



# Johnstown Colorado



## AQUATICS CENTERS FEASIBILITY STUDY

May 24, 2024



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# 1 - EXECUTIVE SUMMARY

In April of 2023, the team of Ballard King & Associates, Councilman Hunsaker, and Ohlson Lavoie Corporation (OLC), was hired to conduct a master plan to study an outdoor aquatic center for the Town of Johnstown, Colorado. The scope of work was to conduct an initial Market Analysis/ Needs Assessment, which comprised development of a service area, gathering stake holder/ public input, conducting a market analysis, and administering an online survey. Following the determination of need and approval to move forward with the balance of the study, the second phase of work included analysis of 2 potential sites, and development of a program in response to both the stake holder input received and the Market Analysis that was conducted by the Consulting Team. Finally, the third phase of work comprised of taking the program that had been developed, crafting a design response that satisfied the needs of the Service Area, providing an opinion of probable costs associated with construction of the complex, and providing an Operational Analysis which demonstrates how the facility is likely to perform financially in the future. The following study was accomplished and several key conclusions have been made:

1. The populations of both the primary and secondary service areas are currently underserved in the area of outdoor aquatic facilities when compared to NRPA recommendations.\*
2. According to the survey, the most favorable method to fund a capital aquatics project and ongoing operations would be a sales tax.
3. Several planning options with varying sizes of aquatics amenities, support elements, and parking arose during the study which respond to diverse needs in the community.
4. The Aquatics Center will likely require an ongoing operational subsidy.
5. Both sites that were analyzed in the study would support a facility from a size and access standpoint. During the Design Phase, site zoning diagrams for both locations were developed to demonstrate this fact.
6. The site that scored the highest on the Site Criteria Matrix, termed the "Field Site", was determined to be best suited for implementation of the study. An additional advantage of the chosen site is the great potential for future expansion.
7. A plan was developed that could be logically added on to as the need for additional amenities unfolds over time.
8. It was determined that 8 acres of the North End of the Field Site would be the best location to study the design options because of its ability to expand, ease of access, proximity to existing recreational amenities, and presumed proximity to existing utilities.

The following pages summarize these findings in greater detail, beginning with a comprehensive Market Analysis and Needs Assessment for the Aquatic Center. This information is then followed by the analysis of potential Sites, Survey Results, Recommended Program Elements, Concept Design, anticipated Costs for the preferred Concept, and finally the Operations Proforma.

*\*The National Recreation and Parks Association's (NRPA) recommendation of outdoor community aquatics is 2,000 sf to 3,500 sf of water for every 25,000 people in a given service area. See **Population Table on Page 10.***

## 2 - MARKET ANALYSIS

### A. Executive Summary

Ballard\*King & Associates (B\*K) has contracted by OLC to complete a market assessment and operational plan for an outdoor aquatic center in Johnstown, CO. B\*K is a recreation consulting and facility planning firm based out of Denver, CO. They specialize in feasibility studies, master plans, operational assessments, and provide some short-term management solutions and in the parks and recreation industry.



The intent of the market assessment is to assist in recommending a facility program for the design being developed by OLC and Counsilman-Hunsaker. Upon confirmation of the program, an operational study is developed to understand potential:

- Operational Hours
- Staffing Levels (full-time and part-time)
- Commodities
- Contractual Obligations
- Revenues
  - Memberships/Admissions
  - Programs
  - Rentals and Other

That information then informs the Town of the subsidy needed for the annual operation of the facility. It is important to note that B\*K is a third-party, independent group. They are not affiliated with a firm that may receive a financial benefit from the project moving into construction.

The following document is based on the best information available at the time of the study, along with the input from a planning committee, stakeholders and Town staff.

#### *Service Areas*

As part of the study, B\*K spent time on-site in Johnstown and conducted a market assessment. An outdoor aquatic center typically operates in a traditional Memorial Day to Labor Day configuration. B\*K examined several service areas, that include:

- The Town of Johnstown. This was identified as the Primary Service Area and residents will likely be hyper-users of the facility.
- 15-Minute Drive Time. This was identified as the Secondary Service Area, or a distance from which individuals will travel less frequently to use programs, services, and facilities.

#### *Key Indicators*

B\*K accesses demographic information from Environmental Systems Research Institute (ESRI) who utilizes 2020 Census data and their demographers for 2022-

2027 projections. In addition to demographics, ESRI also provides data on housings, recreation, and entertainment spending and adult participation in activities.

