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THE DEMAND FOR CHANGE: A STUDY OF RECREATIONAL AMENITIES FOR RAMONA
PARK

by

Nicholas K. Mucha

A thesis submitted to the Graduate College
in partial fulfillment of the requirements
for the degree of Master of Arts

Geography

Western Michigan University

May 2015

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THE DEMAND FOR CHANGE: A STUDY OF RECREATIONAL AMENITIES FOR RAMONA

Nicholas K. Mucha

Western Michigan University, 2015

For years, Ramona Park has been a summer destination spot for residents of the City of Portage. With beach access as well as picnic areas and playground structures, Ramona Park has offered visitors a place to beat the summer heat. This thesis looks at what priorities visitors have for potential future developments in the park. Park visitors were surveyed during the summer months of May, June, July, and August of 2014 to see what should be included in future developments of the park, and the potential impacts of those improvements on future park usage. Initial findings indicated that visitors are likely to increase spending on parking permits if new amenities are added.

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CHAPTER I: INTRODUCTION

Ramona Park Today

Ramona Park has been a summer destination for many Kalamazoo County residents. While Ramona is a city park in Portage, many people from the county also come to visit. Ramona Park has something for everyone;

- Playing courts: basketball, tennis
- Game fields: softball, football, soccer
- Play structures, including one with handicap accessibility
- Pavilions (shelter areas)
- Restrooms
- Beach area, including a monitored swim area
- Fishing dock

Ramona Park has served the greater Portage area for over 30 years, providing all types of recreation to Kalamazoo County. The illustrations that follow show Ramona Park as of 2014. It should be noted; the added features to the base map (wooded lot, swim area, playground and shelter locations) are not to scale, but merely provide a reference to the park layout.














Figure 1.1, Ramona Park Facilities

Figure 1.2 illustrates what current amenities are located at Ramona Park.



Figure 1.2: Aerial Photo of Ramona Park

 Playground	 Basketball courts	 Tennis Courts
 Softball Fields	 Football Fields	 Swim Area
 Soccer Fields	 Volleyball Courts	 Fishing Dock
 Shelters/Pavilions	 Picnic Area	 In-park Grills
 Restroom Facilities		

City of Portage Background

The City of Portage “contains approximately 33.65 square miles of land and water area, approximately 130 miles equidistant to the third and sixth largest metropolitan areas in the nation; Chicago and Detroit” (City of Portage, 2014). The topography within Portage is described as “characteristically flat, ranging between 850-900 feet above sea level. Much of the existing topography is a result of glaciation [primarily] outwash plains” (City of Portage, 2014).

According to the City of Portage’s Open Recreation Space Plan in regards to the physical geography; “the growing season in the area averages about 153 days, with monthly average temperatures between 26 degrees Fahrenheit for January, and 74 degrees Fahrenheit for July” (City of Portage, 2014). In terms of water recreation opportunities, Portage has “a relatively large number of lakes; Austin, West and Hampton, as well as portions of Long, Gourdneck, Sugarloaf and Little Sugarloaf” (City of Portage, 2014). Later portions of this chapter will include archive material from the Portage District Library which includes photographs along Long Lake from before the City of Portage was founded.

History of Ramona Park

Before Long Lake became a tourist destination spot for Kalamazoo and the Southwest Michigan area, the region was “inhabited by the Potawatomie Indian Tribe [who] lived here in fairly large numbers. [They] hunted, fished, and planted corn in the Long Lake area. The Potawatomies were forcibly removed by the U.S. Government in the 1830s and sent to reservations out west” (Long Lake Association). It would appear that after the Potawatomi Tribe was relocated, the area saw development of summer housing.

Long Lake had “cottages popping up around the lake in the late 1800s. Many of these were those of Kalamazoo Residents wanting a summer place” (Ellis, 2010). It was due in part that “in 1886 the Grand Rapids & Indiana railroad was completed and a spur brought visitors directly to the area that is now Ramona Park” (Long Lake Association).

Ramona Park received its name after the “Indian Princess in Helen Hunt Jackson’s popular novel Ramona, which was published in 1884” (Hanson, 2013). Initial uses at Ramona Park included; “teen dances and concerts [at the Ramona Palace Ballroom], picnics because he [manager at the time] could obtain a one day liquor license” (Hanson, 2013). “Ramona Palace was always very family oriented right down to the ownership” (Whitcomb, 2014), indicating that Ramona Park was in fact a family destination. “Entertainment at the park was held at the Ramona Palace, a popular dancing establishment, until it was closed in the 1940s” (Ellis, 2010). Ramona Park was also a destination spot for visitors such as “Micky Mantle (New York Yankee) [who] played at Ramona before becoming a professional ballplayer” (Whitcomb, 2014).

As of 2014, “there are 315 homes on the shorelines of Long Lake, and our lake continues to be a favorite destination for recreation, fishing and family living” (Long Lake Association). Ramona Park in its current state provides recreational enjoyment for thousands of people a year. As demand increases for summer recreational destinations that are close to home, Ramona Park has had to adapt to meet the needs of the visitors. In later chapters, research that was conducted in the summer of 2014 will discuss what new amenities might be developed at Ramona Park to meet the needs and demands of the visitors.

Ramona Park was the destination spot for summer recreation in Kalamazoo County. If park developers and managers wish to continue to keep visitors interested in Ramona Park, then the information provided should be considered when deciding what new amenities will be added in future developments. If an amenity didn’t work in the past for the park, it may not work in the future. The next section of this chapter looks at photographs collected from the archive room at the Portage District Library.

Photos

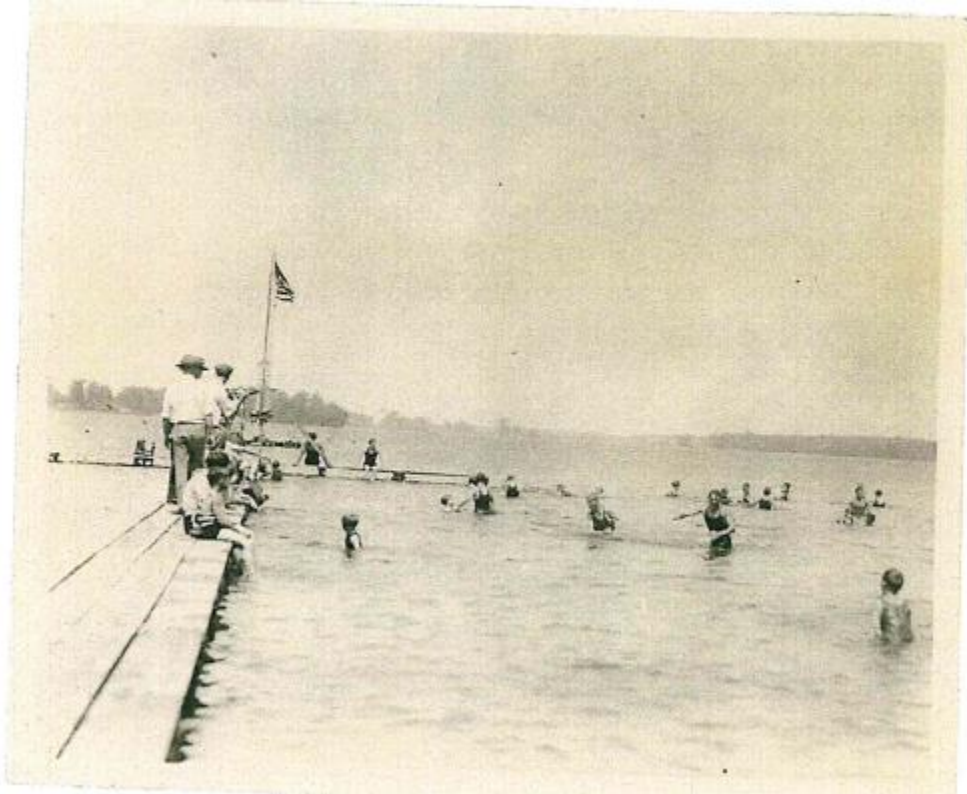


Figure 1: Long Lake Swim Area

Prior to city ownership, the photo illustrates the swim area in the early 1900s. During the early to mid-1900s, people used this style of dock, where currently there is no dock at Ramona Park that allows visitors to interact with the swim area. It would appear that there are no visible lifeguards in this photo during this time, where today Ramona Park has a staff of a dozen lifeguards who focus on patron safety in and around the water.



Figure 2: "The Slides"

Figure two shows that Long Lake, and possibly the recreational area of the lake, had at least two slides that could be used for summer entertainment. As of the summer of 2014, no water slide exists at the park. In later chapters, we discuss different amenities that park visitors who were surveyed in the summer of 2014 wish to see in the future. As we can see from figure two, Long Lake had an amenity that seemed to draw people to the area, or had the potential to draw people to the lake.



Figure 3: Boat Launch

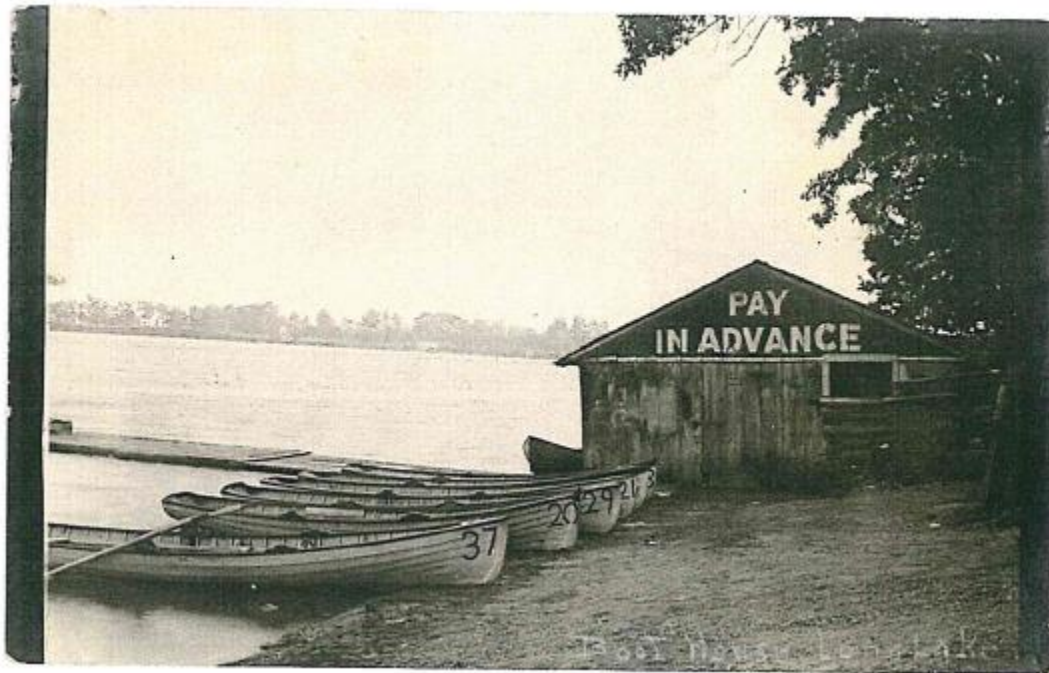


Figure 4: "Pay In Advance"

Figure three and figure four show Long Lake with an area that had boat rentals for visitors to utilize, though as of the summer of 2014, no boat rental facility exists. In later chapters we will discuss how high of a demand boat rentals happened to be for park visitors.

Research Problem

Ramona Park hosts numerous visitors during the summer months of operation (May to September). However, in recent years visitors have felt that they are not getting the most out of their park experience. Rules and regulations are becoming stricter. This ultimately reduces the amount of times visitors want to visit the park, according to claims that were identified numerous times during the 2014 season from my interactions with park visitors. They felt that ‘you couldn’t have any fun at this park anymore’ due to the increase in rules and regulations regarding the swim area. Some visitors, possibly a dozen during the summer season, even stated that they would seek an alternative park where they could use flotation devices (currently not allowed at Ramona Park due to safety concerns). The research conducted for this thesis focused on what future amenities could be brought to the park that would increase visitor’s attendance. The hypothesis of this research; *park attendance will increase if new amenities are added in future developments.*

While Ramona Park does have amenities (playground, beach and swim area), visitors have asked for new amenities. One amenity that visitors asked for is boat rentals, such as kayaks or paddle boards. It has been mentioned several times in both

the summers of 2013 and 2014 by visitors. Their comments indicate that the park could make money by offering some type of boat rental.

Another request that visitors have asked for or commented on is updated bathroom facilities. The Parks and Recreation Department in 2014, updated the Men's restroom (which is located at the beach), to comply with the American with Disabilities Act (ADA) compliant. Prior to the update, both the outside restroom and the one located inside the beach house would not accommodate people who rely on wheelchair accessibility. The woman's restroom is scheduled for remodeling sometime in the year 2015.

Another amenity that could greatly benefit the people who visit Ramona Park in the summer months would be some type of water fountain/water play structure. The idea would allow children a type of recreational play structure that also incorporates water, which could be in a form of a splash pad. With a water play-structure, there would be a maximum depth of standing water in inches, instead of feet (as is the case of the lake). This would provide peace-of-mind to parents and guardians who wish to remain less active and involved with their children.

There are those users who wish to announce their disappointment and irritation in the form of complaints. Complaints at Ramona Park happened to be; not being able to bring floating rafts into the swim area (rafts reduce the visibility of the water for the lifeguards who are on duty). Another popular complaint that visitors have during the summer months at Ramona in regards to the water and beach area is; not being able to bring toys or balls into the swim area (this is banned due to balls going outside of the

swim area where boaters like to travel on the lake and becoming a hazard if a child/adult were to go outside of the designated swim area). As of 2014, the source of these complaints has been carefully looked at by park officials to determine if an alternative is available. Due to the safety concerns for visitors, park officials have decided to keep the rules and regulations as is. While staff would explain to visitors that these rules are designed to keep children and adults safe, most of the visitors who complain do not wish to hear the reason behind why the rules are established. This is why some type of water play structure would be beneficial to Ramona Park; not only to help cut down on the complaints, but also provide an alternative recreational structure for visitors to use. While it is not recorded how many visitors complained, a fair number of them would state that, 'you can't have any fun here anymore'.

CHAPTER II: LITERATURE REVIEW

Introduction

There is a large body of literature on parks; park maintenance, planning, layout of various amenities, and trail system design. The purpose of a park is not only to provide recreational opportunities to users, but to also protect the wildlife and natural resources in a given or specified area. In Portage, Michigan for example, the mission statement is “manage the protection of natural and physical city assets and provides recreation, cultural and leisure programs for resident enjoyment” (Portage, City of – Parks and Recreation Department, 2014).

This literature review will focus on sections of park planning, with an understanding of the benefits of having parks in a city or a given region. Section one will focus on the idea of place making, and how to make a park a center for people to visit and utilize the park for healthy activities to increase quality of life. Section two will discuss the ecological benefit of parks. Section three discusses transportation, and the importance of transit to a park system in terms of getting visitors to the parks. The fourth section discusses park management, and how to effectively provide a safe habitat for native species, while providing for the enjoyment of park visitors.

Place Making

The idea of place making, or public areas, creates a sense of place for people to visit and use for multiple activities. As far back as the Roman Empire “great nobles met their clients – supporters or hangers-on. Business and other deals were made among more general socializing. The custom was that business was conducted in the Forum Romanum in the morning, meetings for pleasure took place later in the day and

elsewhere in the city” (Rodgers, 2008). Ramona Park does not offer a place for citizens to sell their goods, however it does offer citizens a place to meet and socialize with others.

A sense of place also helps improve public health by bringing people together to interact and move around. “if we are to improve the health and quality of life for residents and visitors, and build sustainable, vibrant communities, we must turn our attention to improving the built environment by providing quality places that bring us together” (Layton, 2011). In order to improve the health and quality of life, Ramona Park provides a means for Kalamazoo County residents a place to take part in various recreational activities.

A sense of community also helps make a place better for those who call that area home. Place making helps people take pride in a given area or region, which in turn promotes higher involvement in the community. “Small town residents proclaimed that the small town was the premiere form of community” (Hummon, 1990). Parks have the ability to provide a “natural, quiet, safe, friendly, neighborly, good for families and children” (Hummon, 1990). Central Park in New York, New York for example offers a natural, safe, and friendly place for people of all ages to enjoy. Central Park creates a sense of place and pride to the local inhabitants that surround the area.

Place making is important to any region, for it helps create health and happiness in a community. Parks can be in a position for communities who want to create this sense of health and happiness. Parks allow people to use the given space how they best see fit (within reason) in regards to promoting health and happiness. Parks and place

making should go hand in hand, for they both have the ability to positively influence the other. Place making is just one of the concepts behind a good park system.

Ecology

Understanding the local ecology of an area is vital to future planning of that area. Ecological knowledge is key to providing for both humans and the natural inhabitants of an area. “The lack of urban ecological knowledge is not without consequences. Biodiversity of urban habitats is poorly documented in many cities, and thus baseline information is scarce” (Niemela, 1998). In recent years, park systems have started to document more of the biodiversity that currently exists on a given piece of land. When new parks and structures are built, concern for the local habitat tends to be a low priority. One way to change this is by increasing cooperation among ecologists and planners.

There may not be a correct answer on how to best manage an area of land, however “management prescriptions [should] include leaving certain areas unmanaged, while some areas would be managed lightly, and yet others more intensively” (Niemela, 1998). What Niemela (1998) proposes is to reduce the amount of management seen in urban parks. If management is reduced in urban parks, nature has a better chance of flourishing and providing for the animals that rely on the biodiversity offered in the park. These benefits could include increased air purification, increased water purification, increase in water absorption during rainfall, which in turn would reduce the need for storm water runoff systems. Reducing the impact on the natural environment

could prove beneficial not only to humans, but to animals/insects/non-human species as well.

Unfortunately humans are the biggest influence on the landscape in terms of impact and destruction. “Our historic tendency has been to promote the development of cities at the cost of natural destruction: to build cities we have cleared forests, fouled rivers and the air, and leveled mountains” (Campbell, 2007). In order to reduce the amount of human impact on the landscape, planners need to discuss location; is the location in a poor biodiversity spot (i.e. little to no plant and animal life) or is it in a rich biodiversity spot. It would seem that future developments should include nature, instead of trying to destroy it.

