000
Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
ADA Curb Ramp	5	EA	\$ 500.00	\$ 2,500
Concrete trail/walkways - 6" thick	38980	SF	\$ 6.50	\$ 253,370
Park Wide Site Furnishing				
Park Bench	16	EA	\$ 2,000.00	\$ 32,000
Picnic Table	14	EA	\$ 1,000.00	\$ 14,000
Drinking Fountain and Bottle Filler	2	EA	\$ 3,250.00	\$ 6,500
Bike Racks	10	EA	\$ 1,500.00	\$ 15,000
Trash / Recycling Receptacle	6	EA	\$ 1,700.00	\$ 10,200
Play Equipment				
Fitness Equipment	1	LS	\$ 60,000.00	\$ 60,000
Engineer Wood Fiber	600	CY	\$ 40.00	\$ 24,000
Destination Play	1	LS	\$ 600,000.00	\$ 600,000
Aquatics/Spray Park				
Spray Ground	0	LS	\$ 675,000.00	-
Sports Fields				
Baseball Field Renovation	1	EA	\$ 100,000.00	\$ 100,000
Sand Volleyball	2	EA	\$ 10,000.00	\$ 20,000
Basketball Court	1	EA	\$ 80,000.00	\$ 80,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Architecture - Site Improvements				
Shelters + Buildings				
Restroom	1	EA	\$ 120,000.00	\$ 120,000
Medium Shelter w/Restroom	1	EA	\$ 250,000.00	\$ 250,000
Small Shelter	2	EA	\$ 100,000.00	\$ 200,000
Pedestrian Bridge	1	EA	\$ 120,000.00	\$ 120,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	30	EA	\$ 500.00	\$ 15,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	35	EA	\$ 475.00	\$ 16,625
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	25	EA	\$ 350.00	\$ 8,750
Fescue Turf - Seed	131500	SF	\$ 0.30	\$ 39,450
Native Blend - Seed Mix	251000	SF	\$ 0.50	\$ 125,500
Civil Improvements				
Utilities				
3" Water Service	0	LF	\$ 50.00	-
Backflow preventer (double check)	0	EA	\$ 10,000.00	-
6" Sanitary Service Line with main connection	0	LF	\$ 65.00	-
Grading				
Allowance for Misc. General Grading	1	ALL	\$ 40,000.00	\$ 40,000
Parking Area				
Asphalt Maintenance Road	7500	SF	\$ 4.00	\$ 30,000
Concrete parking spaces	57500	SF	\$ 6.50	\$ 373,750
Granular Subbase 4"	1150	TONS	\$ 25.00	\$ 28,750
4" White Thermoplastic	2580	LF	\$ 3.50	\$ 9,030
Handicapped Pavement Markings symbol	7	EA	\$ 50.00	\$ 350
Electrical Improvements				
Site Lighting				
Baseball Field Lighting - Keep Existing	0	EA	\$ 290,000.00	-
Electrical Service				
Provide Conduit and Power to Shelters	300	LF	\$ 50.00	\$ 15,000
Total Improvements				\$ 2,771,555
General Conditions				\$277,155.50
Overhead				\$138,577.75
Profit				\$138,577.75
Inflation				\$83,146.65
Design Contingency				\$166,293.30

City Park Phase 2 | \$3,575,305.95

Phase 1 of City Park proposed to complete a shelter and splash pad. These were identified as the most important, first improvements.

Phase 2 proposes to complete all of the remaining improvements that were not outlined in Phase 1. These are shown in the above graphic.

These include:

- A practice baseball field
- Improved parking
- The clearing of the East side of the park
- A trail system throughout the park
- A pedestrian bridge over the creek to the East
- A basketball court
- Sand Volleyball
- An additional shelters
- A destination playground
- Trail amenities like benches and exercise equipment
- Improved landscaping for decreased maintenance

With these improvements proposed for Phase 2, City Park would be complete, based on the above master plan and opinion of probable cost. A Phase 3 for City Park would not be needed.

Phase 2 Costs:

\$13,849,708.32 Bernard Park

\$3,575,305.95 City Park

Total: \$17,425,014.27

Budget: \$20M

Phase 2 for Willow Park is the first and only Phase needed to complete all of the proposed improvements.

With Phase 1 and 2 proposing to relocate soccer fields to Bernard Park, Willow Park would be able to be completed following the master plan, shown below.

The improvements proposed for Willow Park include:

- A large main shelter and restroom
- A splash pad
- An upgraded parking lot
- Several small shelters
- New playgrounds
- Bocce Ball
- Gaga Ball
- Shuffleboard
- Pickleball
- Workout stations
- Improved landscaping for decreased maintenance

These improvements will shift the main activities from soccer to more neighborhood-friendly uses, which don't draw as many vehicles.

All of the proposed improvements in Phase 2 fall within the \$20M budget, based on the opinions of probable cost, which are done as accurately as possible.

Phase 2 Costs:

\$13,849,708.32 Bernard Park

\$3,575,305.95 City Park

\$2,574,324 Willow Park

Total: \$19,999,338.27

Budget: \$20M



Willow Park Phase 2 | \$2,574,324

Opinion of Probable Cost | Willow Park

Lansing Parks and Recreation Master Plan

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Demolition and Removal				
Demo and Removal				
Remove Existing Walkway	50	LF	\$ 6.50	\$ 325
Remove Structure	1	LS	\$ 1,000.00	\$ 1,000
Remove Shed	1	LS	\$ 2,000.00	\$ 2,000
Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
ADA Curb Ramp	2	EA	\$ 500.00	\$ 1,000
Concrete walkways - 4" thick	38680	SF	\$ 5.50	\$ 212,740
Concrete edging - 1'	360	LF	\$ 20.00	\$ 7,200
Park Wide Site Furnishing				
Park Bench	8	EA	\$ 2,000.00	\$ 16,000
Park Table	14	EA	\$ 4,000.00	\$ 56,000
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250
Bike Racks	4	EA	\$ 1,500.00	\$ 6,000
Trash / Recycling Receptacle	6	EA	\$ 1,700.00	\$ 10,200
Play Equipment				
Fitness Equipment	1	LS	\$ 60,000.00	\$ 60,000
Small Playground	1	LS	\$ 100,000.00	\$ 100,000
Medium Playground	1	LS	\$ 250,000.00	\$ 250,000
Engineer Wood Fiber	247	CY	\$ 40.00	\$ 9,880
Aquatics/Spray Park				
Spray Ground	1	LS	\$ 450,000.00	\$ 450,000
Sports Fields				
Bocce Ball	2	EA	\$ 15,000.00	\$ 30,000
Shuffleboard	2	EA	\$ 6,000.00	\$ 12,000
Gagaball	1	EA	\$ 2,000.00	\$ 2,000
Pickleball	2	EA	\$ 40,000.00	\$ 80,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Architecture - Site Improvements				
Shelters + Buildings				
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Small Shelter	2	EA	\$ 120,000.00	\$ 240,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	30	EA	\$ 500.00	\$ 15,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	30	EA	\$ 475.00	\$ 14,250
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	15	EA	\$ 350.00	\$ 5,250
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Fescue Turf - Seed	38000	SF	\$ 0.30	\$ 11,400
Native Blend - Seed Mix	32000	SF	\$ 0.50	\$ 16,000
Civil Improvements				
Utilities				
3" Water Service	100	LF	\$ 50.00	\$ 5,000
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000
6" Sanitary Service Line with main connection	280	LF	\$ 65.00	\$ 18,200
Grading				
Allowance for Misc. General Grading	1	ALL	\$ 20,000.00	\$ 20,000
Parking Areas				
New Curb	500	LF	\$ 20.00	\$ 10,000
Asphalt Overlay	0	SF	\$ 2.00	-
4" White Thermoplastic	330	LF	\$ 3.50	\$ 1,155
Handicapped Pavement Markings symbol	3	EA	\$ 50.00	\$ 150
Electrical Improvements				
Electrical Service				
Provide Conduit and Power to Shelter	280	LF	\$ 50.00	\$ 14,000
Total Improvements				\$ 1,995,600
General Conditions				10%
Overhead				5%
Profit				5%
Inflation				3%
Design Contingency				6%

Project Budget: \$2,574,324.00

Phase 2- AQUATICS

Additional \$8-12M

Aquatic Trends

Benefits of Swimming Pools

According to the Physical Activity Council's 2016 Participant Report, all age groups see swimming as a future fitness activity. Individuals ages 25-35 rate swimming as their top interest among 10 different activities that include camping, bicycling, hiking, running, canoeing, backpacking, working with machines, working with weights or kayaking. Those ages 35-65+ rate swimming as their second favorite interest. Swimming and other water-related activities are excellent ways to get the physical activity and health benefits needed for a healthy life. In addition to the health benefits, swimming pools are natural gathering places and provide a place for families with children and teens to engage.

Local Prospective

According to the Lawrence Journal World in 2019, the City's Outdoor Aquatic Center closed two weeks early this summer because of staffing and financial issues. Both Tonganoxie and Bonner Springs closed during the week and only remained open for shortened hours on weekends due to lifeguard shortages and financial concerns. The shrinking body available for lifeguards challenges most communities within the region. It is for these reasons that we are suggesting the introduction of aquatics to the Lansing communities through the development of spray grounds.

Swimming Pools Today

According to Mick Nelson, Facilities Development Director for USA Swimming, more than 2,000 pools throughout the U.S. have closed since January 2009. Nelson, who has painstakingly tracked the closing of community pools in recent years, believes there are several reasons behind this rash of closings. These reasons include aging facilities and under utilization. Although this trend continues nationwide, Lansing is in a unique position of not currently having an outdoor aquatics facility.

Spray Grounds Making a Big Splash

Communities across the country are adding spray grounds as one of the most highly requested and utilized recreation amenities. Spray grounds do not require high levels of staffing, require only minimal maintenance and offer a no-cost (or low-cost) alternative to a swimming pool. They typically appeal to kids 2-12 year-olds and can be a stand-alone facility in a community park or incorporated inside a family aquatic center. It is the recommendation of the design team that the first phase of park improvements includes a spray ground as the initial step into aquatics. Once established, the effectiveness of the spray ground could be evaluated to determine if additional aquatic facilities are necessary to meet the needs of the community.

Aquatics Center Examples

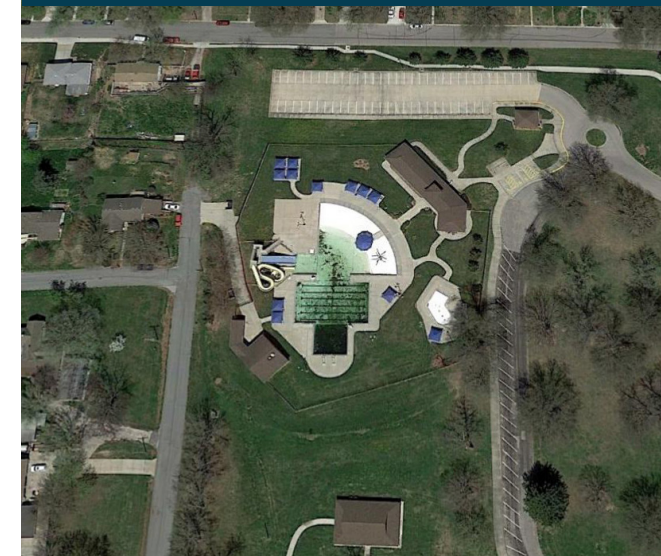
The design team reached out to an aquatic engineer to provide estimated cost information for three existing pools located in similarly sized and nearby communities: Bonner Springs, Leavenworth and Tonganoxie. Based on square footages and the development of similar aquatics improvements as well as land costs, bath house and similar site and parking improvements, the opinion of probable costs range from \$8 million - \$12 million in 2020 dollars.

Bonner Springs, KS



Source: NRPA 2019

Leavenworth, KS



Tonganoxie, KS



Phase 3

\$5M Bond Issue

We suggest a \$5M Bond issue for Phase 3. \$5M would be used to make the final improvements at Bernard Park, and complete Bittersweet Park and Kelly Grove Park.

The proposed improvements for Phase 1 and 2, if completed, would implement the majority of Bernard Park. The proposed improvements for Phase 3 complete all of the remaining aspects of the master plan that have not yet been proposed to be completed. This is shown below.

The final Phase 3 improvements include:

- Upgraded and additional gravel trails
- A nature playground
- An arboretum
- A detention pond and fishing dock
- A Vehicular bridge
- A Northern parking lot

If these improvements are completed, Bernard Park would be finished, according to the master plan.

Bernard Park Phase 3 | \$3,823,366.50



Opinion of Probable Cost | Kenneth Bernard Park Lansing Parks and Recreation Master Plan January - 2020

All grey items have been completed in previous phases

Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps \$ 220,000				
Decomposed Granite, 6' wide	88000	SF	\$ 2.50	\$ 220,000
Decorative Pavement	0	SF	\$ 8.00	-
Park Wide Site Furnishing \$ 33,650				
Park Bench	4	EA	\$ 2,000.00	\$ 8,000
Picnic Table	9	EA	\$ 1,000.00	\$ 9,000
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250
Bike Racks	1	EA	\$ 1,500.00	\$ 1,500
Trash / Recycling Receptacle	7	EA	\$ 1,700.00	\$ 11,900
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500
Aquatics/Spray Park \$ 60,000				
Fishing Docks	2	EA	\$ 30,000.00	\$ 60,000
Spray Ground Materials	1	LS	\$ 350,000.00	\$ 350,000
Spray Ground Installation	1	LS	\$ 200,000.00	\$ 200,000
Play Equipment \$ 250,000				
Nature Play	1	LS	\$ 250,000.00	\$ 250,000
Synthetic Turf	38000	SF	\$ 20.00	\$ 760,000
Large Play	1	LS	\$ 600,000.00	\$ 600,000
Sports Fields				
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000
Dugout Benches	10	EA	\$ 250.00	\$ 2,500
Soccer Fields (2)	2	EA	\$ 478,804.00	\$ 957,608
Soccer Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000
6" Water Service	1800	LF	\$ 50.00	\$ 90,000
Fescue Turf - Seed	40000	SF	\$ 0.30	\$ 12,000
Cornhole	8	EA	\$ 2,000.00	\$ 16,000
Disc Golf	1	EA	\$ 200,000.00	\$ 200,000
Pickleball	6	EA	\$ 40,000.00	\$ 240,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Secondary	3	EA	\$ 10,000.00	\$ 30,000
Architecture - Site Improvements \$ 790,000				
Shelters - Buildings				
Vehicular Bridge	1	EA	\$ 500,000.00	\$ 500,000
Maintenance Building	1	EA	\$ 120,000.00	\$ 120,000
Restroom	1	EA	\$ 120,000.00	\$ 120,000
Pedestrian Bridge	0	EA	\$ 120,000.00	-
Concession w/ Restroom	1	EA	\$ 220,000.00	\$ 300,000
Amphitheater	1	EA	\$ 500,000.00	\$ 500,000
Medium Shelter w/ Restroom	1	EA	\$ 200,000.00	\$ 200,000
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Small Shelter	4	EA	\$ 120,000.00	\$ 480,000
Landscaping and Irrigation \$ 318,700				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	40	EA	\$ 500.00	\$ 20,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	60	EA	\$ 475.00	\$ 28,500
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	20	EA	\$ 350.00	\$ 7,000
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Shrubs - 3 Gal - Flutterby Flow Lavender Butterfly Bush	40	EA	\$ 70.00	\$ 2,800
Annuals/Perennials - 1 Gal - Russian Sage	60	EA	\$ 25.00	\$ 1,500
Grasses - 1 Gal	40	EA	\$ 25.00	\$ 1,000
Fescue Turf - Seed	294000	SF	\$ 0.30	\$ 88,200
Native Blend - Seed Mix	350000	SF	\$ 0.50	\$ 175,000
Civil Improvements \$ 283,000				
Utilities				
6" Water Service	5460	LF	\$ 50.00	\$ 273,000
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000
6" Sanitary Service Line with main connection	6460	LF	\$ 65.00	\$ 419,900
Grading \$ 350,000				
Detention Areas	1	LS	\$ 250,000.00	\$ 250,000
Allowance for Misc. General Grading	1	ALL	\$ 100,000.00	\$ 100,000
Parking Area \$ 553,500				
New Curb	0	LF	\$ 20.00	-
Granular Subbase 4" (2 tons per 100 sf.)	2460	TONS	\$ 25.00	\$ 61,500
Asphalt parking spaces & roads	123000	SF	\$ 4.00	\$ 492,000
4" White Thermoplastic	14400	LF	\$ 3.50	\$ 50,400
Handicapped Pavement Markings symbol	40	EA	\$ 50.00	\$ 2,000
ADA tactile warning strip (21" and 3')	26	EA	\$ 200.00	\$ 5,200
Electrical Improvements \$ 105,000				
Site Lighting				
Soccer Field Lighting	4	EA	\$ 285,000.00	\$ 1,140,000
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000
T-ball Field Lighting	2	EA	\$ 60,000.00	\$ 120,000
Lansing Daze Lighting Allowance	1	LS	\$ 500,000.00	\$ 500,000
Electrical Service				
Provide Conduit and Power to Shelters/Fields	2100	LF	\$ 50.00	\$ 105,000
Total Improvements \$ 2,963,850				
General Conditions	10%			\$296,385.00
Overhead	5%			\$148,192.50
Profit	5%			\$148,192.50
Inflation	3%			\$88,915.50
Design Contingency	6%			\$177,831.00
Project Budget: \$3,823,366.50				



- Proposed Amenities**
1. Scenic Lookout
 2. Fabric Shade Structure
 3. ADA Accessible Path
 4. Small Shelter
 5. Walking Trail
 6. Bench
 7. Future Connection to Development
 8. Existing Gate

Bittersweet Park Phase 3 | \$591,536.25

Bittersweet Park was identified as one of the lowest priority parks to make improvements to. This was based on its potential to offer amenities, which is mostly limited to walking trails. For these reasons, the improvements to this park were reserved for the final phase of implementation.

The proposed improvements include:

- Paved walking trails
- A lookout with a shade structure
- Improved landscaping for limited maintenance requirements

If these improvements are completed, Bittersweet Park would be finished, according to the master plan.

These improvements would be adding a new, functional park to the Lansing park system because as it stands today, Bittersweet Park isn't usable.

Phase 3 Costs:

\$3,823,366.50 Bernard Park
 \$591,536.25 Bittersweet Park

Total: \$4,414,902.75

Budget: \$5M

Opinion of Probable Cost | Bittersweet Park Lansing Parks and Recreation Master Plan January - 2020

Demolition and Removal				
Demo and Removal				\$ 40,000
Clearing and Grubbing	1	LS	\$ 40,000.00	\$ 40,000
Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				\$ 115,200
Concrete trail - 4" thick	19800	SF	\$ 5.50	\$ 108,900
Decorative Pavement	900	SF	\$ 7.00	\$ 6,300
Park Wide Site Furnishing				
Park Bench	6	EA	\$ 2,000.00	\$ 12,000
Park Table	6	EA	\$ 4,000.00	\$ 24,000
Trash / Recycling Receptacle	2	EA	\$ 1,700.00	\$ 3,400
Architectural and Seating Walls				
Natural Stone Veneer Walls (2 - 2.5' ht)	120	LF	\$ 750.00	\$ 90,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Architecture - Site Improvements				
Shelters + Buildings				\$ 60,000
Fabric Shade Structure	1	EA	\$ 60,000.00	\$ 60,000
Landscaping and Irrigation				
Plants and Seed				\$ 48,000
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Fescue Turf - Seed	18000	SF	\$ 0.30	\$ 5,400
Native Blend - Seed Mix	84000	SF	\$ 0.50	\$ 42,000
Civil Improvements				
Grading				\$ 30,000
Allowance for Misc. General Grading	1	ALL	\$ 30,000.00	\$ 30,000
Total Improvements			\$ 438,175	\$ 438,175
General Conditions	10%			\$43,817.50
Overhead	5%			\$21,908.75
Profit	5%			\$21,908.75
Inflation	5%			\$21,908.75
Design Contingency	10%			\$43,817.50

Project Budget: \$591,536.25

Kelly Grove was also identified as one of the lowest priority parks to make improvements to, This was based on it's designation as a nature preserve, as well as its already established walking trails and seating areas. For these reasons, the improvements to this park were also reserved for the final phase of implementation.

The proposed improvements include:

- Updated walking trails
- A boardwalk
- Fire pit improvements
- New low water crossing
- Updated parking lot
- A crosswalk and connecting sidewalk

If these improvements are completed, Kelly Grove Park would be finished, according to the master plan.

These improvements would be increasing the accessibility of the park, by providing more ADA accessible trails, as well as improving wetland areas that are currently not as usable and implementing a crosswalk and sidewalk to improve pedestrian safety.

If all proposed improvements are made for Phase 3, all of the parks would be fully updated according to their individual master plans, as well as being within the budget that is outlined.

Phase 3 Costs:

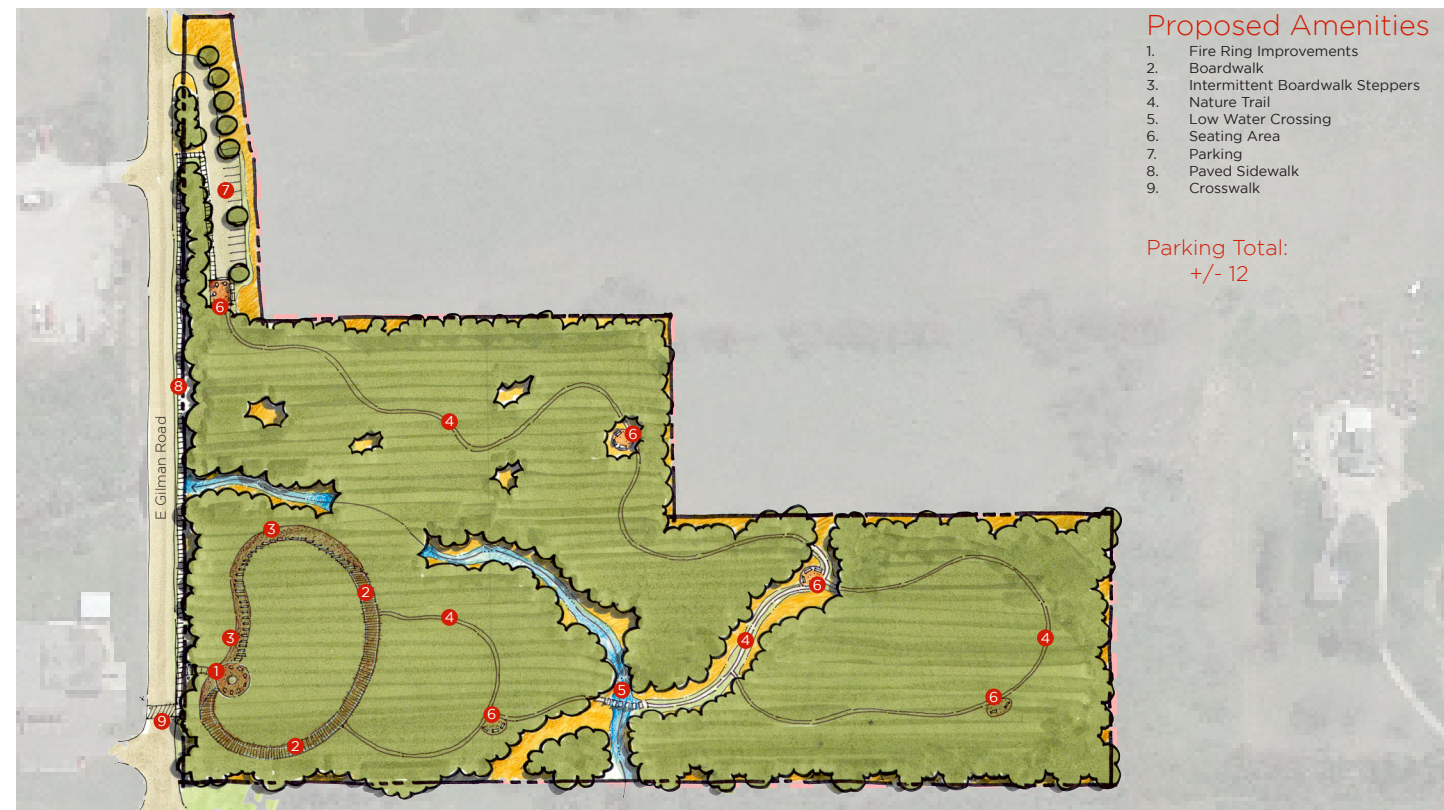
\$3,823,366.50 Bernard Park

\$591,536.25 Bittersweet Park

\$491,541.75 Kelly Grove Park

Total: \$4,906,444.50

Budget: \$5M



Kelly Grove Park Phase 3 | \$491,541.75

Opinion of Probable Cost | Kelly Grove Park

Lansing Parks and Recreation Master Plan

January - 2020

Demolition and Removal						
Demo and Removal						
Clearing and Grubbing	1	LS	\$ 20,000.00	\$ 20,000	\$ 20,000	
Landscape Architecture - Site Improvements						
Pavements / Surfacing / Ramps						
Concrete walkways - 4" thick	6000	SF	\$ 5.50	\$ 33,000		
Decomposed Granite, 6' wide	16500	SF	\$ 2.50	\$ 41,250		
Boardwalk	5300	SF	\$ 15.00	\$ 79,500		
Fire Ring Improvements	1	LS	\$ 15,000.00	\$ 15,000		
Park Wide Site Furnishing						
Park Bench	12	EA	\$ 2,000.00	\$ 24,000		
Trash / Recycling Receptacle	2	EA	\$ 1,700.00	\$ 3,400		
Signage & Wayfinding						
Primary	1	EA	\$ 15,000.00	\$ 15,000		
Architecture - Site Improvements						
Structures						
Low Water Crossing	1	LS	\$ 50,000.00	\$ 50,000		
Landscaping and Irrigation						
Plants and Seed						
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	7	EA	\$ 475.00	\$ 3,325		
Native Blend - Seed Mix	47000	SF	\$ 0.50	\$ 23,500		
Parking Areas						
Asphalt parking spaces	12100	SF	\$ 4.00	\$ 48,400		
Granular Subbase 4"	242	TONS	\$ 25.00	\$ 6,050		
4" White Thermoplastic	180	LF	\$ 3.50	\$ 630		
Crosswalk	1	EA	\$ 1,000.00	\$ 1,000		
Handicapped Pavement Markings symbol	1	EA	\$ 50.00	\$ 50		
				Total Improvements	\$ 364,105	\$ 364,105
General Conditions						
				10%	\$36,410.50	
Overhead						
				5%	\$18,205.25	
Profit						
				5%	\$18,205.25	
Inflation						
				5%	\$18,205.25	
Design Contingency						
				10%	\$36,410.50	

Project Budget: \$491,541.75

Cost of All 3 Phases:

\$4,913,847.90 Phase 1

\$19,999,338.27 Phase 2

\$4,906,444.50 Phase 3

Total: \$29,819,630.67

Budget: \$30M

All of the recommendations outlined in this section are believed to be the most effective and efficient strategy to implementing all of the desired improvements to Lansing's parks.

