

AVAILABILITY OF PUBLIC POOLS IN OHIO: IMPLICATIONS FOR
BLACK/AFRICAN-AMERICAN RESIDENTS

by

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DEDICATION

This is dedicated to my loving family: my parents, Robyn and Robert Culp; my grandparents, Barbara and David Beebe, Nicholas and Diane Zazula; and my siblings, Adrianna and RJ. All of this would not be possible without your outpouring of love and support.

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ABSTRACT

AVAILABILITY OF PUBLIC POOLS IN OHIO: IMPLICATIONS FOR BLACK/AFRICAN-AMERICAN RESIDENTS

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Swimming is an exercise modality that is advantageous for health promotion and disease prevention (e.g., cardiovascular health, weight management, muscle strength), and is one of the most popular, practiced, and recommended forms of physical activity (Tanaka, 2009). Yet, one third of Americans have limited swimming ability (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b) and approximately 320,000 people die annually from drowning (Dasinger, Brown, & Sawyers, 2020; Gilchrist & Parker, 2014). Unintentional drowning rates are not equal across ethnic and racial population groups and ethnic and racial minority group members have higher drowning rates in comparison with the population as a whole (Golob, Giles, & Rich, 2013). African-American males have the highest drowning rates, 56% higher than Caucasians (Dasinger, Brown, & Sawyers, 2020).

Despite the need for Black/African-Americans to learn to swim, there remain a number of cultural, social-economic, and access constraints. Many people of color have a fear of drowning and getting their hair wet (Hoang, Cardinal, & Newhart, 2016; Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b; Norwood, 2010). Social and economic constraints include a cultural history of limited access and inclination to travel to pools, and the cost of getting to the pool or paying to use the pool.

To realize the benefits and to reduce the rates of drowning, it is important to ensure that all population groups have access to public pools. Age, sex, and racial differences in swimming participation are conditioned by the availability of pools (Hastings, Zahran, & Cable, 2006). This thesis focused on the availability of public pools among the 88 counties and incorporated jurisdictions of Ohio and implications for Black/African-American residents. .

The study utilized secondary data, including the number of public pools from the Ohio Department of Health (n.d.), socio-demographic characteristics from the Bureau of the Census (1994), and to better assess economic circumstances, the number of free or reduced lunches from the State of Ohio. Statistical analyses (e.g., descriptive statistics, bivariate correlations), were used to understand the relationship of public pool availability by socioeconomic subgroups. Based on the results, there are more pools in the more populous counties of Ohio, and people of color comprise a greater proportion of the population in these larger jurisdictions. While the researcher anticipated a greater number of public pools overall, the actual number of pools per county was lower than expected and most public pools were found in incorporated cities. The researcher also

expected fewer pools in proximity to populations of color. As a result, the study findings depict widespread availability of pools, but lead to a discussion of implications for better planning, marketing, and recruiting Black/African-Americans to learn to swim in order to lead healthier, safer lives.

CHAPTER ONE: INTRODUCTION

Background and Overview for the Study

Swimming is an exercise modality that is highly suitable for health promotion and disease prevention, and is one of the most popular, most practiced, and most recommended forms of physical activity (Tanaka, 2009). Because swimming does not involve bearing of body weight, due to the buoyancy of water, compressive joint forces are lower. Consequently, adverse impacts on the musculoskeletal system as well as injuries are lower and make swimming an ideal form of exercise for obese patients, the elderly and patients with arthritis (Tanaka, 2009).

One third of Americans have limited swimming ability (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b), and every year, approximately 320,000 people die from drowning (Dasinger, Brown, & Sawyers, 2020; Gilchrist & Parker, 2014). Drowning is defined as death from asphyxia within 24 hours of submersion in water (Hastings, Zahran, & Cable, 2006). Drowning is the third leading cause of unintentional injury death worldwide, accounting for seven percent of all injury-related deaths (Dasinger, Brown, & Sawyers, 2020; Gilchrist & Parker, 2014). In the United States, ethnic and racial minority group members (e.g., Black/African-Americans, Hispanic Americans, Asian-Pacific Americans, Native Americans) drown at much higher rates than Euro-Americans (Golob, Giles, & Rich, 2013). Drowning rates among minority populations are 56 percent higher than

among Caucasians, and African-American males have the highest drowning rates (Dasinger, Brown, & Sawyers, 2020). This may be a function of Black/African-Americans being 60 percent less likely than other population groups to take part in swimming activities (Dasinger, Brown, & Sawyers, 2020) or a function of greater disposition toward risk-taking behavior (Martin & Witman, 2010). Research has indicated the various historic and cultural considerations for a lack of swimming proficiency among this population group. As observed by Rosemond (2017):

Today, nearly 60 years after the abolishment of Jim Crow laws that kept African-Americans from pools and safe swimming places, many children still never get the chance to swim. Municipalities often favor cheap splash parks over pools in black neighborhoods, but no one learns how to avoid drowning in a splash park.

She goes on to say:

Stereotypes suggest black people don't want to swim because they can't float, are scared of water and will do anything to avoid getting their hair wet. These widely held negative stereotypes are literally killing us. According to the Centers for Disease Control and Prevention, black children drown at 5.5 times the rate of other children. And in the United States, where 10 people drown every day, that represents many black lives lost (Rosemond, 2017).

Despite the need for Black/African-Americans to learn swimming, there remain a number of other constraints, including availability and access, cultural, socio-economic, and historic. To complicate matters, there is plentiful historical evidence linking economic, gender, and racial segregation with swimming facility access. According to

Wiltse (2007), toward the end of the 1800s, municipal pools in the United States were built at a great rate in many urban centers. Due to the accepted Victorian-era philosophy, it was taboo for females of any race to swim. On the other hand, males of all races were welcome to swim in these pools. Towards the early to mid-1900s, these same facilities changed the rules and prohibited the very poor and people of color from swimming and allowed White wealthy females to swim. More importantly, a deeper comprehension of why racially underrepresented children are not learning how to swim could possibly decrease fatal and non-fatal drowning events, which suggests additional research on this critical question (Irwin, Irwin, Ryan, & Drayer, 2011). Culturally, family and friends may have a negative attitude toward swimming (Golob, Giles, & Rich, 2013; Gilchrist & Parker, 2014). Many people of color also have a fear of drowning and getting their hair wet (Hoang, Cardinal, & Newhart, 2016; Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b). Socio-economically, there is a cost of getting to the pool or paying to use the pool which may disadvantage minority populations. Access is the ability to get to a pool easily by walking or driving or availability of swimming facilities (Quash, Rawlins, & Anderson, 2020). While these are important individually none matter without the access pools.

Purpose Statement

Age, sex, and race differences in swimming participation are conditioned by the availability of pools (Hastings, Zahran, & Cable, 2006). Therefore, the aim of this study was to examine the availability of public pools among the 88 counties and incorporated jurisdictions of Ohio and implications for Black/African-American residents. Using

county level data for Ohio, the researcher analyzed the distribution of public pools, average household income, population, percentage of Black/African-Americans, age, and to better assess economic circumstances, the number of free or reduced lunches. . The researcher believed that high-income counties would have a greater number of public pool facilities, and that there would be fewer pools in counties with a higher proportion of Black/African-Americans and residents of lower income levels.