Cities have been built due to the increase in demand for new services and better quality of living, with little regard to the resources and impacts. There are some planners and developers that “see the city as a consumer of resources and a producer of wastes. The city is in competition with nature for scarce resources and land, and always poses a threat to nature” (Campbell, 2007). As the world population grows, open land, or more specifically undeveloped land becomes a big commodity. The benefits of the amount of land that the parks cover include; protection of wildlife and native species, development of nature reserves and preserves to reduce the amount of human impact is seen on the land, protection against future human development on this land. Some cities, such as New York, have used up their allotment of land (save for Central Park) and have nowhere else to expand into. Future development should look at what can be

reused or replaced, without needing to acquire more land. More land would decrease the health benefits that are generated by systems such as public parks.

Public parks are a benefit in terms of ecology in the sense that they help provide natural benefits to a region. Public parks are a natural system that helps filter rain water, provide shade which in turn can reduce the urban island heat index, and provide a means for the public to partake in outdoor recreational opportunities. However, parks can only filter a given amount of water based on their land coverage, provide a set amount of shade given the amount of trees. In order to reduce the amount of toxins that a park filters via the ground, proper drainage should be constructed, that way there is less “stormwater runoff [that] cleans the urban surface by carrying heavy metals, organic toxic substances, and some pathogens to nearby water bodies, adding to water pollution levels” (Forman, 2014).

By creating more park systems, not only will the public be able to enjoy recreational opportunities, but biodiversity might be conserved. “The most compelling ‘practical’ reason for conserving biodiversity is undoubtedly to protect nature’s valuable ecosystem services – those ecosystem functions that provide economic utility to humans, such as flood control, water purification, and nutrient cycling” (Perlman, 2005). Perlman (2005) also mentions that; “the dollar value of these services to society is tremendous, if natural ecosystems did not provide them, local and state governments would need to spend large sums to accomplish the same thing” (Perlman, 2005).

Ecology can also play a key role in nature tourism, which “generates some \$30 billion in revenues every year” (Lindberg, 1991). However in some cases people are forgetting about the ‘nature’ part in nature tourism. “Very little of the money tourists spend goes toward protecting the ecosystems they [tourists] want to visit. Most governments charge far less for access to natural sites than tourists and tour organizers are willing to pay” (Lindberg, 1991). By increasing park admittance fees, the operating organizations can use the revenue to improve the conservation efforts of the ecology of that park system. As the quality of the ecology of a region goes up, the benefits that the ecology provides to the local human population also goes up. Protecting the ecosystem is vital for the long term stability of regions natural assets.

Transportation

When people choose a park to visit, most pick one that meets their needs, such as; running/walking trails, restroom facilities, a mix of shade and sun, picnic areas and quite possibly the most important, location. People tend to go to parks within a given radius of their homes. Others drive to get to their destination park. The city of Portage has semi-urban and non-urban regions within the city limits. Portage also has the only operational beach facility (with public swim hours and a professional lifeguard staff) in Kalamazoo County.

The goal of a public space or park system should be to “separate people and cars” (Inman, 2006). Today’s society, cars are becoming more of the go-to mode of transportation, while non-motorized travel is shrinking. However there is hope in creating more eco-friendly transportation options that can assist people in getting from

one area to their park destination. “There should be substantial areas in a city, some even up to a half mile square, into which no automobile should ever intrude unless beneath the ground” (Inman, 2006). This may not be a challenge for cities such as Chicago and New York, which may have the financial abilities to construct underground parking facilities; however a city with a population around 50,000 may not. If finances are not available for underground parking, then alternatives should be considered, such as parking in the front of a park while the rest of the park area is car free.

Unfortunately most American people are in the mindset of jumping in their vehicle to get anywhere, even if it is a short distance away (short distance being a mile or less for this case). In recent years, there has been a push in cities such as Portland, Oregon to increase the number of people who commute to and from places by bicycle. This push has helped “reduce people’s reliance on motor-vehicle transport, while increasing travel options using bicycles” (Smith, 2014).

Cities that rely heavily on motor transit would do well to start developing multi-modal options for those who wish to travel by means other than vehicle. Developing more options for non-motorized transit decreases the impact humans have on the environment in terms of required natural resources and air pollutants. “Many local governments are noting an increase in user demands for developing multi-use, regional trails that in addition to providing recreational experiences and places to exercise also serve as important transportation linkages. It is well known that properly located trail systems can buffer adjoining land uses and help define and shape community boundaries. In addition, urban trails benefit the local economy by attracting tourists

from outside of the region” (David, 2013). Instead of promoting more lanes on a roadway, municipalities should try and promote alternative means of transportation. As David (2013) mentions, local governments are noticing an increase in multi-use trails.

By creating bike paths along roadways, or bike lanes on the roadways, cities can change the way people get to work, recreation opportunities and family. By increasing transportation options that are non-motorized, cities can start to promote a healthier alternative of travel. Bike trails would be beneficial to a city, due to the travel options they help promote. However, bike trails are only effective if they connect to the areas that citizens frequent. A bike trail in the middle of the country may not be as beneficial as a bike trail that follows a main road filled with stores. Access to the bike trails, or multi-modal trails is also essential. Thus, access points should be placed in neighborhoods and high demand areas. This will give the people who live near the bike trail a reason to use said trail.

Park Management

Parks have not always been pristine and elegant; “by the 1960s the great nineteenth-century public parks had fallen on hard times. They were run down, poorly maintained, and often downright dangerous. Parks were thought by city planners to be old-fashioned and thus not considered important urban amenities” (Inman, 2006). Portage Parks and Recreation is fortunate that city planners and officials understand the importance of parks and the attraction they bring to cities. As people start to become more health conscience, their demand for outdoor recreation has increased and “as a result of the public’s interest in outdoor activities such as exercise walking, jogging, in-

line skating, and bicycling, and a greater awareness of the natural environment, large urban parks have grown enormously in popularity and the intensity of use” (Inman, 2006).

Events such as ‘Take Me Fishing’ and ‘Get Active Portage’ help support Inman’s claim that “large urban parks have grown enormously in popularity and the intensity of use” (Inman, 2006). Combined, those two events brought over 1,000 people to Ramona for a combined total of six hours. The popularity of those two events illustrates to Portage officials just how important Ramona Park has become in recent years for family recreation. ‘Take Me Fishing’ is an event sponsored by Portage Parks and Recreation that is held every year, primarily in May, that teaches children how to fish. The event brings multiple vendors and fishing sponsored organizations, such as the Michigan Department of Natural Resources, Kalamazoo County Sheriffs Marine Patrol Division, Portage Public Safety and some private individuals as well. This event usually accommodates anywhere from 500 to 800 people show up, typically a larger group if the weather is favorable. The ‘Get Active’ event is a mini-triathlon that children can partake in. Local groups, such as Lee Sporting Goods bring kayaks to this event so visitors can try their hand at kayaking on Long Lake. There are also other groups that cater more to healthy living that typically promote their company at this event. This event accommodates roughly 150 kids participate in the triathlon with some 300 to 400 adults accompanying them.

Greg Brown (2011) researched methods into gaining information for park planners in terms of what participants wish to see at the park. His researched stated

that “in a time of increasing demands on national parks, park planning would benefit from a set of information tools that provide information about what visitor’s experience, what environmental impacts they observe, the facility/service needs they perceive, and importantly where these attributes are spatially located. The PPGIS (public participation geographic information system) mapping method provides a systemic tool for collecting and analyzing spatial data that can display the consistency of visitor experiences and perceived impacts with park management zones at the regional, national park unit or subunit level” (Brown, 2011). Parks around the world could benefit from PPGIS software that would track “visitor perceptions of park experiences, environmental impacts and facility needs” (Brown, 2011). With this software, park planners could better tailor their time and resources to those areas that see a majority of use from visitors to help increase the patron’s experience.

Some parks, both nationally and locally are looking toward the future in park management and development. The Grand Canyon National Park Foundation Statement discusses the planning and information needs for future developments. Some of the planning and information needs that are mentioned are; “comprehensive plan to address cave and karst – “landscape formed from the dissolution of soluble rocks, characterized by sinkholes, caves, and underground drainage systems” (University of Texas, 2015) - resources, abandoned mineral lands implementation plan, geologic hazards evaluations, cave inventory, better understanding of regional aquifers and how they connect to Grand Canyon seeps and springs, geologic hazards evaluations” (National Park Service, 2011). This list indicates what tasks need to be completed for the

park, to make it both enjoyable to the public, but to also better understand the resources of the park.

Not only is the management of a park important, but the master plan of the park is important. "A thorough planning process is key to gaining trust in the resulting plan. A properly developed master plan has a better chance of being used as a guide, reviewed more often, and adhered to when challenged," (Schnell, M.P. 2014). Master plans are a necessity when it comes to future development, for they show the community where the park is headed, and how it got to its current state. As Schnell (2014) states, trust is an important part of the planning process. Without trust in a plan, there may be little to no community involvement in making the park a better place. Park plans should also promote the green infrastructure of the area. Green infrastructure "refers to urban landscapes that perform environmental work, such as cleaning air and runoff, restoring groundwater, maintaining the native plant gene pool, and providing wildlife habitat" (Lewis, 27). Ramona Park has acres of woodland, grasslands and beach access. While it does have pavement for parking at the various amenities, there is more grass/woodland than pavement.

Parks also help expose visitors to nature. A properly managed park can both provide for nature, in terms of preservation and reservations, as well as providing recreational opportunities for those visitors who visit the park. Recreational opportunities, such as game fields, tennis/basketball courts, picnic areas and playgrounds require money in order to be properly maintained. While funding was mentioned earlier, parks also incur operational costs. These operational costs could be

due to preservation practices, upkeep of the various facilities that are located on the park or a variety of other reasons. Robin Naidoo states that “it is better to recognize and incorporate costs at the outset of the planning process, rather than belatedly incur the (higher) costs of a less efficient plan” (Naidoo, 2006). If park officials allocate a higher budget in the beginning stages of development, in the long run they could save money. An example could be designing a trail system. If an adequate trail system costs \$100,000, but a better trail system costs \$125,000, it may be in the best interest of the park system to spend the extra money in order to reduce the amount that may be needed in later years. “To arrive at a quality park design, both dollar and human value aspects must be weighed. These aspects boil down to functional considerations and those of aesthetics or beauty” (Molnar, 1986). Again, costs of improvements have to be weighed against the human value of those improvements when considering park design.

In terms of site design for a park, one of the first steps is “survey, or an assembling of facts and data. The second is analysis, or the making of value judgments about the effect of one fact upon another. The third step may be called synthesis, or the weaving of the results of analysis into a comprehensive solution to the problem” (Molnar, 1986). The research in this thesis first focused on a survey, which looked at data on what visitors perceived to be important future developments. Developers cannot build a new amenity without the input of those who may or may not use the new amenity, which leads into Molnar’s second step of analysis. Analysis is needed to see what one fact may have on another. The third step to a site design is as Molnar states: synthesis. Without a solution to the problem, the problem will still remain.

Citizen input is essential to site design, or in this case park management.

“Involvement is especially significant for developments serving [local populations], to whom the neighborhood is essentially the entire world and a major source of identity” (Molnar, 1986). Many urban communities focus on their parks as a source of identity, such as New York City. “To deny the residents direct participation, while outsiders ram through ideas they alone imagine to be cute, is both arrogant and patronizing. This is the way public alienation is created” (Molnar, 1986). In recent years there has been a bigger push to get community involvement in park improvements. Without community involvement, site plans and designs are not as effective.

In theory, anyone can build a playground in a field that is located in a neighborhood and call it a park. However to make it a park that visitors want to visit time and time again, “design criteria should be developed through analysis of each situation rather than through reflection upon what has been found to be applicable to other circumstances” (Molnar, 1986). Proper design, which includes analysis of what visitors want via a survey, should be held to a higher standard. As referenced earlier by Molnar (1986), public participation is important in terms of park management, for public input allows designers the ability to meet the needs of those the park is going to serve.

Park management should also look at why children play. Do children play on equipment because it’s new and there, or do they play to have fun and develop motor skills? The reason why children play is important to any developer, for understanding the reason will help the planner effectively create a park that will have a positive impact on as many children as possible. Mike Ellis states that kids “play for the stimulation they

receive” (Ellis, 1973). Parks should be created and designed to make visitors want to stay and enjoy the outdoors for hours, not minutes. If a park is designed well, then there should be little to no problem keeping people engaged and active.

A properly designed park has to also focus on the size and location of the amenities it offers. “It makes sense to locate facilities on portions of the site where only slight remodeling of the topography will be necessary” (Molnar, 1986). This idea is also influenced by the finances available for renovations and improvements. The more topographic remodeling a park system has to do; the less financial resources are available for other improvements. In terms of site design and park management, the better thought out a park is, the less financial resources may be needed for topographic remodeling.

Park planners should first figure out what the problem is, and then address how to remedy this. If public participation can be useful for certain aspects, such as what amenity should be added, or where it should be added, then park managers should gather input from the local community, for they are the ones that are going to be primarily using the park. Park managers should be considering how best to improve the parks so that the parks can best serve the people who use them.

Another way to best serve the people who use the park is by increased productivity. One way to help increase productivity of a given area is by looking at the plan of the park. “The plan one arrives at by putting all the existing resources of a park site to their most appropriate use is in a sense a two-dimensional solution. It becomes three-dimensional when one takes advantage of overlap potentials to create layers of

use occupying essentially the same space” (Molnar, 1986). One way to increase productivity of a park is to use “the outfields of baseball diamonds as football and soccer fields” (Molnar, 1986). Another way to increase the productivity of a park is by increasing the number of plants, such as trees that not only provide shade, but can also act as “environmental cleaning machines” (GGLO, 2015). Increasing the number of trees that can provide shade, clean the air, and help moderate temperature, productivity of parks increase.

The use of appropriate structural materials is also an important concept to park management. The right material could; save a parks department money in the long run in terms of up-keep, be more aesthetically pleasing to visitors, and provide a better building material for play structures. A few ways to accurately match material to the need of the parks is by considering the following, presented by Donald Molnar (1986):

Durability: will it stand up under the anticipated pounding.

Appearance: is it visually compatible with nearby elements.

Availability: it is economically foolish to haul material from distant sources if comparable material is locally handy.

Tactile Qualities: its feel is especially important where the material will come in contact with the skin as in the case of sitting and playground surfaces.

Climatic Adaptability: will the material remain stable under such rigors as freezing, thawing, and intense sunlight?

Drainability: does it allow rainwater to percolate through or run off rapidly and render the area usable after storms?

The above criteria should be “applied along with whatever priorities are suggested by the activity; for example, in a playground, you might consider concrete for a peripheral walkway since durability is the most essential criterion” (Molnar, 1986). The right material is important when considering site plans/designs and park management.

Park management encompasses a host of ideas and practices. While some of the ideas and practices were discussed previously, there are still many that, due to the scope of this research and the limited amount of space to write, could not cover them all. The above topics are only a small portion of what literature is available in regards to park management.

CHAPTER III: METHODOLOGY

Background of Methodology

The Fall of 2013, was when the idea came about to conduct research at Ramona Park. From brain storming ideas with Dr. Dave Lemberg, Parks Director Bill Deming, and Parks Manager Tricia Keala, the ideas were narrowed down to amenity testing. After collaboration between these three people and the primary student investigator, the idea of doing a survey seemed to be the best option to obtain results which would indicate what amenity, according to visitors, would increase their attendance to the park in the summer months. It was not until mid to late February to early March that the first draft of the survey was presented to all three members. After further consultation between these members, and eventually members of this thesis committee, the following survey was agreed upon in April 2014. Once the survey was agreed upon, the primary student investigator worked with the chair of the thesis committee to complete the Human Subjects Institutional Review Board (HSIRB) application. Once the HSIRB application was accepted in May of 2014, sampling could take place.

Survey and Sampling

The survey for this research was administered in Ramona Park during the summer operation months of May, June, July, and August of 2014. The survey focused on park visitors who visited Ramona Park, located in the City of Portage, during the a-fore-mentioned months in 2014. Park visitors who were surveyed were required to be at least 18 years of age or older to be eligible to partake in the research. As the results will later show, the majority of people surveyed lived either in Portage or Kalamazoo. Ramona Park, being a City of Portage Parks and Recreation Department property, is

primarily used by Portage residents. The survey for participants in the study was oriented more toward Portage Residents.

The intent of the survey was to collect data in regard to testing if a certain park amenity alternative was more favorable for future developments. Park visitors were given various options in terms of new park developments that could potentially take place. These new amenities are designed to increase park attendance and provide alternative modes of entertainment for visitors at Ramona Park in the summer operation months. See appendix B for the actual survey that was presented to visitors during the above mentioned months.

Survey Questions and Design

The survey was primarily focused on gathering data and feedback from Portage Residents. This was due in part to park visitors being mostly Portage Residents. For reference, each question discussed in this next section will also include the question as it appeared on the survey. Some formatting may be different due to print margins on the survey.

The first question in the survey asked participants if they were residents of Portage, Kalamazoo, Other, with space to write where participants are from if they selected 'other'.

Are you a resident of:

Portage_____

Kalamazoo_____

Other _____

The next question asked on the survey was Age. Participants had to be at least 18 years of age or older to partake in this research. The question offered seven categories for participants to select their appropriate age range: 18-21, 22-30, 31-40, 41-50, 50-60, 61-70, and 71 and above.

Age

18 – 21 22 – 30 31 – 40 41 – 50 50 – 60 61 – 70 71+

The next question in the survey asked, how many times do you come to Ramona Park in the summer season (May to September). A number line was produced that allowed participants to circle the appropriate number of times they come to Ramona Park; 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 or above.