Revenue and Funding Grants

Transportation Alternatives (TA) Program

The Kansas Department of Transportation offers the following information on their website at www.ksdot.org. “Kansas Department of Transportation’s Transportation Alternatives (TA) program provides funding for a variety of alternative transportation projects. These include the construction of pedestrian and bicycle facilities and infrastructure for non-driver access to public transportation, projects that enhance safety and mobility for pedestrians, bicyclists and transit riders, projects that improve scenic or environmental assets in our state, Safe Routes to School projects, and more. All selected projects are required to meet a minimum 20% local cash match.” According to the state reports, for Federal Fiscal Year 2020, \$8.5 million in federal funds were awarded to the State of Kansas in 23 counties.

All submitted applications go through the same competitive, multi-phase selection process. More details can be found in the 2020 TA Program Guide. The Guide provides guidance on the program to assist eligible Project Sponsors in compiling and completing applications.

KDOT historically hosts TA Application workshops for possible Project Sponsors to describe, explain and cover the parameters of the TA Program. At the workshop, applicants review program requirements and eligibilities, any changes since the last Call for Projects and participated in open Q&A sessions.

Safe Routes To School (SRTS)

The Safe Routes to School (SRTS) program, which is administered by KDOT through the TA Program, funds walking and bicycle facilities that connect residents to schools. The goals of the program are to: enable and encourage children to walk and bike to school safely; make walking and biking a safer and more appealing transportation choice; facilitate the planning and development of projects and activities that will improve safety; and to reduce traffic, fuel consumption and air pollution in the vicinity of elementary and middle schools. This grant does not require a match, but grant funds are limited to \$500,000 per application per funding cycle. Applications received from a project sponsor may include multiple elements—including sidewalks, bike lanes and speed humps—but cannot exceed \$500,000.

Recreational Trails Program (RTP)

The House and Senate have passed a five-year transportation bill creating the Fixing America’s Surface Transportation (FAST) Act that has been signed by the President, leaving Recreational Trails intact. Changes to these bills can occur so it is best to check the Kansas Department of Wildlife, Parks and Tourism’s website. According to the website, applications for the Recreational Trail Program grants are accepted August 1st each year to be considered for funding available in each round. Applications received by August 1 of each year are considered for the funding available in the next round.

The grant program provides eighty percent matching funds, on a reimbursement basis, for eligible recreational trail and trail-related projects. Since 1965, Kansas has received over \$50 million and funded approximately 700 LWCF projects in nearly every county. Qualifying projects include development and/or acquisition of outdoor facilities for the purpose of public recreation.

Community Development Block Grants

Although this program specifically funds housing, public facilities, economic development and community projects, recreation could be a minor component of the project seeking grant funding. The city has used these funds for streetscape, riverfront development and parking projects in the past—all projects that could support recreation activities. Other ways the funds might be used could include the construction of a mini-park on land purchased by a housing project that services primarily low- to moderate-income families. The program is administered through the Kansas Development Authority.

Environmental Education Grants

This program is sponsored by the EPA’s Environmental Education Division (EED), Office of Children’s Health Protection and Environmental Education. It supports environmental education projects that enhance the public’s awareness, knowledge and skills to help people make informed decisions that positively affect environmental quality. The EPA awards grants each year based on funding appropriated by Congress. Annual funding for the program ranges between \$2 and \$3 million. Most grants awarded will be in the \$15,000 to \$25,000 range. These grants could be used to improve the concrete flumed waterways within most parks.

Land And Water Conservation Fund

Since the mid-1960s, the Land and Water Conservation Fund (LWCF) program has provided funds for outdoor recreation acquisition and development. According to the Kansas Department of Wildlife, Parks and Tourism, since 1965, Kansas has received over \$50 million and funded approximately 700 projects in nearly every county. The program provides 50 percent reimbursement to selected outdoor recreation projects that are sponsored by political subdivisions and other appropriate public agencies. Qualifying projects include development and/or acquisition of outdoor facilities for the purpose of public recreation.

Private Grants

Local governments throughout the country are seeking funding for outdoor recreation projects from private philanthropic organizations, foundations and corporations. One private grant example is the American Greenways Kodak Awards Program. This program, administered by The Conservation Fund, provides grants of \$500 to \$2500 to local greenways projects. The purpose of the grants is to stimulate the planning, design and development of greenways. Information can be found at: www.conservationfund.org.

Rehabilitation Service Programs

This program is available through the US Department of Education, Office of Special Education and Rehabilitative Services. The intent of the program is to provide disabled individuals with recreational activities and related experiences that can aid in employment, mobility, socialization, independence and community integration. Specific project activities may include swimming, wheelchair basketball, camping, hiking, water skiing, horseback riding, arts and sports. Historically, applications are due in September of each year.

U.S. Soccer Foundation Grants

The U.S. Soccer Foundation awards grants on both an annual basis (Program grants) and through a rolling process (Safe Places to Play grants) to support soccer programs and field-building initiatives nationwide. Grants are provided to support all aspects of the beautiful game — from assisting programs with operational costs to creating Safe Places to Play. Each season, a grant cycle opens for spring, summer and fall, which cover grants for lighting, irrigation and sport courts. They also offer grant opportunities specifically for synthetic turf and program equipment, these are offered once a year.



APPENDIX

PARK SYSTEM GOALS

Consolidate Sports Activities to Bring Back Neighborhood Park Uses

Currently, soccer and baseball are divided between three parks: Willow Park, City Park and Bernard Park. The soccer is held at Willow and Bernard, while City Park is used for baseball. Willow and City Park are in the middle of neighborhoods, and currently don't offer many neighborhood park amenities. By consolidating the sport activities to Bernard Park, these other parks would be freed up to offer more suitable uses for their locations in proximity to where residents live.

Raise the Health, Safety and Welfare of Kids by Improving Play Experiences

This goal is to improve all of the play experiences in the park system by upgrading all play features and surfaces that aren't currently up to standard. The sports fields that are currently being used are not optimal. Many of the fields are not graded properly, which creates drainage issues and hazards for the kids playing the sport. This is also the case for several of the playgrounds, or play structures, which are outdated and need to be replaced.

Eliminate Peak Parking Draws in Neighborhoods

The goal is to add uses to the neighborhood parks that don't flood the parking lot, or the neighborhood with cars. This goal works in conjunction with the first, the consolidation of sports. By having sports activities held in neighborhood parks, it creates a peak time that cars need to park for sports games. None of the parks currently have enough parking to accommodate all of the cars that are present during these games, which leads to cars lining neighborhood streets, blocking driveways and upsetting neighbors.

Expand Lansing's Trail System and Connect to Parks and Recreation Amenities

This goal was requested by the community and City Staff, that would also create safer routes to school. Lansing's trail system continues to grow as larger trails continue to be implemented around the City. The goal is to encourage that growth, but specifically between each of the parks. The trail system in Lansing is growing, but not necessarily connecting each of the parks, which would be a great asset for the community.

Make Park Trails More Bicycle Friendly

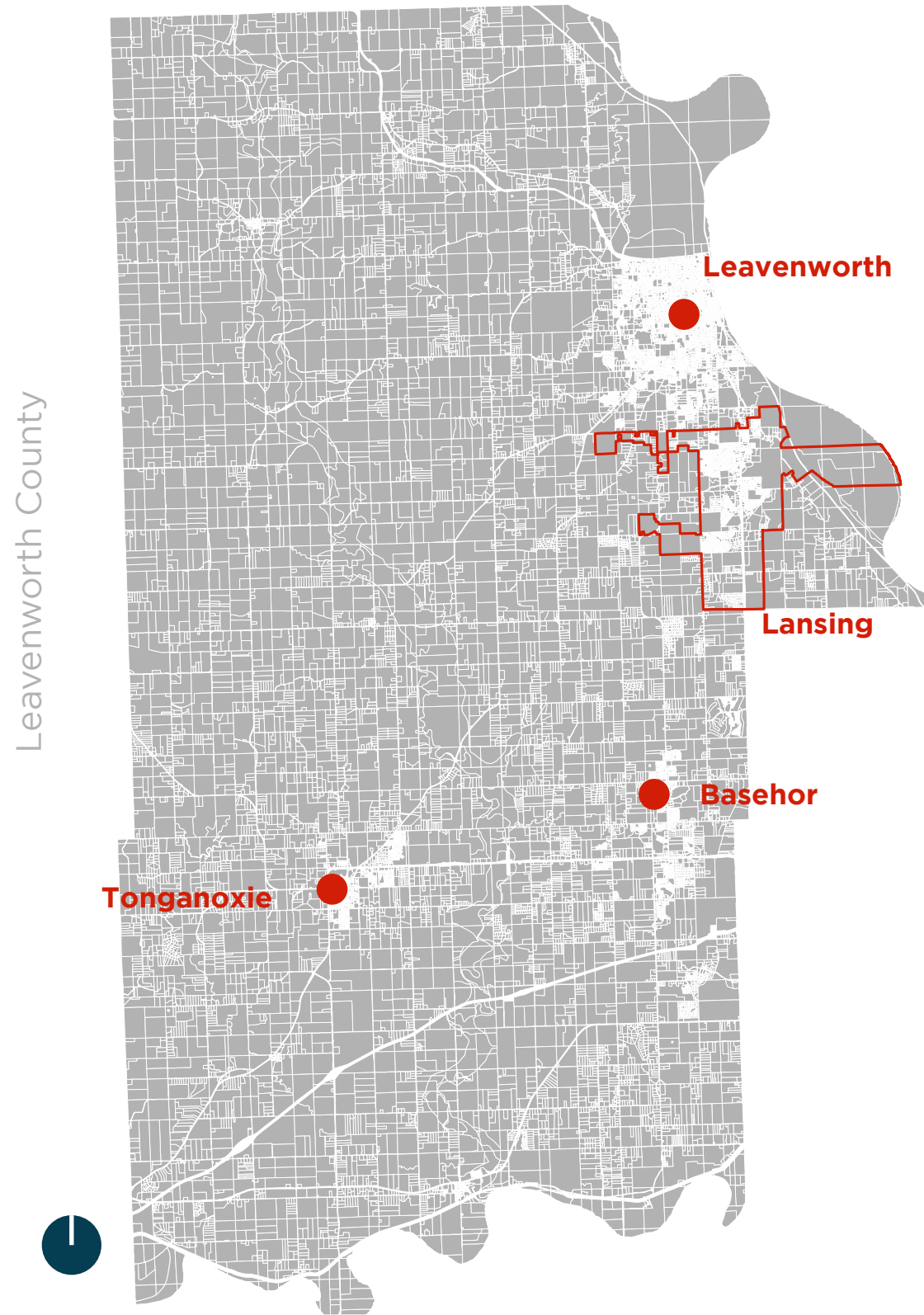
This goal pertains to the individual park walking trails, where most currently aren't wide enough, or aren't paved to a level that allows bicycle traffic as well as pedestrians. At the request of the community and City Staff, it is a goal in the following recommendations to make most, if not all of the trails in each of the parks, usable by bikes. This would fill an amenity gap in Lansing's parks.

Provide a Restroom at Every Park

This goal is to offer a restroom as a needed amenity to each of the parks in Lansing. Lansing currently only offers one restroom at City Park and is not open unless a game is taking place. All other parks either have a portable restroom, or none at all. This was a serious issue that was raised by the community and City Staff.