Theoretical Framework

This study was predicated on the theory of leisure constraints. Leisure constraints limit “the formation of leisure preferences and inhibit or prohibit participation and enjoyment in leisure” (Chick & Dong, 2003, p. 338). There are three types of leisure constraints: Interpersonal or lack of appropriate partners, intrapersonal or lack of skill or too much stress, and structural or excessive cost or lack of availability. This theory explains how people choose their leisure activities. Structural constraints are mostly from outside conditions, and are the focus of this study

While the purpose of this study is to consider accessibility to public pools, so that further research might focus on the swimming experiences of Black/African-Americans and their constraints to swimming (e.g., monetary constraints, lack of time, poor health, family support or interest). Access to swimming pools, the lack of desire to learn to swim, and disinterest in water related recreational activities may contribute to the racial differences in drowning rates (Quash, Rawlins, & Anderson, 2020).

Rationale and Significance of the Study

This study is important because all individuals should have equal access to public swim facilities, predicated on availability. This would mean that all populations, including those of minority groups that do not participate at the same levels, would be more likely to learn to swim which would cause the drowning gaps to be decreased.

Summary

This chapter has discussed an introduction related to racial disparities in public pools in Ohio and the implications. A review of literature covering drowning, fear, racism, and solutions will be presented in Chapter 2. In Chapter 3, the study of secondary data will be discussed. The results of the secondary data collected will be discussed in Chapter 4. Finally, a summary, conclusion, and implications will encompass Chapter 5.

CHAPTER TWO: REVIEW OF LITERATURE

Drowning

Drowning is defined as death from asphyxia within 24 hours of submersion in water (Hastings, Zahran, & Cable, 2006). Drowning is the third leading cause of unintentional injury death worldwide, accounting for seven percent of all injury-related deaths (Dasinger, Brown, & Sawyers, 2020). Research has shown that racial and ethnic minorities drown at higher rates than the general population (Martin & Witman, 2010). Unintentional drowning rates are not equal across ethnic and racial population groups and ethnic and racial minority group members have higher drowning rates in comparison to the population as a whole (Golob, Giles, & Rich, 2013). In the United States, over 4,000 people die annually from drowning accidents: It is the second leading cause of death in children (Dasinger, Brown, & Sawyers, 2020). Data from the United States shows that ethnic and racial minority group members (e.g., Black/African-Americans, Hispanic Americans, Asian-Pacific Americans, Native Americans) drown at much higher rates than Euro-Americans (Golob, Giles, & Rich, 2013). Black/African-Americans are 60 percent less likely than other population groups to take part in swimming activities (Dasinger, Brown, & Sawyers, 2020). Black/African-American children unintentionally drown 3.1 times more than those from other population groups (Golob, Giles, & Rich, 2013; Gilchrist & Parker, 2014). U.S.A. Swimming, the nation's governing body for the sport, reports that only has three percent of participants in their programs are made up of people of color (Burzillo, 2014, p. 2).

Swimming is a recreational activity that has had limited minority participation for many reasons, but the illusion that “blacks don’t swim” is prevalent (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b). Many researchers including Ito et. al have found that higher drowning rates are related to lack of water safety instruction due to socioeconomic factors (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b; Ito, 2014; Hastings, Zahran, & Cable, 2006). Black/African-Americans perceive aquatics recreation as an unwelcome environment (Gadberry & Gadberry 2020)

Ito (2014) noted several issues why minorities do not learn to swim, including socioeconomic constraints such as less access to swimming pools and swimming lessons, more crowded condition and a lack of swimming skill in family and friends. The rate of non-swimming is 4 to 5 times higher in Black/African-Americans than in whites. Ito also addressed increased drowning rates that may be due to inadequate or lack of supervision. Age, sex, and race differentials in swimming participation are conditioned by the availability of pools (Hastings, Zahran, & Cable, 2006). Subsequently, some Black/African-Americans choose to participate in other more accessible leisure activities (Quash, Rawlins, & Anderson, 2020).

There are several factors that impact drowning rates among minority population, including: age, sex, location, access, social exclusivity, supervision and lack of swimming lessons (Martin & Witman, 2010; Wiltse, 2014). White children are exposed to pools at a young age becoming more comfortable around them. Male drowning rates for Black adolescents tend to be related to a greater disposition toward risk-taking behavior (Martin & Witman, 2010). Location is a significant factor due to the lack of

pools in lower income and more socio-demographically diverse areas. Access shows the possibility that groups are denied access to relatively safe swimming areas (e.g., guarded pools and beaches) which can lead to a higher risk of drowning. Lastly, the lack of swim lessons or proper water safety education may lead to a higher drowning rate.

Wiltse (2014) noted that past discrimination in the provision of and access to swimming pools is largely responsible for the current disparity in swimming rates between Blacks and Whites. This is true today because many Blacks did not learn to swim which in return means they did not have their children learn to swim (Wiltse, 2014). Much of this is because Blacks/African-Americans did not have access to pools which made it hard for them to learn to swim. A second primary cause of the swimming disparity is widespread fear of water and drowning among Blacks (Wiltse, 2014). Affordable, accessible, and, most importantly, appealing swimming pools are needed to popularize swimming among Blacks and expand access for poor and working-class Americans more generally (Wiltse, 2014).

Water safety is essential to knowing what to do if they or someone they love find themselves submerged (Stallman, Junge, & Blixt, 2008). The causes of drowning should command the way we teach and what children should learn (Stallman, Junge, & Blixt, 2008). This includes teaching children a young age how to submerge and then resurface. This is useful if they were to fall into water when they were not expecting it, which can save many lives.

Fear

Drowning is a complex public health issue in the United States that is especially life threatening for racially underrepresented youth. African-American children in the United States aged 5 to 14 years encounter fatal unintentional drowning at more than three times the rate of their White counterparts (Irwin, Irwin, Ryan, & Drayer, 2011). In the only U.S. adult swimming ability study, Gilchrist, Sacks, and Branche (2000) found that 62% of African-American respondents had limited swimming ability (i.e., not able to swim at all or could swim less than one pool length — 24 feet) compared to 32% of White participants, 47% rate of Asian/Asian Americans, and a 44% rate of Hispanic respondents. Children of color face swimming ability challenges and an alarming number of children (4–17 years) are “at risk for drowning”, unable to swim, or to feel comfortable only in the shallow end of a pool (Irwin, Irwin, Ryan, & Drayer, 2011).

It has been noted that racially underrepresented parents deny their children swimming experiences out of their own fear of water and the fear that their child will drown (Irwin, Irwin, Ryan, & Drayer, 2011). Fear of water, or aquaphobia, is considered to be a “specific phobia” by the American Psychiatric Association that is “a marked and persistent fear that is cued by circumscribed or clearly discernible objects or situations” (p. 1). Numerous studies have confirmed parental involvement to be critical for children’s positive experiences with organized physical activities like swimming (Irwin, Drayer, Irwin, Ryan, & Southall, 2008). African-American adolescents are more likely to listen to and value advice given by their relevant others (e.g., parents, guardians) as compared to White peers. Irwin et al. (2011, p. 563) said, “This process of racial socialization

highlights explicit cultural principles, which have been found to shape acceptance of laws, consumer behaviors, as well as health knowledge and attitudes which include cultural viewpoints about swimming. Thus, racially underrepresented parents may be unknowingly socializing their children away from swimming and placing them at risk for drowning.”