How many times do you come to Ramona Park in the summer season? (May – September)

1 2 3 4 5 6 7 8 9 10 11+

The next question asked, do you have children. The aim of this research, in part, was to determine if new amenities should be oriented more towards kids, or adults. If the survey found that most participants did not have kids, then the need for a splash pad [a fountain set into the ground that shoots water up through holes at various times] might be quite small.

Do you have children?

Yes No

Do you bring your child/children to Ramona Park was then asked. Again, if participants in the survey do not have kids, or do not bring their kids to the park, future developments may need to tailor a different age group or demographic of people.

Do you bring your child/children to Ramona Park?

Yes No

If ‘yes’ to children, ages? The need for ages was determined to help in deciding how to tailor future developments to the needs of the park visitors. If children do come to the park with their parents/guardians/adult in charge, but are between the ages of two years old and four years old, a in-line hockey rink may not be the best new amenity to add to Ramona Park. The age groups for this question were as follows: 0-1 year, 2-5 years, 6-11 years, 12-15 years, and 16-18 years old. A spot was given below each age group for participants to put the number of children they have that belongs to that age group.

If Yes to children, ages?

0yrs – 1yr. 2yrs. – 5yrs. 6yrs – 11yrs. 12yrs. – 15yrs. 16yrs 18yrs.

The next section of the survey focused on; rank the reason you come to Ramona Park. The rank system was set up for a 1 to 5 response. The categories that were available for ranking were: beach, playground, picnic area, monitored swim area, location. Ramona Beach is the only lifeguard monitored beach in Kalamazoo County, being a draw for people in the region. The playground at Ramona Park was recently redesigned. The surface of the playground is a soft felt style mat, which has sand underneath. This provides extra padding if a child or user were to fall and land on the ground. A section of the playground also allows wheelchair access to part of the play structure via a ramp that is incorporated in the design. Ramona Park has many visitors who use the various picnic areas near the beach. The picnic areas are shaded, and have a view of the lake. The ‘monitored swim area’ was asked to determine if the lifeguarded swim area is a reason people visit Ramona Park. The final question, ‘location’ was asked to help determine if

people choose Ramona Park over beaches such as Silver Lake in St. Joseph Michigan, or the beaches at South Haven Michigan.

Please rank (1-5) the reason you come to Ramona Park: (5= highest, 1 = lowest)

Beach_____

Playground_____

Picnic Area_____

Monitored Swim Area_____

Location_____

Other Reasons why you come to Ramona?

Other_____

The following section of the survey asked park visitors: how likely would you come to Ramona if the following items were added in the future; with the following scale for visitors to use in their rankings; 1 = not likely, 2 = less likely, 3 = neutral, 4 = more likely, 5 = very likely. Future improvements were listed; boat livery (rentals) with a sub-section including, row boat, kayak, paddle board; splash pad; dog park; trail system; in-line hockey rink; disc golf course. This list was compiled with the help of Portage Parks and Recreation personnel; Director of Parks and Recreation, William (Bill) Deming, Parks and Recreation Manager Tricia Keala, and Thesis Advisor Dr. Dave Lemberg (Western Michigan University) with consultations from Dr. C. Scott Smith (Western Michigan University), and Dr. James (Jim) Lewis (Western Michigan University). The bottom of this section also had a place that park visitors could leave comments for any other amenities that they wished to see that was not listed previously. In the next chapter, results, the comments listed under this section will be presented. Programs were the next sections that were tested in this survey under the overall category of new amenities.

Fishing camps and swim lessons were the subsections for this portion of the survey. As with the previous section, a section was set aside to allow park visitors a place to provide feedback for any other programs they wished to see added to Ramona Park.

How likely would you come to Ramona if the following items were added in the future:

1=Not likely 2=Less Likely 3=Neutral 4=More Likely 5=Very Likely

Facilities:

Boat Livery: (Rentals)	1	2	3	4	5
Row Boat	1	2	3	4	5
Kayak:	1	2	3	4	5
Paddle Board:	1	2	3	4	5
Splash Pad:	1	2	3	4	5
Dog Park:	1	2	3	4	5
Trail System:	1	2	3	4	5
In Line Hockey Rink	1	2	3	4	5
Disc Golf Course	1	2	3	4	5

Please add any other amenities you would like to see

Other: _____

Programs:

Fishing Camps	1	2	3	4	5
Swim Lessons	1	2	3	4	5

Please add any other programs you would like to see

Other: _____

Following the facilities and program amenities section, any of the above items you do not wish to see brought to Ramona Park, was asked. Responses to this question will be discussed in the next chapter, results.

Any of the above items you do not wish to see brought to Ramona Park? Why?

Would you be willing to pay more for a parking permit if any of the above (boat livery, splash pad, dog park, trail system, in-line hockey rink, disc golf course) amenities were added to Ramona Park was the next question asked of park visitors taking the survey. Room was given on the survey for visitors to respond to this question (responses will be discussed in the following chapter, results). Visitors had the option of circling either yes or no in this section. If yes (to paying more for parking permits) how much more on parking permits was then asked as a follow up question. Visitors could check one of the following options; \$1, \$2, \$3, \$4, \$5, greater than \$5.

Would you be willing to pay more for a parking permit if any of the above (Boat Livery, Splash Pad, Dog Park, Trail System, In-line Hockey Rink, Disc Golf Course) amenities were added to Ramona Park?

Yes No

If yes, how much more on parking permits?

\$1____ \$2____ \$3____ \$4____ \$5____ Greater than \$5____

The last question asked on the survey was; any feed-back you wish to share. In the next chapter, results, the responses will be given to this question. The survey provided five lines at the bottom for people to share any comments, questions, concerns they had either with the survey, or the Portage Parks and Recreation Department itself.

Any feed-back you wish to share?

Change In Methodology

It should be noted that factors influenced the change in the methodology over the summer of 2014. Initially, the survey was handed out when the concession stand was open to the public. The actual time that the concession stand was open during the summer typically ran from 12:30pm to 6:00pm. However, due to a big influence of weather, the concession stand may not have been opened on some days due to either the beach not being open (this would happen if the weather is forecast to rain during operational hours) or a worker calling in sick. With limited concession operation hours, there happened to be a peak time when visitors would require something to eat/drink or wish to purchase for their children. It was noticed that the peak time for concession demand happened to be from 1:00pm to 3:30pm/4:00pm depending if it was a nice day in terms of weather.

Weather was one of the biggest influences on survey collection that could not be accounted for or controlled. Park visitors do not wish to come to the beach on rainy days. Rainy days would be the cause that little to no surveys were collected. On the other hand, when the weather was forecasted for sunshine and a temperature in the 80's (Fahrenheit), Ramona Park would have more visitors' visit, which would increase the demand for concession items. For the month of May, according to the United States Climate Data, the average high temperature for Portage was 70 degrees Fahrenheit. With 70 being the average high, many visitors may not wish to go swimming or use the beach if the air temperature is only in the 60s for most of the day. This factor could attribute to the low number of surveys that were collected for the month of May, 2014.

Once the weather changed in June, with an “average high temperature of 79 degrees Fahrenheit” (U.S. Climate Data), more visitors visited the park, which also increased the rate of survey responses that were collected. July, 2014 had an “average high temperature of 83 degrees Fahrenheit” (U.S. Climate Data). The average high temperature for August was “81 degrees Fahrenheit” (U.S. Climate Data). The increase in average high temperature increased park attendance due to visitors wishing to have lake and beach access when they visit a park.

With the hottest part of the day in the afternoon, the park had peak visits from visitors during this time. The peak number of visits would be greater on weekends than during the week. On weekends, if the weather was favorable for beach visits (sunshine and hot) more surveys were collected than during the week, even if the weather conditions were the same. While the park was open seven days a week, it was noticed that more visitors would visit on weekends than during the week. However, there were days during the week that patron numbers were higher than weekend numbers. Again, weather was one of the biggest, if not the biggest influence on survey collection.

However, if the weather was ideal for survey collection, the next hurdle was getting visitors to be part of the research. Patron’s willingness to participate in the research was the second biggest influence of collecting surveys. It did appear that once visitors noticed recompense was being offered for their time, most visitors at least considered filling out a survey.

University Compliance

Compliance with standards set forth by Western Michigan University’s *Human Subjects Institutional Review Board* (HSIRB) had to be met. Information packets, such as what the research entails, who the subjects would be, what type of research is being

conducted, was sent to the HSIRB group for approval. Upon approval, a case number was assigned to this research (14-04-22). The HSIRB group requires researchers to take online courses in how to properly conduct research. These courses focused on what type of questions can be asked in research, the importance of confidentiality, and the ‘do’s and don’ts’ of research collection.

Once the online courses were completed, and the submitted information accurate and up to the standards set forth by the HSIRB, the *Human Subjects Institutional Review Board* approved the research for this thesis on May 5th, 2014. See appendix C for a listing of the documents submitted to the Human Subjects Institutional Review Board.

Data Collection

Surveys were located in the concession stand which can be seen from the beach, water, and playground area. The concession stand is located inside of the ‘beach house’ which houses changing rooms, bathrooms and facilities for Ramona Staff. Most visitors pass by this building when they head to the beach portion of the park.

Initially, the staff member working the concession duty for that day would ask park visitors if they would fill out a survey for potential park developments. The word ‘potential’ was used so as not to have park visitors expect new developments to take place within the coming months. This was so visitors were not being misled about changes at Ramona Park.

Initial data collection took place from May 23rd, to June 23rd, 2014. This was without recompense being offered for those who took a survey. Due to the low number of responses that were being gathered for this first month, an amendment was made to the HSIRB Protocol, which included recompense for any patron who took the time to complete a survey for this research. For the first month of data collection, only 13 visitors

wished to partake in the research survey. Once the new amendment was added on June 23rd 2014, response rates went up quite substantially.

From June 23rd, to August 23rd, 2014, there were an additional 147 visitors who completed a survey. At this time, recompense was offered for any patron who completed a survey. Recompense was in the form of a flavored ice treat. To advertise the survey, a sign was attached to the concession windows which stated; “free ice cream treat for those who complete a survey”. As mentioned earlier, participants had to be 18 years or older, in accordance with HSIRB Protocol.

CHAPTER IV: ANALYSIS

Overview

In this chapter, analysis to the previous chapter's questions will be answered and expanded upon. This chapter explains the results that were gathered from park visitors who took the survey; this will be in part by use of graphs that were generated by imputing the survey data into an excel spreadsheet. This chapter will also discuss and expand upon any additional feedback that was given from park visitors in the survey.

Analysis

Analysis was conducted on the information listed below by using a Chi-Square Test of Significance. This test helped determine if a pattern of responses in the research was a real pattern or due to random error. The equation for the Chi-Square Test:

$$\chi^2 = \sum_{i=1}^n \frac{(O_i - E_i)^2}{E_i}$$

In this case, the "X" is our Chi-Square value. The 'o' in the equation is observed value of ordinal response. The 'e' is the expected value of the ordinal response. The below information analyzes the survey responses from park visitors. The first portion of each sub-section discusses the information gathered for each question, and then discusses the Chi-Square analysis.

Survey Results

The first question in the survey asked subjects where they were located geographically; Portage, Kalamazoo, Other. Of the 160 park visitors who took the survey, 73 identified themselves as Portage residents; 56 identified themselves as Kalamazoo residents, and 31 park visitors identified themselves as belonging to another area. The

following were responses, of those who listed where they were from, under the other category; the state of Indiana, Mattawan Michigan, Pavilion Township Michigan, Southfield (state not given), Grand Rapids, Michigan, Vicksburg, Michigan, Otsego, Michigan, the state of Texas, Texas Township, Michigan, Galesburg, Michigan, Tucson, Arizona, Columbus, Ohio, Scotts, Michigan, Centerville (state not given), Battle Creek, Michigan, Comstock, Michigan, Climax, Michigan, Paw Paw, Michigan, and Earlham, Iowa.

The 73 subjects who were surveyed and identify themselves as being Portage residents represent 45.6% of the total number of visitors surveyed. Fifty-six visitors surveyed identified themselves as being Kalamazoo residents represent 35% of the subjects. Finally, the 31 subjects who identified themselves as living in a city/township outside of Portage or Kalamazoo make up the remainder 19.4%. Figure (4.1) illustrates this.

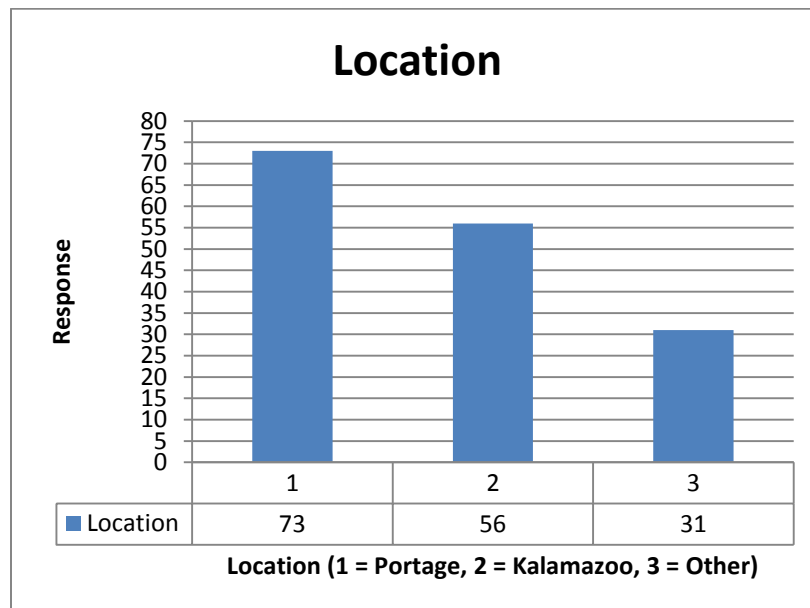


Figure 4.1 - Location

In terms of our Chi-Square Test values for 'location,' our actual values were; Portage = 73, Kalamazoo = 56, Other = 31. To find the expected values, we total up the responses that were collected (160) and divide by the number of categories that were tested, in this case 3. $160/3 = 53.33$. By using the above equation the expected value (e) is 53.33 and the actual value (f) is 73.

$$\text{Value 1: } (53.33 - 73)^2 / (53.33) = 7.25$$

$$\text{Value 2: } (53.33 - 56)^2 / (53.33) = 0.133$$

$$\text{Value 3: } (53.33 - 31)^2 / (53.33) = 9.34$$

For this value, the p-value is 2.920 for two degrees of freedom at a 95% confidence level. The total for this chi-square test on the 'location' variable is 16.723, which indicates the pattern seen for this variable was not due to random error.

The next section asked subjects to identify their age range; 157 of the 160 subjects responded to this question, 24 subjects identified themselves as being between 18 and 21 years old (15%); 37 subjects identified as being between the ages of 22 and 30 years old (23.4%); 38 subjects identified themselves as being between the ages of 31 and 40 years old (24%); 27 subjects identified themselves as being between the ages of 41 and 50 years old (17%); 21 subjects identified themselves as being between the ages of 50 to 60 years old (13%); 9 subjects identified themselves as being between the ages of 61 and 70 (5%); 1 subject identified their self as being above the age of 71 years old (0.6%).

After the surveys were collected, it was noticed that the choice for the age of 50 was listed twice; 41 – 50 years old and 50 – 60 years old. It is possible that instead of having the age group read 51 – 60 years old, visitors were not sure which one to select, thus offering a margin of error for this age group. While collecting this data, no park

patron pointed out this error in the survey. This may mean that a person of 50 years old identified with an age category that appealed to them. Figure 4.02 illustrates this data.

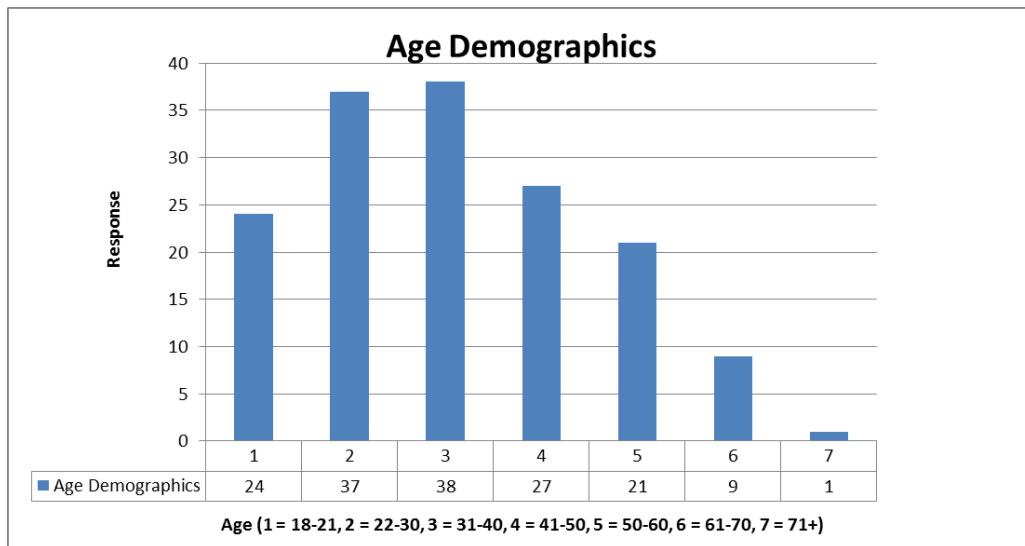


Figure 4.2 - Age Demographics

The majority of subjects fall under the 50 years or older categories - 79.4%. The Chi-Square Test value for this variable was 46.97. The p-value for a 95% confidence interval for six degrees of freedom is 1.943. With the calculated value being 46.97, and the p-value being 1.943, the responses in this question are not due to random error.

How many times do you come to Ramona Park in the summer season was the next question asked in the survey. There were 159 subjects of the 160 surveyed that selected the following as their amount of visits to Ramona Park in the summer months of operation in 2014. There were 32 subjects said they have only come to Ramona Park once (20.12%). Of the 159 responses, 23 subjects said they have come twice to Ramona Park (14.46%). There were 15 subjects that said they come three times (9.43%). Seven subjects said they come four times (4.4%). Twelve subjects said they come five times (7.54%). Nine subjects said they come six times (5.66%). Seven subjects said they come

seven times (4.4%). Six subjects said they come eight times (3.77%). One subject said they come to Ramona Park nine times in the summer season (0.62%). Eight subjects said they come to the park ten times (0.50%). Finally, 39 visitors said they come to Ramona Park eleven times or more during the summer season (24.5%). Figure 4.03 illustrates this.