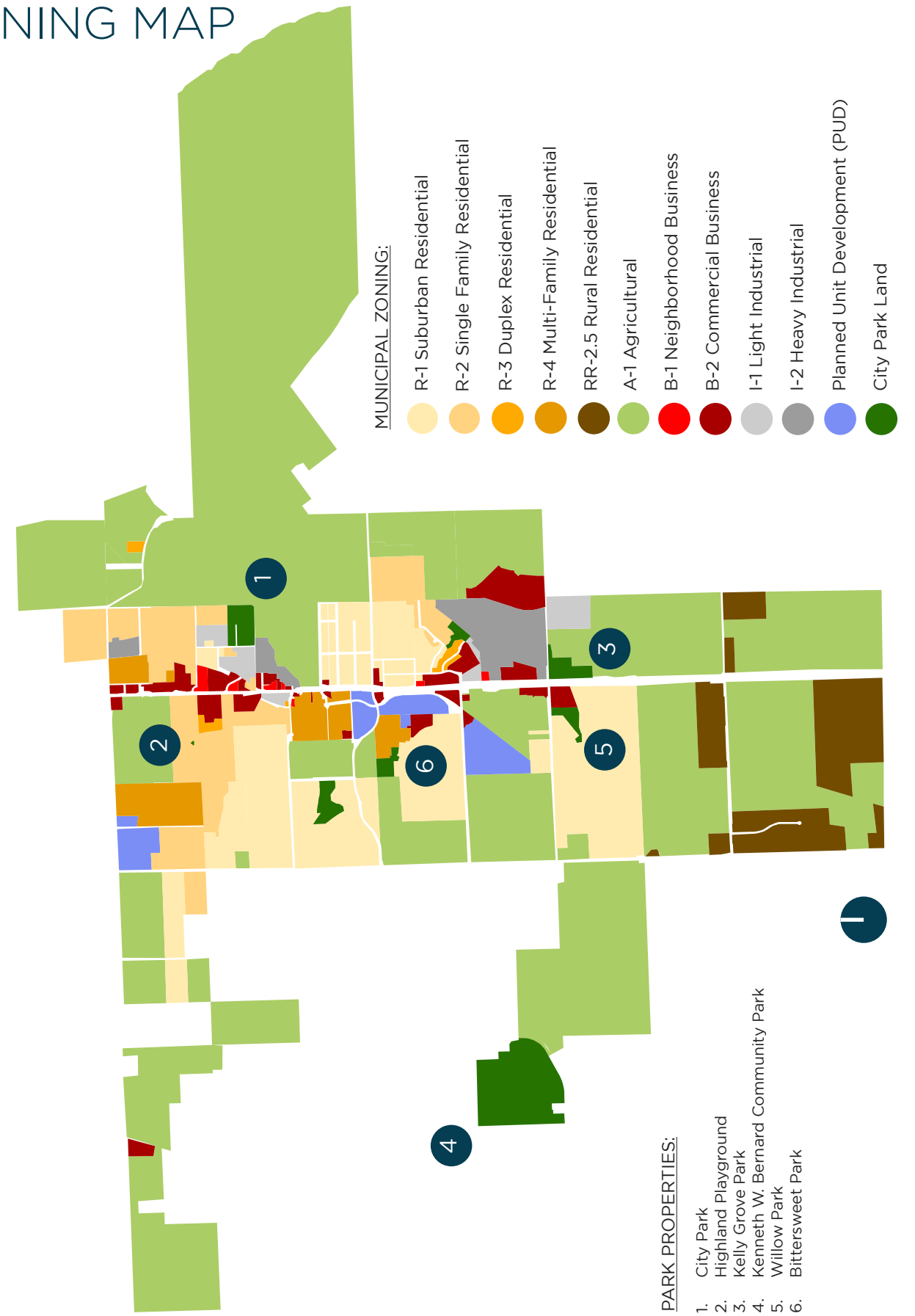
GIS MAPS

CONTEXT MAP



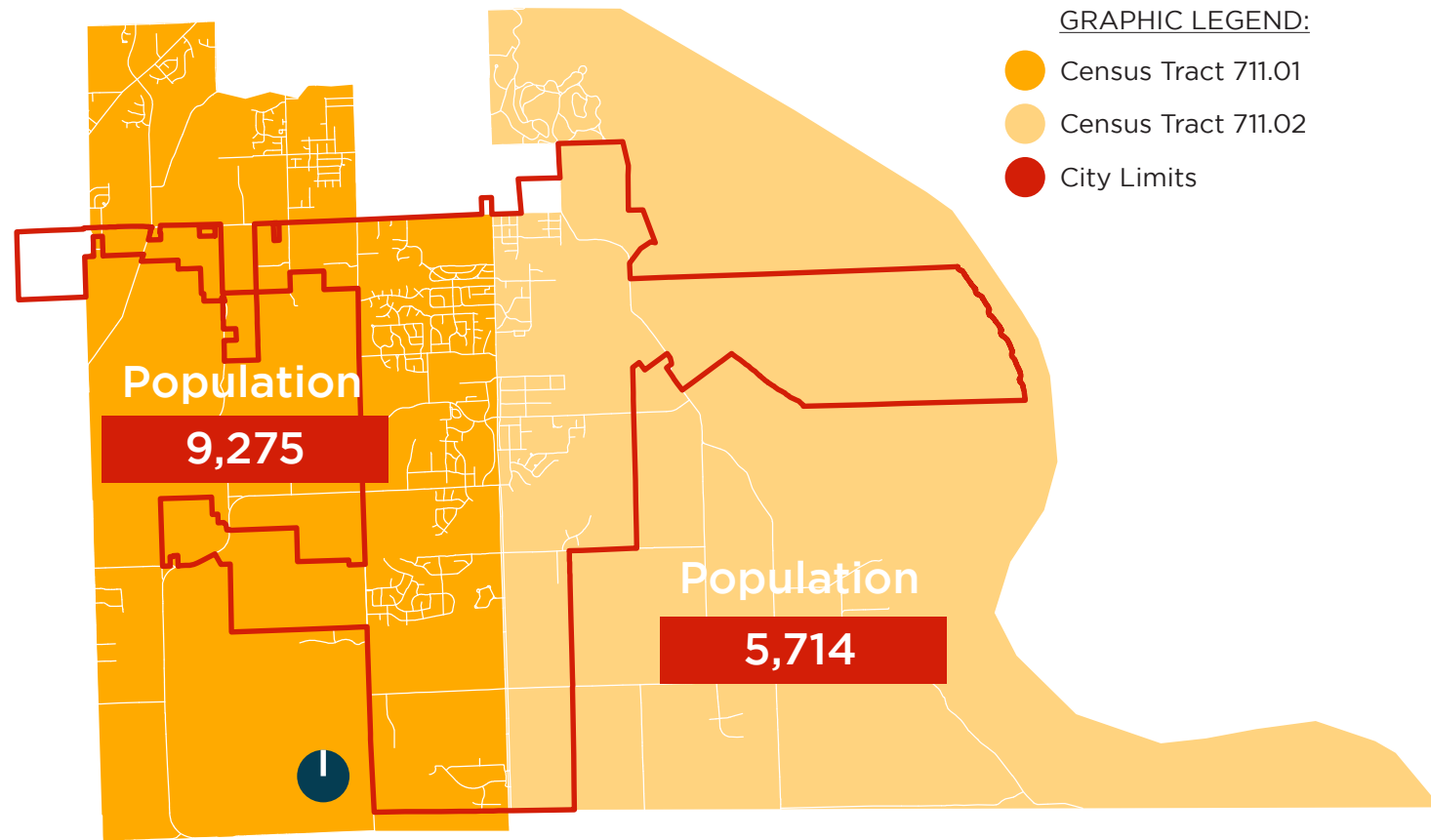
GIS MAPS

ZONING MAP



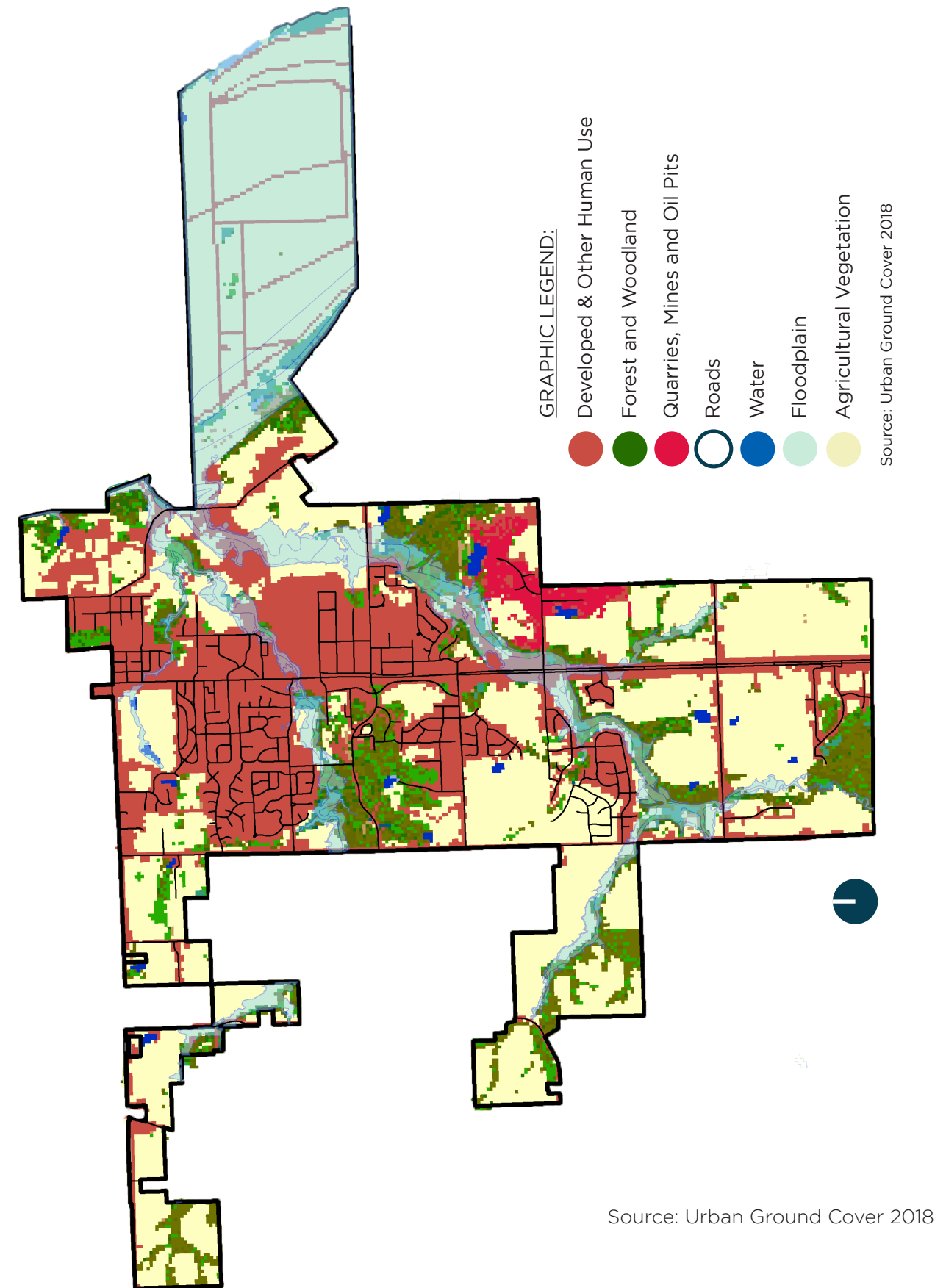
GIS MAPS

POPULATION MAP



GIS MAPS

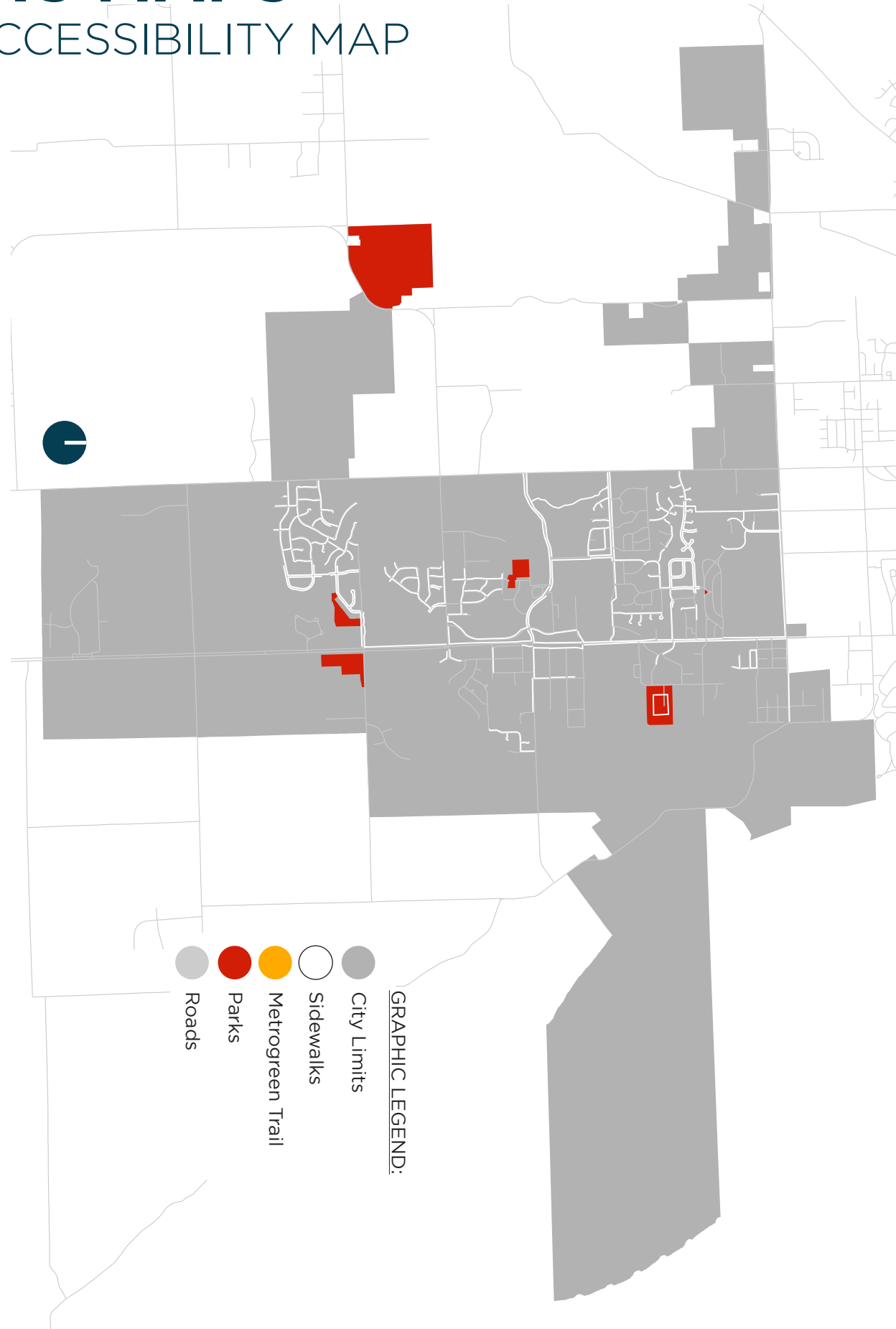
URBAN LAND COVER MAP



Source: Urban Ground Cover 2018

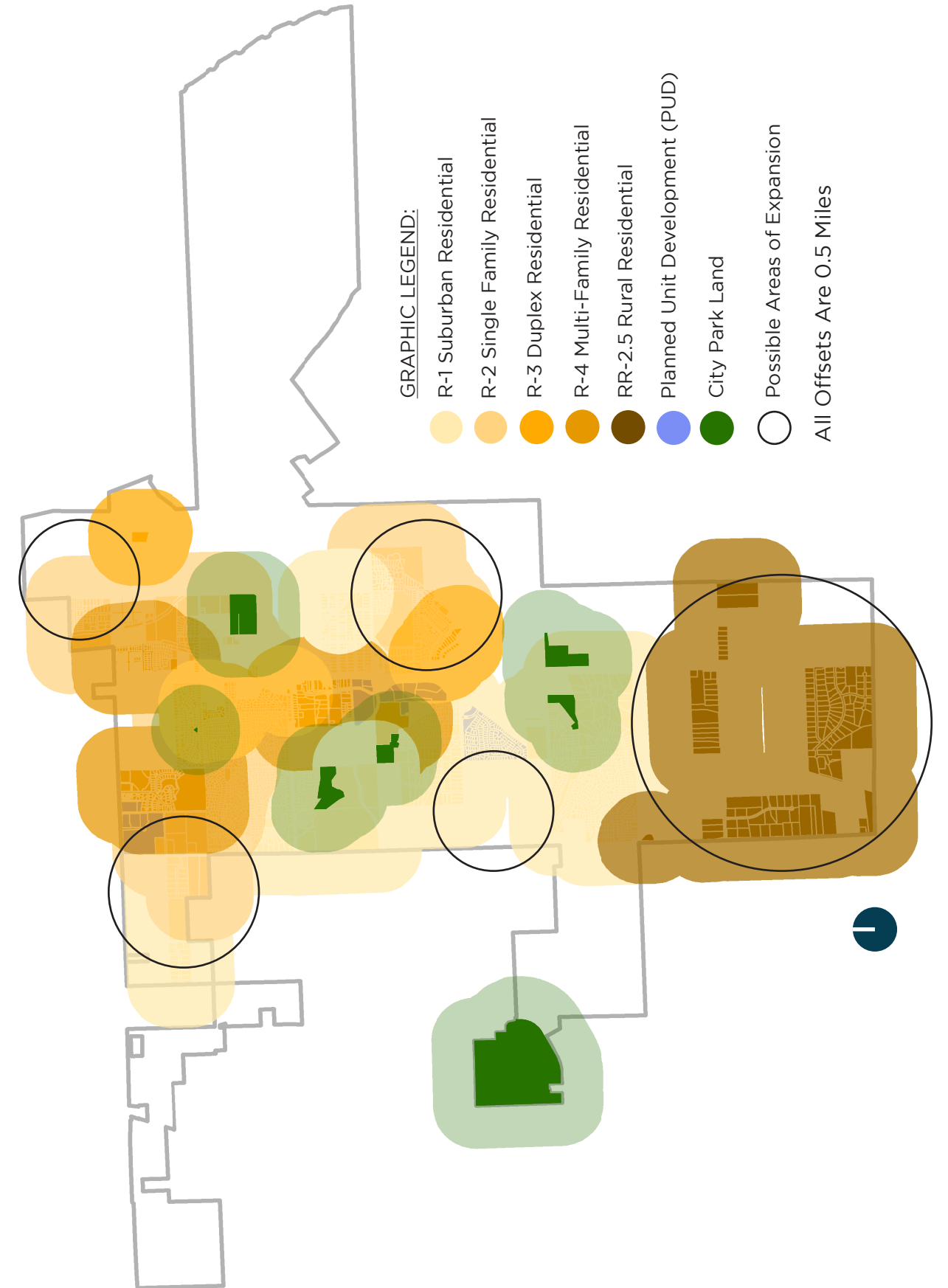
GIS MAPS

ACCESSIBILITY MAP



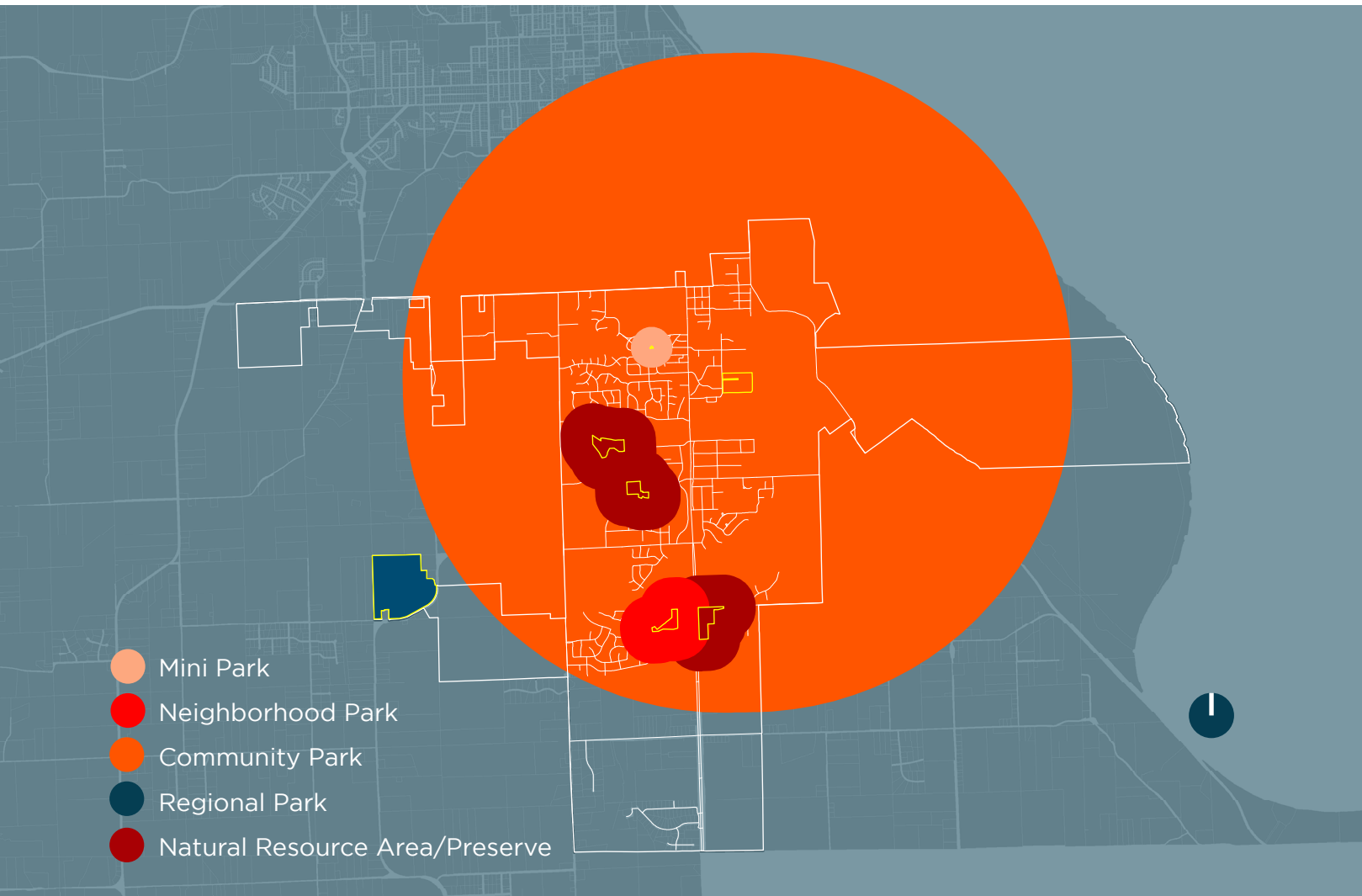
GIS MAPS

GAP ANALYSIS MAP



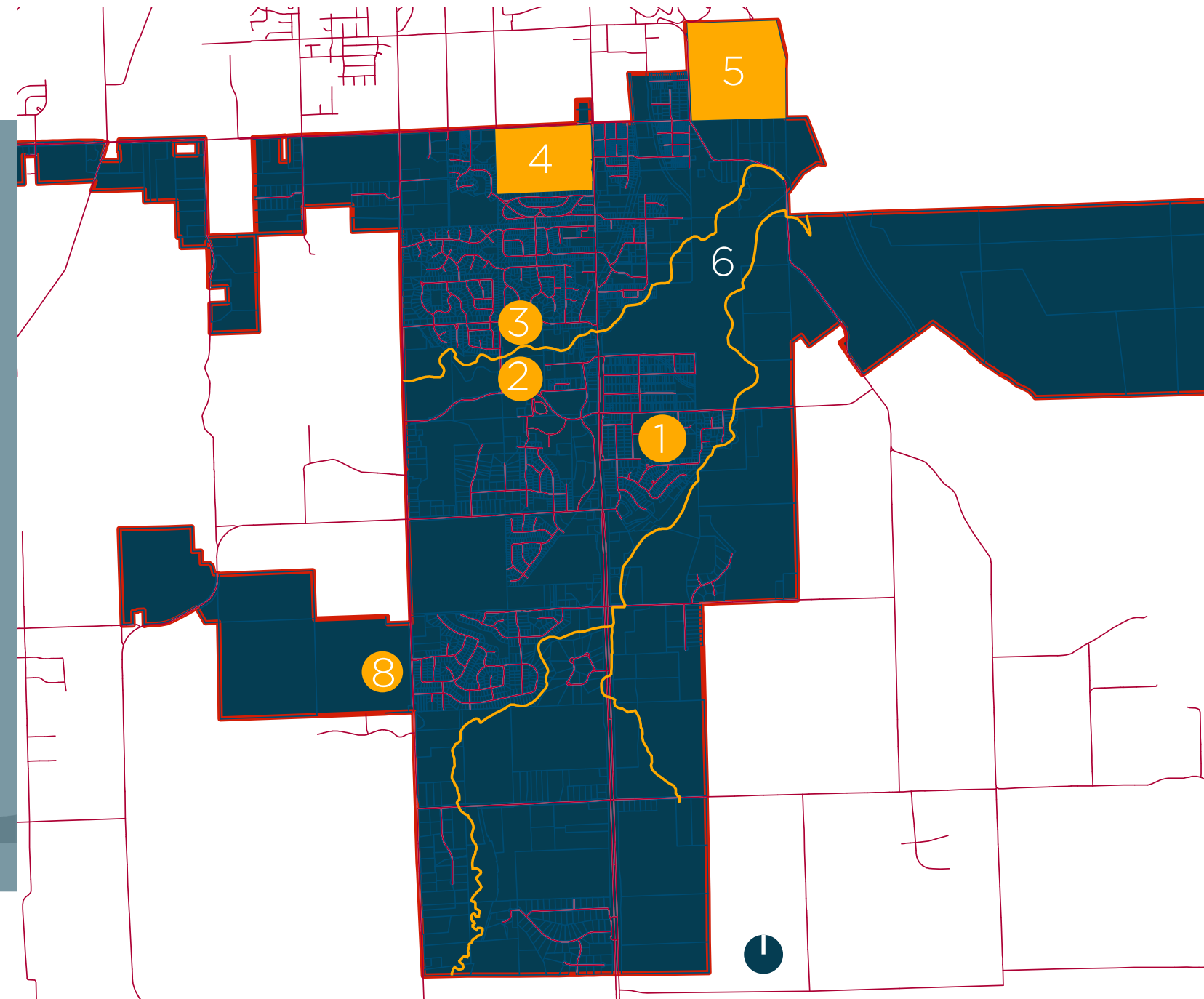
GIS MAPS

LEVEL OF SERVICE MAP



GIS MAPS

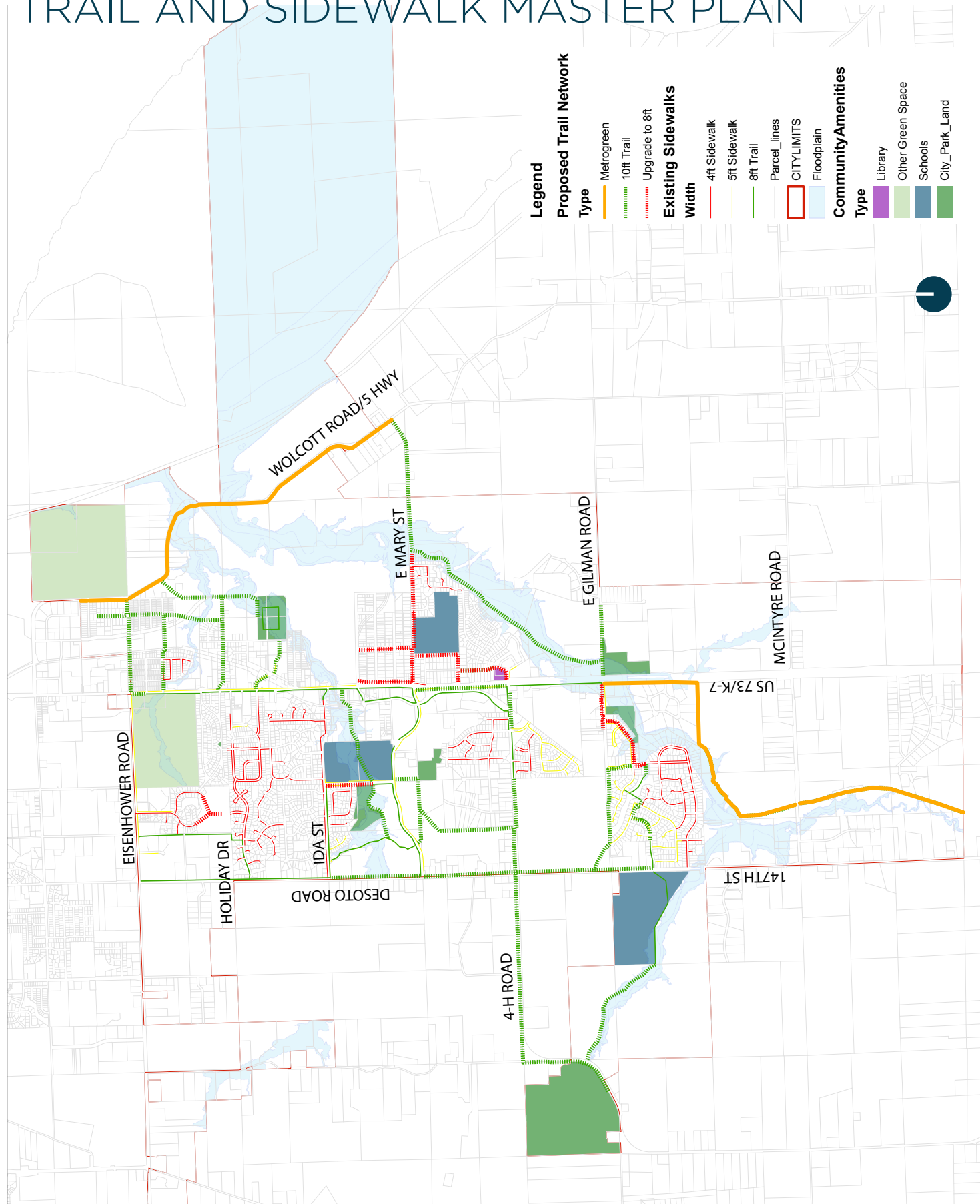
COMMUNITY AMENITIES MAP



- 1. Lansing Middle School
- 2. Lansing Elementary School
- 3. Lansing Intermediate School
- 4. Leavenworth Country Club and Golf Course
- 5. Leavenworth National Cemetery and Mt Muncie Cemetery
- 6. Sevenmile Creek
- 7. Ninemile Creek
- 8. Lansing High School

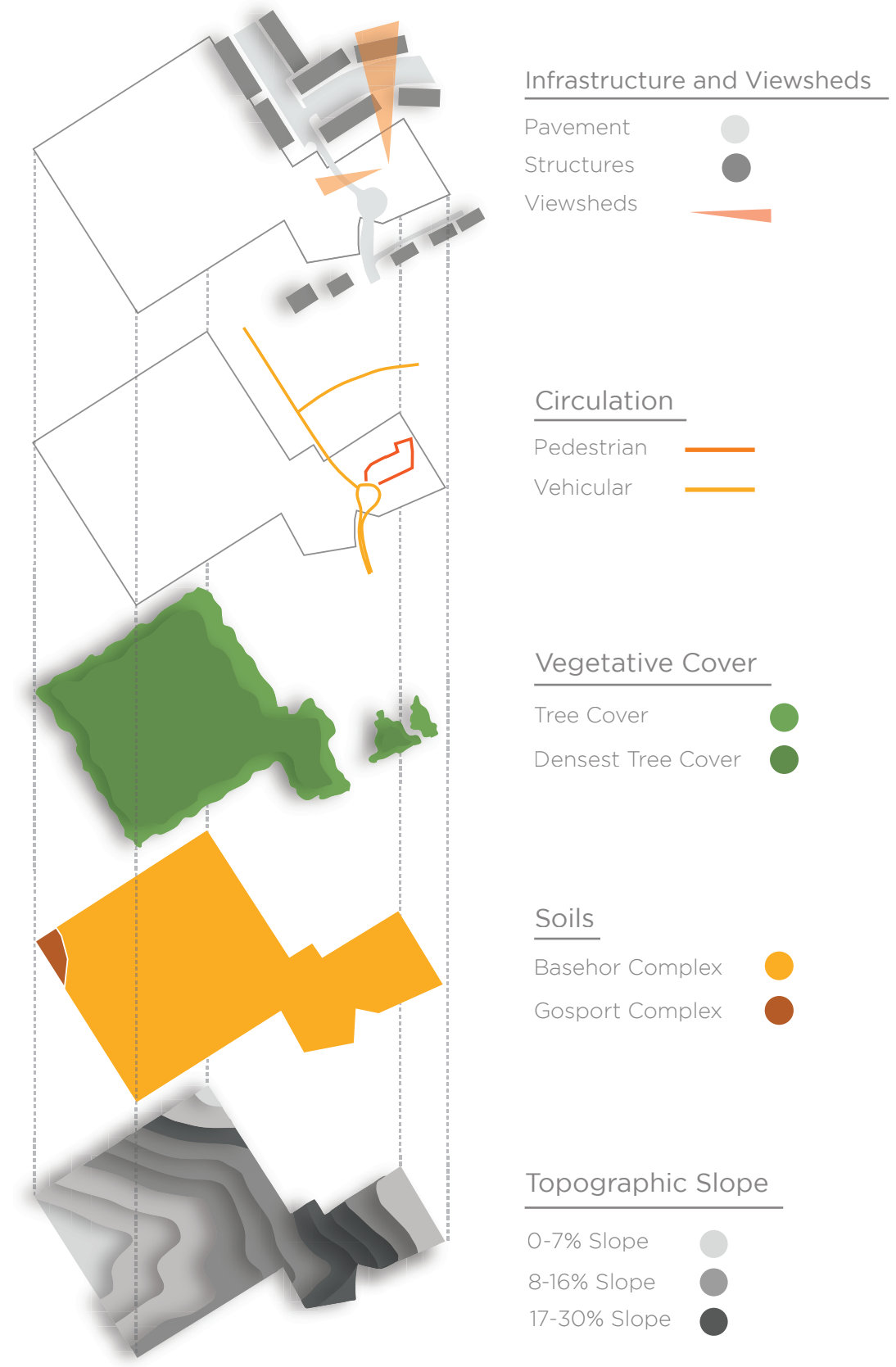
GIS MAPS

TRAIL AND SIDEWALK MASTER PLAN



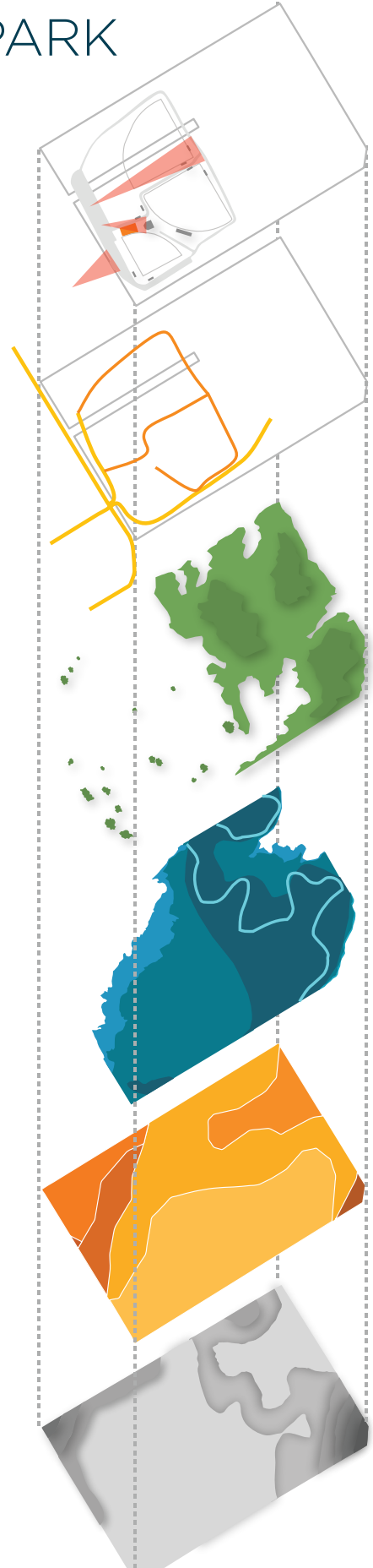
SITE ANALYSIS GRAPHICS

BITTERSWEET PARK



SITE ANALYSIS GRAPHICS

CITY PARK



Infrastructure and Viewsheds

- Pavement
- Built Amenity
- Sports Field
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Vegetative Cover

- Tree Cover
- Densest Tree Cover

Hydrology

- Creek
- Rarely Flooded
- Occasionally Flooded
- Frequently Flooded

Soils

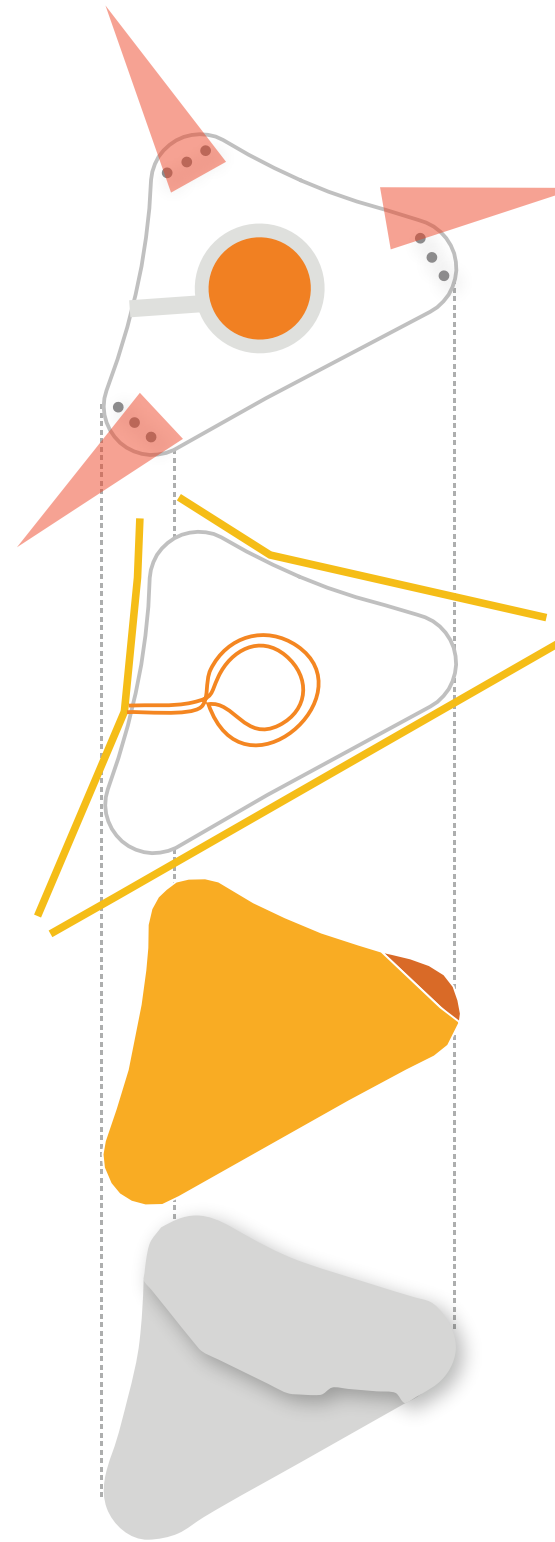
- Judson Silt Loam
- Knox Silt Loam
- Kennebec Silt Loam
- Kennebec Silt Loam

Topographic Slope

- 0-1% Slope
- 3-8% Slope
- 8-12% Slope

SITE ANALYSIS GRAPHICS

HIGHLAND PLAYGROUND



Infrastructure and Viewsheds

- Pavement
- Built Amenity
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Soils