Racism in Swimming

To complicate matters, there is plentiful historical evidence linking economic, gender, and racial segregation with swimming facility access. According to Wiltse (2007), toward the end of the 1800s, municipal pools in the United States were built at a great rate in many urban centers. Due to the accepted Victorian-era philosophy, it was taboo for females of any race to swim. On the other hand, males of all races were welcome to swim in these pools. Towards the early to mid-1900s, these same facilities changed the rules and prohibited the very poor and people of color from swimming and allowed White wealthy females to swim. Therefore, African-American females experienced historical double jeopardy—thorough institutional segregation from swimming not just once, but twice, within 50 to 75 years. Wiltse cites three reasons as contributing factors to acute discrimination against Blacks. The first was the Great Black Migration. One and a half million southern Blacks migrated to the north, creating hordes of “Black belt” residences. The 1919 Chicago Riot characterizes the tension between Whites and Blacks. The riot entailed seven days of violence and started when African-American teenagers visited a White beach. Enraged Whites abused Blacks physically and verbally when they attempted to use a public swimming beach. The second factor was

race-based sanitation. According to Wiltse, Whites believed Black swimmers were diseased and swimming with them would put them at risk. Race-based sanitation was exemplified by the Highland Park Pool in Pittsburgh, where pool employees demanded a “health certificate” from would-be Black swimmers before they were allowed admittance. This pattern was repeated repeatedly throughout the “Swimming Pool Age.” At the heart of the conflict was the third factor, gender-integrated swimming. Fairground Park Pool was the first racially segregated pool, which Wiltse believed was built as a consequence of gender integration. It was believed by Whites that Black men lusted after White women and would take advantage of them if given the opportunity. City officials deemed it unsafe to allow African-American men to swim in the same area as White women. Municipal swimming pools were literally a battleground as Blacks struggled for equal access to public amenities.

In the 1950s, White Americans realized they could no longer control Blacks’ access to the municipal swimming pools they frequented. This resulted in a huge increase in the building of private pools (Irwin, Irwin, Ryan, & Drayer, 2011). Residential pools, once an unattainable luxury, became a material example of middle-class success in the booming postwar economy. Significantly, private pools allowed White Americans greater control over the people with whom they swam. Private swim clubs and residential pools also signaled the erosion of community support and funding for municipal pools. Consequently, crumbling municipal pools became a symbol of strained race relations, leaving the working-class Whites and minorities with second-hand recreation spaces that are forever in danger of closing. This struggle for equal access to pools would last for

years. Which put generations of African Americans without formal swimming instruction which caused fear of water that would be passed down to the next generations.

According to Rohrer (2010), “Swimming never became a part of African-American recreational culture.” Further, “in the northern US [while] segregation in pools ended in the 1940s and early 1950s, . . . many white swimmers responded by abandoning the municipal pools and heading off to private clubs in the suburbs where segregation continued to be enforced.”

Municipal pools became a low public priority, observed Wiltse (2015). After the race riots of the 1960s, many cities did start building pools in predominantly black areas, but there was still a problem. Many of the new pools were small - often only 20 by 40 ft (six by 12m) and 3.5 ft (1m) deep. Rohrer (2010) notes that these pools “didn’t really accommodate swimming. They attracted young kids who would stand in them and splash about. There really wasn’t an effort to teach African-American children to swim in these pools.” According to Wolcott (2019), “swimming pools and beaches were among the most segregated and fought over public spaces in the North and the South.” Much segregation of public facilities was based on white stereotypes of Black/African-Americans in terms of sexuality and fear of disease. Further, “city leaders [justified] segregation [and] also pointed to fears of fights breaking out if whites and blacks mingled. Racial separation for them equaled racial peace.” Ohio was not immune to public pools and segregation:

These fears were underscored when white teenagers attacked black swimmers after activists or city officials opened public pools to blacks. For example, whites threw

nails at the bottom of pools in Cincinnati, poured bleach and acid in pools with black bathers in St. Augustine, Florida, and beat them up in Philadelphia (Wolcott, 2019).

“Across the country,” observes Wiltse (2015):

public swimming pools were racially desegregated after World War II, but that was met with widespread opposition from whites that again exposed their social prejudices. Southern cities typically shut down their public pools rather than allow mixed-race swimming. In the North, whites generally abandoned pools that became accessible to blacks and retreated to ones located in thoroughly white neighborhoods or established private club pools, where racial discrimination was still legal.

Regarding Ohio, Wiltse goes on to say:

Warren, Ohio, for example, was forced by a pending court order to desegregate its municipal pool in 1948. The local newspaper covered the first day of interracial swimming by printing a front-page photo showing a dozen children waiting to enter. The last two children in line were black; the caption read: “Last one in the water is a monkey.” The racial antipathy expressed in the newspaper was shared by many local whites, who stopped using the pool when they realized black residents intended to use it.

Similar issues related to public swimming pools occurred in other Ohio cities. In his study of the African-American experience in Youngstown, Ohio from 1940-1965, Beverly (2002) reported that the city’s newspaper, the *Vindicator*, in 1940s-era articles indicate[d] that the newspaper in fact was a supporter of segregated swimming pools and the 1949 refusal on the part of white lifeguards to work at Chase Pool. In 1949, the

newspaper indicated what it believed to be the real reason behind the problems of the 1949 opening of municipal pools. “The actual reason is the attempt on the part of certain persons and groups to force mixed swimming in all pools by both Negroes and whites” (p. 25).

And in Cleveland’s Woodland Hill Park in 1941, as Wolcott (2012) recounts, a group of African-American boys was chased away by White teens. Officially, the event was chalked up to juvenile delinquency by officials. Wolcott explained,

But the increasing number of swimming pool and beach riots in the 1940s was an outgrowth of larger challenges to segregated recreation. These riots, both large and small, also reflected the ways in which postwar America’s racial anxieties coalesced in the water: fears of disease in the midst of a polio epidemic, concerns over the safety of young children in American growing families, apprehension about the rapidly changing racial and ethnic makeup of urban neighborhoods, and alarm over the seeming rise of teenage delinquency (p. 72).

Socioeconomic Characteristics

Self-reported swim ability levels reveal disparity among socioeconomic and racial classifications (Irwin, Irwin, Martin, & Ross, 2010). USA Swimming conducted a study of its swimmers in which the majority (61%) of the respondents reported low swimming ability with 10% of the 72-person sample unable to swim. Free/reduced school lunch recipients reported significantly less swimming ability than students who paid for their lunch. Two-thirds (66%) of the Free/Reduced School Lunch recipients self-reported

no/low swim ability. In fact, 12% of respondents qualifying for a Free Lunch Program self-reported that they were not able to swim. This figure is almost twice that reported by those who do not qualify for free school lunch. Overall, White respondents self-reported significantly higher swimming ability than Black/African-American and Hispanic/Latino respondents. More than two-thirds (69%) of the Black/African-American respondents self-reported low swimming skills while 58% of the Hispanic/Latino and 42% of the White respondent's self-reported similar swim ability. Only 14% of Black/African-American and 7% of Hispanic/Latino respondents self-reported that they were not able to swim. In fact, when controlling for income, Black/African-American respondents were found to have significantly less swimming ability than White and Hispanic/Latino.