The chi-square value for this variable was calculated at 98.59. The p-value for this variable, with eleven options has a degree of freedom of ten, is 3.940. With a calculated value higher than the p-value, the variable's pattern is not random.

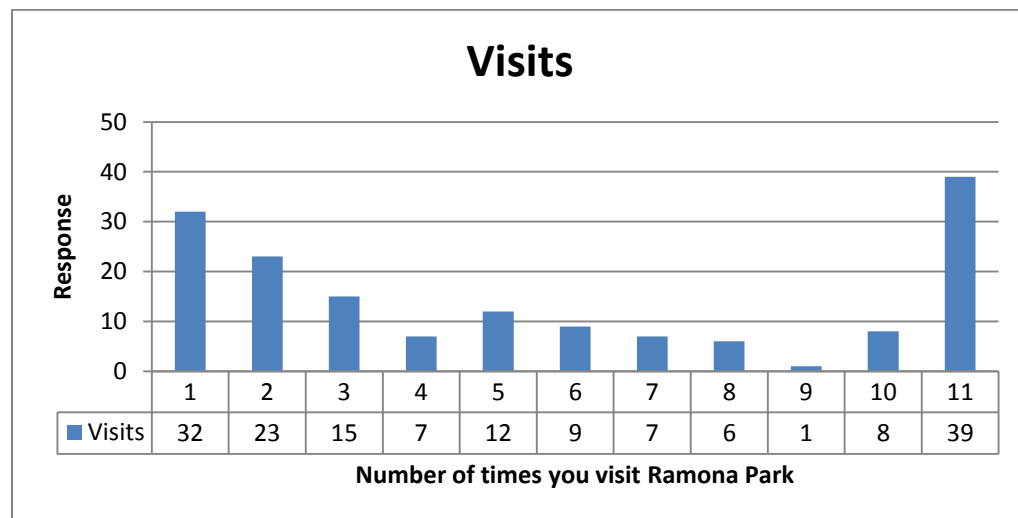


Figure 4.3 - Visits

This information illustrates that park visitors are either new to Ramona Park in terms of visits, or make Ramona Park a second home. This information will help city and park officials in terms of planning; they can tailor designs to help increase the number of people who visit the park. With an eye to future development in the park, planners need to seek answers to why almost a quarter of those surveyed say they come more than eleven times throughout the summer season. In later analyses, data indicates why people come to Ramona Park; however it would be beneficial to know why subjects have come

three times or less originally chose to come to Ramona Park. In future surveys, questions can be dedicated to seeking those answers.

Do you have children is the next question asked on the survey. Of the 159 responses in regards to having children, 103 subjects identified with having children (65%). Fifty-six subjects identified with not having children (35%). The value for this variable computed at 13.89, with a p-value with one degree of freedom of 0.00393. With the calculated significance value greater than the p-value, the test indicates that the pattern is not due to random error. Figure 4.04 illustrates this.

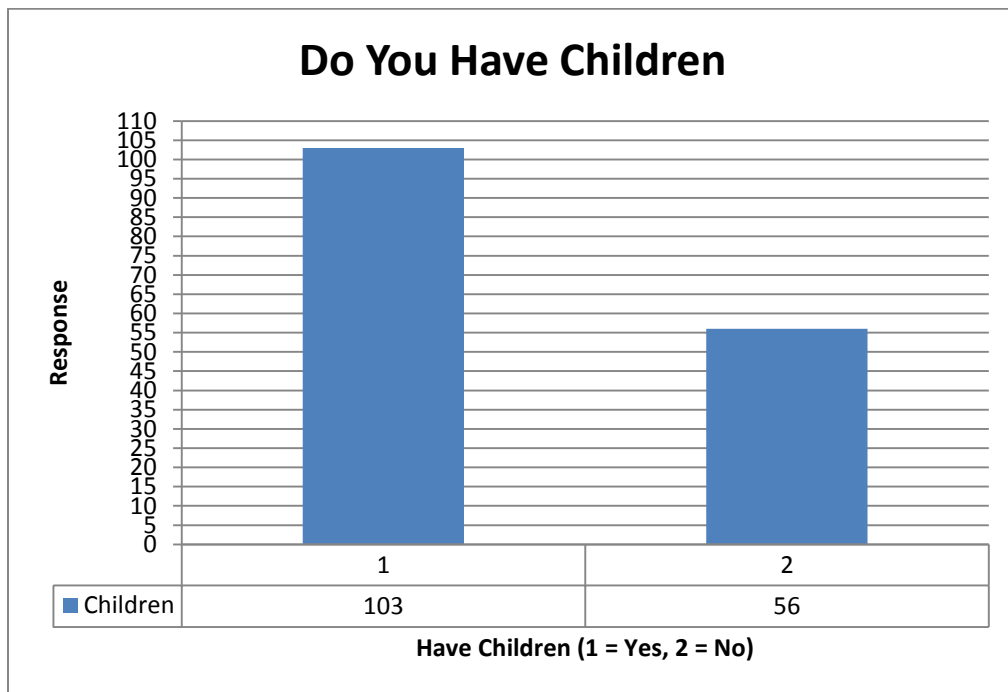


Figure 4.4 - Do You Have Children

Do you bring your children to Ramona Park is the follow up question. Of the 160 surveys collected, only 134 responses were given for this question; 84 percent of park visitors surveyed answered this question. However, of the 134 responses, 99 subjects said they bring their children to Ramona Park – or 74%. Thirty-five subjects responded that

they do not bring their children to Ramona Park – or 26%. The calculated value for this variable was 30.56, with a p-value of 0.00393 for one degree of freedom. The pattern in regards to this variable is not due to random error. Figure 4.05 illustrates this data.

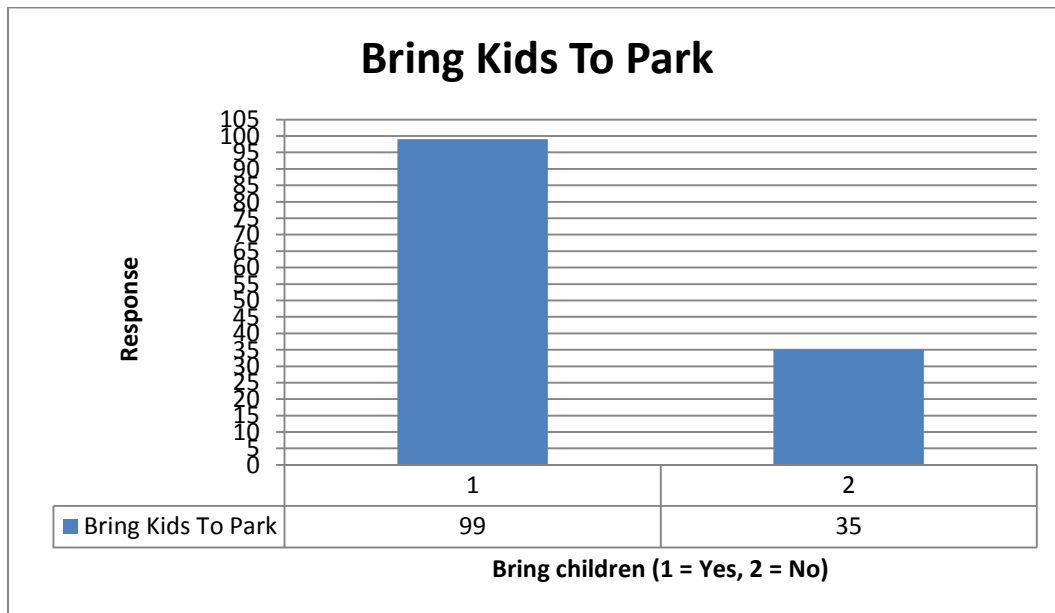


Figure 4.5 - Bring Kids To Park

The next question if yes to children, ages, was then asked of subjects. Subjects could identify their child or children under the following categories; 0 – 1 year old, 2 – 5 years old, 6 – 11 years old, 12 – 15 years old, 16 – 18 years old. A total of 197 children were identified with the ages between new born and 18 years old. Six children were listed for the ages of new born to 1 year old (3%). Sixty-two children were listed for the ages of 2 – 5 years old (31%). Seventy-six children were listed for the ages 6 – 11 years old (39%). Thirty-nine children were listed for the age range of 12 – 15 years old (20%). Finally, 14 children were listed as being between the ages of 16 – 18 years old (7%). The calculated value for this variable was at 91.65, with a p-value of 0.711 for four degrees of

freedom. This calculated value indicates that the pattern of children age is not a random variable in the research. Figure 4.06 illustrates this data.

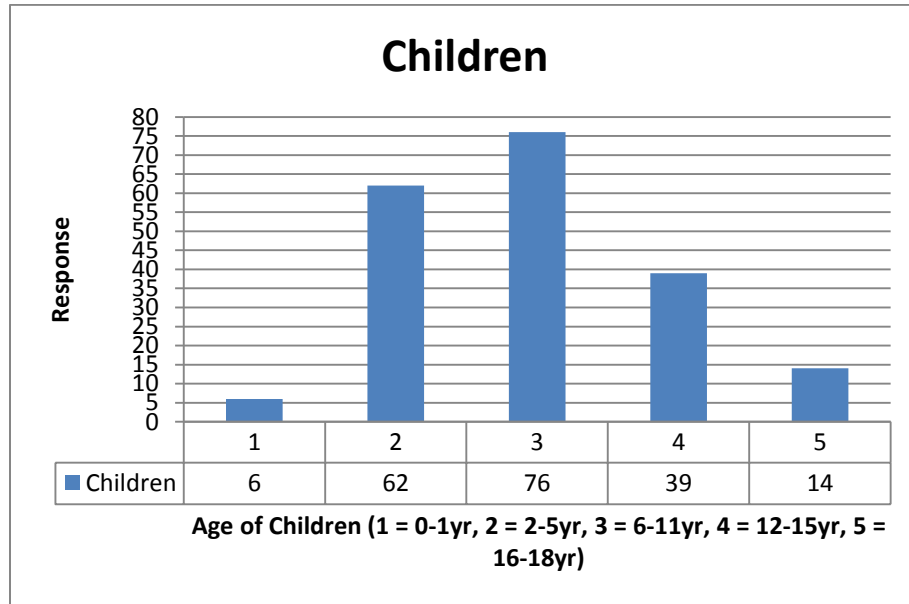


Figure 4.6 - Children Ages

The next section of questions asked subjects to please rank (1-5) the reason you come to Ramona Park (5 = highest, 1 = lowest). Thirteen subjects rated the beach as a “1” for 9%. Eight subjects rated the beach as a “2” for 5%. Ten subjects rated the beach at a “3” for 7%. Nineteen subjects rated the beach as a “4” for 13%. Ninety-nine (99) visitors rated the beach as a “5” for a total of 66% of the responses for this subsection of the question. This subsection, as indicated above, had the highest response rate of “5” reinforcing that the beach itself is a primary factor that brings people to Ramona Park. No other subsection in this question had this high of a response rate. The next value that came close this this number of positive responses was location with 54 responses listed in the “5” category. In all of Kalamazoo County, there is no other public waterfront/beach

property that has a professional lifeguard staff, which may be an influencing factor as to why this number is as high as indicated.

The value for this variable calculated to 203.18, with a p-value of 0.711 for four degrees of freedom. With a high chi-square value, the pattern in regards to ‘reason – beach’ is not due to random error. Figure 4.07 illustrates this.

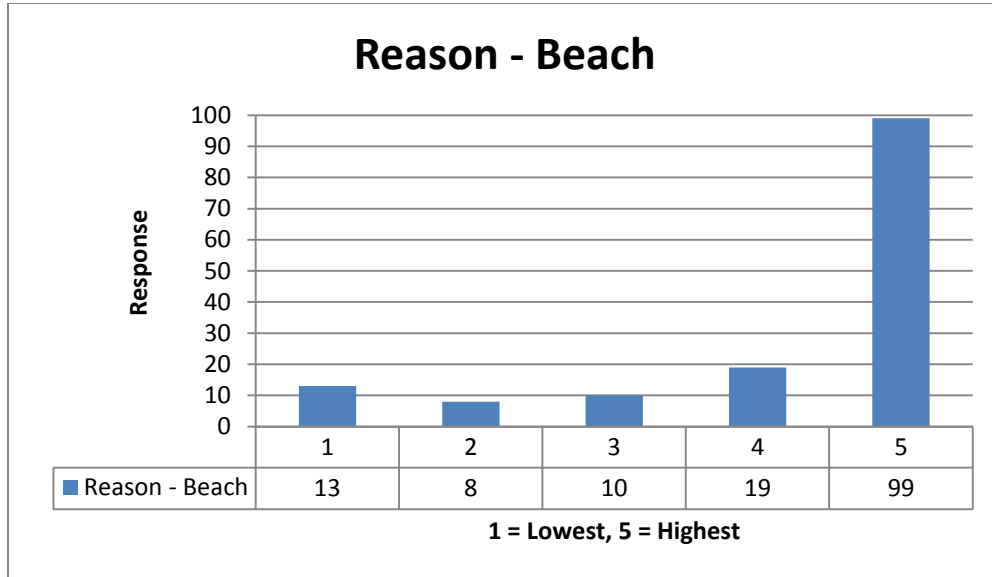


Figure 4.7- Reason – Beach

Seventeen subjects listed the playground as a “1” for the reason why they come to Ramona Park – for a total of 12%. Nineteen subjects listed playground as a “2”, for 14%. Twenty-one subjects listed playground as a “3”, 15% of the total responses. Thirty-three subjects listed playground as a “4” for reasons why they come to Ramona Park – 23%. Finally, 50 visitors listed the playground as a “5” for reason why they come to Ramona Park – for 36%.The playground value calculated out to be 27.14, with a p-value of 0.711 for four degrees of freedom. The pattern for this variable is not due to random error.

Figure 4.08 illustrates this.

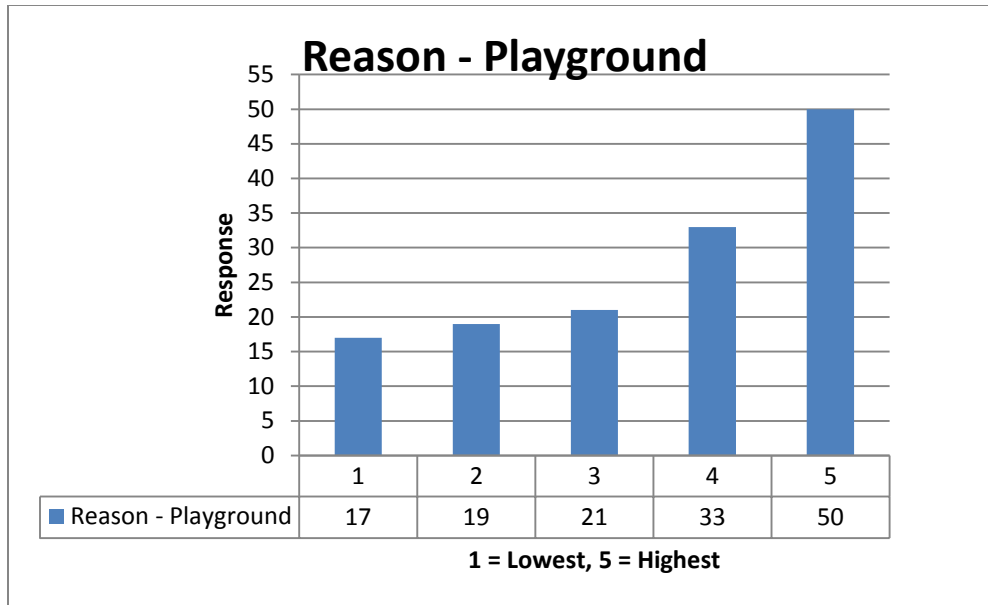


Figure 4.8 - Reason – Playground.

The next section included the picnic area as a reason to visit Ramona Park. Twenty-six subjects listed picnic area as a “1” for 20% of the total response. Eighteen subjects listed picnic area as a “2” for 14%. Twenty subjects listed picnic area as a “3” for 15%. Twenty-two subjects listed picnic area as a “4” for 17%. Lastly, 45 visitors – 34% - listed picnic area as the number one reason why they come to Ramona Park. The value for this variable is 18.19, with a p-value of 0.711 for four degrees of freedom, indicating that the pattern is not random. Figure 4.09 illustrates this.

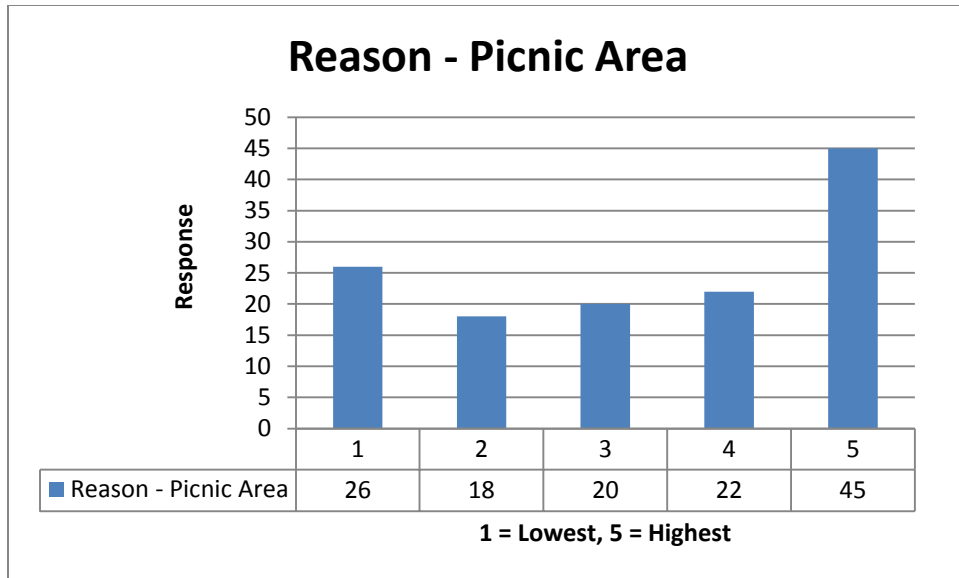


Figure 4.9 - Reason – Picnic Area

The fourth reason given as to why subjects visit Ramona Park is for the monitored swim area. The lower response rate could be due to subjects not using the monitored swim area as much as other amenities Ramona Park offers. Thirteen subjects listed monitored swim area as a “1” for 10% percent of the total responses. Fourteen subjects listed monitored swim area as a “2” for 11%. Twenty-two subjects listed monitored swim area as a “3” for a total of 17%. Thirty-six subjects listed monitored swim area as a “4” for 27%. Finally, 46 subjects listed monitored swim area as a “5” for reasons why they visit the park, for a total of 35% of responses. The calculated value for this variable is 31.63, with a p-value of 0.711 for four degrees of freedom. Figure 4.10 illustrates this.