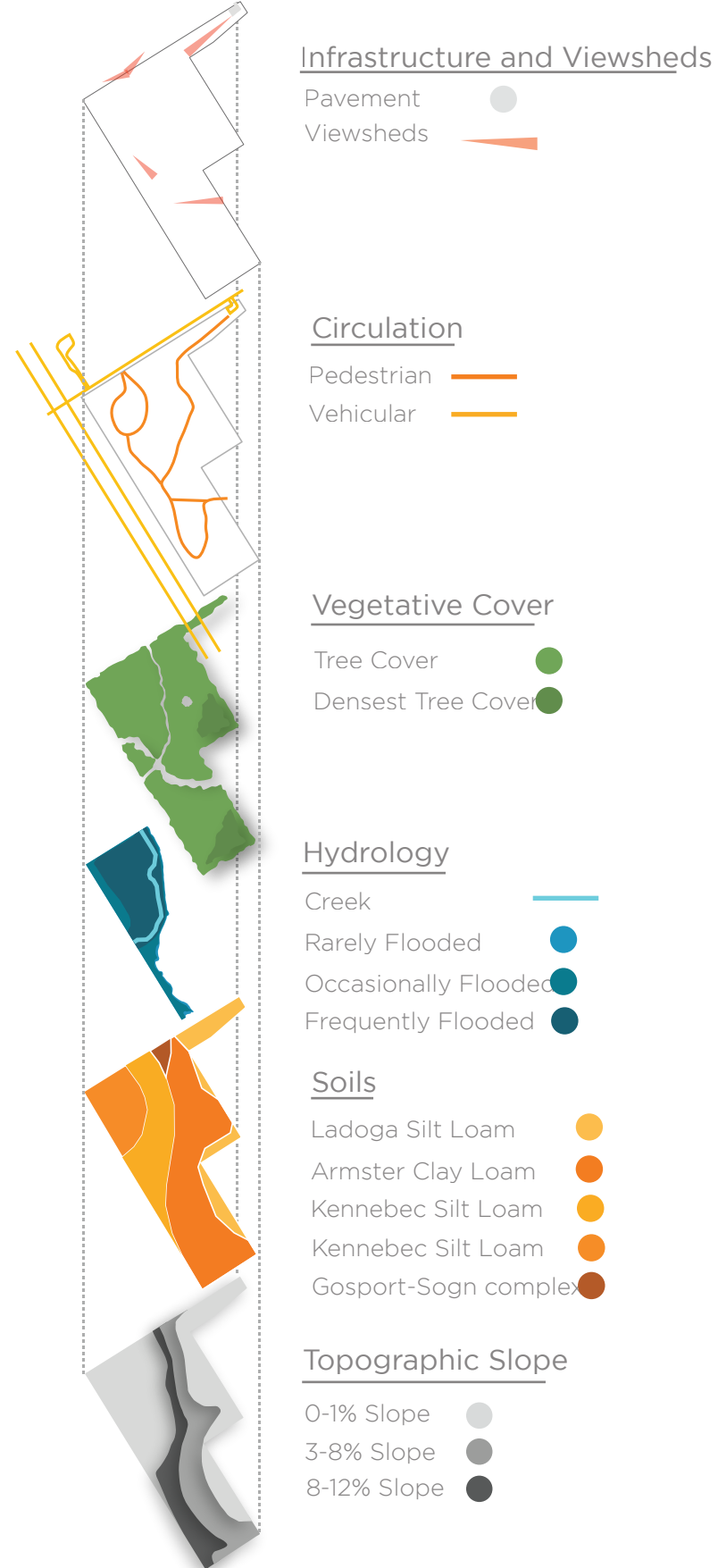
- Sharpsburg Silty Clay Loam
- Grundy Silty Clay Loam

Topographic Slope

- 1-3% Slope

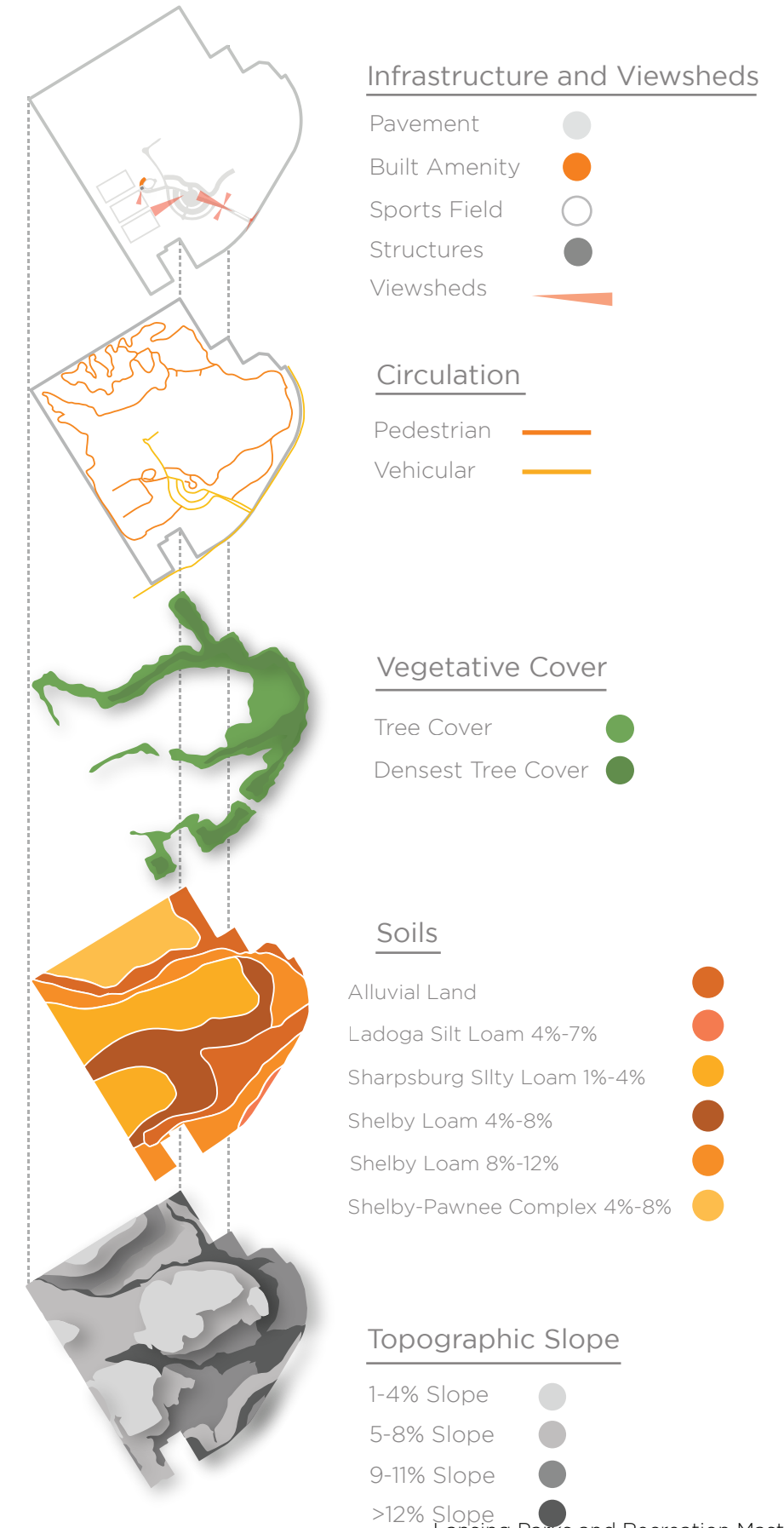
SITE ANALYSIS GRAPHICS

KELLY GROVE PARK



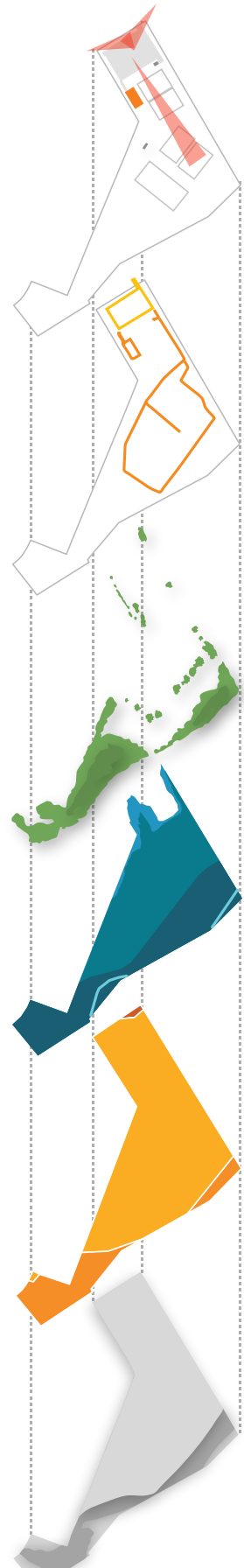
SITE ANALYSIS GRAPHICS

BERNARD PARK



SITE ANALYSIS GRAPHICS

WILLOW PARK



Infrastructure and Viewsheds

- Pavement
- Built Amenity
- Sports Field
- Structures
- Viewsheds

Circulation

- Pedestrian
- Vehicular

Vegetative Cover

- Tree Cover
- Densest Tree Cover

Hydrology

- Creek
- Rarely Flooded
- Occasionally Flooded
- Frequently Flooded

Soils

- Kennebec Silt Loam
- Ladoga Silt Loam
- Judson Silt Loam

Topographic Slope

- 0-1% Slope
- 3-8% Slope

CITIZEN SURVEY

Lansing Parks and Recreation Master Plan Community Survey

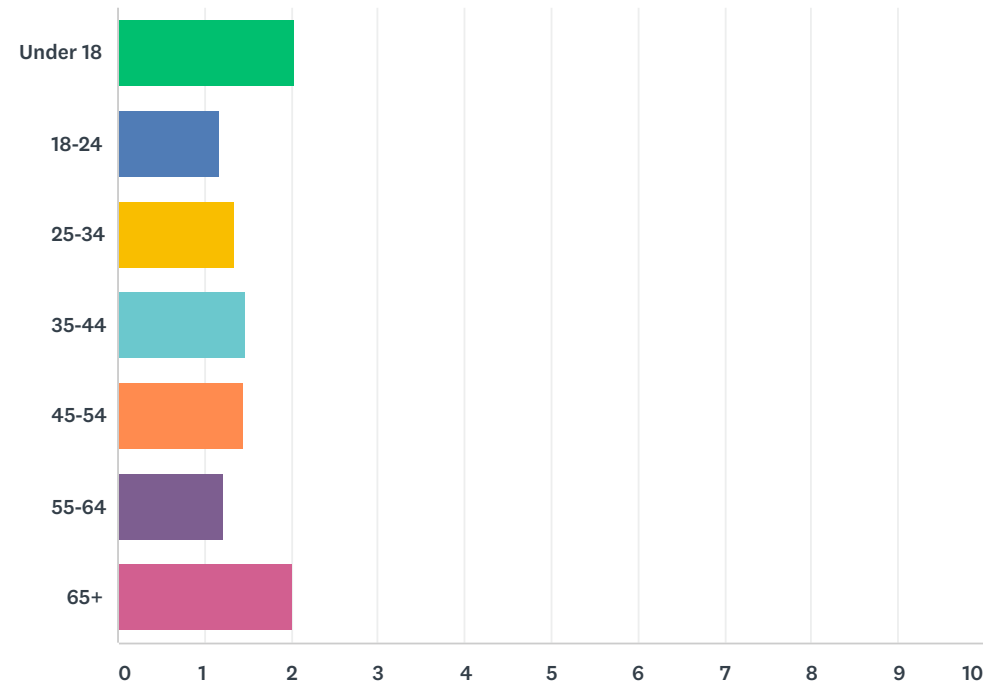
SurveyMonkey

Q1 Counting yourself, how many people live in your household?

Answered: 470 Skipped: 15

Q2 Counting yourself, how many people in your household are?

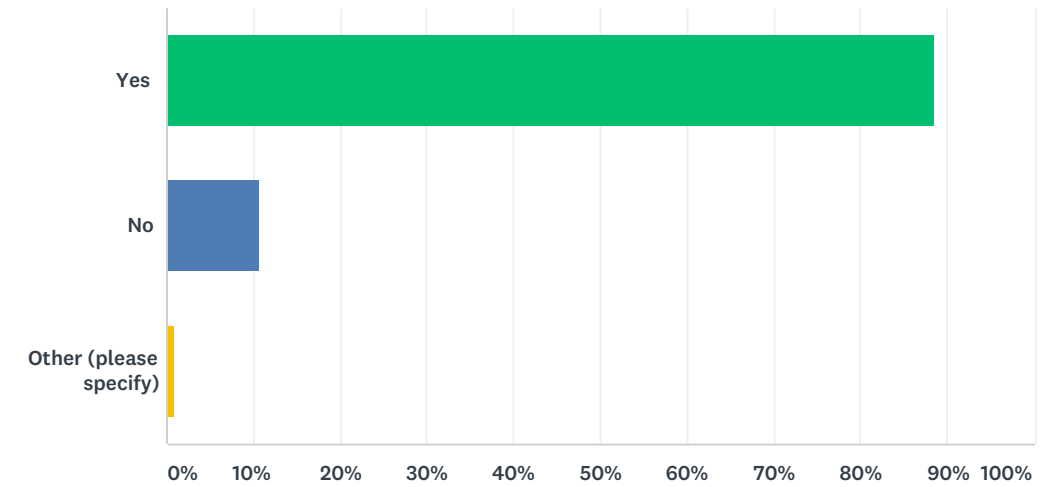
Answered: 470 Skipped: 15



ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
Under 18	2	694	342
18-24	1	144	124
25-34	1	171	128
35-44	1	306	209
45-54	1	235	163
55-64	1	137	112
65+	2	158	79
Total Respondents: 470			

Q3 Have you or members of your household visited any City of Lansing parks within the past year?

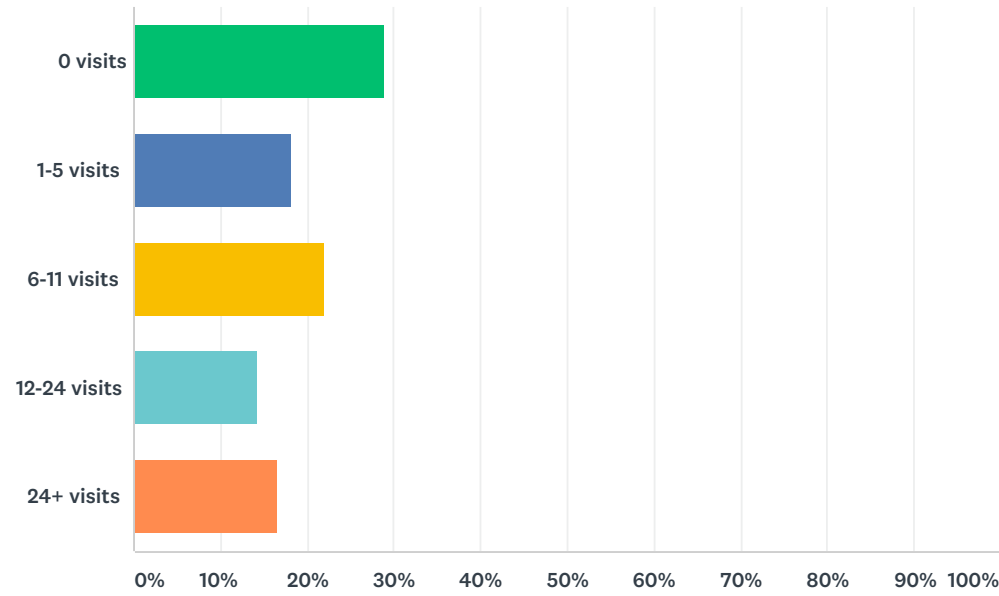
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Yes	88.51% 416
No	10.64% 50
Other (please specify)	0.85% 4
TOTAL	470

Q4 Please indicate how often you or members of your household have visited the following parks in the past year: Bernard Park, City Park, Highland Playground, Kelly Grove Park, and Willow Park

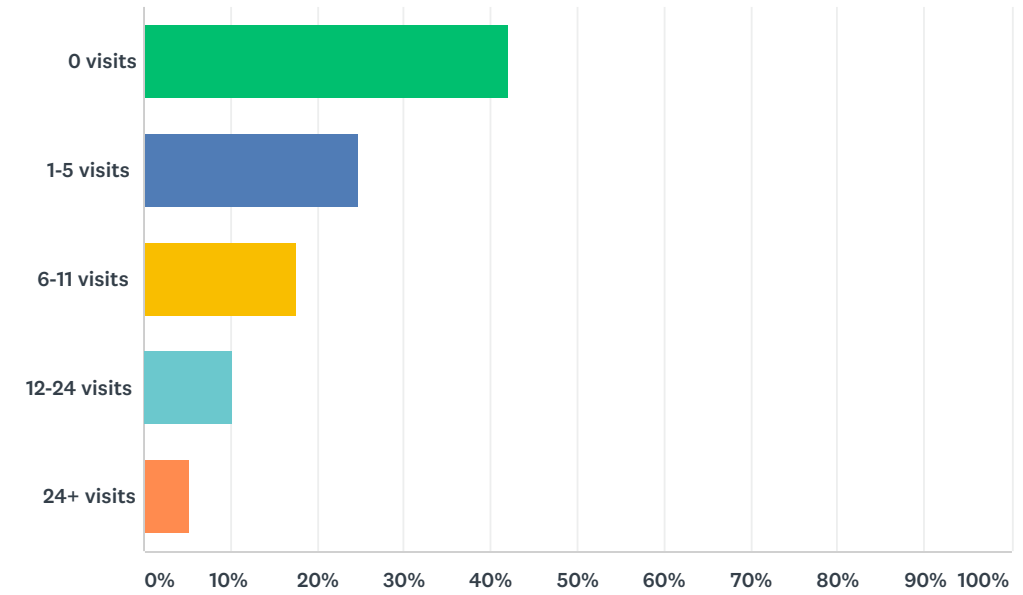
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
0 visits	28.94%	136
1-5 visits	18.30%	86
6-11 visits	21.91%	103
12-24 visits	14.26%	67
24+ visits	16.60%	78
TOTAL		470

Q5 Within the past year, how often have you or members of your household visited... Bernard Park

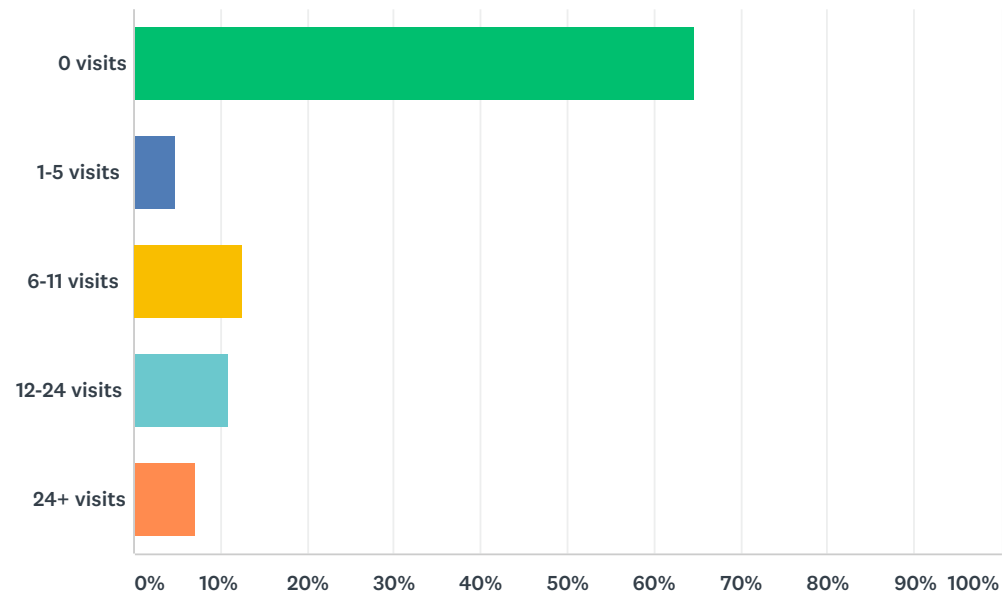
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
0 visits	42.13%	198
1-5 visits	24.68%	116
6-11 visits	17.66%	83
12-24 visits	10.21%	48
24+ visits	5.32%	25
TOTAL		470

Q6 City Park (Baseball, Softball Fields)

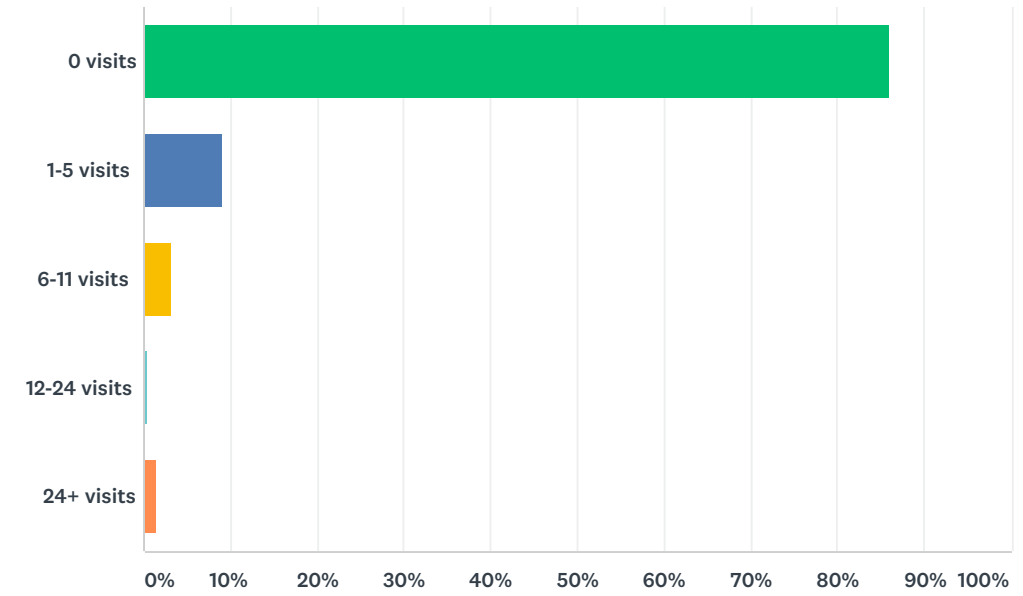
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
0 visits	64.68% 304
1-5 visits	4.89% 23
6-11 visits	12.55% 59
12-24 visits	10.85% 51
24+ visits	7.02% 33
TOTAL	470

Q7 Highland Playground

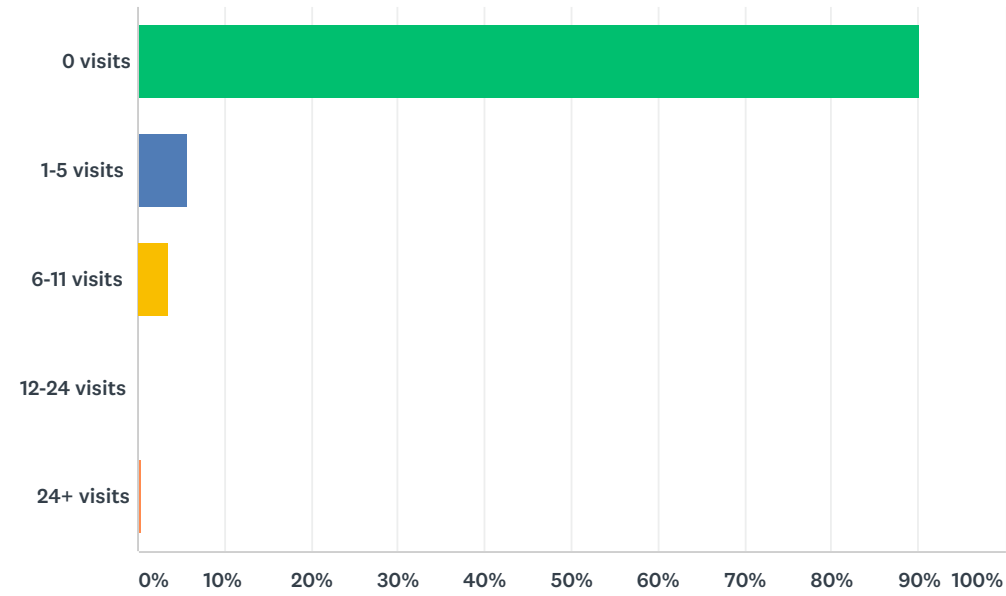
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
0 visits	85.96% 404
1-5 visits	8.94% 42
6-11 visits	3.19% 15
12-24 visits	0.43% 2
24+ visits	1.49% 7
TOTAL	470

Q8 Kelly Grove Park

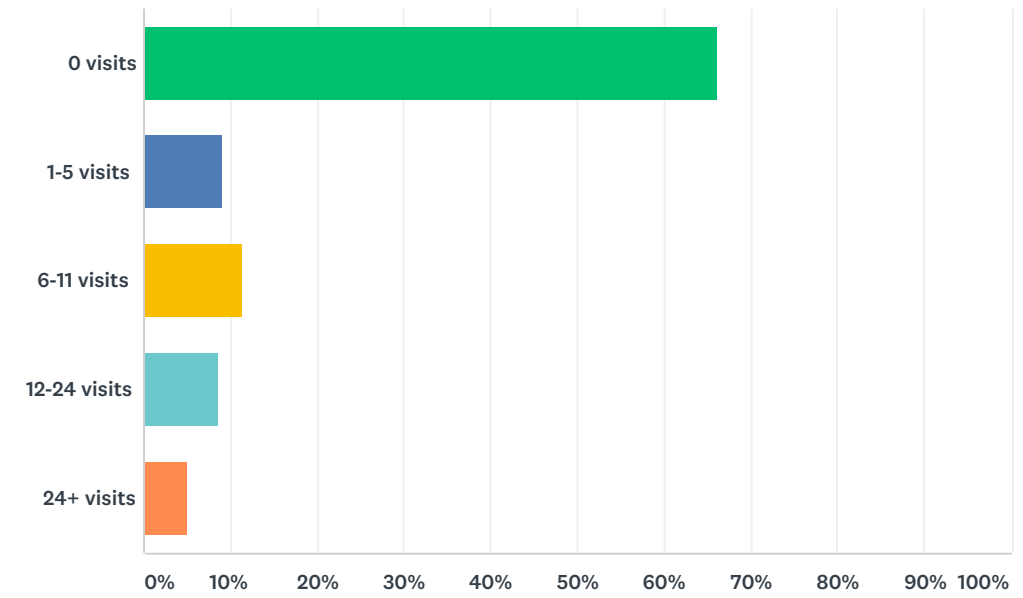
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
0 visits	90.21% 424
1-5 visits	5.74% 27
6-11 visits	3.62% 17
12-24 visits	0.00% 0
24+ visits	0.43% 2
TOTAL	470

Q9 Willow Park (Soccer Fields)

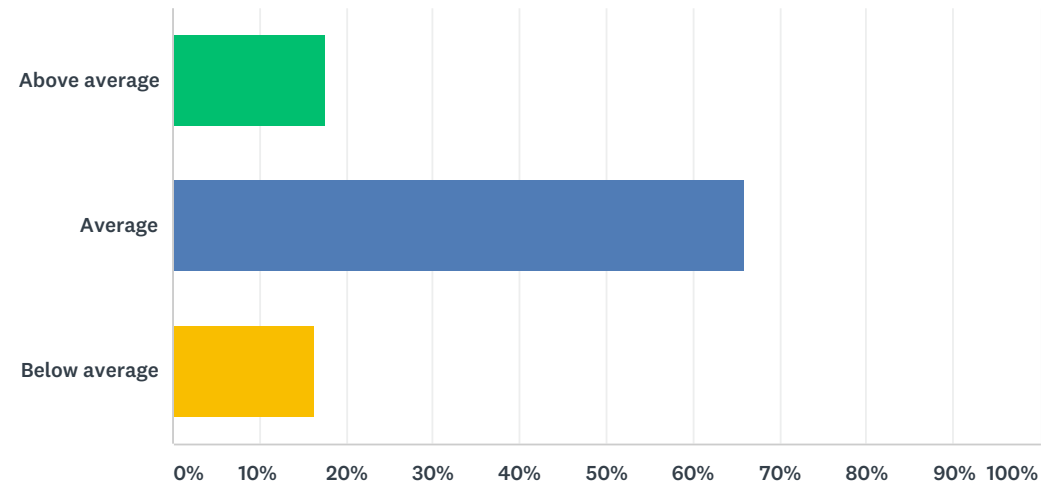
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
0 visits	66.17% 311
1-5 visits	8.94% 42
6-11 visits	11.28% 53
12-24 visits	8.51% 40
24+ visits	5.11% 24
TOTAL	470

Q10 How do you rate the physical condition of the Lansing Parks that you have visited?