Solutions

Wiltse (2007) also noted that one of the first steps in dispelling fear, specifically fear of water and drowning, is education. Formal swimming instruction is important for all children but teaching the importance of these swimming lessons to the parents/guardians and to the entire community is imperative. Communities in the United States with high drowning rates would be the best to target excluded groups with this vital information, educating parents/guardians to understand that not allowing their children to partake in these lessons is counterproductive to ensuring their children's safety. Public service announcements using radio, print/social media, and television could be the first step to delivering this information to affected groups.

School programming that includes water safety information would be another effective strategy. Children are in school around 180 days per year in the United States,

and many children attend after-school care programs. Swimming instruction is required in many other countries like the United Kingdom and their fatal drowning rate is 0.6 per 100,000 as compared to the U.S. rate of 1.3 (Irwin, Irwin, Ryan, & Drayer, 2011).

Delivering just a small amount of information concerning how to be safe around the water would save families from the tragedy of drowning. Swimming is a physical activity that should be available to all children. Hindering children of color from the sport of swimming excludes this group from financial opportunities that swimming can bring including college scholarships, summer pool jobs, and aquatic careers (Irwin, Irwin, Martin, & Ross, 2010). Also, it prohibits disadvantaged children from experiencing various water activities and sports including water polo, competitive team swimming and diving (Irwin, Irwin, Ryan, & Drayer, 2011). Understanding the barriers, both physical and psychological, is imperative to overcoming these obstacles for these children. More importantly, a deeper comprehension of why racially underrepresented children are not learning how to swim could possibly decrease fatal and non-fatal drowning events, which suggests additional research on this critical question (Irwin, Irwin, Ryan, & Drayer, 2011).

There are a few ways to bridge the racial/ethnic gap with regard to the high drowning rate. The first is to listen to the minorities and what they need (Waller & Norwood, 2011). This can include surveys and interviews. This is important because, in order to fix the issue, one must listen to the people you want to help. Second would include building pools that are capable of having learn to swim programs, having sensors and cameras in the pool to alert someone of struggling swimmers, and accurately

reporting accidental drownings (Gadberry & Gadberry, 2020). These buildings would need to be in various areas to allow access to everyone.

Synthesis of the Literature

Despite the overall trend toward decreased drowning rates, minority groups continue to drown at higher rates than the population as a whole (Waller & Norwood, 2011). Black/African-Americans still experience repercussions from segregation. Black/African-Americans did not have access to quality or safe pools to learn to swim. This caused them to not teach their children to swim and created the gap in the drowning rate. Swimming is a recreational activity that has had limited minority participation for many reasons, but the illusion that “blacks don’t swim” is prevalent (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b; Norwood, 2010).

Many researchers (e.g., Irwin, Irwin, Ryan, & Drayer, 2011; Gadberry & Gadberry, 2020) state that higher drowning is related to lack of water safety instruction due to socioeconomic factors. Black/African-Americans perceive aquatics recreation as an unwelcome environment. Ito (2014) noted several issues regarding why minorities do not learn to swim, including less access to swimming pools and swimming lessons, more crowded conditions at local pools, and lack of swimming skill among family and friends.

CHAPTER THREE: METHDOLOGY

Research Design and Justification

This chapter includes information related to the secondary data available for the 88 counties of Ohio, and the processes used to analyze the data to understand the relationship of public pool availability and socio-economic characteristics (e.g., household income, percentage of Black/African-Americans, age, free and reduced lunches). According to Hox and Boije (2005), secondary data is material created by other researchers that is made readily available for reuse by the general research community. Data sets collected by university-based researchers are often archived by data archives; these are organizations set up mainly for the purpose of releasing and disseminating secondary data to the general research community. Examples of secondary data include official statistics, administration records or other accounts kept routinely by organizations, but any primary data can serve as secondary data.

Sample and Sampling Procedure

The data represents a census of all 88 counties in the state of Ohio. This was necessary to fully understand the availability of public pools and relationships to population, percentage of Black/African-Americans, household income, free or reduced lunches and average age.

Instrumentation/Data Collection Procedures

The U.S. Census Bureau publicly provides 2020 Decennial Census data. Via Census.gov, I downloaded the following demographic variables for each of the 88 counties in the state of Ohio: average age, average household income, and the percentage of Black/African-Americans in the county. To find the *location of public pools*, the Ohio Department of Health (n.d.) provided a list of public pools in each county and jurisdiction. This excel sheet indicated the addresses, county and type of pool. The researcher removed data dealing with water parks, splash pads and hotel pools. Data related to free and reduced lunches was available from Ohio Department of Education and was used as a refined, alternate indicator of income. Additionally, the square miles of each county were collected from Census.gov to discern if availability was a function of acreage. I then transferred all this data to an Excel sheet where the columns indicated the demographic information and number of pools. Further, the rows reflected each county.

Data Analysis

The data were analyzed descriptively and using Pearson Product Moment Correlations to understand the simple bivariate relationships among the number of pools per jurisdiction with age, household income, size the of the county, percentage of Black/African-Americans, and free and reduced lunches. Maps were used to outline the state and county distribution of pools and population by characteristics.

CHAPTER FOUR: RESULTS

The intent of this study was to examine the availability of public pools among the 88 counties and incorporated jurisdictions of Ohio (see Appendix A) and to frame implications for Black/African-American residents. Using county level data for Ohio, the researcher analyzed the distribution of public pools, average household income, population, percentage of Black/African-Americans, age, and to better assess economic circumstances, the number of free or reduced lunches (see Appendix B). This chapter includes a discussion of descriptive statistics and inferential statistics (bivariate correlations) among the key study variables. .

Descriptive Statistics. Ohio was the 17th state when it entered the Union in 1803, the birthplace of seven former presidents and the sport of football (O’Connell, 1994; Ohio, n.d.). Ohio is the 34th largest state with a population of 11.7 million people (O’Connell, 1994; Ohio, n.d.). There are 88 counties ranging in population from 13,083 to 1,290,360 people. The average income ranges from \$39,079 to \$106,908, and the age of Ohio residents’ ranges from 32 to 50 years old. Cuyahoga County has the highest population of Black/African-Americans at 20 percent. Cleveland City has the highest number of public pools at 57.