For reference, a ‘monitored swim area’ for this research is a lifeguarded beach. This swim area is marked by cable and buoys to keep users from going too far out into the lake, and letting boat traffic know there are swimmers in this designated area. During operational hours, if a patron was in the water, there was always a lifeguard present and

monitoring the water for potential dangers and hazardous conditions (such as weather and boat traffic).

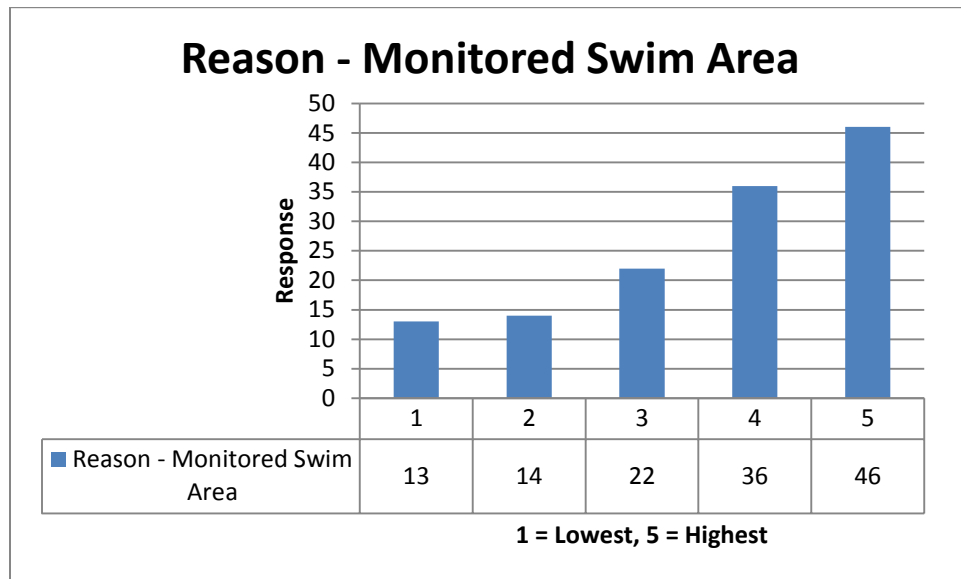


Figure 4.10 - Reason – Monitored Swim Area

The last section of this question asks about location. Seventeen subjects listed location as a “1” for 13% of the total responses. Eighteen subjects listed location as a “2” for 14%. Twenty-three subjects listed location as a “3” for 17%. Nineteen subjects listed location as a “4” for 15%. Lastly, 54 subjects listed location as a “5” for 41% of the total responses collected for this subsection. Figure 4.11 illustrates this data. The value for this variable calculated at 37.66, with a p-value of 0.711 for four degrees of freedom. Out of the five reasons why people visit Ramona Park the levels of importance are as follows; beach, location, monitored swim area, playground and picnic area.

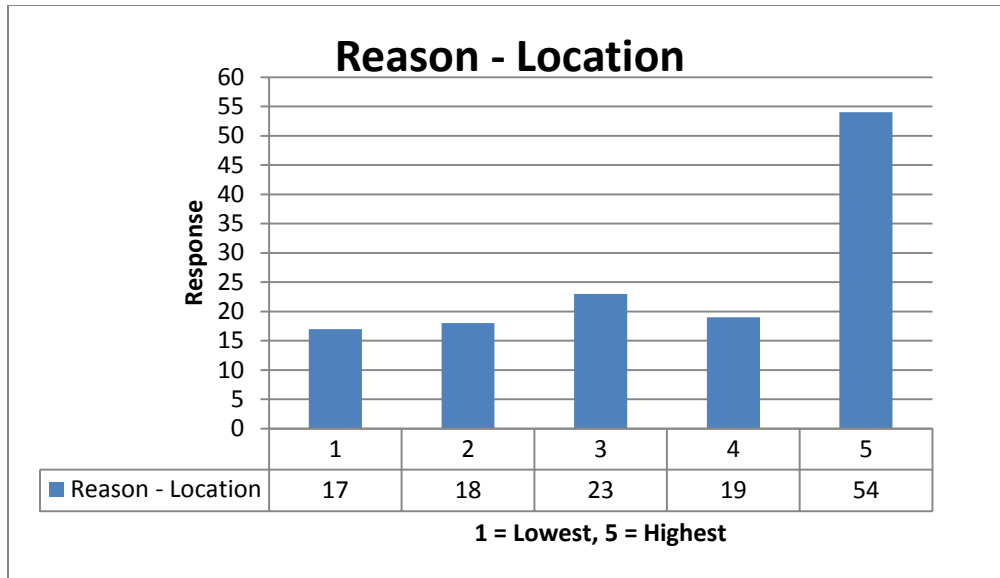


Figure 4.11 - Reason – Location

In summation of the following responses, it would appear that subjects visit Ramona Park primarily due to the; clean park, bathroom accessibility, lifeguarded beach, and it’s a place that people can bring their boats to who live on the lake or use the lake for fishing. For a complete listing, refer to Appendix C: Other Reasons.

The next set of questions asked subjects how likely you would come to Ramona if the following items were added in the future. Subjects were asked to circle the correct number that matches their likelihood of frequenting the park more if these items (boat livery; row boat, kayak, paddle board; splash pad; dog park; trail system; in-line hockey rink; disc golf course) were made accessible at the park. The numbers corresponded to the following feelings; 1 = not likely, 2 = less likely, 3 = neutral, 4 = more likely, and 5 = very likely.

Boat livery is the first subset question. Twenty subjects circled “1” (not likely) for 14% of the total responses. Four subjects circled “2” (less likely) for 3%. Thirty-four

subjects circled “3” (neutral) for 25%. Thirty subjects circled “4” (more likely) for 22%. Finally, 50 subjects circled “5” (very likely) for 36% percent of the total responses. If the neutral category is not counted, then we see that 80 subjects (48%) of the responses felt that a boat livery would increase their attendance at Ramona Park. This is compared to the 24 subjects (17%) who said they were less likely to increase their attendance if a boat livery was added. The low response number (138 of 160) could be due to subjects not knowing exactly what a boat livery is. The calculated value for this variable is 42.14, with a p-value of 0.711 for four degrees of freedom. The pattern seen is not due to random error. Figure 4.12 illustrates this data.

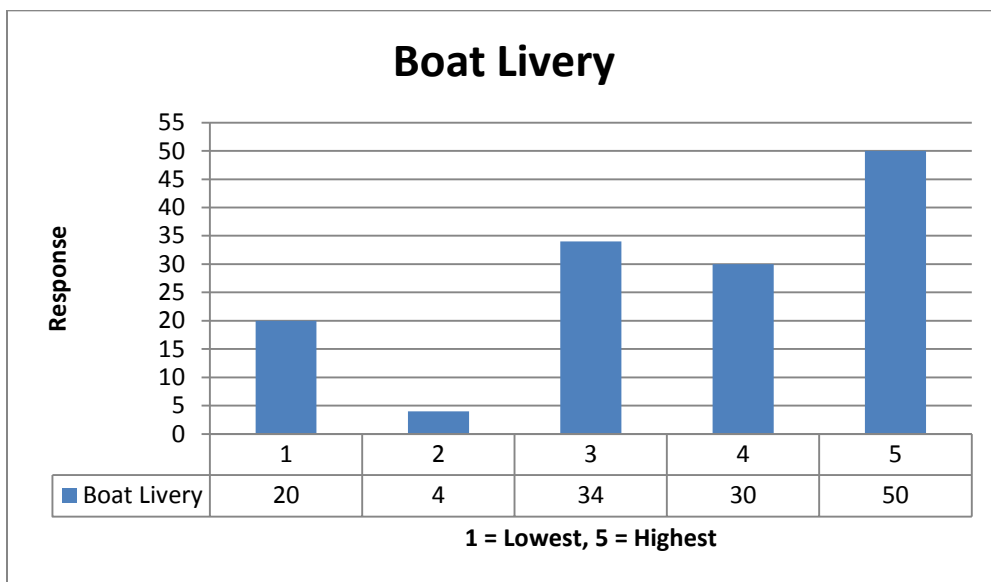


Figure 4.12 - Boat Livery

The information depicts that a boat livery would be favorable to park visitors for future developments. During the summer operation months, many of the lifeguard staff was asked by park visitors about boat rentals. While this number of park visitors who asked about boat rentals was not recorded, the general conclusion from the Ramona Park

lifeguard staff was; at a minimum, one park patron asked about boat rentals per week of summer operation.

Row boat was the next question asked in the boat livery section. Twenty-one subjects circled “1” (not likely) for 14% of the total responses. Fifteen subjects circled “2” (less likely) for 9%. Thirty-three subjects circled “3” (neutral) for 22%. Thirty-five subjects selected “4” (more likely) for 23%. Finally, 49 visitors circled “5” (most likely) for 32% percent of the total responses. Over half of the subjects, 84 (55%), found that row boats would be a beneficial new amenity for future developments. However, 36 subjects (23%) found that a row boat rental would not increase their attendance at Ramona Park. The calculated value for this variable is 22.84, with a p-value of 0.711 for four degrees of freedom. The pattern seen in this variable is not due to random error.

Figure 4.13 illustrates this data.

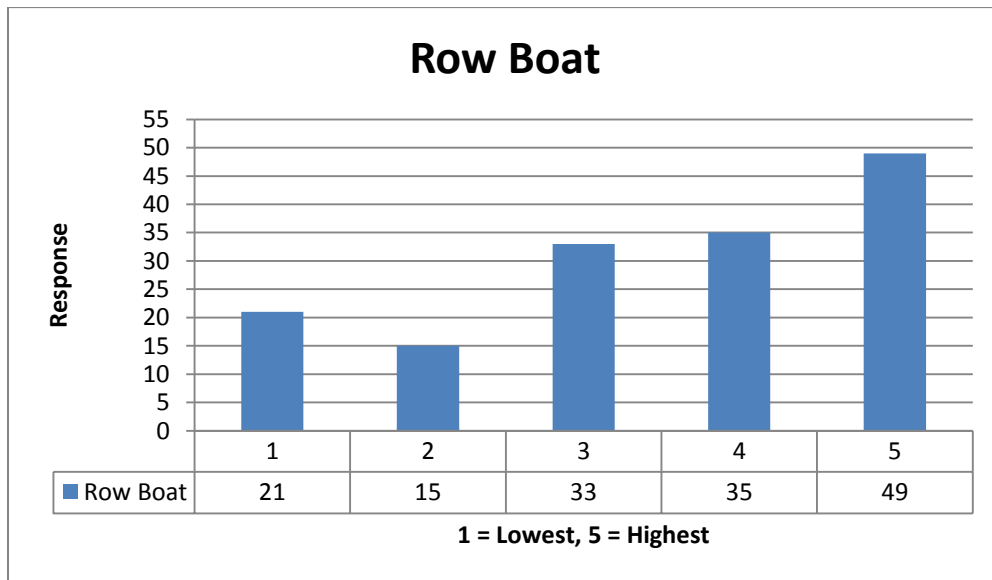


Figure 4.13 - Row Boat

The next section refers to kayak. Fifteen subjects circled “1” (not likely) for 10% of the total responses. Eight subjects circled “2” (less likely) for 5%. Thirty-three subjects circled “3” (neutral) for 21.5%. Thirty-three subjects circled “4” (more likely) for 21.5%. Finally, 65 visitors circled “5” (very likely) for 42% of the total responses to this subsection. This data indicates that 98 subjects, or 63.5% of total responders, believed that by adding a kayak rental to Ramona Park, their visits would increase. Twenty-three subjects (15%) stated that by adding kayak rentals to Ramona Park, their visits would not increase. The calculated value for this variable is 63.27, with a p-value of 0.711 for four degrees of freedom. The pattern seen in this variable is not due to random error. Figure 4.14 illustrates this.

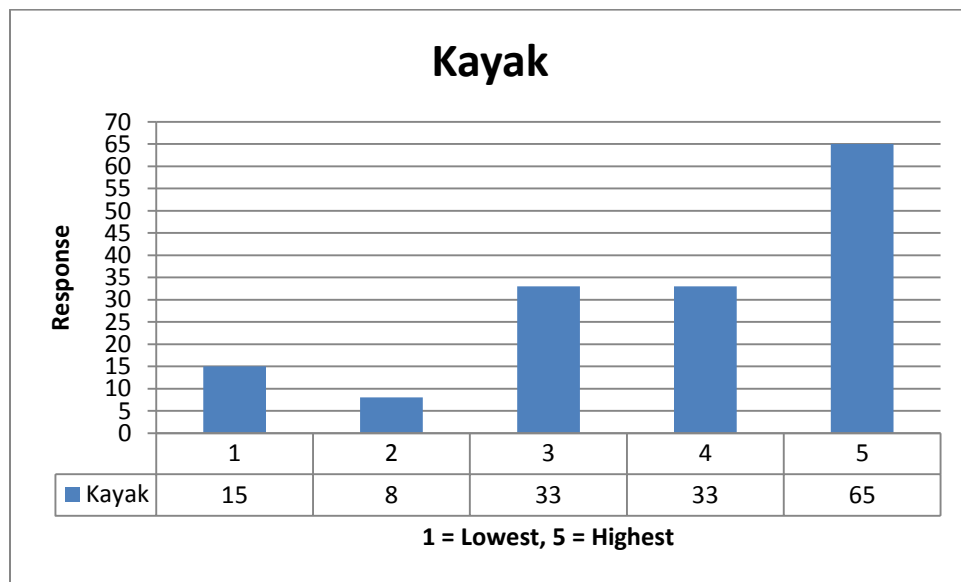


Figure 4.14 - Kayak

The last section to boat livery asked subjects about paddle boards. Of the 153 responses, 16 subjects circled “1” (not likely) for 10% of the total responses. Nine subjects circled “2” (less likely) for 6%. Thirty-four subjects circled “3” (neutral) for

22%. Thirty-two subjects circled “4” (more likely) for 21%. Lastly, 62 subjects circled “5” (very likely) for 41% of the total responses. This data indicates that a total of 94 subjects, of the 153 who responded to this question, or 62%, found in favor of adding paddle boards to Ramona Park for summer rentals. Although, 25 subjects (16%) found that by adding paddle boards to Ramona Park their attendance would not increase. The calculated value for this variable is 54.87, with a p-value of 0.711 for four degrees of freedom, indicating that the pattern for paddle boards is not due to random error. Figure 4.15 illustrates this.

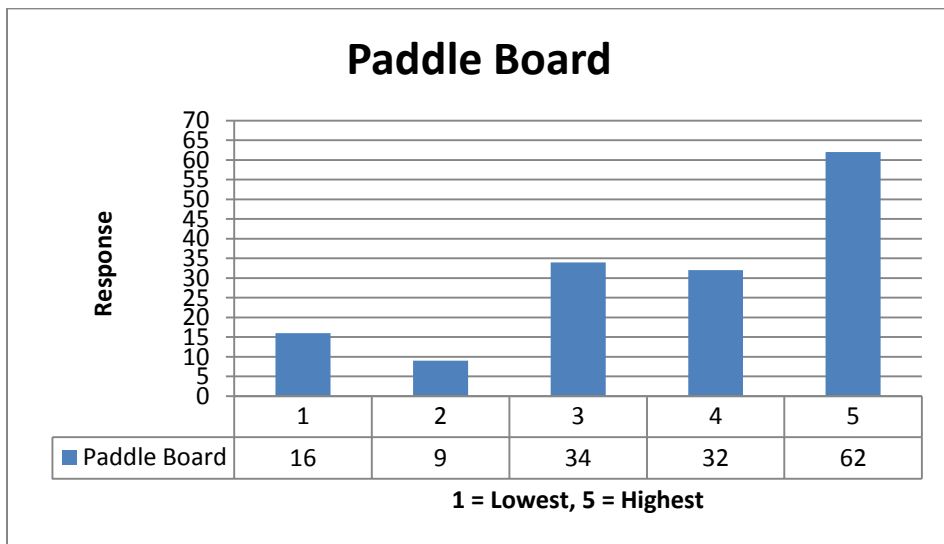


Figure 4.15 - Paddle Board

The next question asked in how likely would you come to Ramona if the following items were added in the future was splash pad. A splash pad is an area on the ground that has fountains set below a rubber mat (or other material) that would then project water up thru various holes in the ground. There is a wide variety of splash pad

designs, and the picture below is only one type.



Picture provided by: Adventure Playground Systems: Splash Pads, Home

Of the 154 responses to the splash pad question, 13 subjects circled “1” (not likely) for 8% percent of the total responses. Ten subjects circled “2” (less likely) for 6%. Forty-one subjects circled “3” (neutral) for 27%. Twenty-four subjects circled “4” (more likely) for 16%. Lastly, 66 visitors circled “5” (very likely) for 43% of the total responses. Ninety subjects (59%) who responded identified that by adding a splash pad, their visits to the park would increase. Twenty-three subjects (14%) identified that they would not increase their visits if a splash pad was added to Ramona Park. The splash pad variable had a calculated level of 69.44, with a p-value of 0.711 for four degrees of freedom, indicating that the splash pad variable pattern is not due to random error. Figure 4.16 illustrates this data.