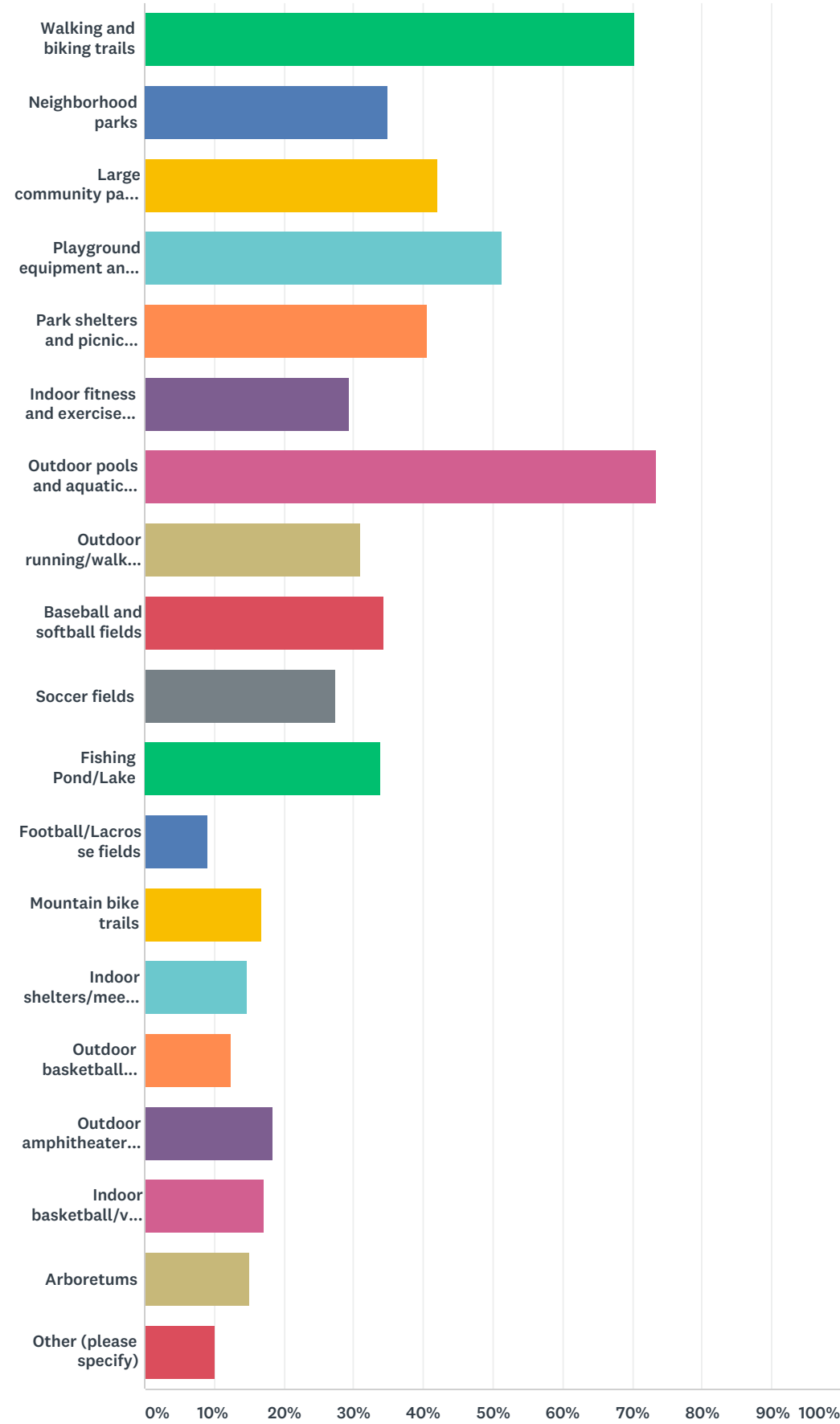
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Above average	17.66% 83
Average	65.96% 310
Below average	16.38% 77
TOTAL	470

Q11 What Lansing Parks and Recreation facilities are most important to you and your household? (check all that apply)

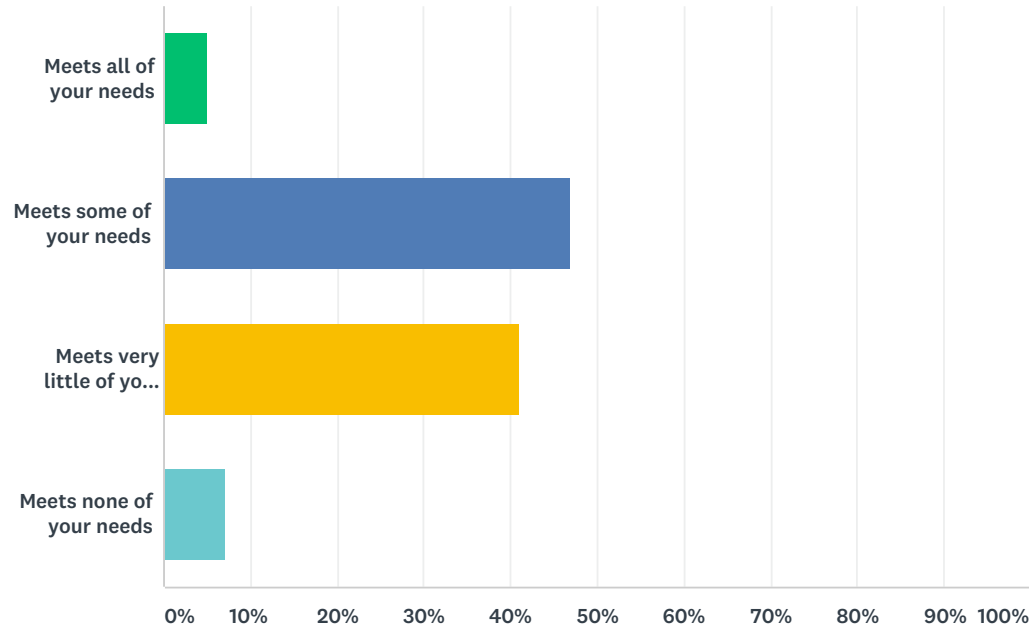
Answered: 470 Skipped: 15



Answer Choice	Percentage	Count
Walking and biking trails	70.21%	330
Neighborhood parks	34.89%	164
Large community parks nature trails	42.13%	198
Playground equipment and play areas	51.28%	241
Park shelters and picnic areas	40.64%	191
Indoor fitness and exercise facilities	29.36%	138
Outdoor pools and aquatic areas	73.40%	345
Outdoor running/walking track	31.06%	146
Baseball and softball fields	34.26%	161
Soccer fields	27.45%	129
Fishing Pond/Lake	33.83%	159
Football/Lacrosse fields	8.94%	42
Mountain bike trails	16.81%	79
Indoor shelters/meeting space	14.68%	69
Outdoor basketball courts	12.34%	58
Outdoor amphitheater/theater	18.51%	87
Indoor basketball/volleyball courts	17.23%	81
Arboretums	15.11%	71
Other (please specify)	10.00%	47
Total Respondents: 470		

Q12 Which ONE of the following statements best represents how the existing Lansing park, outdoor recreation, sports, fitness, and aquatic facilities meet your needs?

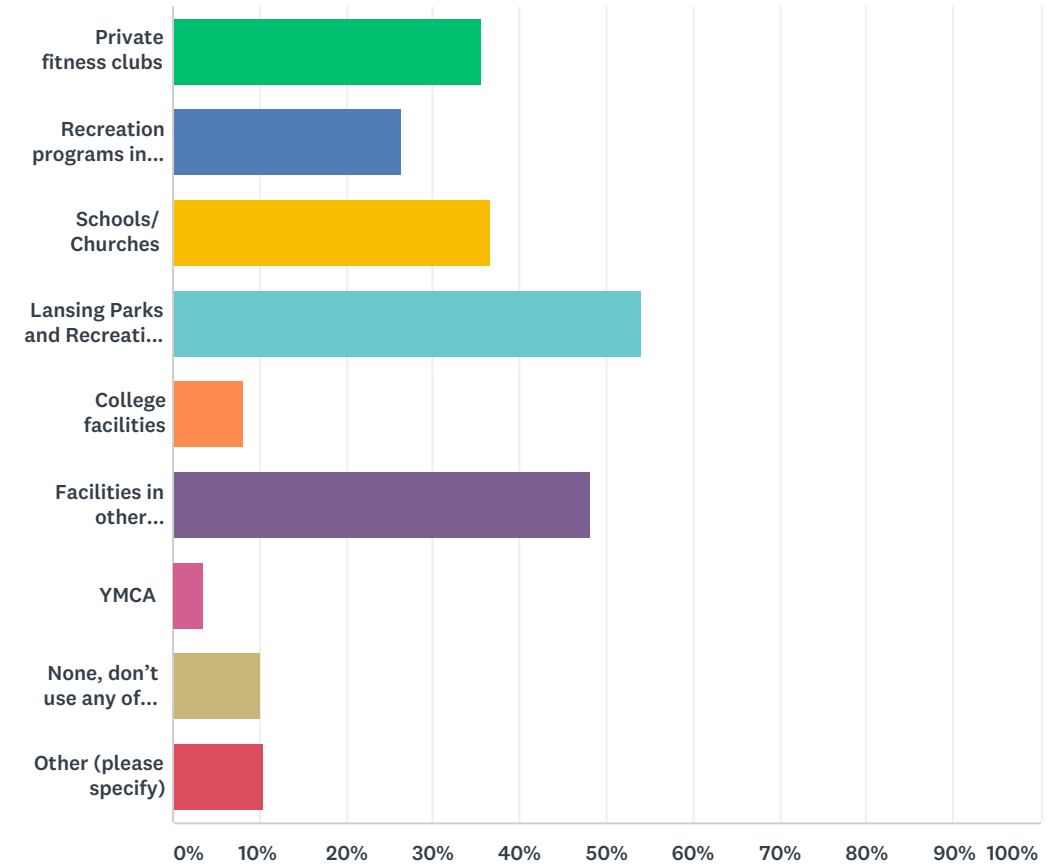
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Meets all of your needs	5.11% 24
Meets some of your needs	46.81% 220
Meets very little of your needs	41.06% 193
Meets none of your needs	7.02% 33
TOTAL	470

Q13 Which park, outdoor recreation, sports, fitness, and aquatic facilities do you and members of your household currently use? (check all that apply)

Answered: 470 Skipped: 15



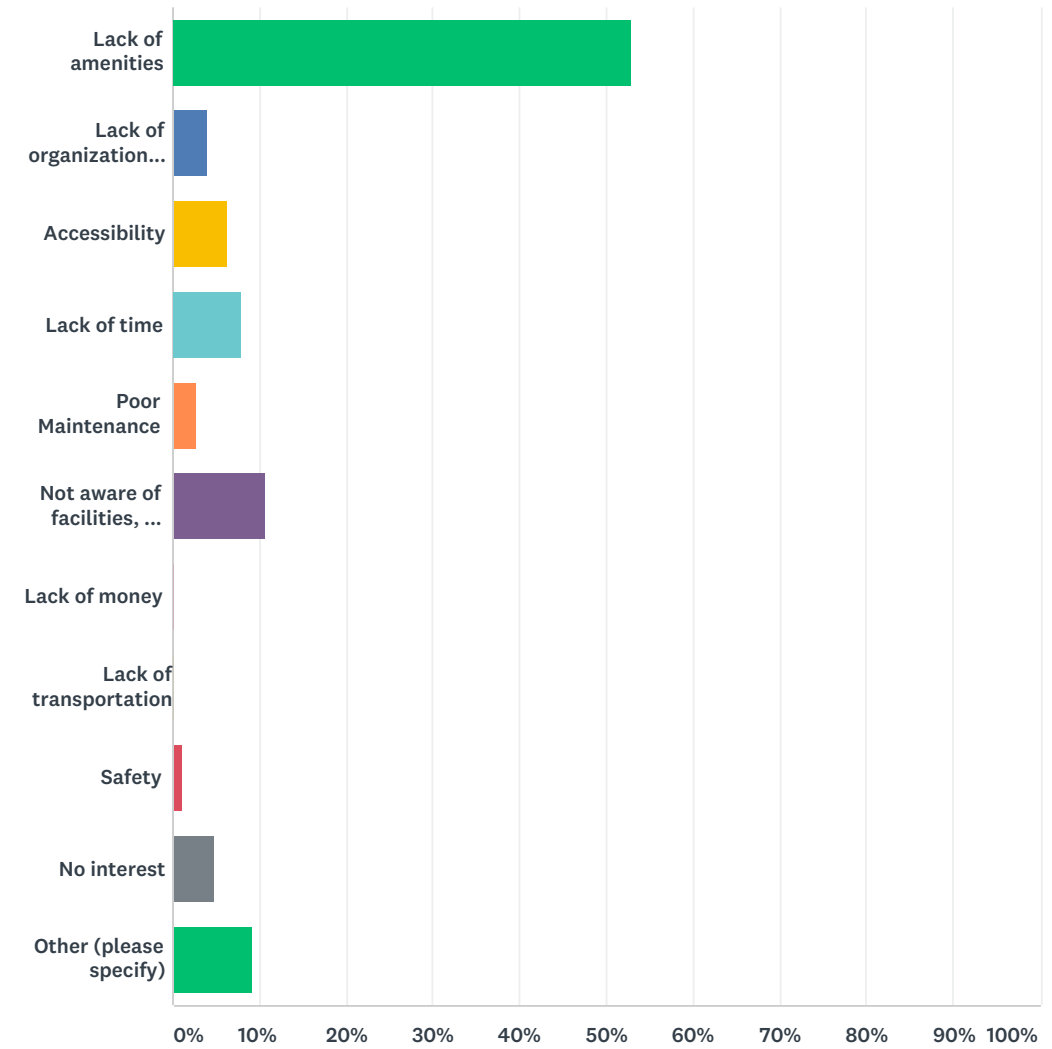
ANSWER CHOICES	RESPONSES
Private fitness clubs	35.53% 167
Recreation programs in schools	26.38% 124
Schools/ Churches	36.60% 172
Lansing Parks and Recreation facilities	54.04% 254
College facilities	8.09% 38
Facilities in other communities	48.09% 226
YMCA	3.62% 17
None, don't use any of these facilities	10.00% 47
Other (please specify)	10.43% 49
Total Respondents: 470	

Q14 If you selected "Facilities in other communities", which facilities did you use?

Answered: 324 Skipped: 161

Q15 Please indicate, if any, what prevents you or members of you family from using Lansing parks, facilities, or trails?

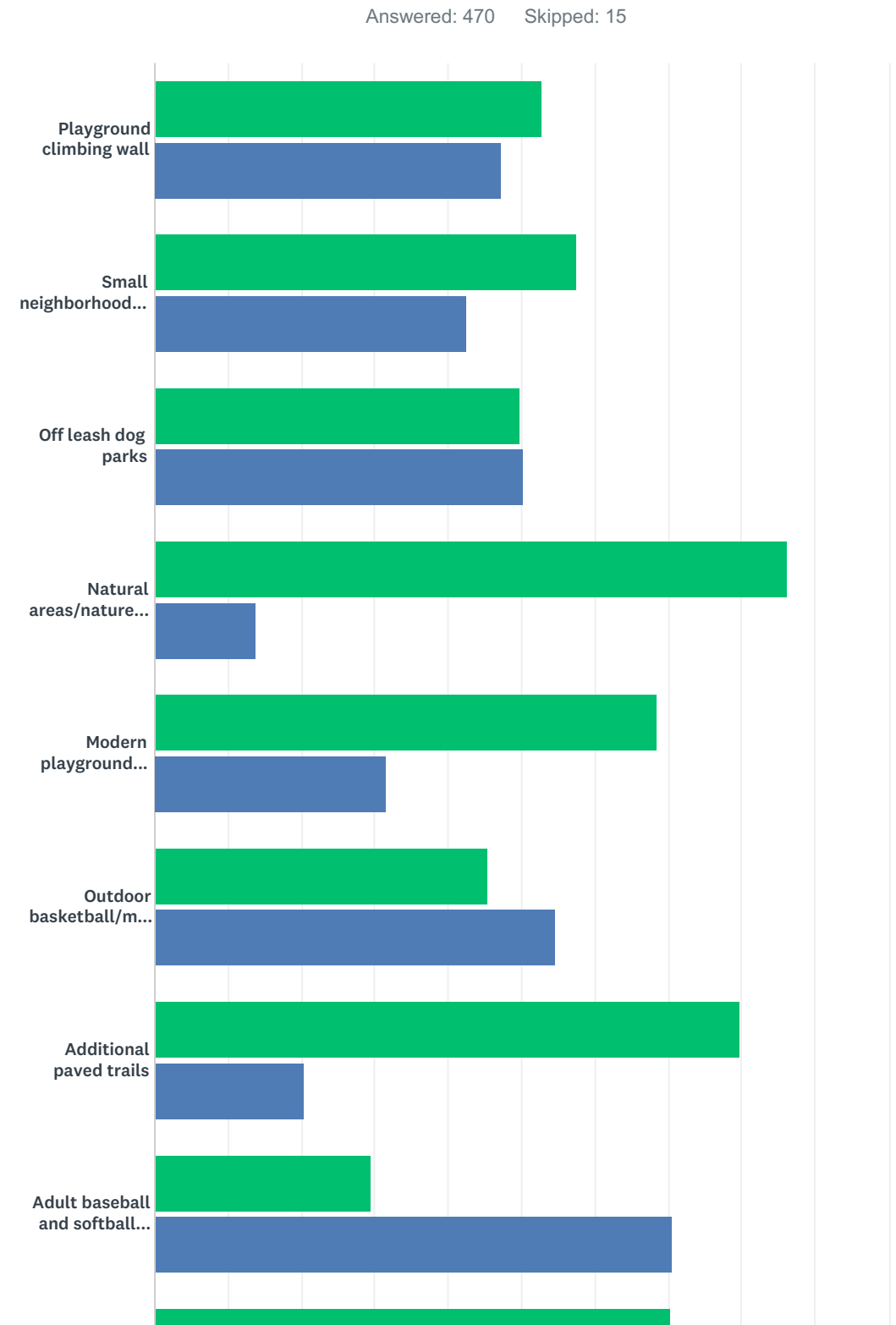
Answered: 444 Skipped: 41

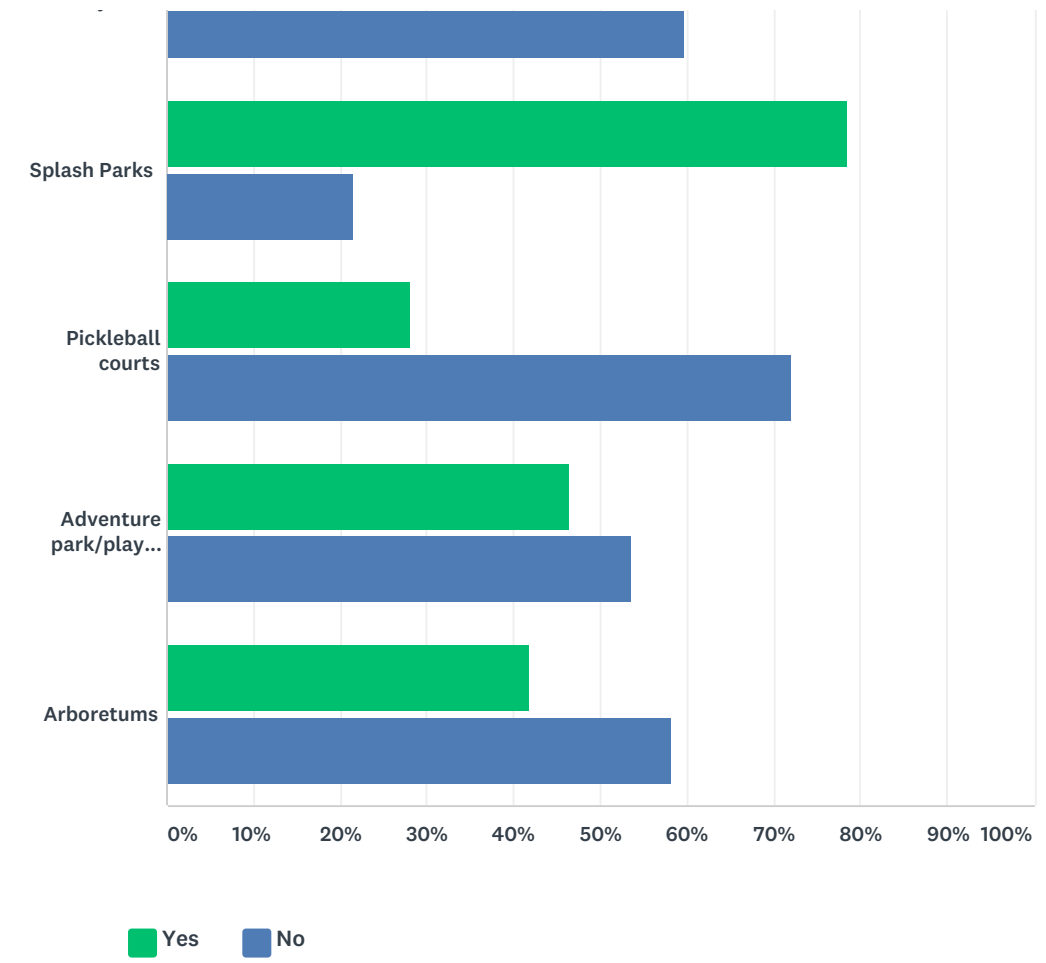
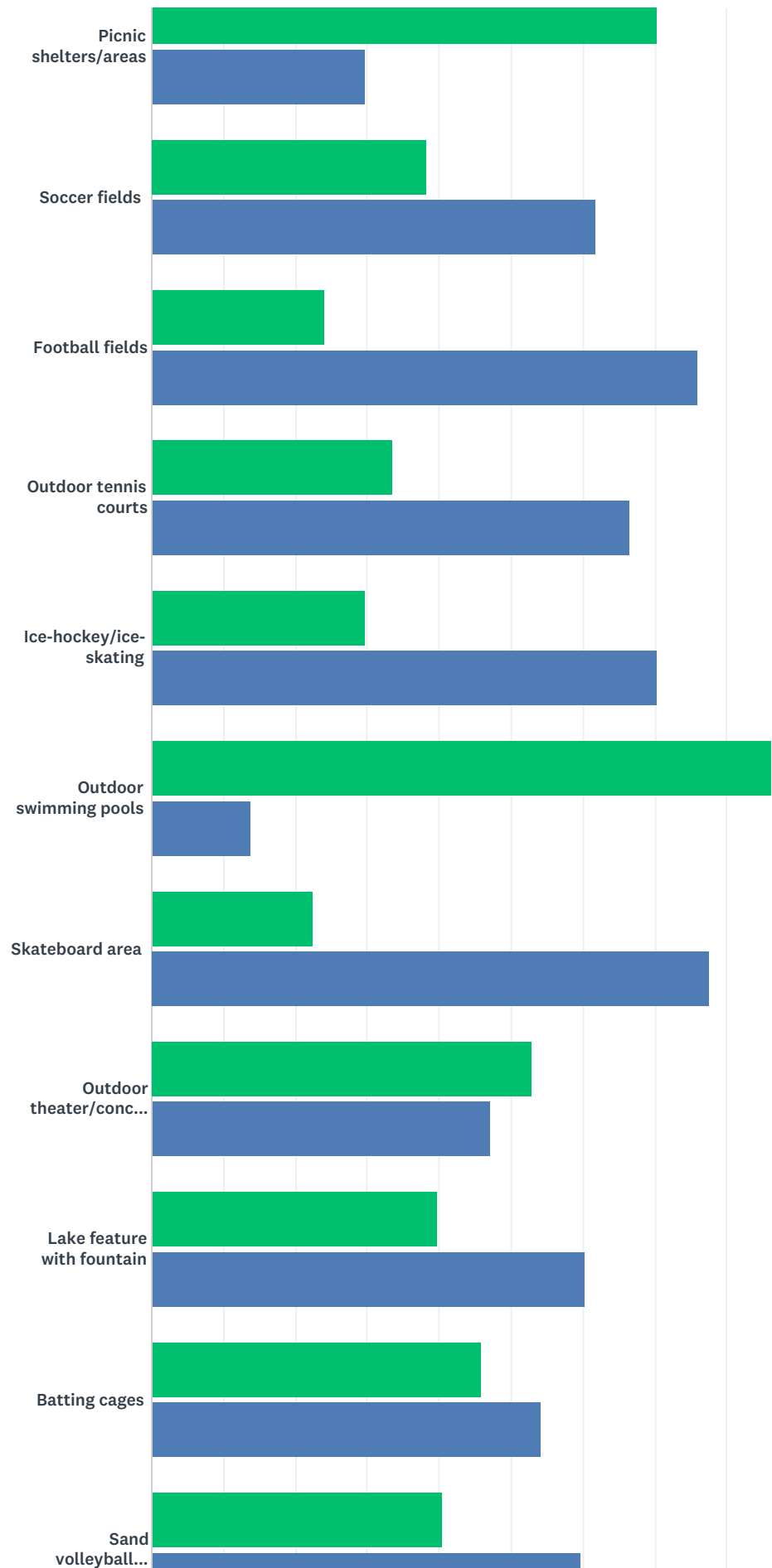


ANSWER CHOICES	RESPONSES	Count
Lack of amenities	52.93%	235
Lack of organization that participates in your interest	4.05%	18
Accessibility	6.31%	28
Lack of time	7.88%	35
Poor Maintenance	2.70%	12
Not aware of facilities, or their public availability	10.59%	47
Lack of money	0.23%	1
Lack of transportation	0.23%	1
Safety	1.13%	5

No interest	4.73%	21
Other (please specify)	9.23%	41
TOTAL		444

Q16 The City of Lansing would like your input regarding improvements to outdoor recreational facilities. Please indicate if YOU or any member of your HOUSEHOLD has a desire for each of the parks and recreational facilities listed below by indicating the YES OR NO next to the recreational facility. Does your household have a desire for:



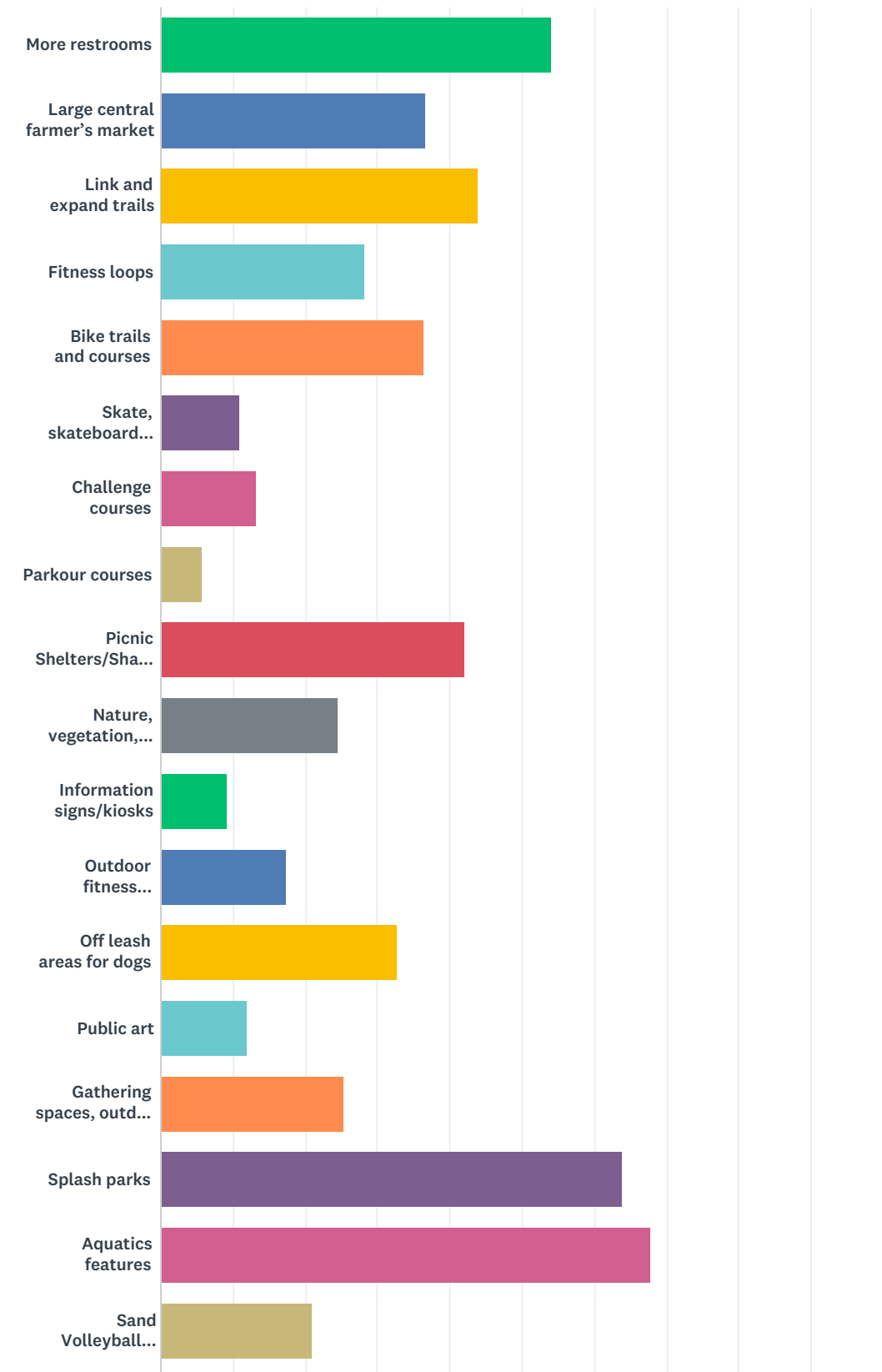


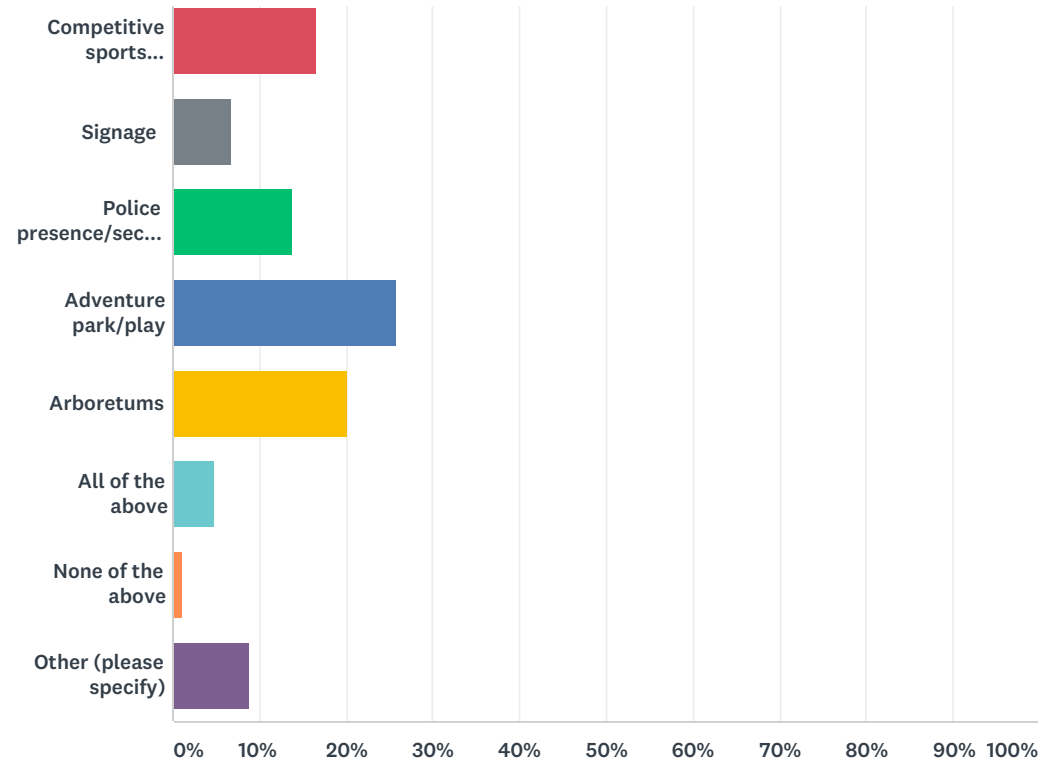
	YES	NO	TOTAL
Playground climbing wall	52.62% 231	47.38% 208	439
Small neighborhood parks	57.45% 243	42.55% 180	423
Off leash dog parks	49.77% 212	50.23% 214	426
Natural areas/nature trails	86.27% 377	13.73% 60	437
Modern playground equipment	68.32% 289	31.68% 134	423
Outdoor basketball/multi-use courts	45.34% 185	54.66% 223	408
Additional paved trails	79.72% 342	20.28% 87	429
Adult baseball and softball fields	29.50% 118	70.50% 282	400
Picnic shelters/areas	70.33% 294	29.67% 124	418
Soccer fields	38.35% 153	61.65% 246	399
Football fields	24.03% 93	75.97% 294	387

Outdoor tennis courts	33.50% 131	66.50% 260	391
Ice-hockey/ice-skating	29.74% 116	70.26% 274	390
Outdoor swimming pools	86.28% 390	13.72% 62	452
Skateboard area	22.45% 86	77.55% 297	383
Outdoor theater/concert area	52.93% 217	47.07% 193	410
Lake feature with fountain	39.80% 156	60.20% 236	392
Batting cages	45.80% 191	54.20% 226	417
Sand volleyball courts	40.40% 160	59.60% 236	396
Splash Parks	78.52% 340	21.48% 93	433
Pickleball courts	27.99% 110	72.01% 283	393
Adventure park/play developed and managed by a third-party concessionaire	46.52% 187	53.48% 215	402
Arboretums	41.77% 165	58.23% 230	395

Q17 Which of these elements do you think that Lansing needs more of in their parks? (check all that apply)

Answered: 470 Skipped: 15



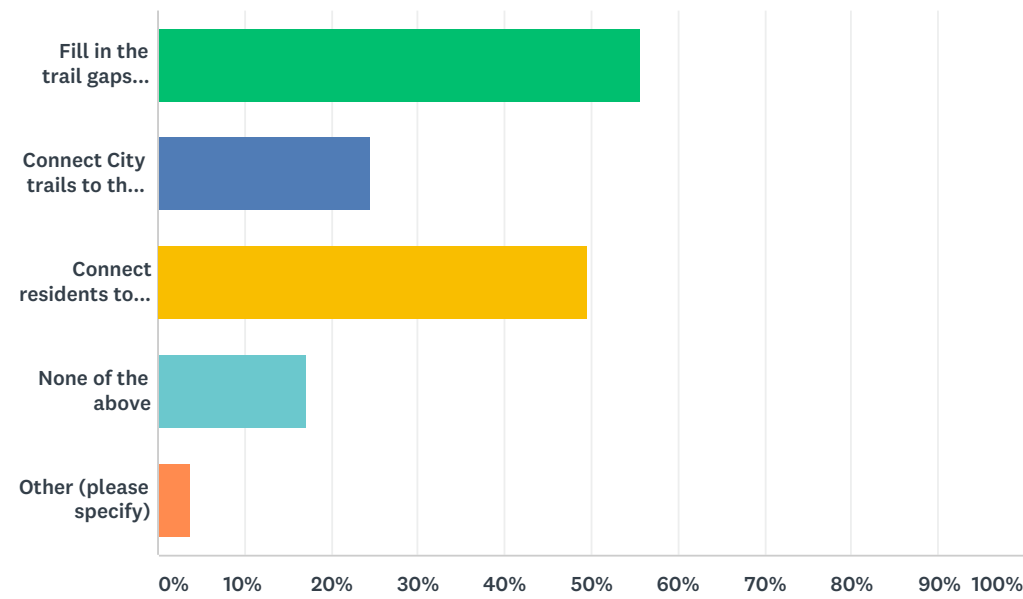


Category	Percentage	Count
Competitive sports facilities	16.60%	78
Signage	6.60%	31
Police presence/security	13.83%	65
Adventure park/play	25.74%	121
Arboretums	20.00%	94
All of the above	4.89%	23
None of the above	1.06%	5
Other (please specify)	8.72%	41
Total Respondents: 470		

ANSWER CHOICES	RESPONSES
More restrooms	54.04% 254
Large central farmer's market	36.60% 172
Link and expand trails	43.83% 206
Fitness loops	28.30% 133
Bike trails and courses	36.38% 171
Skate, skateboard courses	10.85% 51
Challenge courses	13.19% 62
Parkour courses	5.74% 27
Picnic Shelters/Shade Structures	42.13% 198
Nature, vegetation, trees, gardens	24.47% 115
Information signs/kiosks	9.15% 43
Outdoor fitness equipment	17.45% 82
Off leash areas for dogs	32.55% 153
Public art	11.91% 56
Gathering spaces, outdoor seating	25.32% 119
Splash parks	63.83% 300
Aquatics features	67.87% 319
Sand Volleyball Courts	20.85% 98

Q18 Which recreational trail gaps should be a priority to complete? (check all that apply)

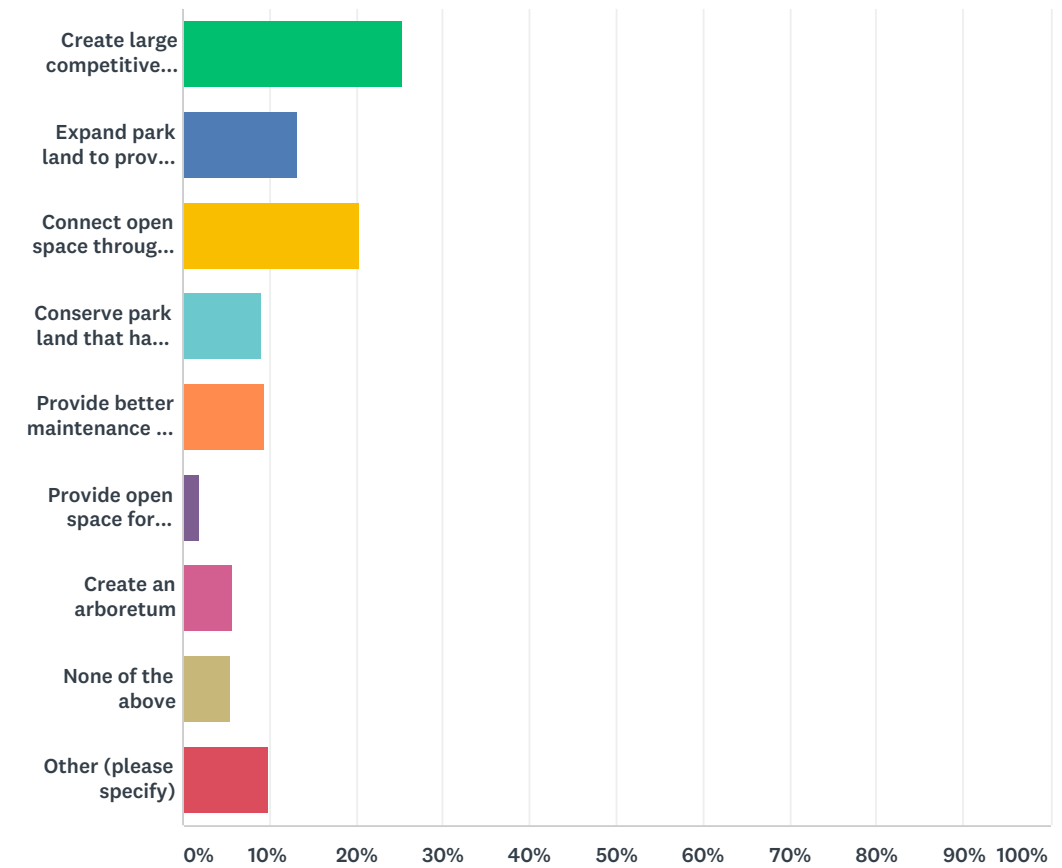
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Fill in the trail gaps between residents and parks and recreation centers	55.74% 262
Connect City trails to the Metrogreen Trail Network	24.47% 115
Connect residents to schools	49.57% 233
None of the above	17.23% 81
Other (please specify)	3.83% 18
Total Respondents: 470	

Q19 What should be Lansing's open space priorities?

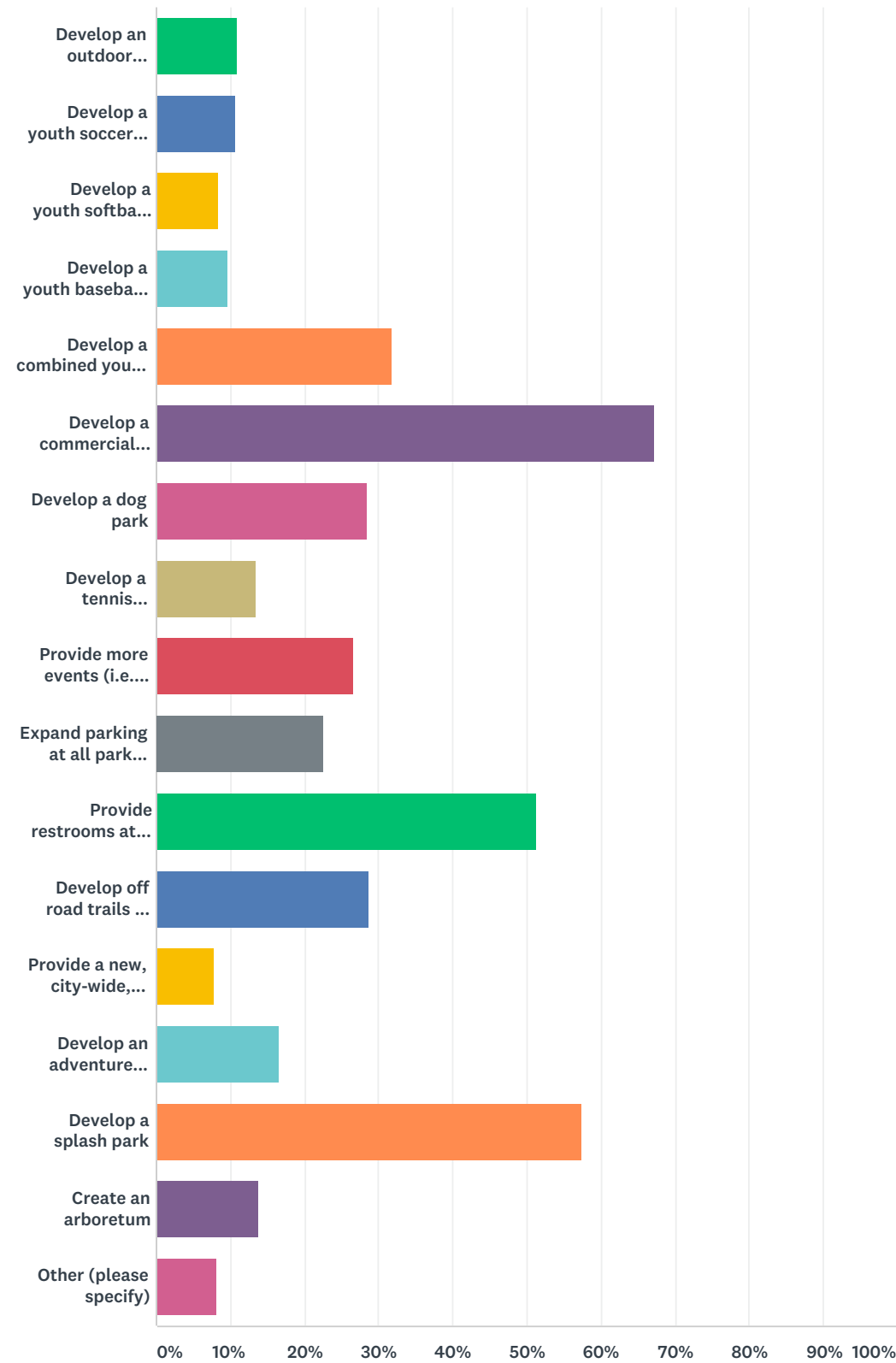
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Create large competitive sports parks to help keep our children playing locally and draw outside tourists	25.32% 119
Expand park land to provide closer parks to all residents	13.19% 62
Connect open space through expanded trails	20.21% 95
Conserve park land that has quality natural resources	8.94% 42
Provide better maintenance and care for park areas	9.36% 44
Provide open space for community agricultural gardens	1.91% 9
Create an arboretum	5.74% 27
None of the above	5.53% 26
Other (please specify)	9.79% 46
TOTAL	470

Q20 Please indicate what specific facilities Lansing needs to consider building and or funding (check all that apply):

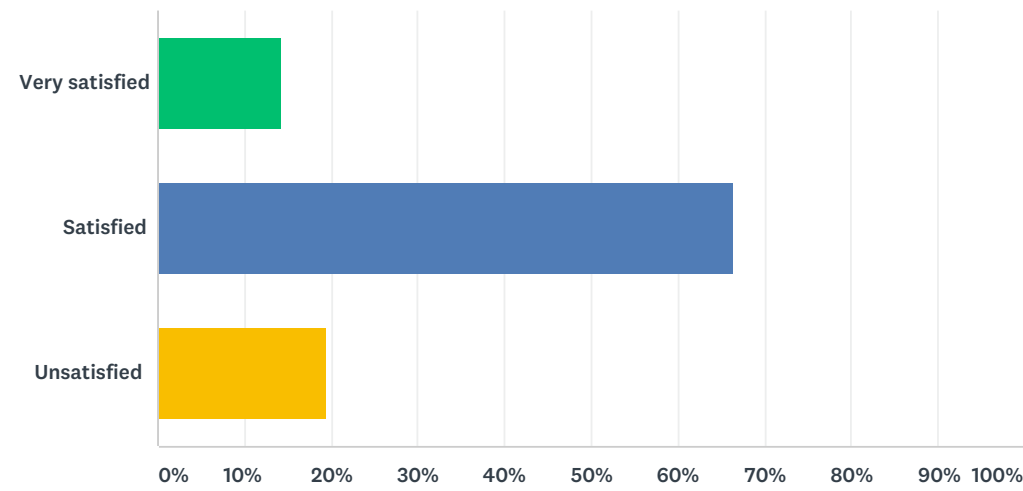
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Develop an outdoor performing arts center	10.85% 51
Develop a youth soccer complex	10.64% 50
Develop a youth softball complex	8.30% 39
Develop a youth baseball complex	9.57% 45
Develop a combined youth sports complex (group all the above)	31.70% 149
Develop a commercial style pool, i.e. lazy river, tall slides, waver rider	67.23% 316
Develop a dog park	28.51% 134
Develop a tennis court/pickleball court	13.40% 63
Provide more events (i.e. festivals, celebrations, weekly events, etc.)	26.60% 125
Expand parking at all park facilities	22.55% 106
Provide restrooms at all park facilities	51.28% 241
Develop off road trails to connect with the existing parks system	28.72% 135
Provide a new, city-wide, parks wayfinding system that includes new signage and information kiosks	7.66% 36
Develop an adventure amusement area providing challenge elements for all ages	16.60% 78
Develop a splash park	57.23% 269
Create an arboretum	13.83% 65
Other (please specify)	8.09% 38
Total Respondents: 470	

Q21 Overall, how satisfied have you been with the current level of maintenance of Lansing's parks?

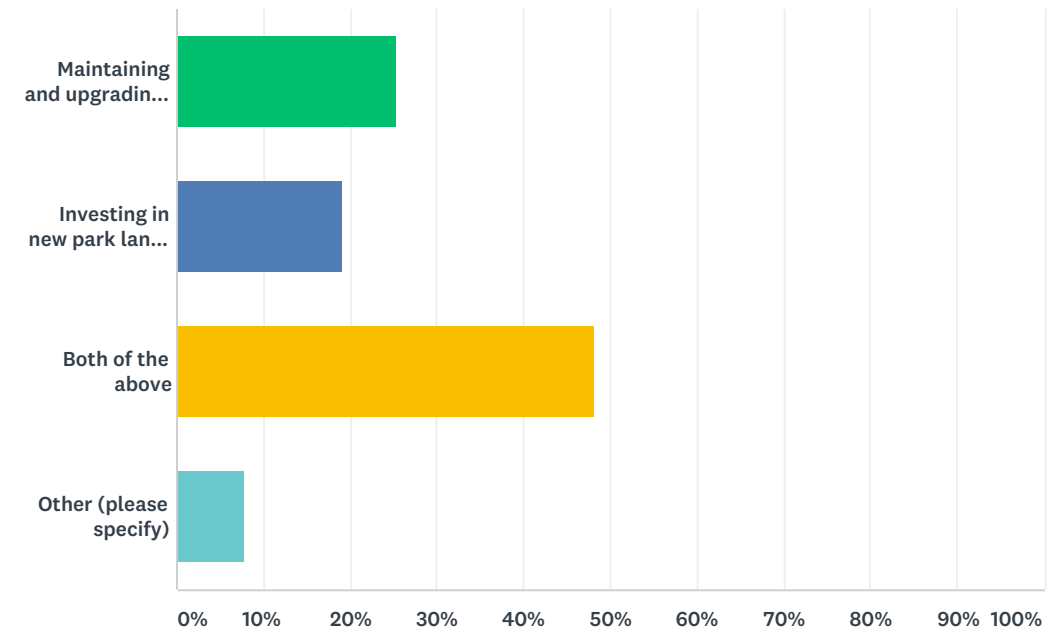
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
Very satisfied	14.26%	67
Satisfied	66.38%	312
Unsatisfied	19.36%	91
TOTAL		470

Q22 What should be the highest priority for Lansing?

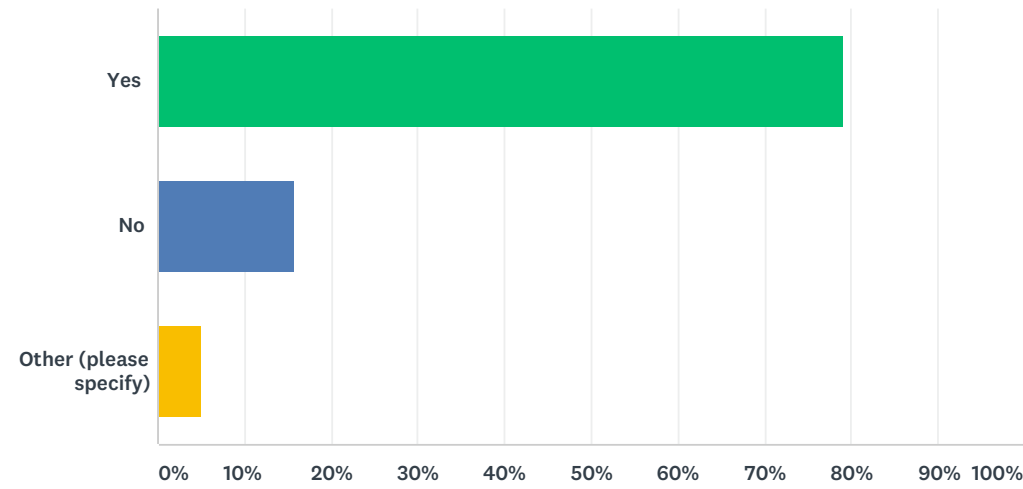
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
Maintaining and upgrading existing parks	25.32%	119
Investing in new park land and facilities	18.94%	89
Both of the above	48.09%	226
Other (please specify)	7.66%	36
TOTAL		470

Q23 Would Lansing benefit from adaptive recreation (includes abled bodied and differently abled) facilities and programs?

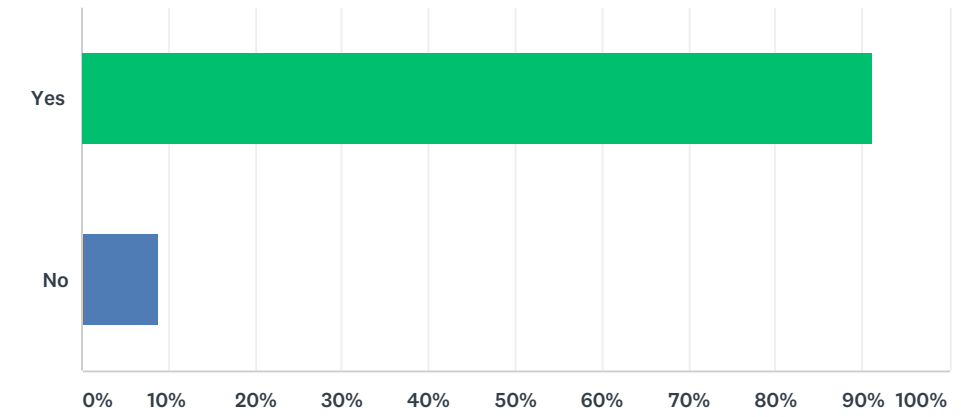
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Yes	79.15% 372
No	15.74% 74
Other (please specify)	5.11% 24
TOTAL	470

Q24 Do you live within the city limits of the City of Lansing?