In Ohio, the Department of Health oversees all public pools (i.e., any indoor or outdoor structure, chamber, or tank containing a body of water that is intended to be used collectively for swimming, diving, or bathing. The US Census Bureau notes that “incorporated places are established under the authorization of the governments in each

of the 50 States. Requirements for incorporation vary widely among the States; some States have few specific criteria, while others have established population thresholds and occasionally other conditions (for example, minimum land area, population density, and distance from other existing incorporated places) that must be met for incorporation” (Census Bureau, 1994). Incorporated cities must have a minimum population of 25,000 for new cities; existing cities have a minimum population requirement of 5,000. Cities must be at least 4 square miles in area, have a minimum population density of 1,000 people per square mile, and an assessed property valuation of \$2,500 per capita. To be an incorporated village, the minimum population requirement is 1,600, a minimum population density requirement of 800 people per square mile, and an assessed property valuation of at least \$3,500 per capita (Census Bureau, 1994).

Inferential Statistics. Based on a series of bivariate correlations, the interrelationships among the number of public pools in each county by size of jurisdiction and population characteristics (i.e., average household income, average age, population, percent of Black/African-Americans, Receipt of Free and Reduced Lunch) were assessed (Table 1). Significance was determined at the .05 level or less. The number of public pools were found to be significantly and positively related to total population ($r=.57$, $p<.001$) and the number of Black/African-Americans($r=.79$, $p<.001$), meaning that the greater the population, the greater the number of Black/African-Americans, and the greater the number of available public pools. Additionally, the number of public pools were significantly and inversely correlated with regard to average household income ($r=-.11$, $p=.273$), age ($r=-.28$, $p=.005$), and square miles ($r=-.25$, $p=-.014$), meaning the

greater the number of public pools, the lower the household income, age, and size of jurisdiction. There was no significant relationship between the number of public pools and the number of free or reduced lunches as a more refined measure of income ($r=-.01$, $p=.937$).

With regard to the population characteristics, there was a significant, inverse relationship between the percentage of Black/African-Americans and average household income ($r= -.23$, $p=.02$), average age ($r=-.36$, $p<.001$) and square miles ($r= -.29$, $p=.004$). This means that Black/African-Americans have a lower household income, are younger and live in more populated areas.

Table 1. Pearson Correlations of Public Pool Distribution in Ohio and Population Characteristics

| | | Number of Public Pools | Average Household income | Average Age | Total Population | Percent of Black/African-Americans | Square Miles | Free and Reduced Lunch |
|--------------------------|---------------------|------------------------|--------------------------|-------------|------------------|------------------------------------|--------------|------------------------|
| Number of Public Pools | Pearson Correlation | 1 | -.11 | -.28** | .57** | .79** | -.25* | -.01 |
| | Sig. (2-tailed) | | .273 | .005 | .001 | .001 | .014 | .937 |
| Average Household income | Pearson Correlation | | 1 | .08 | .12 | -.23* | .31** | -.85** |
| | Sig. (2-tailed) | | | .453 | .248 | .020 | .001 | .001 |
| Average Age | Pearson Correlation | | | 1 | -.28** | -.36** | .27** | .19 |
| | Sig. (2-tailed) | | | | .005 | .001 | .006 | .081 |

| | | | | | | | | |
|------------------------------------|---------------------|--|--|--|---|-------|--------|------|
| Total Population | Pearson Correlation | | | | 1 | .68** | .06 | .07 |
| | Sig. (2-tailed) | | | | | .001 | .564 | .525 |
| Percent of Black/African-Americans | Pearson Correlation | | | | | 1 | -.29** | .19 |
| | Sig. (2-tailed) | | | | | | .004 | .078 |
| Square Miles | Pearson Correlation | | | | | | 1 | .23* |
| | Sig. (2-tailed) | | | | | | | .029 |
| Free and Reduced Lunch | Pearson Correlation | | | | | | | 1 |
| | Sig. (2-tailed) | | | | | | | |

* Significant at less than the .05 level

** Significant at less than the .01 level

CHAPTER FIVE: SUMMARY AND CONCLUSION

The intent of this study was to focus on the availability of public pools in Ohio by jurisdiction and population characteristics. This chapter includes a discussion of findings, implications for research and practice, and conclusions.

Discussion

There are several factors that impact drowning rates, including: age, sex, location, access, social exclusivity, supervision and lack of swimming lessons. Based on results of this study, there are a several relationships worth considering. The first relates to total population and the number of public pools. In the state of Ohio, there are more public pools in higher populated areas. There is also a significant relationship between the number and percentage of Black/African-Americans and public pools. Specially, there are more pools in places where the number of Black/African-Americans is higher. This is not what was originally thought. I believe that this is because there are more Black/African-Americans in the more populated parts of the state. There was no significant relationship between income and number of public pools. This may be a function of a growing number of private pools in higher income areas. While overall there were fewer public pools than expected, Ohio is rich in other sources of water in which residents can swim. Lake Erie is one of the largest bodies of water found in northwest Ohio, yet the state has lakes that have “beaches” and areas to swim and boat. Additionally, there are other sources of exposure to water that were not included in this

study including splash pads, hotel pools, country clubs and home association pools.

These facilities are frequented by Ohio residents.

There are certain limitations as a function of using secondary data. Not all eligible individuals complete the census; while this can cause some degree of skewness in the data. That said, the Census Bureau does impute the data to account for missing information. Another limitation is that as secondary data, the researcher must rely on that information collected for other purposes. There was a challenge in gaining access to the data regarding the distribution of public pools. While availability of pools was the intent of this analysis, conclusions are limited by a lack of input from residents regarding their perceived accessibility and constraints to access and swimming.

Future research should consider residence distance from each pool and who is actually using the pools. This may support planning efforts to identify locations for future pool construction. The findings of this study support that there are pools available to Ohio residents. Access to these pools and a focus on constraints is needed. Future researchers should consider the population residing within a certain radius of each public pool to compare demographic characteristics to those who use or do not use a specific facility. Lastly, future research should consider how to encourage a greater number of people to learn to swim and therefore encourage water safety, regardless of race and ethnicity. As noted by Wiltse (2014), affordable, accessible, and, most importantly, appealing swimming pools are needed to popularize swimming among Black/African-Americans and expand access for poor and working-class Americans more generally. Thus, racially underrepresented parents may be unknowingly socializing their children

away from swimming and placing them at risk for drowning. School programming that includes water safety information would be another effective strategy.

Conclusion

This study analyzed secondary data for the 88 counties in Ohio. The quantitative study determined the availability of pools and the relationship to jurisdictional and population characteristics. Using census data from the state of Ohio, the researcher analyzed household income; demographics; and the number of public pools in each county and incorporated city. There were significant relationships between the number of public pools and population characteristics including the percentage of Black/African-Americans. The researcher believes this is because in the state of Ohio many of the Black/African-Americans live in higher population jurisdictions where the pools are found.

Swimming is a recreational activity that has had limited minority participation for many reasons, but the illusion that “blacks don’t swim” is prevalent (Irwin, Irwin, Ryan, & Drayer, 2009a, 2009b; Norwood, 2010). Although swimming has proven to be a beneficial recreational activity for one’s health, 60 percent of Americans have limited swimming abilities. Every year, approximately 320,000 people die from drowning (Dasinger, Brown, & Sawyers, 2020; Gilchrist & Parker, 2014). Researchers have identified several issues why individuals from underrepresented minority groups do not learn to swim, including less access to swimming pools and swimming lessons, more crowded conditions of facilities, and lack of swimming skill among family and friends (Ito, 2014). The rate of non-swimming is 4 to 5 times higher in Black/African-Americans

than in whites. It also noted that increased drowning rates may be due to inadequate or lack of supervision.