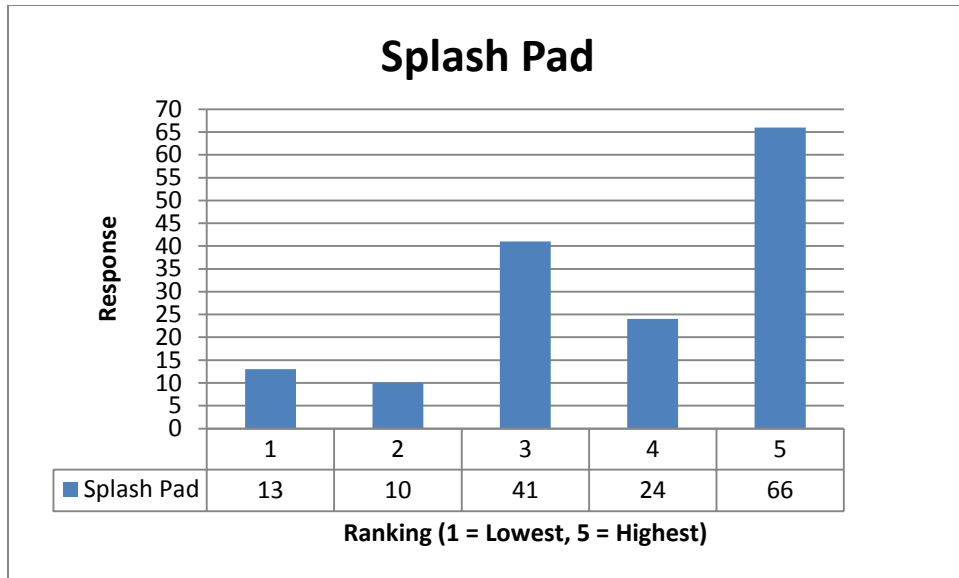


Figure 4.16 - Splash Pad

The next question asked in the survey in this section refers to a dog park. Forty-five subjects circled “1” (not likely) for 30% of the total responses. Twenty subjects circled “2” for 13%. Thirty-six subjects circled “3” (neutral) for 24%. Fifteen subjects circled “4” (more likely) for 10%. Finally, 36 subjects circled “5” (very likely) for 24% of the total responses. Sixty-five subjects (43%) said they would not increase their attendance if a dog park was added to Ramona Park. Although, 51 subjects (34%) said they would increase their attendance at the park if a dog park was added. This data had a calculated value of 20.43, with a p-value of 0.711 for four degrees of freedom. With the calculated value being greater than the p-value, this variable’s pattern is not due to random error. Figure 4.17 illustrates this data.

While there is space at Ramona for a dog park, it would appear from the data collected that subjects do not wish to see a dog park at Ramona. While the neutral group is that, neutral, there was more of a negative response to installing an area for dogs than

there was a positive response. This could indicate that a dog park may not be the priority amenity to be built in the park for a future development.

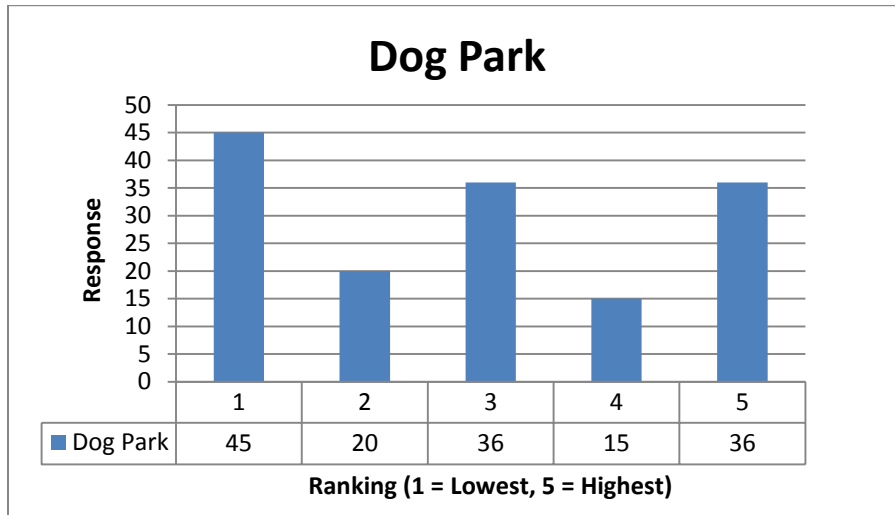


Figure 4.17 - Dog Park

The next question refers to adding a trail system into Ramona Park.. Of these 152 responses, 18 subjects circled “1” (not likely) for 12% of the total responses. Six subjects circled “2” (less likely) for 4%. Forty-two subjects circled “3” (neutral) for 28%. Thirty-five subjects circled “4” (more likely) for 23%. Lastly, 51 subjects circled “5” (very likely) for 34% of the total responses. A trail system seems to be a favorable amenity to add to Ramona Park. 86 subjects (57%) found that they would be either ‘more likely’ or ‘very likely’ to increase their attendance at Ramona Park if a trail system was added. Twenty-four subjects (15%) stated that a trail system would not increase their visit to Ramona Park. The trail system variable had a value of 43.72, with a p-value of 0.711 for four degrees of freedom. The pattern seen for this variable was not due to random error.

Figure 4.18 illustrates this data.

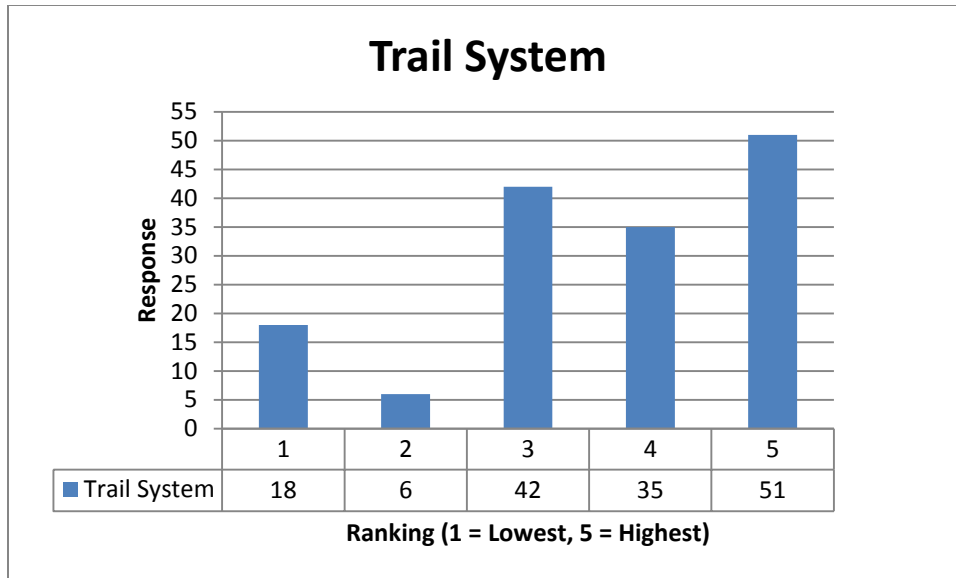


Figure 4.18 – Trail System

Of the 160 total surveys collected, there were 152 responses in regards to an in-line hockey rink. Thirty-eight subjects circled “1” (not likely) for 25% of the total responses. Twenty-three subjects circled “2” (less likely) for 15%. Fifty subjects circled “3” (neutral) for 33%. Eleven subjects circled “4” (more likely) for 7%. Finally, 30 subjects circled “5” (very likely) for 20% of the total responses in regards to this question.

Sixty-one subjects (40%) felt that they would be ‘not likely’ or ‘less likely’ to increase their visits to Ramona Park if an in-line hockey rink was added in future developments. This was compared to 41 subjects (27%) that stated they would increase their visits if this amenity was added to Ramona Park. This variable had a calculated value of 28.72, with a p-value of 0.711 for four degrees of freedom, which indicated that the pattern was not due to random error. Figure 4.19 illustrates this data.

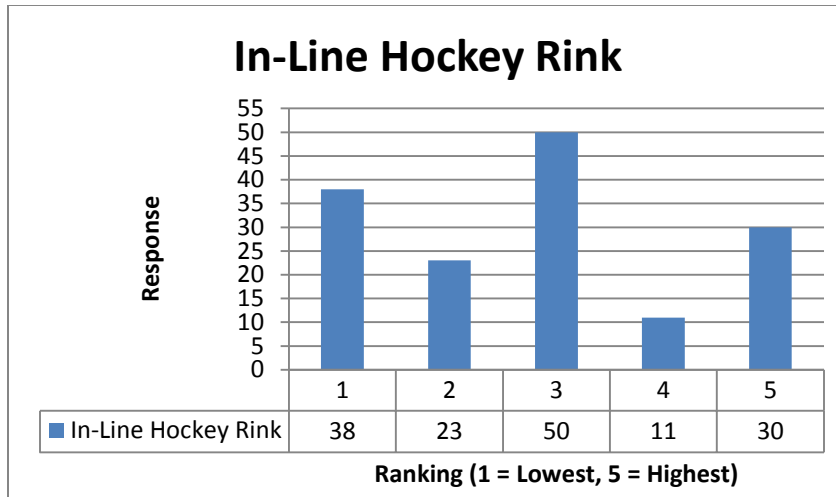


Figure 4.19 - In-line Hockey Rink

There were a total of 153 responses of the 160 surveys collected with regards to a disc golf course. Thirty-one subjects circled “1” (not likely) for 20% of the total responses. Thirteen subjects circled “2” (less likely) for 8%. Thirty-eight subjects circled “3” (neutral) for 25%. Twenty-seven subjects circled “4” (more likely) for 18%. Finally, 44 subjects circled “5” (very likely) for 29% of the total responses in regards to adding a disc golf course to Ramona Park. A calculated value of 18.209 was attained for this variable, with a p-value of 0.711 for four degrees of freedom. The pattern in this variable was not due to random error. Figure 4.20 illustrates this data.

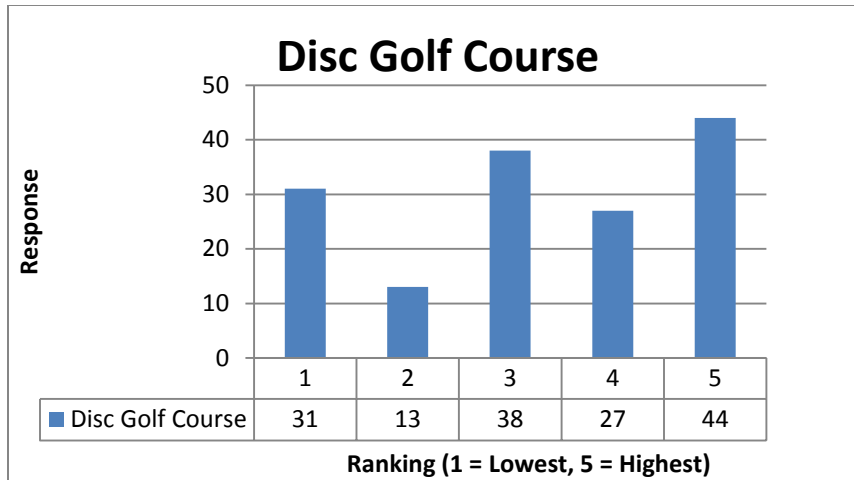


Figure 4.20 – Disc Golf

Forty-four subjects (28%) identified with a disc golf course either ‘not likely’ or ‘less likely’ to increase their visits to Ramona Park in the summer months. This is compared to the 71 subjects (47%) that identified with a disc golf course either ‘more likely’ or ‘very likely’ to increase their visits in the summer months. A disc golf course would be a benefit to the recreational amenities offered at Ramona Park in the summer months of operation. The next section of the survey asked subjects to please add any other amenities you would like to see. See Appendix D: Added Amenities for a full listing.

. Of those 151 subjects that responded to fish camps, 26 subjects circled “1” (not likely) for 17% percent of the total responses. Ten subjects circled “2” (less likely) for 7%. Forty-seven subjects circled “3” (neutral) for 31%. Twenty-eight subjects circled “4” (more likely) for 19%. Finally, 40 subjects circled “5” (very likely) for 26% of the total responses gathered in this question.

Sixty-eight subjects (45%) identified ‘more likely’ to, or ‘very likely’ to visit the park more in the summer if fishing camps were added to the summer amenities listing.

However 36 subjects (24%) identified with ‘not likely’ to or ‘less likely’ to visit the park more in the summer if fishing camps were added to the summer amenities listing. For fish camps a value of 26.78 was calculated, with a p-value of 0.711 for four degrees of freedom, which indicates that the pattern in this variable was not due to random error.

Figure 4.21 illustrates this.

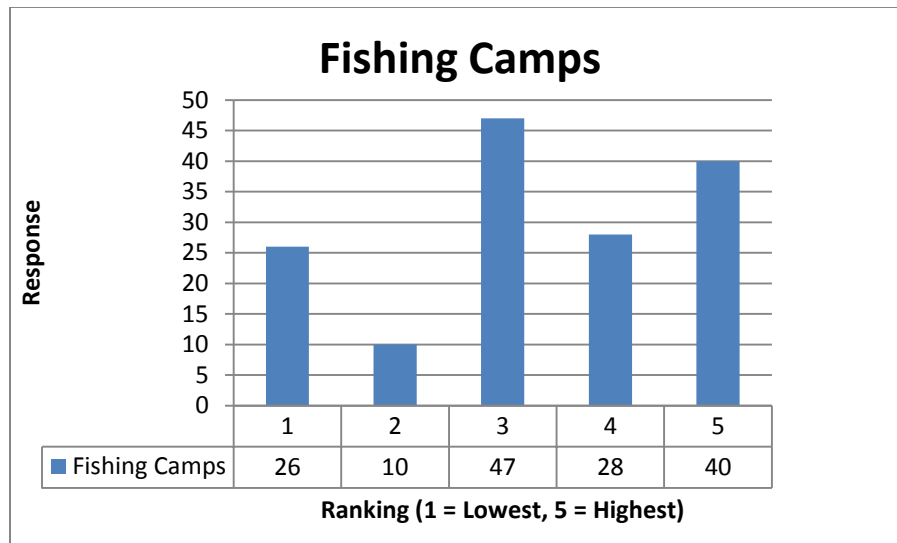


Figure 4.21 - Fishing Camps.

Of the 152 subjects who responded to swimming lessons, 18 subjects circled “1” (not likely) for 12% of the total responses collected. Ten subjects circled “2” (less likely) for 7%. Forty-one subjects circled “3” (neutral) for 27%. Twenty-seven subjects circled “4” (more likely) for 18%. Lastly, 56 subjects circled “5” (very likely) for 37% percent of the total responses collected in regards to adding swimming lessons in future developments.

There were a total of 28 subjects (19%) who identified with either ‘not likely’ to or ‘less likely’ to increase their visits to Ramona Park if swim lessons were added in future amenities. This was compared to the 83 subjects (55%) who identified with either

‘more likely’ to or ‘very likely’ to increase their attendance in the summer months if swim lessons were added in future amenities. A value of 44.38 was calculated for this variable, with a p-value of 0.711 for four degrees of freedom. The pattern in this variable was not due to random error. Figure 4.22 illustrates this data.

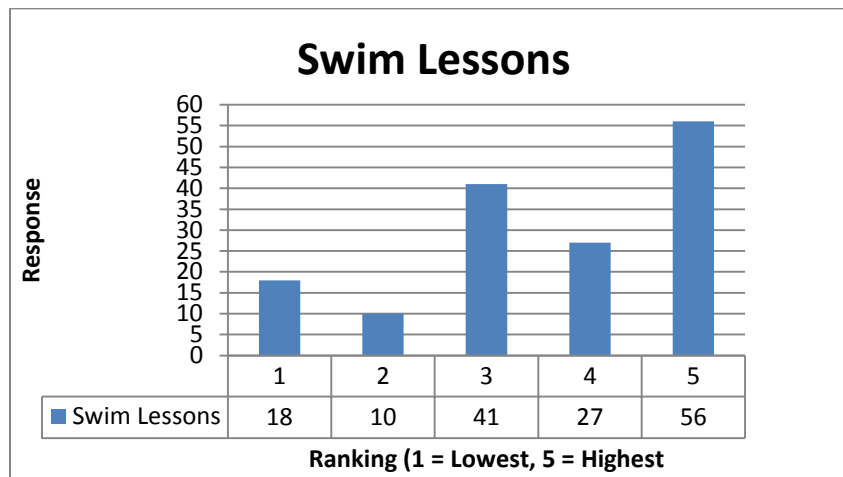


Figure 4.22 - Swim Lessons

After the program section of the survey, it was asked; any other programs you would like to see. The results from this section are as follows (in no particular order);

- First aid demonstrations
- Survival gear demonstrations
- Tennis camps
- Basketball camps
- Basketball tournaments
- Boating safety classes
- Paddle boat lessons
- Boater safety programs
- Beach volleyball tournaments

The next question asked subjects; any of the above items you do not wish to see brought to Ramona Park. The results are as follows (in no particular order);

- Dog park: have to pick up poo
- Hockey rink: chaos
- Dog park: cleanliness
- Swim lessons: would increase people in the water
- Dog park: dirty park
- Dog park: poop
- Dog park: brings a different group of people and noise
- Fishing camps: facilities are not big enough
- No dog park
- Dogs: distraction
- Swim lessons should be one day for those out of town
- No dogs: unless people have good cleanup habits
- Dog park: should be considerably far from everything else
- Bike trails
- Fountains

Would you be willing to pay more for a parking permit if any amenities were added to Ramona Park was the next question asked on the survey. Of the 155 subjects to respond, 81 subjects (52%) circled 'yes' that they would be willing to pay more if one or more of these amenities were added to Ramona Park in the future. There were 74 subjects (48%) that stated they would not be willing to pay more for a parking permit if one or more of the above amenities were added in future developments.