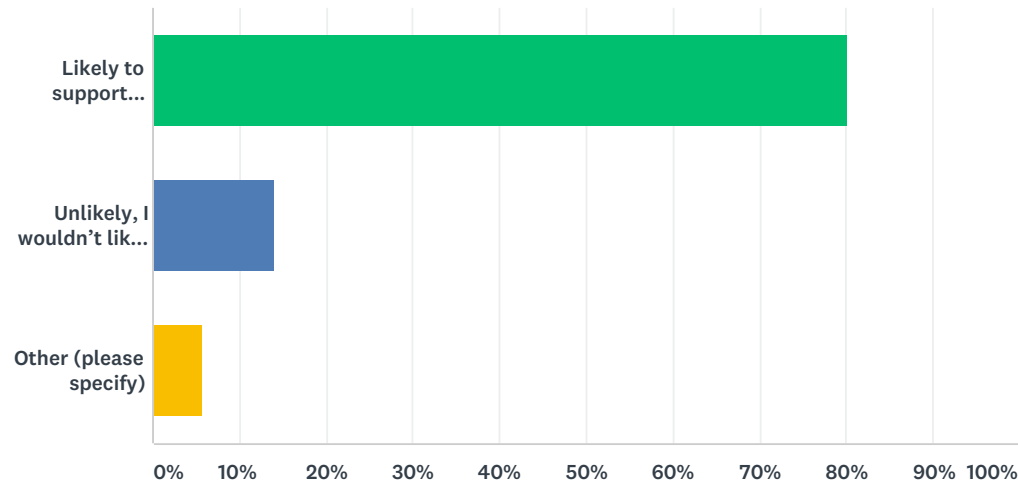
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Yes	91.28% 429
No	8.72% 41
TOTAL	470

Q25 As we consider improving the parks system and our ability to have a more regional draw to our parks system, how willing are you and members of your household to pay for enhanced attractions like commercial aquatics facilities, large adventure parks?

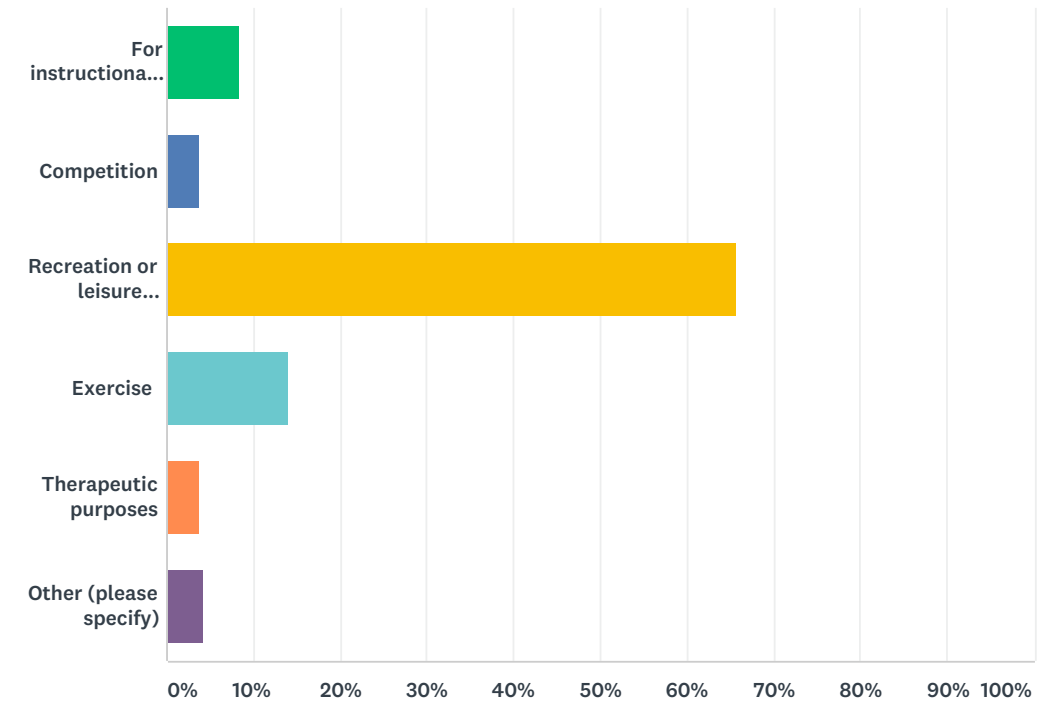
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Likely to support enhanced attractions, I appreciate the added revenue and sales tax they may bring	80.21% 377
Unlikely, I wouldn't like any enhanced attractions	14.04% 66
Other (please specify)	5.74% 27
TOTAL	470

Q26 Listed below are some purposes for which you and members of your household would use an outdoor aquatic facility. Please indicate which of these purposes best describe the reasons you or members of your household would use an outdoor aquatic facility.

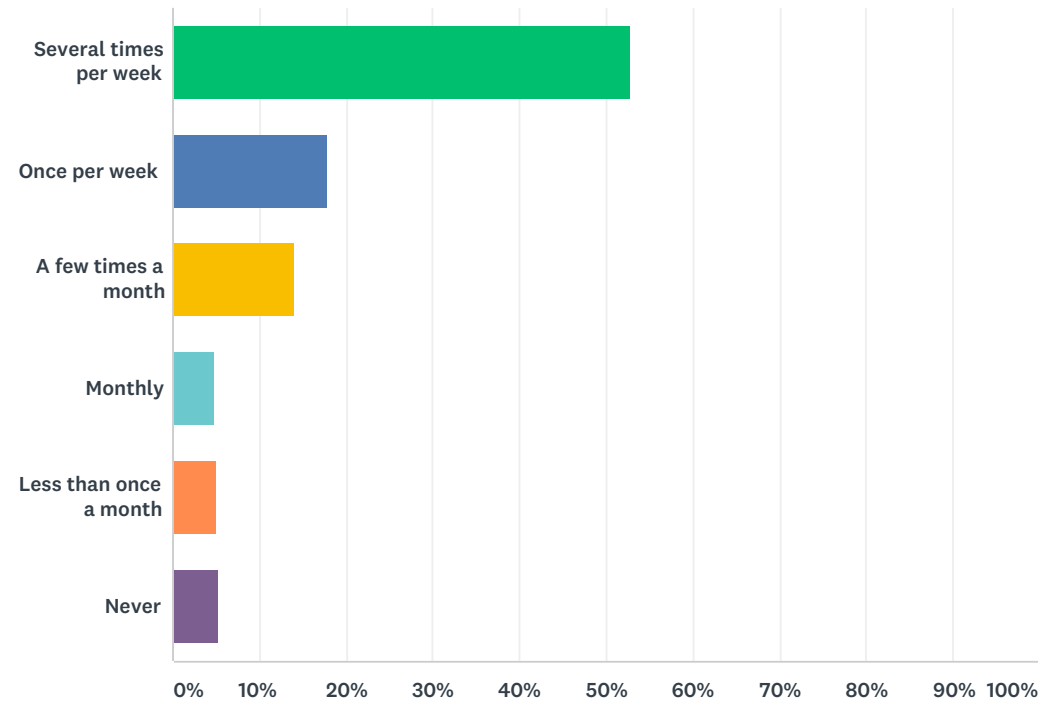
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
For instructional classes	8.30% 39
Competition	3.83% 18
Recreation or leisure activities	65.74% 309
Exercise	14.04% 66
Therapeutic purposes	3.83% 18
Other (please specify)	4.26% 20
TOTAL	470

Q27 If the City of Lansing builds a new outdoor aquatic facility with the features you prefer, which ONE of the following statements represents how often you or other members of your household would visit the facility?

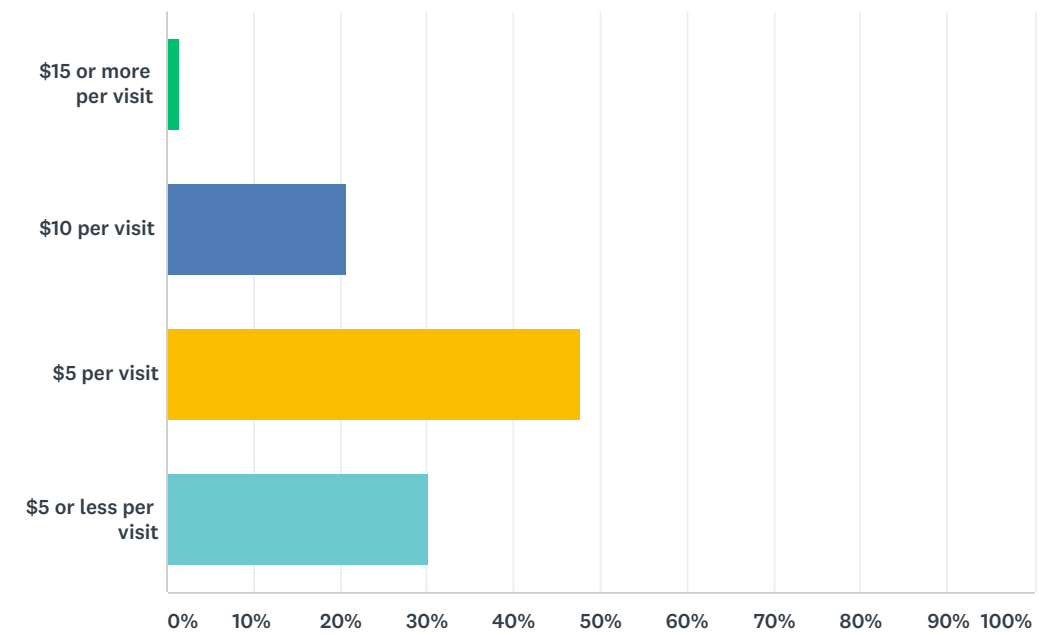
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
Several times per week	52.77%	248
Once per week	17.87%	84
A few times a month	14.04%	66
Monthly	4.89%	23
Less than once a month	5.11%	24
Never	5.32%	25
TOTAL		470

Q28 If the City of Lansing builds a new outdoor aquatic facility with the features that are most important to your household, please select each option listed below of the MAXIMUM fees you and members of your household would be willing to pay. How much would you be willing to PAY PER VISIT for an ADULT to use the facility?

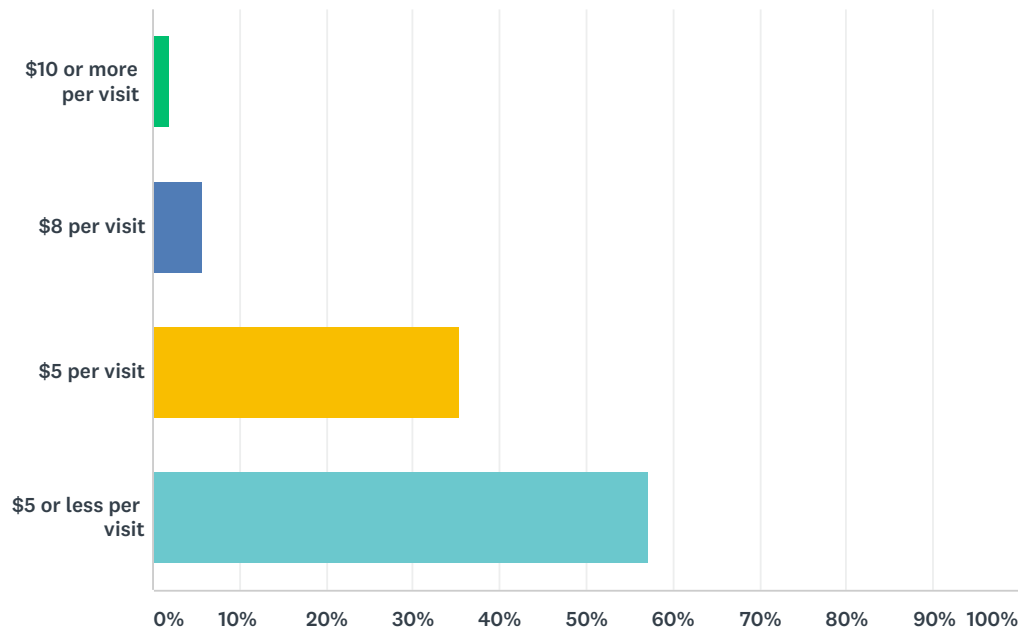
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES	
\$15 or more per visit	1.49%	7
\$10 per visit	20.64%	97
\$5 per visit	47.66%	224
\$5 or less per visit	30.21%	142
TOTAL		470

Q29 How much would you be willing to PAY PER VISIT for a CHILD to use the facility?

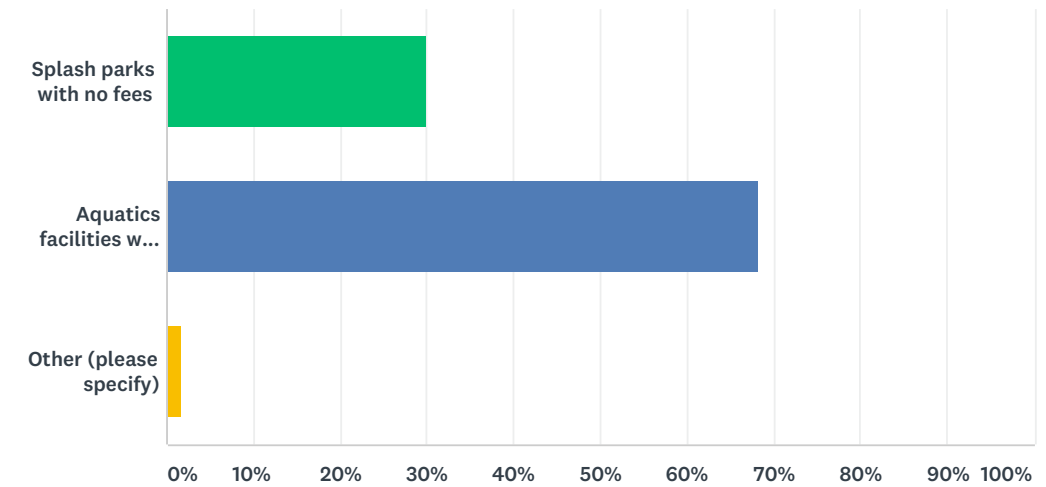
Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
\$10 or more per visit	1.91% 9
\$8 per visit	5.74% 27
\$5 per visit	35.32% 166
\$5 or less per visit	57.02% 268
TOTAL	470

Q30 Would you rather see the City of Lansing develop splash parks that would not require fees per visit, or an aquatics facility that would require fees per visit?

Answered: 470 Skipped: 15



ANSWER CHOICES	RESPONSES
Splash parks with no fees	30.00% 141
Aquatics facilities with fees	68.30% 321
Other (please specify)	1.70% 8
TOTAL	470

PARK DESIGN CONCEPTS

BITTERSWEET PARK



PARK DESIGN CONCEPTS

CITY PARK



PARK DESIGN CONCEPTS

KELLY GROVE PARK



PARK DESIGN CONCEPTS

BERNARD PARK



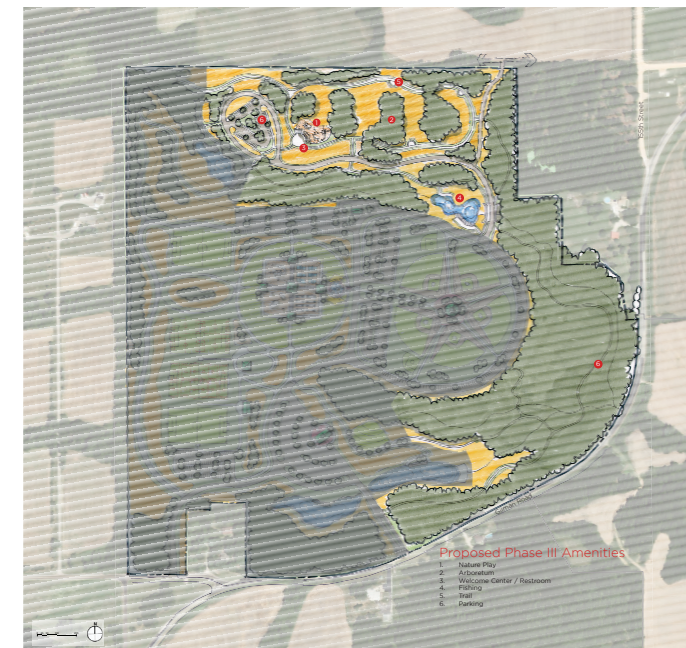
PARK DESIGN CONCEPTS

WILLOW PARK



PHASING

BERNARD PARK



PHASING

CITY PARK



PHASING

BERNARD PARK PHASE 1

Opinion of Probable Cost | Kenneth Bernard Park Lansing Parks and Recreation Master Plan January - 2020

Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
Concrete trails - 6" thick	27000	SF	\$ 6.00	\$ 162,000	
Park Wide Site Furnishing					
Picnic Table	6	EA	\$ 1,000.00	\$ 6,000	
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250	
Trash / Recycling Receptacle	5	EA	\$ 1,000.00	\$ 5,000	
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500	
Baseball Fields					
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835	
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000	
Dugout Benches	10	EA	\$ 250.00	\$ 2,500	
Soccer Fields					
Soccer Fields (2)	1	LS	\$ 478,804.00	\$ 478,804	
Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000	
6" Water Service	1800	LF	\$ 50.00	\$ 90,000	
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000	
Soccer Fields					
Soccer Fields (2)	1	LS	\$ 478,804.00	\$ 478,804	
6" Water Service	1800	LF	\$ 50.00	\$ 90,000	
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000	
Architecture - Site Improvements					
Shelters + Buildings					
Concession w/ Restroom & Storage	1	EA	\$ 300,000.00	\$ 300,000	
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	12	EA	\$ 475.00	\$ 5,700	
Fescue Turf - Seed	120000	SF	\$ 0.30	\$ 36,000	
Civil Improvements					
Utilities					
6" Water Service	2700	LF	\$ 50.00	\$ 135,000	
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000	
Leachfield	1	EA	\$ 30,000.00	\$ 30,000	
Grading					
Allowance for Misc. General Grading	1	ALL	\$ 20,000.00	\$ 20,000	
Parking Area					
Granular Subbase 4" (2 tons per 100 sf.)	1000	TONS	\$ 25.00	\$ 25,000	
Asphalt parking & roads (chip & seal)	50000	SF	\$ 3.00	\$ 150,000	
Electrical Improvements					
Site Lighting					
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000	
Electrical Service					
Provide Conduit and Power to Shelters/Fields	2100	LF	\$ 50.00	\$ 105,000	
Total Improvements				\$ 2,993,785	\$ 1,229,608
General Conditions	10%		\$299,378.50	\$122,960.80	
Overhead	5%		\$149,689.25	\$61,480.40	
Profit	5%		\$149,689.25	\$61,480.40	
Inflation	3%		\$89,813.55	\$36,888.24	
Design Contingency	6%		\$179,627.10	\$73,776.48	
Project Budget:				\$ 3,861,982.65	Soccer: \$ 1,586,194.32

PHASING

BERNARD PARK PHASE 2

Opinion of Probable Cost | Kenneth Bernard Park
Lansing Parks and Recreation Master Plan
January - 2020

Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
Concrete trails - 6" thick	157,000	SF	\$ 6.50	\$ 1,020,500
Decorative Pavement	0	SF	\$ 8.00	-
Park Wide Site Furnishing				
Park Bench	28	EA	\$ 2,000.00	\$ 56,000
Picnic Table	17	EA	\$ 1,000.00	\$ 17,000
Drinking Fountain and Bottle Filler	3	EA	\$ 3,250.00	\$ 9,750
Bike Racks	9	EA	\$ 1,500.00	\$ 13,500
Trash / Recycling Receptacle	11	EA	\$ 1,700.00	\$ 18,700
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500
Aquatics/Spray Park				
Fishing Docks	2	EA	\$ 30,000.00	\$ 60,000
Spray Ground Materials	1	LS	\$ 350,000.00	\$ 350,000
Spray Ground Installation	1	LS	\$ 200,000.00	\$ 200,000
Play Equipment				
Nature Play	0	LS	\$ 250,000.00	-
Synthetic Turf	38000	SF	\$ 20.00	\$ 760,000
Large Play	1	LS	\$ 600,000.00	\$ 600,000
Sports Fields				
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000
Dugout Benches	10	EA	\$ 250.00	\$ 2,500
Soccer Fields (2)	2	EA	\$ 239,402.00	\$ 478,804
Soccer Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000
6" Water Service	1800	LF	\$ 50.00	\$ 90,000
Fescue Turf - Seed	20000	SF	\$ 0.30	\$ 6,000
Cornhole	8	EA	\$ 2,000.00	\$ 16,000
Disc Golf	1	EA	\$ 200,000.00	\$ 200,000
Pickleball	6	EA	\$ 40,000.00	\$ 240,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Secondary	3	EA	\$ 10,000.00	\$ 30,000
Architecture - Site Improvements				
Shelters + Buildings				
Vehicular Bridge	0	EA	\$ 500,000.00	-
Maintenance Building	1	EA	\$ 120,000.00	\$ 120,000
Restroom	1	EA	\$ 120,000.00	\$ 120,000
Pedestrian Bridge	1	EA	\$ 120,000.00	\$ 120,000
Concession w/ Restroom	1	EA	\$ 220,000.00	\$ 300,000
Amphitheater	1	EA	\$ 500,000.00	\$ 500,000
Medium Shelter w/ Restroom	1	EA	\$ 250,000.00	\$ 250,000
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Small Shelter	4	EA	\$ 120,000.00	\$ 480,000
Low Water Crossing	1	EA	\$ 50,000.00	\$ 50,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	110	EA	\$ 500.00	\$ 55,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	150	EA	\$ 475.00	\$ 71,250
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	100	EA	\$ 350.00	\$ 35,000
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Shrubs - 3 Gal - Flutterby Flow Lavender Butterfly Bush	40	EA	\$ 70.00	\$ 2,800
Annuals/Perennials - 1 Gal - Russian Sage	60	EA	\$ 25.00	\$ 1,500
Grasses - 1 Gal	40	EA	\$ 25.00	\$ 1,000
Fescue Turf - Seed	330000	SF	\$ 0.30	\$ 99,000
Native Blend - Seed Mix	500000	SF	\$ 0.50	\$ 250,000
Civil Improvements				
Utilities				
6" Water Service	1000	LF	\$ 50.00	\$ 50,000
Backflow preventer (double check)	5	EA	\$ 10,000.00	\$ 50,000
6" Sanitary Service Line with main connection	6460	LF	\$ 65.00	\$ 419,900
Grading				
Detention Areas	1	LS	\$ 250,000.00	\$ 250,000
Allowance for Misc. General Grading	1	ALL	\$ 100,000.00	\$ 100,000
Parking Area				
New Curb	0	LF	\$ 20.00	-
Granular Subbase 4" (2 tons per 100 sf.)	5740	TONS	\$ 25.00	\$ 143,500
Asphalt parking spaces & roads	287000	SF	\$ 4.00	\$ 1,148,000
4" White Thermoplastic	14400	LF	\$ 3.50	\$ 50,400
Handicapped Pavement Markings symbol	40	EA	\$ 50.00	\$ 2,000
ADA tactile warning strip (21' and 3')	26	EA	\$ 200.00	\$ 5,200
Electrical Improvements				
Site Lighting				
Soccer Field Lighting	4	EA	\$ 135,000.00	\$ 540,000
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000
T-ball Field Lighting	2	EA	\$ 60,000.00	\$ 120,000
Lansing Daze Lighting Allowance	1	LS	\$ 500,000.00	\$ 500,000
Electrical Service				
Provide Conduit and Power to Shelters/Fields	2300	LF	\$ 50.00	\$ 115,000
Total Improvements				
			\$ 10,736,208	\$ 10,736,208
General Conditions	10%		\$1,073,620.80	
Overhead	5%		\$536,810.40	
Profit	5%		\$536,810.40	
Inflation	3%		\$322,086.24	
Design Contingency	6%		\$644,172.48	
Project Budget:				\$13,849,708.32

The soccer number doubles if Phase I recommendations were not met.