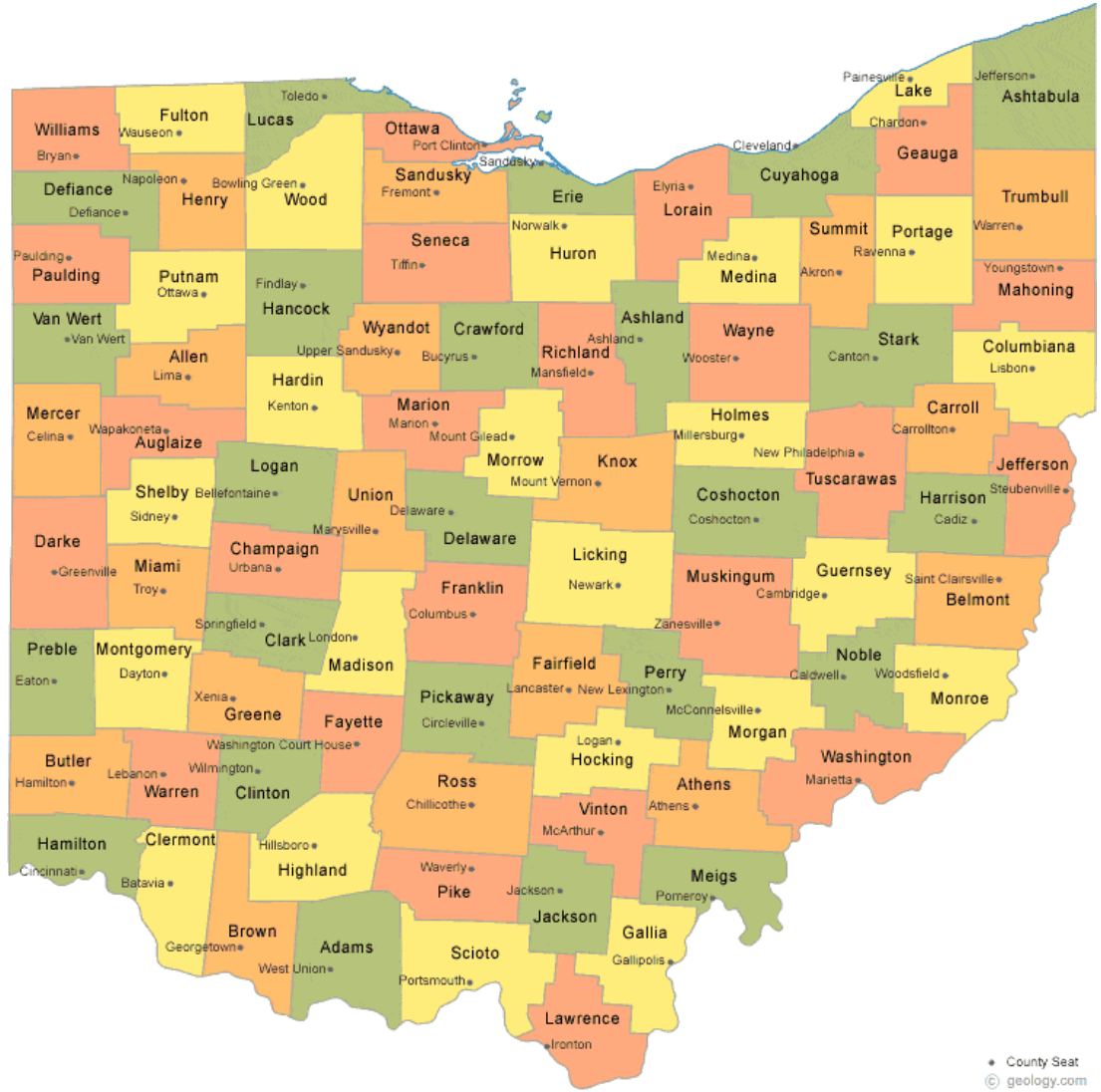
Age, sex, and racial differences in swimming participation are conditioned by the availability of pools (Hastings, Zahran, & Cable, 2006). In this study, no discrepancies in availability were noted, in fact, a greater number of pools are located in areas with a higher number of Black/African-Americans. This then prompts the question, if available, why is there such a discrepancy in swimming as an activity among non-white population groups. Quash et al. (2020) state that some Black/African-Americans simply choose to participate in other leisure activities. To complicate matters, there is plentiful historical evidence linking economic, gender, and racial segregation with swimming facility access. Despite the overall trend toward decreased drowning rates, minority groups continue to drown at higher rates than the population as a whole (Waller & Norwood, 2011). Black/African-Americans still experience repercussions from segregation. Many individuals did not have access to quality or safe pools in which to learn to swim. This set the conditions for families not to teach their children to swim and created gaps in the drowning rate.

The intent of this study was to identify the availability of public pools in Ohio, as a precursor to access, and to consider demographic characteristics in order to understand the implications for Black/African-American residents. The findings reflect that access is not the primary constraint to swimming participation. Further research into such constraints and a focus on how best to inform the population about the benefits of

swimming will, in turn, increase safety and encourage current and future generations to engage in this beneficial and lifelong physical activity.

APPENDIX A

Counties in Ohio



APPENDIX B

Descriptive Data

| Ohio County Name | Number of Public Pools | Average income | Average Age | Population | Percent of Black/African-Americans | Square Miles | Free and Reduced lunch |
|------------------|------------------------|----------------|-------------|------------|------------------------------------|--------------|------------------------|
| Adams | 0 | \$ 39,079.00 | 42 | 27,698 | 1% | 587.3 | 51% |
| Allen | 3 | \$ 53,131.00 | 39 | 103,175 | 11% | 402.4 | 42% |
| Alliance City | 1 | \$ 35,718.00 | 35 | 21,842 | 9% | 9 | |
| Ashland | 1 | \$ 52,823.00 | 40 | 53,823 | 1% | 422.8 | 38% |
| Ashtabula | 0 | \$ 46,700.00 | 43 | 97,830 | 4% | 701.8 | 53% |
| Athens | 0 | \$ 40,905.00 | 30 | 65,917 | 3% | 503.5 | 41% |
| Auglaize | 6 | \$ 64,074.00 | 41 | 45,729 | 1% | 401.3 | 31% |
| Belmont | 3 | \$ 50,904.00 | 45 | 68,024 | 4% | 532 | 42% |
| Brown | 0 | \$ 54,575.00 | 42 | 43,572 | 1% | 489.9 | 47% |
| Butler | 9 | \$ 66,117.00 | 37 | 380,019 | 8% | 466.9 | 38% |
| Carroll | 0 | \$ 55,267.00 | 46 | 27,332 | 0% | 394.5 | 51% |