For this variable, a calculated value of 0.316 was determined (the lowest one in the data set). For this variable with only two options to choose from, the degrees of freedom would be one, with a p-value of 0.00393. With the calculated and given p-value close, this variable can be considered random. The survey question does provide useful information for the City of Portage, however in terms of the research this variable would indicate it is not significant. Figure 4.23 illustrates this data.

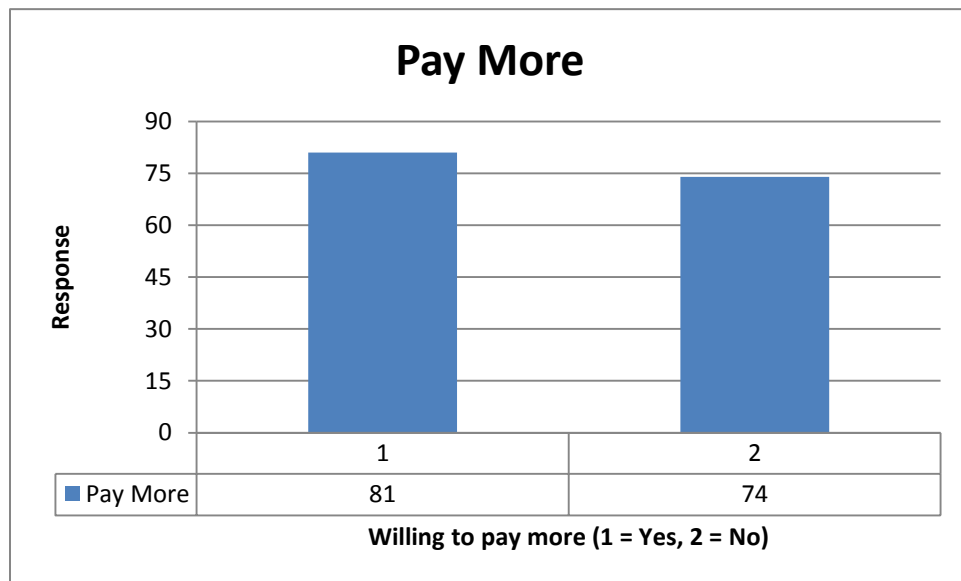


Figure 4.23 - Pay More

The last question asked on the survey was a follow up to the previous one; if yes (to paying more per permit) how much more on parking permits. Of those 81 responses, 5 subjects (6%) stated they would pay \$1.00 more. Twenty-four subjects (30%) stated they would pay \$2.00 more. Nineteen subjects (23%) stated they would pay \$3.00 more. Four subjects (5%) stated they would pay \$4.00 more. Twenty-five subjects (31%) stated they

would pay \$5.00 more. Finally, 4 subjects (5%) stated they would pay more than \$5.00 on parking permits if one or more of these amenities were added in future developments at Ramona Park. A Chi-Square value was calculated to be 38.925 for this variable, with a p-value of 1.145 for five degrees of freedom. With a high calculated value, the pattern for this variable would not be due to random error. Figure 4.24 illustrates this.

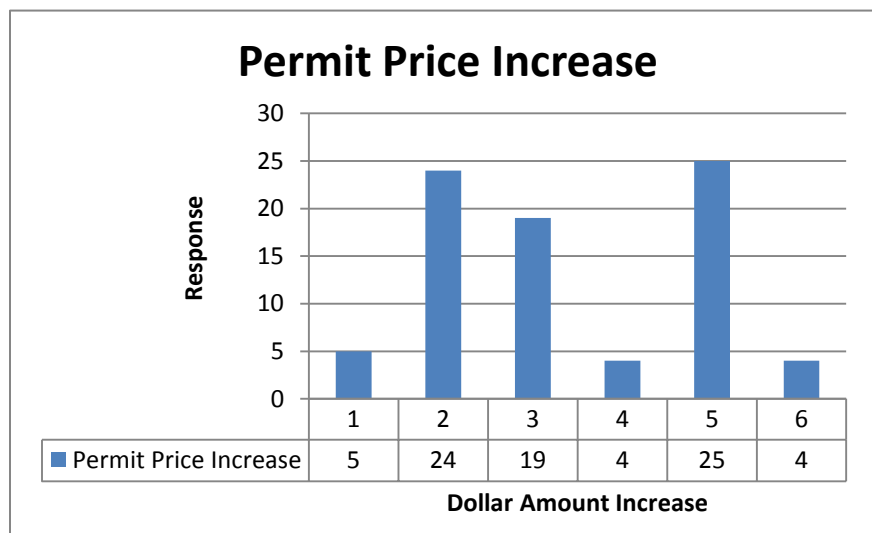


Figure 4.24 - Permit Price Increase

The prices that subjects selected were, \$5.00 first, and \$2.00 secondly. The third price subjects said they would pay would be \$3.00. This would indicate that raising the parking permit fee between \$1.00 and \$5.00 would be acceptable to 77 of the 81 subjects that responded. However, as mentioned above, 74 subjects who responded to this question said they would not be willing to pay more for new amenities. At the end of the survey, a section was given for visitors to provide any feed-back they wished to share.

See Appendix E for a complete listing of the comments received in the survey from subjects.

Chi-Square Test Discussion

The next listing of data is the completed chi-square test for each variable that was measured in this research.

Age: 46.9786

Visits: 98.59

Have Children: 13.89

Bring Kids: 30.56

Children Age: 91.65

Reason – Beach: 203.18

Reason – Playground: 27.14

Reason – Picnic: 18.19

Reason – Monitored: 31.63

Reason – Location: 37.66

Boat Livery: 42.14

Row Boat: 22.84

Kayak: 63.27

Paddle Board: 54.87

Splash Pad: 54.87

Dog Park: 20.43

Trail System: 43.72

In – Line Hockey: 28.72

Disc Golf: 18.209

Fish Camps: 26.78

Swim Lessons: 44.38

Pay More: 0.316

How Much More: 38.925

The values that are of primary concern to this research are the amenities; boat livery, row boat, kayak, paddle board, splash pad, dog park, trail system, in-line hockey, disc golf, fish camps, swim lessons. The values for these amenities are all significant, which indicates that the null hypothesis can be rejected, and that by adding one or more of these amenities, park attendance would in fact increase.

By using the chi – square test on ‘reasons’ and other demographic variables (location, age, visits etc.) the data would indicate that these factors are important as well to understanding what amenities should be included in the future. For example, the ‘bring kids to park’ variable had a significance level of 30.56, quite high, though still important. This indicates that knowing if park visitors bring children to Ramona Park will help determine what future amenities to bring into the park, thus these amenities can be tailored to children. If this value was low, say between 1 and 2, park officials would then know that future amenities do not need to be tailored to children due to the low significance of this variable.

The value that was noted on this variable was 0.316, which shows that ‘paying more’ is not a significant variable in the research. This value then shows that ‘paying more’ would not in fact increase the park attendance if future amenities were added.

The highest value that was found was under ‘reason – beach’ which had a chi – square value of 203.18. While this number is substantially higher than other values, it

would indicate that the beach is one of the top reasons why visitors frequent Ramona Park. This value shows that any future developments of Ramona Park should see the beach as one of the primary features that park visitors utilize and should not be removed to make room for other amenities.

CHAPTER V: CONCLUSION

One of the main purposes of this research was to show that adding new amenities to Ramona Park, park patron attendance would increase during the summer months of operation. Using the data collected, and conducting an analysis by using a chi-square test, we can successfully reject the null hypothesis; adding new amenities will not increase park patron attendance during the summer months of operation. The data collected from surveying 160 park visitors through the months of May, June, July and August indicate that park patron attendance will increase if new amenities (boat livery, row boat, kayak, paddle board, splash pad, dog park, trail system, in-line hockey rink, disc golf course, fishing and swimming lessons) were added in future developments.

The data collected in this thesis can assist Portage officials in the Parks and Recreation Department better plan for future developments at Ramona Park. By using the responses in this research, parks officials can better determine what age group they wish to focus on if new amenities are added. This style of research can also be used for other parks in the Portage system, in which surveys can be posted at other parks to better determine if visitors are getting what they want out of the current amenities being offered.

According to the results, the amenity that visitors identified with being the most likely to increase their attendance was a kayak livery. Kayak livery had the highest rating, with visitors selecting either a '4' or '5', for a total response rate of 98.

The next amenity that received the most selections was a paddle board livery, with 94 visitors ranking this amenity as a '4' or '5'. The third amenity that would be

beneficial to future park development as indicated by surveyed visitors was a splash pad, which received 90 responses that were either a '4' or '5'. The following list shows the rest of the amenities and how they were ranked by those visitors who were surveyed.

Trail system: 86

Row Boat: 84

Boat Livery: 80

Dis Golf Course: 71

Dog Park: 51

In-Line Hockey: 41

The in-line hockey and dog park are two amenities that park visitors do not wish to see added in future developments to Ramona Park. In terms of added programs however, swim lessons received 83 selections of '4' or '5' while fishing camps received only 68 selections of '4' or '5'. Visitors have indicated via the survey that kayaks and swim lessons are two amenities (in terms of a recreational addition, and a city sponsored program) that they wish to see brought to Ramona Park.

Future Research

For future development, the City of Portage Parks and Recreation Department should take into consideration the data collected from the above research. By considering what is being asked for from visitors, park officials can tailor future developments to the needs and demands of visitors. In order to make sure the new developments are what visitors requested, another survey could be given when

considering what style or type of a certain amenity is being asked for. For example; to determine what type of splash pad may be best suited for visitor's needs, another survey could be given with options for visitors to choose from.

Research should also be conducted with regards to state funding, such as grants. The projects discussed above may need financial support that does not come directly from the City of Portage. With state funding, Portage officials may be able to add more than one new amenity to Ramona Park. Another survey may even be needed to see how much visitors would be willing to pay for each new amenity as an individual amenity, instead of an all-encompassing pass.

Research Errors

With any type of research there are errors, some small and others large. Some errors that this research uncovered included the wording and layout of the survey itself. It was noticed on multiple surveys (10-15 of the 160) that when visitors were asked to 'rank the reasons you come to Ramona Park' instead of only using each number, 1 2 3 4 5 once, they used a number multiple times, primarily 5. Future surveys may need an example for visitors to follow, or more directions on how to rank responses. Other issues that were noted; visitors were leaving large sections blank. This is allowed in the consent form they signed, however, in three cases entire pages were not filled out. This may have been due to the patron wishing to receive their compensation instead of actually doing the survey. It is noted now for future reference to make sure in the directions to ask visitors to completely fill out the survey.

Hypothesis Rejection

From the results in chapter four, the research hypothesis: park attendance will remain constant even if new amenities are added in future developments, can successfully be rejected. The data collected in the summer of 2014, from 160 visitor's states that park attendance will increase if new amenities are added to Ramona Park. One way to increase park attendance is to offer kayak rentals, which had the highest demand with low likelihood of random error in the sample. The next amenity that should be added, as indicated by the data and statistical analysis, is a tie between paddle boards and a splash pad. With these three variables being the highest of the possible new amenities, a new survey may be needed to see which one visitor would wish to have included in future developments. It is possible that with fewer variables to have park visitors choose from, kayaks, paddle boards and a splash pad may have different ratings than what was observed in this research.

The research conducted with the 160 subjects implies that attendance will increase if some of the amenities listed in previous chapters are in fact added to Ramona Park. One key finding in the research indicated that 58.75% of the subjects would increase their attendance if a paddle board livery was added in future developments. While the study did not ask subjects what type of parking permit they purchase, which would be helpful in future studies, it is possible to believe that parking permit sales would also increase if new amenities were added. This assumption is based on the response from subjects that they would increase their visits if new amenities were added.

The second finding with regards to the hypothesis being supported is due to the 90 subjects (56.25%) that stated they would increase their attendance if a splash pad was built at the park. As stated in the previous chapter, it is possible that some subjects did not understand the design or function of a splash pad. In terms of future research, a description/photograph would be needed to help subjects understand/visualize what a splash pad is. If a photo was added to the study conducted in 2014, it is possible that the number of subjects who were in favor of adding a splash pad would only increase.

A third finding is the amount of subjects that stated a trail system would increase their attendance rate. Eighty-six subjects (53.75%) indicated that they found a trail system to be favorable for future developments. One benefit of a trail system is that it can target all age groups of users, where a splash pad is more designed for children. Trail systems are also viewed as a way for users to get active while enjoying nature. Any one of these three findings successfully proves the hypothesis true, that by adding a new amenity, or amenities, park attendance will increase.

Future Recommendations

Upon the completion of the research, and the completion of the analysis, it is my recommendation to the City of Portage Parks and Recreation Department that kayaks be the first new amenity added to Ramona Park in future developments. The data indicates that kayaks would have the highest influence in increasing park attendance during the months of May, June, July, and August. In my opinion, supported by the surveys collected during the summer months of 2014, and the analysis of the data, a kayak livery would also increase park revenue due to the results indicated by the data.

My second recommendation would be to include paddle boards for rent at Ramona Park. I believe that the Parks and Recreation Department should allocate funds to build a new facility, or modify the current infrastructure to accommodate these new amenities. In conjunction with adding these two new amenities, I also recommend that parking permit prices be increased to help offset the cost of purchasing, maintaining, and building the facilities needed to house and operate a rental facility for kayaks and paddle boards. While it was almost an even split of visitors who said they would be willing to pay more for in terms of a parking permit price increase, and those who said they did not want parking permit prices to increase, I recommend that permit prices be increased from \$5.00 to \$7.00 for the daily resident passes, and from \$10.00 to \$12.00 for non-resident passes. I believe that raising the annual parking passes by \$10.00 for both resident and non-resident would also be acceptable to park visitors. However, this price increase may need to be researched further too accurately determine the appropriate price increase.

The two amenities that I think would not increase patron visits are in-line hockey and dog park. Both of these amenities received low approval from the 160 visitors who were surveyed. I do not think that the parks department would recuperate the investment that would be put into building/designing these two amenities if they were built. Building a disc golf course at Ramona Park would allow Portage officials a way to see if new amenities do in fact raise park attendance. The challenge of building a disc golf course is where to put it. Further research/planning would be needed to work out the logistics of such an investment, but has the potential for a good return on the initial investment. Another way to raise funds for the disc golf course would be to sell discs (Frisbees in other words) at the beach house. This would encourage visitors to use the course, and

also expose children and adults to a new recreational activity that doesn't cost much to partake in.

Adding any one of these amenities (paddle boards, kayaks, trail system, splash pad, and disc golf course) would greatly increase the park attendance during the summer months of operation. However, future research should be conducted to help Portage officials narrow down which amenity should first be added. In order to encourage more visitors to partake in the research, some other type of recompense should be used instead of a free frozen ice treat. One recommendation would be to refund/discount the subjects next parking permit fee. In conclusion, by adding a new amenity to Ramona Park, park visitors (subjects) indicated that they would increase their attendance rate. I believe that by adding a new amenity/amenities, parking permit sales would increase, the number of visits visitors make to Ramona Park would increase, and Ramona Park could become a key recreational spot in Kalamazoo County during the summer months.

BIBLIOGRAPHY

Adventure Playground Systems. Copyright 2014. Accessed October 2014.

http://www.adventureplaysystems.com/play-systems.php?ID=55&no_sub=1&system=610

American Red Cross. Swimming and Water Safety Manual. Copyright 2009 by The American National Red Cross. Accessed October 2013.

http://www.redcross.org/images/MEDIA_CustomProductCatalog/m3240085_SwimmingWaterSafety.pdf

Banko, Winston E. Trumpeter Swan, Its History, Habitats, and Population in the United States. Refuge Manager, Branch of Wildlife Refuges. Bureau of Sport Fisheries and Wildlife. Published by U.S. Fish and Wildlife Service, April 30, 1960. Accessed 10/1/2014

Beattie, Judy. Senior Park Ranger. City of Portage, Parks and Recreation Department, 2013, 2014.

Brown, Greg. Delene Weber. Public Participation GIS: A New Method for National Park Planning. Landscape and Urban Planning. Elsevier, 2011. Accessed October 2014. www.elsevier.com/locate/landurbplan

Campbell, Scott. Green Cities, Growing Cities, Just Cities? Urban Planning and the Contradictions of Sustainable Development. Journal of the American Planning Association. Published online November 2007

Chiesura, Anna. The Role of Urban Parks for the Sustainable City. Department of Leisure, Tourism and Environment, Wageningen University, Netherlands. Landscape and Urban Planning, 2004. Accessed October 2014. www.elsevier.com/locate/landurbplan

Clark, Richard J, Wildlife Monographs, A Publication of the Wildlife Society A Field Study Of The Short Eared Owl, *Asio Flammeus* (Pontoppidan) In North America. The New York Cooperative Wildlife Research Unit, Ithaca, New York. November 1975, Accessed 10/1/2014

David, Paula. Laura Westrup. Planning Division: Technical Assistance; Multi-use trails, ensuring successful regional planning. California State Parks. May 2002. Accessed September 2013. <http://atfiles.org/files/pdf/multiuseplan.pdf>

Deming, William. Director of Parks and Public Services. City of Portage. 2013, 2014.

Department of Astronomy. University of Arizona. 2015.

http://exoplanet.as.arizona.edu/~lclose/a302/lecture3/lecture_3_4.html

Ellis, Michael J. *Why People Play*, Prentice-Hall, Inc. 1973

Ellis, Steve. Long Lake: From Sinking Houses to Sea Serpents. September 2010. From: [mlive.com](http://www.mlive.com).

http://www.mlive.com/travel/index.ssf/2010/08/long_lake_from_sinking_houses.html

Ernst, Carl H. Ecology of the Spotted Turtle, *Clemmys guttata*, in Southeastern Pennsylvania. *Journal of Herpetology*. Published by "society for the study of amphibians and reptiles. Feb 23, 1976. Accessed 9/25/2014

<http://www.jstor.org/stable/1562924?seq=2>

Ferraro, Paul J. The Local Costs Of Establishing Protected Areas In Low-Income Nations. *Ecological Economics* 43 (2002). Elsevier.