PHASING

BERNARD PARK PHASE 3

Opinion of Probable Cost | Kenneth Bernard Park
Lansing Parks and Recreation Master Plan
January - 2020

Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
Decomposed Granite, 6' wide	88000	SF	\$ 2.50	\$ 220,000
Decorative Pavement	0	SF	\$ 8.00	-
Park Wide Site Furnishing				
Park Bench	4	EA	\$ 2,000.00	\$ 8,000
Picnic Table	9	EA	\$ 1,000.00	\$ 9,000
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250
Bike Racks	1	EA	\$ 1,500.00	\$ 1,500
Trash / Recycling Receptacle	7	EA	\$ 1,700.00	\$ 11,900
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500
Aquatics/Spray Park				
Fishing Docks	2	EA	\$ 30,000.00	\$ 60,000
Spray Ground Materials	1	LS	\$ 350,000.00	\$ 350,000
Spray Ground Installation	1	LS	\$ 200,000.00	\$ 200,000
Play Equipment				
Nature Play	1	LS	\$ 250,000.00	\$ 250,000
Synthetic Turf	38000	SF	\$ 20.00	\$ 760,000
Large Play	1	LS	\$ 600,000.00	\$ 600,000
Sports Fields				
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000
Dugout Benches	10	EA	\$ 250.00	\$ 2,500
Soccer Fields (2)	2	EA	\$ 478,804.00	\$ 957,608
Soccer Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000
6" Water Service	1800	LF	\$ 50.00	\$ 90,000
Fescue Turf - Seed	40000	SF	\$ 0.30	\$ 12,000
Cornhole	8	EA	\$ 2,000.00	\$ 16,000
Disc Golf	1	EA	\$ 200,000.00	\$ 200,000
Pickleball	6	EA	\$ 40,000.00	\$ 240,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Secondary	3	EA	\$ 10,000.00	\$ 30,000
Architecture - Site Improvements				
Shelters + Buildings				
Vehicular Bridge	1	EA	\$ 500,000.00	\$ 500,000
Maintenance Building	1	EA	\$ 120,000.00	\$ 120,000
Restroom	1	EA	\$ 120,000.00	\$ 120,000
Pedestrian Bridge	0	EA	\$ 120,000.00	-
Concession w/ Restroom	1	EA	\$ 220,000.00	\$ 300,000
Amphitheater	1	EA	\$ 500,000.00	\$ 500,000
Medium Shelter w/ Restroom	1	EA	\$ 250,000.00	\$ 250,000
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Small Shelter	4	EA	\$ 120,000.00	\$ 480,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	40	EA	\$ 500.00	\$ 20,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	60	EA	\$ 475.00	\$ 28,500
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	20	EA	\$ 350.00	\$ 7,000
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Shrubs - 3 Gal - Flutterby Flow Lavender Butterfly Bush	40	EA	\$ 70.00	\$ 2,800
Annuals/Perennials - 1 Gal - Russian Sage	60	EA	\$ 25.00	\$ 1,500
Grasses - 1 Gal	40	EA	\$ 25.00	\$ 1,000
Fescue Turf - Seed	294000	SF	\$ 0.30	\$ 88,200
Native Blend - Seed Mix	350000	SF	\$ 0.50	\$ 175,000
Civil Improvements				
Utilities				
6" Water Service	5460	LF	\$ 50.00	\$ 273,000
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000
6" Sanitary Service Line with main connection	6460	LF	\$ 65.00	\$ 419,900
Grading				
Detention Areas	1	LS	\$ 250,000.00	\$ 250,000
Allowance for Misc. General Grading	1	ALL	\$ 100,000.00	\$ 100,000
Parking Area				
New Curb	0	LF	\$ 20.00	-
Granular Subbase 4" (2 tons per 100 sf.)	2460	TONS	\$ 25.00	\$ 61,500
Asphalt parking spaces & roads	123000	SF	\$ 4.00	\$ 492,000
4" White Thermoplastic	14400	LF	\$ 3.50	\$ 50,400
Handicapped Pavement Markings symbol	40	EA	\$ 50.00	\$ 2,000
ADA tactile warning strip (21' and 3')	26	EA	\$ 200.00	\$ 5,200
Electrical Improvements				
Site Lighting				
Soccer Field Lighting	4	EA	\$ 285,000.00	\$ 1,140,000
Baseball Field Lighting	1	EA	\$ 300,000.00	\$ 300,000
T-ball Field Lighting	2	EA	\$ 60,000.00	\$ 120,000
Lansing Daze Lighting Allowance	1	LS	\$ 500,000.00	\$ 500,000
Electrical Service				
Provide Conduit and Power to Shelters/Fields	2100	LF	\$ 50.00	\$ 105,000
Total Improvements				
			\$ 2,963,850	\$ 2,963,850
General Conditions	10%		\$296,385.00	
Overhead	5%		\$148,192.50	
Profit	5%		\$148,192.50	
Inflation	3%		\$88,915.50	
Design Contingency	6%		\$177,831.00	
Project Budget:				\$3,823,366.50

PHASING

CITY PARK PHASE 1

Opinion of Probable Cost | City Park Lansing Parks and Recreation Master Plan January - 2020

Demolition and Removal					
Demo and Removal					
Remove Playground (In-House)	0	LS	\$ 2,000.00	-	
Remove Structures (In-House)	0	LS	\$ 12,000.00	-	
Remove Pavement	1400	SF	\$ 3.00	\$ 4,200	\$ 4,200
Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
Concrete trail/walkways - 6" thick	2200	SF	\$ 6.00	\$ 13,200	\$ 13,200
Park Wide Site Furnishing					
Park Bench	4	EA	\$ 2,000.00	\$ 8,000	
Picnic Table	4	EA	\$ 1,000.00	\$ 4,000	
Trash / Recycling Receptacle	4	EA	\$ 1,700.00	\$ 6,800	
Play Equipment					
Engineered Wood Fiber	0	SF	\$ 4.00	-	
Destination Play	0	LS	\$ 350,000.00	-	
Aquatics/Spray Park					
Spray Ground	1	LS	\$ 675,000.00	\$ 675,000	\$ 675,000
Architecture - Site Improvements					
Shelters + Buildings					
Small Shelter	1	EA	\$ 100,000.00	\$ 100,000	\$ 100,000
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	5	EA	\$ 475.00	\$ 2,375	
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	3	EA	\$ 350.00	\$ 1,050	
Fescue Turf - Seed	13500	SF	\$ 0.30	\$ 4,050	
Civil Improvements					
Utilities					
3" Water Service	100	LF	\$ 50.00	\$ 5,000	
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000	
6" Sanitary Service Line with main connection	100	LF	\$ 65.00	\$ 6,500	
Grading					
Allowance for Misc. General Grading	1	ALL	\$ 10,000.00	\$ 10,000	\$ 10,000
Electrical Improvements					
Electrical Service					
Provide Conduit and Power to Shelter	100	LF	\$ 50.00	\$ 5,000	\$ 5,000
Total Improvements \$ 855,175					
General Conditions 10% \$85,517.50					
Overhead 5% \$42,758.75					
Profit 5% \$42,758.75					
Inflation 3% \$25,655.25					
Design Contingency 6% \$51,310.50					
Project Budget: \$1,051,865.25					

PHASING

CITY PARK PHASE 2

Opinion of Probable Cost | City Park Lansing Parks and Recreation Master Plan January - 2020

Demolition and Removal					
Demo and Removal					
Remove Playground	1	LS	\$ 2,000.00	\$ 2,000	
Remove Structures	1	LS	\$ 12,000.00	\$ 12,000	
Remove Pavement	40860	SF	\$ 3.00	\$ 122,580	
Clearing and Grubbing	1	LS	\$ 20,000.00	\$ 20,000	\$ 142,580
Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
ADA Curb Ramp	5	EA	\$ 500.00	\$ 2,500	
Concrete trail/walkways - 6" thick	38980	SF	\$ 6.50	\$ 253,370	\$ 255,870
Park Wide Site Furnishing					
Park Bench	16	EA	\$ 2,000.00	\$ 32,000	
Picnic Table	14	EA	\$ 1,000.00	\$ 14,000	
Drinking Fountain and Bottle Filler	2	EA	\$ 3,250.00	\$ 6,500	
Bike Racks	10	EA	\$ 1,500.00	\$ 15,000	
Trash / Recycling Receptacle	6	EA	\$ 1,700.00	\$ 10,200	
Play Equipment					
Fitness Equipment	1	LS	\$ 60,000.00	\$ 60,000	\$ 684,000
Engineer Wood Fiber	600	CY	\$ 40.00	\$ 24,000	
Destination Play	1	LS	\$ 600,000.00	\$ 600,000	
Aquatics/Spray Park					
Spray Ground	0	LS	\$ 675,000.00	-	
Sports Fields					
Baseball Field Renovation	1	EA	\$ 100,000.00	\$ 100,000	\$ 200,000
Sand Volleyball	2	EA	\$ 10,000.00	\$ 20,000	
Basketball Court	1	EA	\$ 80,000.00	\$ 80,000	
Signage & Wayfinding					
Primary	1	EA	\$ 15,000.00	\$ 15,000	\$ 15,000
Architecture - Site Improvements					
Shelters + Buildings					
Restroom	1	EA	\$ 120,000.00	\$ 120,000	\$ 690,000
Medium Shelter w/Restroom	1	EA	\$ 250,000.00	\$ 250,000	
Small Shelter	2	EA	\$ 100,000.00	\$ 200,000	
Pedestrian Bridge	1	EA	\$ 120,000.00	\$ 120,000	
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Swamp White Oak	30	EA	\$ 500.00	\$ 15,000	
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	35	EA	\$ 475.00	\$ 16,625	
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	25	EA	\$ 350.00	\$ 8,750	
Fescue Turf - Seed	131500	SF	\$ 0.30	\$ 39,450	
Native Blend - Seed Mix	251000	SF	\$ 0.50	\$ 125,500	\$ 209,525
Civil Improvements					
Utilities					
3" Water Service	0	LF	\$ 50.00	-	
Backflow preventer (double check)	0	EA	\$ 10,000.00	-	
6" Sanitary Service Line with main connection	0	LF	\$ 65.00	-	
Grading					
Allowance for Misc. General Grading	1	ALL	\$ 40,000.00	\$ 40,000	\$ 40,000
Parking Area					
Asphalt Maintenance Road	7500	SF	\$ 4.00	\$ 30,000	\$ 441,880
Concrete parking spaces	57500	SF	\$ 6.50	\$ 373,750	
Granular Subbase 4"	1150	TONS	\$ 25.00	\$ 28,750	
4" White Thermoplastic	2580	LF	\$ 3.50	\$ 9,030	
Handicapped Pavement Markings symbol	7	EA	\$ 50.00	\$ 350	
Electrical Improvements					
Site Lighting					
Baseball Field Lighting - Keep Existing	0	EA	\$ 290,000.00	-	
Electrical Service					
Provide Conduit and Power to Shelters	300	LF	\$ 50.00	\$ 15,000	\$ 15,000
Total Improvements \$ 2,771,555					
General Conditions 10% \$277,155.50					
Overhead 5% \$138,577.75					
Profit 5% \$138,577.75					
Inflation 3% \$83,146.65					
Design Contingency 6% \$166,293.30					
Project Budget: \$3,575,305.95					

COST ANALYSIS

BITTERSWEET PARK

Opinion of Probable Cost | Bittersweet Park

Lansing Parks and Recreation Master Plan

November - 2019

Demolition and Removal				
Demo and Removal				
Clearing and Grubbing	1	LS	\$ 40,000.00	\$ 40,000
Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
Concrete trail - 4" thick	19800	SF	\$ 5.50	\$ 108,900
Decorative Pavement	1800	SF	\$ 7.00	\$ 12,600
Park Wide Site Furnishing				
Park Bench	6	EA	\$ 2,000.00	\$ 12,000
Park Table	6	EA	\$ 4,000.00	\$ 24,000
Trash / Recycling Receptacle	2	EA	\$ 1,700.00	\$ 3,400
Architectural and Seating Walls				
Natural Stone Veneer Walls (2 - 2.5' ht)	120	LF	\$ 750.00	\$ 90,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Architecture - Site Improvements				
Shelters + Buildings				
Fabric Shade Structure	1	EA	\$ 60,000.00	\$ 60,000
Landscaping and Irrigation				
Plants and Seed				
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600
Fescue Turf - Seed	18000	SF	\$ 0.30	\$ 5,400
Native Blend - Seed Mix	84000	SF	\$ 0.50	\$ 42,000
Civil Improvements				
Grading				
Allowance for Misc. General Grading	1	ALL	\$ 30,000.00	\$ 30,000
Total Improvements				\$ 444,475

General Conditions	10%	\$44,447.50
Overhead	5%	\$22,223.75
Profit	5%	\$22,223.75
Inflation	5%	\$22,223.75
Design Contingency	10%	\$44,447.50

Project Budget: \$600,041.25

COST ANALYSIS

CITY PARK

Opinion of Probable Cost | City Park

Lansing Parks and Recreation Master Plan

November - 2019

Demolition and Removal				
Demo and Removal				
Remove Playground	1	LS	\$ 2,000.00	\$ 2,000
Remove Structures	1	LS	\$ 12,000.00	\$ 12,000
Remove Pavement	42260	SF	\$ 3.00	\$ 126,780
Clearing and Grubbing	1	LS	\$ 20,000.00	\$ 20,000
Landscape Architecture - Site Improvements				
Pavements / Surfacing / Ramps				
ADA Curb Ramp	5	EA	\$ 500.00	\$ 2,500
Concrete trail/walkways - 6" thick	41180	SF	\$ 6.50	\$ 267,670
Park Wide Site Furnishing				
Park Bench	20	EA	\$ 2,000.00	\$ 40,000
Picnic Table	18	EA	\$ 1,000.00	\$ 18,000
Drinking Fountain and Bottle Filler	2	EA	\$ 3,250.00	\$ 6,500
Bike Racks	10	EA	\$ 1,500.00	\$ 15,000
Trash / Recycling Receptacle	10	EA	\$ 1,700.00	\$ 17,000
Play Equipment				
Fitness Equipment	1	LS	\$ 60,000.00	\$ 60,000
Synthetic Turf	16400	SF	\$ 20.00	\$ 328,000
Destination Play	1	LS	\$ 600,000.00	\$ 600,000
Aquatics/Spray Park				
Spray Ground	1	LS	\$ 650,000.00	\$ 650,000
Sports Fields				
Baseball Field Renovation	1	EA	\$ 100,000.00	\$ 100,000
Sand Volleyball	2	EA	\$ 10,000.00	\$ 20,000
Basketball Court	1	EA	\$ 80,000.00	\$ 80,000
Signage & Wayfinding				
Primary	1	EA	\$ 15,000.00	\$ 15,000
Architecture - Site Improvements				
Shelters + Buildings				
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000
Medium Shelter w/ Restroom	1	EA	\$ 250,000.00	\$ 250,000
Small Shelter	2	EA	\$ 120,000.00	\$ 240,000
Pedestrian Bridge	1	EA	\$ 120,000.00	\$ 120,000
Landscaping and Irrigation				
Plants and Seed				
Deciduous Trees - B&B 2" Cal - Swamp White Oak	30	EA	\$ 500.00	\$ 15,000
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	40	EA	\$ 475.00	\$ 19,000
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	28	EA	\$ 350.00	\$ 9,800
Fescue Turf - Seed	145000	SF	\$ 0.30	\$ 43,500
Native Blend - Seed Mix	251000	SF	\$ 0.50	\$ 125,500
Civil Improvements				
Utilities				
3" Water Service	400	LF	\$ 50.00	\$ 20,000
Backflow preventer (double check)	2	EA	\$ 10,000.00	\$ 20,000
6" Sanitary Service Line with main connection	400	LF	\$ 65.00	\$ 26,000
Grading				
Allowance for Misc. General Grading	1	ALL	\$ 50,000.00	\$ 50,000
Parking Area				
Asphalt Maintenance Road	7500	SF	\$ 4.00	\$ 30,000
Concrete parking spaces	57500	SF	\$ 6.50	\$ 373,750
Granular Subbase 4"	1150	TONS	\$ 25.00	\$ 28,750
4" White Thermoplastic	2580	LF	\$ 3.50	\$ 9,030
Handicapped Pavement Markings symbol	7	EA	\$ 50.00	\$ 350
Electrical Improvements				
Site Lighting				
Baseball Field Lighting - Keep Existing	0	EA	\$ 290,000.00	-
Electrical Service				
Provide Conduit and Power to Shelters	400	LF	\$ 50.00	\$ 20,000
Total Improvements				\$ 4,075,330

General Conditions	10%	\$407,533.00
Overhead	5%	\$203,766.50
Profit	5%	\$203,766.50
Inflation	5%	\$203,766.50
Design Contingency	10%	\$407,533.00

Project Budget: \$5,501,695.50

COST ANALYSIS

KELLY GROVE PARK

Opinion of Probable Cost | Kelly Grove Park

Lansing Parks and Recreation Master Plan
November - 2019

Demolition and Removal					
Demos and Removal					
Clearing and Grubbing	1	LS	\$ 20,000.00	\$ 20,000	\$ 20,000
Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
Concrete walkways - 4" thick	6000	SF	\$ 5.50	\$ 33,000	\$ 168,750
Decomposed Granite, 6' wide	16500	SF	\$ 2.50	\$ 41,250	
Boardwalk	5300	SF	\$ 15.00	\$ 79,500	
Fire Ring Improvements	1	LS	\$ 15,000.00	\$ 15,000	
Park Wide Site Furnishing					
Park Bench	12	EA	\$ 2,000.00	\$ 24,000	\$ 27,400
Trash / Recycling Receptacle	2	EA	\$ 1,700.00	\$ 3,400	
Signage & Wayfinding					
Primary	1	EA	\$ 15,000.00	\$ 15,000	\$ 15,000
Architecture - Site Improvements					
Structures					
Low Water Crossing	1	LS	\$ 50,000.00	\$ 50,000	\$ 50,000
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	7	EA	\$ 475.00	\$ 3,325	\$ 26,825
Native Blend - Seed Mix	47000	SF	\$ 0.50	\$ 23,500	
Parking Areas					
Asphalt parking spaces	12100	SF	\$ 4.00	\$ 48,400	\$ 56,130
Granular Subbase 4"	242	TONS	\$ 25.00	\$ 6,050	
4" White Thermoplastic	180	LF	\$ 3.50	\$ 630	
Crosswalk	1	EA	\$ 1,000.00	\$ 1,000	
Handicapped Pavement Markings symbol	1	EA	\$ 50.00	\$ 50	
Total Improvements				\$ 364,105	\$ 364,105
General Conditions	10%			\$36,410.50	
Overhead	5%			\$18,205.25	
Profit	5%			\$18,205.25	
Inflation	5%			\$18,205.25	
Design Contingency	10%			\$36,410.50	

Project Budget: \$491,541.75

COST ANALYSIS

BERNARD PARK

Opinion of Probable Cost | Kenneth Bernard Park

Lansing Parks and Recreation Master Plan
November - 2019

Landscape Architecture - Site Improvements						
Pavements / Surfacing / Ramps						
Concrete trails - 6" thick	245000	SF	\$ 6.50	\$ 1,592,500	\$ 1,896,500	
Decorative Pavement	38000	SF	\$ 8.00	\$ 304,000		
Park Wide Site Furnishing						
Park Bench	32	EA	\$ 2,000.00	\$ 64,000	\$ 156,100	
Picnic Table	26	EA	\$ 1,000.00	\$ 26,000		
Drinking Fountain and Bottle Filler	4	EA	\$ 3,250.00	\$ 13,000		
Bike Racks	10	EA	\$ 1,500.00	\$ 15,000		
Trash / Recycling Receptacle	18	EA	\$ 1,700.00	\$ 30,600		
Flag Pole	1	EA	\$ 7,500.00	\$ 7,500		
Aquatics/Spray Park						
Fishing Docks	4	EA	\$ 30,000.00	\$ 120,000	\$ 670,000	
Spray Ground Materials	1	LS	\$ 350,000.00	\$ 350,000		
Spray Ground Installation	1	LS	\$ 200,000.00	\$ 200,000		
Play Equipment						
Nature Play	1	LS	\$ 250,000.00	\$ 250,000	\$ 1,510,000	
Synthetic Turf	38000	SF	\$ 20.00	\$ 760,000		
Large Play	1	LS	\$ 500,000.00	\$ 500,000		
Sports Fields						
Baseball Fields (5)	1	LS	\$ 1,550,835.00	\$ 1,550,835	\$ 3,288,943	
Field Irrigation	1	EA	\$ 140,000.00	\$ 140,000		
Dugout Benches	10	EA	\$ 250.00	\$ 2,500		
Soccer Fields (2)	2	EA	\$ 478,804.00	\$ 957,608		
Soccer Field Irrigation	1	EA	\$ 80,000.00	\$ 80,000		
6" Water Service	1800	LF	\$ 50.00	\$ 90,000		
Fescue Turf - Seed	40000	SF	\$ 0.30	\$ 12,000		
Cornhole	8	EA	\$ 2,000.00	\$ 16,000		
Disc Golf	1	EA	\$ 200,000.00	\$ 200,000		
Pickleball	6	EA	\$ 40,000.00	\$ 240,000		
Signage & Wayfinding						
Primary	1	EA	\$ 15,000.00	\$ 15,000		\$ 45,000
Secondary	3	EA	\$ 10,000.00	\$ 30,000		
Architecture - Site Improvements						
Shelters + Buildings						
Vehicle Bridge	1	EA	\$ 500,000.00	\$ 500,000	\$ 3,210,000	
Maintenance Building	1	EA	\$ 120,000.00	\$ 120,000		
Restroom	1	EA	\$ 120,000.00	\$ 120,000		
Pedestrian Bridge	3	EA	\$ 120,000.00	\$ 360,000		
Concession w/ Restroom	1	EA	\$ 220,000.00	\$ 220,000		
Amphitheater	1	EA	\$ 500,000.00	\$ 500,000		
Medium Shelter w/ Restroom	1	EA	\$ 250,000.00	\$ 250,000		
Large Shelter w/ Restroom	2	EA	\$ 290,000.00	\$ 580,000		
Small Shelter	4	EA	\$ 120,000.00	\$ 480,000		
Landscaping and Irrigation						
Plants and Seed						
Deciduous Trees - B&B 2" Cal - Swamp White Oak	160	EA	\$ 500.00	\$ 80,000		\$ 470,100
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	220	EA	\$ 475.00	\$ 104,500		
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	120	EA	\$ 350.00	\$ 42,000		
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600		
Shrubs - 3 Gal - Flutterby Flow Lavender Butterfly Bush	40	EA	\$ 70.00	\$ 2,800		
Annuals/Perennials - 1 Gal - Russian Sage	60	EA	\$ 25.00	\$ 1,500		
Grasses - 1 Gal	40	EA	\$ 25.00	\$ 1,000		
Fescue Turf - Seed	624000	SF	\$ 0.30	\$ 187,200		
Native Blend - Seed Mix	101000	SF	\$ 0.50	\$ 50,500		
Civil Improvements						
Utilities						
6" Water Service	6460	LF	\$ 50.00	\$ 323,000	\$ 802,900	
Backflow preventer (double check)	6	EA	\$ 10,000.00	\$ 60,000		
6" Sanitary Service Line with main connection	6460	LF	\$ 65.00	\$ 419,900		
Grading						
Detention Areas	1	LS	\$ 500,000.00	\$ 500,000	\$ 700,000	
Allowance for Misc. General Grading	1	ALL	\$ 200,000.00	\$ 200,000		
Parking Area						
New Curb	25600	LF	\$ 20.00	\$ 512,000	\$ 3,234,600	
Granular Subbase 4" (2 tons per 100 sf.)	8200	TONS	\$ 25.00	\$ 205,000		
Concrete parking spaces & roads	410000	SF	\$ 6.00	\$ 2,460,000		
4" White Thermoplastic	14400	LF	\$ 3.50	\$ 50,400		
Handicapped Pavement Markings symbol	40	EA	\$ 50.00	\$ 2,000		
ADA tactile warning strip (21' and 3')	26	EA	\$ 200.00	\$ 5,200		
Electrical Improvements						
Site Lighting						
Soccer Field Lighting	4	EA	\$ 285,000.00	\$ 1,140,000	\$ 2,980,000	
Baseball Field Lighting	1	EA	\$ 290,000.00	\$ 290,000		
T-ball Field Lighting	2	EA	\$ 60,000.00	\$ 120,000		
Lansing Daze Lighting Allowance	1	LS	\$ 1,000,000.00	\$ 1,000,000		
Electrical Service						
Provide Conduit and Power to Shelters/Fields	4400	LF	\$ 50.00	\$ 220,000		
Total Improvements				\$ 18,964,143	\$ 18,964,143	
General Conditions	10%			\$1,896,414.30		
Overhead	5%			\$948,207.15		
Profit	5%			\$948,207.15		
Inflation	5%			\$948,207.15		
Design Contingency	10%			\$1,896,414.30		

Project Budget: \$25,601,593.05

COST ANALYSIS

WILLOW PARK

Opinion of Probable Cost | Willow Park
Lansing Parks and Recreation Master Plan
 November - 2019

Demolition and Removal					
Demo and Removal					
Remove Existing Walkway	50	LF	\$ 6.50	\$ 325	\$ 3,325
Remove Structure	1	LS	\$ 1,000.00	\$ 1,000	
Remove Shed	1	LS	\$ 2,000.00	\$ 2,000	
Landscape Architecture - Site Improvements					
Pavements / Surfacing / Ramps					
ADA Curb Ramp	2	EA	\$ 500.00	\$ 1,000	\$ 220,940
Concrete walkways - 4" thick	38680	SF	\$ 5.50	\$ 212,740	
Concrete edging - 1'	360	LF	\$ 20.00	\$ 7,200	
Park Wide Site Furnishing					
Park Bench	8	EA	\$ 2,000.00	\$ 16,000	\$ 91,450
Park Table	14	EA	\$ 4,000.00	\$ 56,000	
Drinking Fountain and Bottle Filler	1	EA	\$ 3,250.00	\$ 3,250	
Bike Racks	4	EA	\$ 1,500.00	\$ 6,000	
Trash / Recycling Receptacle	6	EA	\$ 1,700.00	\$ 10,200	
Play Equipment					
Fitness Equipment	1	LS	\$ 60,000.00	\$ 60,000	\$ 543,400
Small Playground	1	LS	\$ 100,000.00	\$ 100,000	
Medium Playground	1	LS	\$ 250,000.00	\$ 250,000	
Synthetic Turf	6670	SF	\$ 20.00	\$ 133,400	
Aquatics/Spray Park					
Spray Ground	1	LS	\$ 450,000.00	\$ 450,000	\$ 450,000
Sports Fields					
Bocce Ball	2	EA	\$ 15,000.00	\$ 30,000	\$ 124,000
Shuffleboard	2	EA	\$ 6,000.00	\$ 12,000	
Gagaball	1	EA	\$ 2,000.00	\$ 2,000	
Pickleball	2	EA	\$ 40,000.00	\$ 80,000	
Signage & Wayfinding					
Primary	1	EA	\$ 15,000.00	\$ 15,000	\$ 15,000
Architecture - Site Improvements					
Shelters + Buildings					
Large Shelter w/ Restroom	1	EA	\$ 290,000.00	\$ 290,000	\$ 530,000
Small Shelter	2	EA	\$ 120,000.00	\$ 240,000	
Landscaping and Irrigation					
Plants and Seed					
Deciduous Trees - B&B 2" Cal - Swamp White Oak	30	EA	\$ 500.00	\$ 15,000	\$ 62,500
Deciduous Trees - B&B 2" Cal - Emerald Sunshine Elm	30	EA	\$ 475.00	\$ 14,250	
Ornamental Trees - B&B 1.5" Cal - Eastern Redbud	15	EA	\$ 350.00	\$ 5,250	
Shrubs - 5 Gal - Juniper	10	EA	\$ 60.00	\$ 600	
Fescue Turf - Seed	38000	SF	\$ 0.30	\$ 11,400	
Native Blend - Seed Mix	32000	SF	\$ 0.50	\$ 16,000	
Civil Improvements					
Utilities					
3" Water Service	100	LF	\$ 50.00	\$ 5,000	\$ 33,200
Backflow preventer (double check)	1	EA	\$ 10,000.00	\$ 10,000	
6" Sanitary Service Line with main connection	280	LF	\$ 65.00	\$ 18,200	
Grading					
Allowance for Misc. General Grading	1	ALL	\$ 20,000.00	\$ 20,000	\$ 20,000
Parking Areas					
New Curb	500	LF	\$ 20.00	\$ 10,000	\$ 47,305
Asphalt Overlay	18000	SF	\$ 2.00	\$ 36,000	
4" White Thermoplastic	330	LF	\$ 3.50	\$ 1,155	
Handicapped Pavement Markings symbol	3	EA	\$ 50.00	\$ 150	
Electrical Improvements					
Electrical Service					
Provide Conduit and Power to Shelter	280	LF	\$ 50.00	\$ 14,000	\$ 14,000
Total Improvements					
				\$ 2,155,120	\$ 2,155,120
General Conditions	10%			\$215,512.00	
Overhead	5%			\$107,756.00	
Profit	5%			\$107,756.00	
Inflation	5%			\$107,756.00	
Design Contingency	10%			\$215,512.00	

Project Budget: \$2,909,412.00