| | | | | | | | |
|----------------|-----|-------------|----|-----------|-----|-------|-----|
| Champaign | 20 | \$ 60,112.0 | 42 | 38,845 | 2% | 428.3 | 37% |
| Cincinnati | 510 | \$ 40,640.0 | 32 | 301,394 | 42% | 77.4 | |
| Clark | 10 | \$ 50,873.0 | 41 | 134,726 | 8% | 397.4 | 46% |
| Clermont | 20 | \$ 66,968.0 | 40 | 204,275 | 1% | 452 | 33% |
| Cleveland City | 570 | \$ 30,907.0 | 36 | 385,282 | 49% | 77.7 | |
| Clinton | 00 | \$ 52,815.0 | 40 | 41,957 | 2% | 408.6 | 40% |
| Columbia | 60 | \$ 48,345.0 | 44 | 103,190 | 2% | 531.8 | 46% |
| Columbus City | 420 | \$ 53,745.0 | 32 | 878,553 | 29% | 218.4 | |
| Coshocton | 20 | \$ 46,606.0 | 41 | 36,585 | 1% | 563.8 | 51% |
| Crawford | 10 | \$ 44,971.0 | 43 | 41,821 | 1% | 401.7 | 47% |
| Cuyahoga | 390 | \$ 50,366.0 | 40 | 1,247,451 | 30% | 457 | 47% |
| Darke | 60 | \$ 55,620.0 | 42 | 51,513 | 1% | 598 | 33% |
| Defiance | 50 | \$ 59,931.0 | 40 | 38,160 | 2% | 411.3 | 36% |
| Delaware | 000 | \$ 106,908. | 39 | 201,135 | 3% | 443.1 | 12% |
| Erie | 40 | \$ 54,226.0 | 45 | 74,780 | 9% | 251.5 | 36% |

| | | | | | | | |
|----------------|---|----------|----|-------|-----|-------|-----|
| | | \$ | | | | | |
| | | 67,609.0 | | 154,4 | | | |
| Fairfield | 5 | 0 | 39 | 57 | 7% | 504.3 | 33% |
| | | \$ | | | | | |
| | | 47,308.0 | | 28,62 | | | |
| Fayette | 0 | 0 | 42 | 0 | 3% | 406.3 | 44% |
| | | \$ | | | | | |
| | | 61,305.0 | | 1,290 | | | |
| Franklin | 9 | 0 | 34 | ,360 | 23% | 532.2 | 45% |
| | | \$ | | | | | |
| | | 63,092.0 | | 63,09 | | | |
| Fulton | 5 | 0 | 41 | 2 | 0% | 405.3 | 30% |
| | | \$ | | | | | |
| | | 35,738.0 | | 10,07 | | | |
| Galion City | 2 | 0 | 40 | 4 | 1% | 7.4 | |
| | | \$ | | | | | |
| | | 44,858.0 | | 30,08 | | | |
| Gallia | 6 | 0 | 41 | 8 | 2% | 466.4 | 50% |
| | | \$ | | | | | |
| | | 82,303.0 | | 93,84 | | | |
| Geauga | 6 | 0 | 45 | 3 | 1% | 400.1 | 16% |
| | | \$ | | | | | |
| | | 68,720.0 | | 166,5 | | | |
| Greene | 0 | 0 | 38 | 02 | 7% | 413.6 | 27% |
| | | \$ | | | | | |
| | | 45,917.0 | | 39,11 | | | |
| Guernsey | 0 | 0 | 42 | 1 | 1% | 522.1 | 45% |
| | | \$ | | | | | |
| | | 57,212.0 | | 813,5 | | | |
| Hamilton | 5 | 0 | 37 | 89 | 25% | 405.8 | 45% |
| | | \$ | | | | | |
| | | 58,450.0 | | 75,83 | | | |
| Hancock | 6 | 0 | 39 | 7 | 2% | 531.2 | 30% |
| | | \$ | | | | | |
| | | 50,506.0 | | 31,42 | | | |
| Hardin | 4 | 0 | 36 | 5 | 1% | 470.3 | 45% |
| | | \$ | | | | | |
| | | 49,689.0 | | 15,21 | | | |
| Harrison | 0 | 0 | 46 | 1 | 3% | 402.2 | 34% |
| | | \$ | | | | | |
| | | 59,695.0 | | 27,20 | | | |
| Henry | 1 | 0 | 41 | 8 | 1% | 415.9 | 30% |
| | | \$ | | | | | |
| | | 43,016.0 | | 43,01 | | | |
| Highland | 1 | 0 | 41 | 6 | 1% | 552.9 | 48% |

| | | | | | | | |
|-----------|----|----------|----|-------|-----|-------|-----|
| | | \$ | | | | | |
| | | 52,363.0 | | 28,30 | | | |
| Hocking | 0 | 0 | 43 | 9 | 1% | 421.2 | 40% |
| | | \$ | | | | | |
| | | 63,753.0 | | 43,90 | | | |
| Holmes | 0 | 0 | 32 | 1 | 0% | 422.4 | 32% |
| | | \$ | | | | | |
| | | 52,560.0 | | 58,33 | | | |
| Huron | 0 | 0 | 40 | 9 | 1% | 491.4 | 44% |
| | | \$ | | | | | |
| | | 47,550.0 | | 32,45 | | | |
| Jackson | 3 | 0 | 40 | 0 | 1% | 420.2 | 48% |
| | | \$ | | | | | |
| | | 46,581.0 | | 66,37 | | | |
| Jefferson | 3 | 0 | 45 | 1 | 5% | 408.1 | 54% |
| | | \$ | | | | | |
| | | 29,811.0 | | 32,99 | | | |
| Kent City | 1 | 0 | 24 | 3 | 8% | 9.2 | |
| | | \$ | | | | | |
| | | 57,749.0 | | 61,48 | | | |
| Knox | 0 | 0 | 39 | 1 | 1% | 525.4 | 38% |
| | | \$ | | | | | |
| | | 64,466.0 | | 229,9 | | | |
| Lake | 25 | 0 | 44 | 54 | 4% | 229.2 | 30% |
| | | \$ | | | | | |
| | | 45,118.0 | | 60,18 | | | |
| Lawrence | 0 | 0 | 42 | 4 | 2% | 453.3 | 46% |
| | | \$ | | | | | |
| | | 64,589.0 | | 173,7 | | | |
| Licking | 4 | 0 | 40 | 50 | 4% | 682.2 | 37% |
| | | \$ | | | | | |
| | | 56,754.0 | | 45,31 | | | |
| Logan | 2 | 0 | 41 | 6 | 2% | 458.3 | 39% |
| | | \$ | | | | | |
| | | 58,427.0 | | 307,6 | | | |
| Lorain | 10 | 0 | 42 | 70 | 9% | 491 | 36% |
| | | \$ | | | | | |
| | | 48,736.0 | | 431,1 | | | |
| Lucas | 4 | 0 | 38 | 02 | 19% | 340.8 | 45% |
| | | \$ | | | | | |
| | | 68,022.0 | | 44,13 | | | |
| Madison | 0 | 0 | 41 | 5 | 6% | 465.8 | 30% |
| | | \$ | | | | | |
| | | 46,042.0 | | 229,9 | | | |
| Mahoning | 4 | 0 | 44 | 61 | 15% | 411.4 | 47% |