GGLO, LLC. *Productive Parks: Sustaining Communities*. 2015.

<http://www.gglo.com/insight/productiveparks.aspx>

Handy, Susan L, Ph.D. et al. How the Built Environment Affects Physical Activity: Views from Urban Planning. *American Journal of Preventive Medicine*, 2002. Published by Elsevier Science Inc.

Hanson Family. Park with a Literary Name. Blog post. January 2013.

<https://thefamilykalamazoo.wordpress.com/2013/01/14/a-park-with-a-literary-name/>

Hummon, David M. *Commonplaces, Community Ideology and Identity in American Culture*. State University of New York Press, Albany. 1990.

Inman, Robert P. *Making Cities Work: Prospects and Policies For Urban America*. Princeton University Press, 2006.

Kalamazoo, The City of. Parks and Recreation. Nicholas KIK Pool. Copyright 2013. Accessed October 2013. Updated 2014. <http://www.kalamazoocity.org/nicholas-kik-pool>

Keala, Tricia. Parks and Recreation Manager. City of Portage, Parks and Recreation Department. 2013, 2014.

Layton, Colleen, Tawny Pruitt, Kim Cekola. *The Economics of Place: The Value of Building Communities Around People*. Published by the Michigan Municipal League. 2011. Pg. 77

Lewis, Megan. From Recreation to Re-creation, *New Directions in Parks and Open Space System Planning*. American Planning Association. 2008, Planning Advisory Service, Report Number 551

Lindberg, Kreg. Policies For Maximizing Nature Tourism's Ecological And Economic Benefits. World Resources Institute. February 1991.

Long Lak Association. History of Long Lake. Kalamazoo County-USA.
<http://longlakeassoc.com/gallery.html>

Michigan Department of Natural Resources. Lake Sturgeon. Accessed 9/24/2014.
http://www.michigan.gov/dnr/0,4570,7-153-10370_12145_12203-33009--,00.html

Molnar, Donald J. Anatomy of a Park. The Essentials of Recreation Area Planning and Design. Second Edition. Waveland Press, Inc. 1986.

Naidoo, Robin et al. Integrating Economic Costs Into Conservation Planning. Trends In Ecology & Evolution. Volume 21, Issue 12, December 2006.

National Park Service, Department of the Interior. Grand Canyon National Park, Foundation Statement. April 2010. <http://www.nps.gov/grca/parkmgmt/upload/grca-foundation20100414.pdf>

Niemela, Jari. Ecology and Urban Planning. Department of Ecology and Systematics. Biodiversity and Conservation, Kluwer Academic Publishers. Printed in the Netherlands. August 1998.

Perlman, Dan, Jeffrey Milder, Practical Ecology: for planners, developers, and citizens. Island Press, Lincoln Institute of Land Policy, 2005.

Portage, City of. Parks and Recreation Department. Copyright 2010. Accessed October 2013. <http://portagemi.gov/Departments/ParksRecreation.aspx>

Portage, City of. Parks and Recreation Department. Recreation and Open Space Plan 2013 (including 2014 amendments).

Povich, Elaine. As Gas Prices Drop, So Does Road Funding. Planning, American Planning Association. January 2015

Rodgers, Nigel. Ancient Rome, A complete history of the rise and fall of the roman empire, chronicling the story of the most important and influential civilization the world has ever known. Hermes House, Anness Publishing Ltd. 2008

Rogerson, Peter A. Statistical Methods for Geography, A Student's Guide, Third Edition. Sage Publications Inc. 2010

Schnell, Steve, W. Randolph Frykberg. The Rebirth of Walloon Village: A Lesson In Holding Fast To Your Master Plans. Michigan Planner, American Planning Association. November/December 2014. Vol. 18, No. 5

Schwartz, Sam. Sam Schwartz Engineering. Steps To A Walkable Community. America Walks, 2012.

Smith, Christopher Scott. Professor of Geography, Western Michigan University. Transportation Planning, 2014.

United States Fish and Wildlife Service. Lake Sturgeon Biology. Updated November 21, 2013. Accessed 9/24/2014. <http://www.fws.gov/midwest/sturgeon/biology.htm>

United States Climate Data. Portage Michigan. 2014.
<http://www.usclimatedata.com/climate/portage/michigan/united-states/usmi1585/2014/1>

United States Department of Transportation. Transportation For A New Generation. Strategic Plan, Fiscal Years 2012 – 2016.

University of Texas At Austin. What is Karst? 2015.
<http://www.esi.utexas.edu/outreach/caves/karst.php>

Whitcomb, Jan C. Ramona Park Narrative. Portage Park Board, 2014.

Yonker, Steve. Senior Park Ranger, City of Portage, Parks and Recreation Department. 2013, 2014.

APPENDIX A: SURVEY

City of Portage

Ramona Park Survey

Are you a resident of:

Portage _____ Kalamazoo _____ Other _____

Age

18 – 21 22 – 30 31 – 40 41 – 50 50 – 60 61 – 70 71+

How many times do you come to Ramona Park in the summer season? (May – September)

1 2 3 4 5 6 7 8 9 10 11+

Do you have children?

Yes No

Do you bring your child/children to Ramona Park?

Yes No

If Yes to children, ages?

0yrs – 1yr. 2yrs. – 5yrs. 6yrs – 11yrs. 12yrs. – 15yrs. 16yrs 18yrs.

Please rank (1-5) the reason you come to Ramona Park: (5= highest, 1 = lowest)

Beach_____

Playground_____

Picnic Area_____

Monitored Swim Area_____

Location_____

Other Reasons why you come to Ramona?

Other_____

How likely would you come to Ramona if the following items were added in the future:,

1=Not likely 2=Less Likely 3=Neutral 4=More Likely 5=Very Likely

Facilities:

Boat Livery: (Rentals)	1	2	3	4	5
Row Boat	1	2	3	4	5
Kayak:	1	2	3	4	5
Paddle Board:	1	2	3	4	5
Splash Pad:	1	2	3	4	5
Dog Park:	1	2	3	4	5
Trail System:	1	2	3	4	5
In Line Hockey Rink	1	2	3	4	5
Disc Golf Course	1	2	3	4	5

Please add any other amenities you would like to see

Other: _____

Programs:

Fishing Camps 1 2 3 4 5

Swim Lessons 1 2 3 4 5

Please add any other programs you would like to see

Other: _____

Any of the above items you do not wish to see brought to Ramona Park? Why?

Would you be willing to pay more for a parking permit if any of the above (Boat Livery, Splash Pad, Dog Park, Trail System, In-line Hockey Rink, Disc Golf Course) amenities were added to Ramona Park?

Yes No

If yes, how much more on parking permits?

\$1_____ \$2_____ \$3_____ \$4_____ \$5_____ Greater than \$5_____

Any feed-back you wish to share?

APPENDIX B: OTHER REASONS

- Great bathrooms
- Great service
- Kayak/paddle board events
- Condition of park
- Grew up here
- Kids like this park
- Close to our home
- Biking [distance]
- Got a pass [possibly from a community event that had passes for prizes]
- Boating and lake access
- Shelter when it rains
- Quiet
- City of Portage, Parks and Recreation Staff
- Friends like to swim
- Relax
- Only place around
- Love it here
- Great place to hang with the 'bro's'
- Clean water
- Lifeguards, safe, clean
- Birthday party
- Got married here

- Live on the lake [Long Lake]
- Basketball
- Field trip with work
- Peaceful and calm
- Baptisms
- Fishing
- Family gatherings, holidays, walk the dog
- Social and school activities
- Fun for kids
- Nice beach

APPENDIX C: ADDED AMENITIES

- Motor boat rental
- Selling alcohol
- Music stage
- Water slide
- Bumper cars
- Roller coaster ride
- Canoe rental
- Flotation devices allowed
- Alcohol allowed [currently not allowed in Ramona Park]
- Jet-ski rental
- Deck for jumping off of [into the water in the swim area]
- Water play for kids in play area
- Fishing poles
- Another rental pavilion
- Target range [not sure if this was for archery/bb-pellets/or actual hand gun range]
- Pier
- More in concessions [assuming this was in reference to food items]
- High ropes course
- Kid pool
- Soccer field [Ramona Park already has one near the entrance]
- Bigger concessions – take credit cards
- More hot food choices

APPENDIX D: SUBJECT COMMENTS

- Great park
- Food selection should be more [in terms of concession items]
- Include BMX Park – Mountain bike trails
- Great staff
- Would pass increase include boat fees?!
- Willing to pay more if rentals were included in the price of the permit
- Would be nice if they brought in more sand, and raked the weeds out of the swim beach
- Music should be kid friendly [Ramona Park has a sound system that utilizes Sirius XM]
- Staff are friendly and competent
- Beautiful park
- Wish swim area was bigger
- Appreciate the efforts to keep the geese away
- Should allow dogs, Kalamazoo needs a dog beach
- Would be a great provision to the park to add auxiliary programs to benefit the park
- Do not want to pay more for additions that are not needed
- Annual pass is smart: should only raise the daily rate
- Would be nice to have two different permits: one for swimming and park, other for rentals
- Rules are ridiculous, you can hardly do anything in the water

- Thanks for making Portage better
- Please do something about people 'sagging' their shorts. It is inappropriate, especially around children
- Nice and clean park
- More things for children to play with
- Great park, first time here – will be back
- Not willing to pay more than \$10.00 for a visit, but would come back if more amenities were added
- Kayaks would be great
- Fun, clean and safe
- Love the park, thinking of moving into this area because of the park. If more amenities, the peacefulness of the park may be disrupted
- Parking should be \$5 to \$7 regardless of city residence
- It would be nice to have floating things in the water
- Beach is clean and well maintained, picnic area and playground are very inviting for family time
- More shelters/tents
- Boat and wave-runner parking
- Cleaner restrooms would be nice
- Being able to use flotation devices, nerf footballs, toys in the water
- Disc golf is a good idea
- Very nice park to come to with your family
- Kayaks are a good idea, trails too

- Growing up, never had to pay to swim, floaty devices are encouraged, it's called having fun, not under a thumb or communist rule. It's got a reputation as so.
- Cannot believe all the rules here at the park, I hear constant complaints from others every time I come
- Larger beach, swim area
- Allow rafts and balls to be played in the water. Other parks allow them
- Keep parking fees the same, only charge for rentals
- Special and very beneficial recreation facility to be able to offer your residents
- Enjoy coming here due to proximity to home
- Nice family park
- Be able to play with balls in the water, have floats in the water
- Cleaner and bigger restrooms
- More fencing for park area
- Thought pass went for other parks as well
- Don't like how crowded its allowed to get
- Would be nice to have sticker be good for county park
- Need more and better toys for the kids to play with in the sand
- All Kalamazoo fees should be the same, not just portage
- Boat rentals would be awesome
- Would pay for rental, but prefer seasonal pass to stay at the same rate
- Very clean and well kept
- Keep park smoke free, alcohol free
- Offer a live video feed of the park

- Be able to swim before noon during the week
- I'm a teacher in the Portage Public School system, live a street away from 'City of Portage limits'. Would like to be honored with resident sticker

APPENDIX E: HSIRB



Parks, Recreation & Public Services

March 31, 2014

Human Subjects Institutional Review Board
Western Michigan University
Kalamazoo, MI 49006

Dear Review Board:

This letter is to serve as permission for Kyle Mucha to perform a survey at Ramona Park in Portage during the summer of 2014. It is my understanding that Mr. Mucha is performing this survey for his graduate program. I have reviewed a draft of the proposed survey and believe it will gather information that will be of value for the city.

Please feel free to contact me if there are any questions.

Sincerely,

William M. Deming, Director
Parks, Recreation & Public Services

7719 South Westridge Avenue • Portage, Michigan 49002
Parks and Recreation: (269) 329-4522 • Public Services: (269) 329-4444
www.portagemi.gov

Abstract/Background Information:

The goal of the thesis survey is to test which ‘hypothetical’ new amenity should be added to Ramona Park, located in Portage Michigan. Many park visitors have asked for various park amenities during the summer months of operation. The purpose of this survey will be to see which of these amenities park visitors wish to see the most brought to Ramona.

After the summer months of observation are completed, the information collected anonymously from park visitors will be analyzed and formatted in a printable version to be presented to the Director of Portage Parks and Recreation. It is the goal of this survey to show city officials what park visitors are seeking in future developments of Ramona Park.

Subject Recruitment

In order to contact participants, a sign will be located at the beach concession area, which states that:

“Interested in taking a survey? Please see concession attendant for survey. This survey asks what park visitors would like to see brought to Ramona Park in future developments.”

Informed Consent Process

If visitors are wishing to participate in this survey, they will be given a one page copy of the informed consent form to read over. This survey will be voluntary and open to anyone who is 18 years of age or older.

Research Procedure

As part of the research, participants will fill out a survey. To collect the data, participants will fill out the survey, and return it to the concession stand. The location of the survey will be located at Ramona Park. The duration of the survey should take roughly ten (10) minutes to complete. The survey is in the form of circling numbers, and checking boxes, with an option for additional suggestions in some areas. The survey will be available from May 23rd to August 31st. The survey may be ended early if desired amount of participants (100) is reached before the August 31st deadline

Upon completion of the survey, visitors will be given a complementary ice cream treat. These ice cream treats will only be handed out after a completed survey is returned.

Methodology

This survey will provide the research for a Masters Level Thesis. The survey will be conducted at Ramona Park and have an option to be taken online. Visitors will have until August 31st to complete this survey. The minimum amount of surveys needed is 30, with the goal being at least 100 people to take the survey.

Throughout the summer, once the surveys are completed, the results will be imputed into an excel spreadsheet to help formalize the results. Once the results can be interpreted in an easy to read format, they will be presented to the Director of Portage Parks and Recreation, and to supplement the requirements of the Master Thesis.

Risks And Costs To And Protections For Subjects

The only foreseeable risks to participants is an inconvenience of their time to take the survey, due to possibly having to monitor their child/children at the beach while partaking in this survey. To protect subjects from inconveniences, the survey will be offered during the summer months of operation. This is so participants may come back and take the survey when they have other adults with them to help monitor their child/children, so they can focus on the survey. No names, income level or race are being asked in the survey, which should limit the risks to participants who take the survey. The survey will be used in a Masters Thesis, and the results will also be presented to the Director of Parks and Recreation of Portage.

Benefits Of Research

The known benefits will be to provide the Parks and Recreation Director of Portage with a list of the findings of the survey that can be used for future planning and development of Ramona park. The benefit(s) to the research participant is that their voice will be heard on this survey in regards to seeing more amenities brought to Ramona Park for their future use. As mentioned, the benefits of this survey will allow Park Officials to plan future developments around what park visitors are asking for in the survey. E.g. if park visitors are indicating in the survey that some type of boat livery would be highly desired, then future funds could be allocated by the Parks department to meet this demand.

Confidentiality

No names, income level or race are being asked in this survey, thus no specific group will be identifiable from this survey. This survey is anonymous and voluntary.

Western Michigan University

H.S.I.R.B.

Approved for use for one year from this date:

MAY 05 2014



HSIRB Office

Western Michigan University
Geography

Principal Investigator: Dr. David Lemberg, Ph.D.
Student Investigator: Nicholas Mucha
Title of Study: Ramona Park Amenities Testing

You have been invited to participate in a research project titled "Ramona Park Amenities Testing." This project will serve as Nicholas Mucha's thesis for the requirements of the Masters of Arts. Please read this consent form carefully and completely and please ask any questions if you need more clarification. The purpose of this study is to see if patrons (visitors) of Ramona Park during the months of May to September, would like to see more amenities made available. Those who may participate in this survey should be 18 years of age or older.

This survey is comprised of 15 fill-in-the-blank and circle-the-appropriate-answer questions and will take approximately 15 minutes to complete. You may choose to not answer any question and simply leave it blank. You can choose to stop participating in the study at anytime for any reason. You will not suffer any prejudice or penalty by your decision to stop your participation. The investigator can also decide to stop your participation in the study without your consent. Upon completion of the survey, you will be compensated for your time with an ice cream treat.

Should you have any questions prior to or during the study, you can contact the student investigator, Nicholas Mucha at 269.387.3410 or Nicholas.k.mucha@wmich.edu. You may also contact the Chair, Human Subjects Institutional Review Board at 269-387-8293 or the Vice President for Research at 269-387-8298 if questions arise during the course of the study. This consent document has been approved for use for one year by the Human Subjects Institutional Review Board (HSIRB) as indicated by the stamped date and signature of the board chair in the upper right corner. Do not participate in this study if the stamped date is older than one year.

I have read this informed consent document. The risks and benefits have been explained to me. I agree to take part in this study.

Please Print Your Name

Participant's signature

Date

WESTERN MICHIGAN UNIVERSITY



Human Subjects Institutional Review Board

Date: June 24, 2014

To: David Lemberg, Principal Investigator
Nicholas Mucha, Student Investigator for thesis

From: Amy Naugle, Ph.D., Chair 

Re: HSIRB Project Number 14-04-22

This letter will serve as confirmation that the changes to your research project titled "City of Portage Ramona Park Alternative Amenities Testing" requested in your memo received June 23, 2014 (to add an ice cream treat as compensation for completing survey; to remove online survey option) have been approved by the Human Subjects Institutional Review Board.

The conditions and the duration of this approval are specified in the Policies of Western Michigan University.

Please note that you may **only** conduct this research exactly in the form it was approved. You must seek specific board approval for any changes in this project. You must also seek reapproval if the project extends beyond the termination date noted below. In addition if there are any unanticipated adverse reactions or unanticipated events associated with the conduct of this research, you should immediately suspend the project and contact the Chair of the HSIRB for consultation.

The Board wishes you success in the pursuit of your research goals.

Approval Termination: May 4, 2015

251 W. Walwood Hall, Kalamazoo, MI 49008-5456
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