| | | | | | | | |
|-----------------------|----------------|------|----------|-------|-----|-------|-----|
| Marietta City | \$ 38,729.0 | 1 0 | 37 8 | 13,58 | 2% | 8.4 | |
| Marion | \$ 47,498.0 | 0 0 | 41 9 | 65,29 | 6% | 403.7 | 49% |
| Medina | \$ 76,600.0 | 1 0 | 42 80 | 177,9 | 2% | 421.3 | 20% |
| Meigs | \$ 44,899.0 | 2 0 | 44 8 | 23,07 | 1% | 430 | 52% |
| Mercer | \$ 62,952.0 | 0 0 | 40 4 | 40,88 | 1% | 462.3 | 23% |
| Miami | \$ 61,041.0 | 0 0 | 41 71 | 105,3 | 2% | 406.5 | 33% |
| Monroe | \$ 45,289.0 | 0 0 | 47 2 | 13,94 | 0% | 455.6 | 45% |
| Montgomery | \$ 51,542.0 | 39 0 | 39 70 | 531,6 | 20% | 461.4 | 44% |
| Morgan | \$ 42,341.0 | 0 0 | 45 0 | 14,64 | 5% | 416.3 | 41% |
| Morrow | \$ 59,452.0 | 0 0 | 42 3 | 35,04 | 1% | 406 | 39% |
| Muskingum | \$ 47,254.0 | 1 0 | 40 1 | 86,13 | 3% | 664.4 | 45% |
| New Philadelphia City | \$ 44,603.0 | 4 0 | 38 6 | 17,44 | 1% | 8.2 | |
| Noble | \$ 46,897.0 | 2 0 | 50 6 | 14,41 | 6% | 397.9 | 42% |
| Norwood City | \$ 62,171.0 | 3 0 | 37 5,384 | | 0% | 3.1 | |
| Ottawa | \$ 59,099.0 | 3 0 | 50 2 | 40,63 | 1% | 254.9 | 33% |

| | | | | | | | |
|--------------------|----|----------|----|-------|----|-------|-----|
| | | \$ | | | | | |
| | | 55,330.0 | | 18,80 | | | |
| Paulding | 0 | 0 | 42 | 9 | 1% | 416.3 | 38% |
| | | \$ | | | | | |
| | | 50,150.0 | | 36,02 | | | |
| Perry | 10 | 0 | 40 | 2 | 0% | 407.9 | 39% |
| | | \$ | | | | | |
| | | 63,633.0 | | 57,76 | | | |
| Pickaway | 0 | 0 | 40 | 2 | 4% | 501 | 34% |
| | | \$ | | | | | |
| | | 42,832.0 | | 28,00 | | | |
| Pike | 0 | 0 | 41 | 0 | 2% | 440.2 | 47% |
| | | \$ | | | | | |
| | | 43,061.0 | | 21,02 | | | |
| Piqua City | 3 | 0 | 38 | 8 | 2% | 11.6 | |
| | | \$ | | | | | |
| | | 57,618.0 | | 162,5 | | | |
| Portage | 3 | 0 | 38 | 11 | 4% | 487.3 | 33% |
| | | \$ | | | | | |
| | | 28,840.0 | | 20,31 | | | |
| Portsmouth City | 2 | 0 | 36 | 1 | 6% | 10.7 | |
| | | \$ | | | | | |
| | | 58,957.0 | | 41,09 | | | |
| Preble | 0 | 0 | 43 | 3 | 0% | 424.1 | 38% |
| | | \$ | | | | | |
| | | 64,822.0 | | 33,91 | | | |
| Putnam | 4 | 0 | 40 | 1 | 0% | 482.4 | 22% |
| | | \$ | | | | | |
| | | 49,547.0 | | 121,1 | | | |
| Richland | 2 | 0 | 41 | 00 | 9% | 495.1 | 45% |
| | | \$ | | | | | |
| | | 51,092.0 | | 76,94 | | | |
| Ross | 0 | 0 | 41 | 8 | 5% | 689 | 47% |
| | | \$ | | | | | |
| | | 54,089.0 | | 59,02 | | | |
| Sandusky | 1 | 0 | 42 | 9 | 3% | 408.4 | 40% |
| | | \$ | | | | | |
| | | 41,330.0 | | 76,04 | | | |
| Scioto | 1 | 0 | 40 | 0 | 3% | 610.1 | 47% |
| | | \$ | | | | | |
| | | 52,500.0 | | 55,35 | | | |
| Seneca | 0 | 0 | 40 | 1 | 3% | 550.9 | 38% |
| | | \$ | | | | | |
| | | 63,806.0 | | 48,74 | | | |
| Shelby | 6 | 0 | 40 | 9 | 3% | 407.6 | 28% |

| | | | | | | | |
|-------------|---|----------------|----|-------|-----|-------|-----|
| Shelby City | | \$ 45,417.0 | | | | | |
| | 2 | 0 | 46 | 8,866 | 0% | 6.3 | |
| Stark | | \$ 53,806.0 | | 372,4 | | | |
| | 1 | 0 | 42 | 04 | 7% | 575.2 | 40% |
| Summit | | \$ 57,181.0 | | 541,3 | | | |
| | 7 | 0 | 41 | 34 | 14% | 412.7 | 37% |
| Trumbull | | \$ 47,280.0 | | 220,3 | | | |
| | 3 | 0 | 44 | 67 | 7% | 618.1 | 52% |
| Tuscarawas | | \$ 53,243.0 | | 92,33 | | | |
| | 0 | 0 | 41 | 5 | 1% | 567.3 | 37% |
| Union | | \$ 86,715.0 | | 56,70 | | | |
| | 4 | 0 | 38 | 7 | 3% | 431.6 | 21% |
| Warren City | | \$ 28,898.0 | | 39,30 | | | |
| | 1 | 0 | 39 | 7 | 27% | 16.1 | |
| Van Wert | | \$ 54,254.0 | | 28,26 | | | |
| | 0 | 0 | 41 | 1 | 1% | 409 | 38% |
| Vinton | | \$ 45,673.0 | | 13,08 | | | |
| | 0 | 0 | 43 | 3 | 0% | 412.3 | 58% |
| Warren | | \$ 87,125.0 | | 229,1 | | | |
| | 0 | 0 | 39 | 32 | 3% | 401.2 | 16% |
| Washington | | \$ 50,021.0 | | 60,42 | | | |
| | 0 | 0 | 44 | 6 | 1% | 631.8 | 43% |
| Wayne | | \$ 58,300.0 | | 116,0 | | | |
| | 4 | 0 | 39 | 99 | 1% | 554.8 | 36% |
| Williams | | \$ 53,183.0 | | 36,81 | | | |
| | 7 | 0 | 41 | 6 | 1% | 420.9 | 36% |
| Wood | | \$ 62,390.0 | | 130,1 | | | |
| | 7 | 0 | 35 | 50 | 3% | 617 | 27% |
| Wyandot | | \$ 55,767.0 | | 22,00 | | | |
| | 4 | 0 | 42 | 0 | 0% | 406.8 | 27% |

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