Median Age: for purposes of a feasibility study, the preference is for median age to be lower than the national number, indicating the presence of families with young children. The median age is lower than both the State and National figure. In both services areas identified in the study there are at least 37.5% of household with children present. This is positive information as swimming is heavily participated in by youth. However, much like exercise walking and exercising with equipment, swimming is an activity that all age categories can participate in.

B\*K would identify the median age as a positive attribute regarding the potential success of the proposed aquatic center.

Median Income: one of the goals of this feasibility study is for the pool to be as operationally efficient as possible. Both service areas have a significantly higher median household income than the State and National number.

B\*K would identify the median household income as a strong indicator for revenue generation within the facility.

Other important demographic notes:

- The total population in the Primary Service Area (20,000+ based on 2027 projections) is enough to support the proposed facility as many communities throughout the country operate outdoor pools. The total population of the Secondary Service Area (60,000+ based on 2027 projections) is more than enough to support the proposed outdoor facility. In addition, the population is growing at a steady pace and anticipated to continue.
- Within the Primary Service Area, 26.2% of the population is under age 18, and 27.0% of the population is age 55+.
- The Market Potential Index (MPI) for adults that participate in swimming is higher than the national number, and accounts for 17.6% of the adult population.

### *Participation Statistics*

B\*K uses information produced by the National Sporting Goods Association (NSGA) to overlay onto the demographic profile to determine potential participation in various activities.

- When one accounts for age distribution, median household income, region of the country, and the national participation percentage there is approximately 17.9% of the population in the Primary Service Area that participate in swimming or visit the pool.
- When that percentage is applied to the population of the Primary Service Area, aged 7 and up, it equals 2,813 individuals that participate in swimming in 2022.
- Taking that information one step further and using frequency tables produced by the NSGA, B\*K can determine that the 2,813 individuals that swim, would

account for approximately 117,989 pool visits during a calendar year. Those visits are not specific to one facility.

- Another important statistic to consider when looking at pool visits is the fact that 10% of people participating in swimming are looking for an organized activity, while 90% are in search of unorganized use. This further emphasizes the need for the leisure components within an outdoor pool.
- In most cases facilities hope to capture between 5-10% of the market within the identified primary service area.

### *Aquatic Trends*

Leisure pools continue to be a very popular trend as they serve many uses. The warmer and shallow water is less intimidating as a traditional lap pool. They can accommodate multiple programs simultaneously, and typically offer something for the full age spectrum over the course of a day.

The traditional pool uses of competitive swimming and diving are still important and significant users of pools. However, these users enjoy swimming outdoor, they are typically looking for consistent use indoors.

### *Operations*

All the information gathered to this point is used to develop an operational plan for the proposed facility. It is important to note again, that B\*K is an operational and planning firm. As such we provide third party, independent analysis regarding operations, and have no financial gain associated with the facility being built and/or operated.

B\*K takes a conservative approach when developing operational plans for proposed facilities. As such the rate structure and penetration rates are not aggressive for the market. While the pool is new to the market and have enticing features not currently offered, there is a public perception of what it costs for entry and use.

	Year 1	Year 2	Year 3	Year 4	Year 5
Expenses	\$860,287	\$868,889	\$894,956	\$921,805	\$949,459
Revenue	\$632,340	\$663,957	\$697,155	\$711,098	\$725,320
	(\$227,947)	(\$204,932)	(\$197,801)	(\$210,707)	(\$224,139)
Percentage w/ Capital	73.5%	76.4%	77.9%	77.1%	76.4%
Capital (cumulative)	\$50,000	\$100,000	\$150,000	\$200,000	\$250,000

There are ways to close the operational gap, but if one looks at a national average, most stand-alone aquatic facilities have a 50-75% cost recovery range for operational expenses only.

## **B. Market Assessment**

Ballard\*King & Associates (B\*K) has been contracted by OLC to complete a market assessment for Johnstown, Colorado for an outdoor aquatic center. The first step to complete this scope of work is to determine service areas for analysis and recreation/leisure activities.

The following is a summary of the demographic characteristics within areas identified as the Primary and Secondary Service Areas. The Primary Service Area encompasses the Town of Johnstown, CO. The Secondary Service Area is an approximate 15-minute drive time to the proposed site.

B\*K accesses demographic information from Environmental Systems Research Institute (ESRI) who utilizes 2020 Census data and their demographers for 2022-2027 projections. In addition to demographics, ESRI also provides data on housing, recreation, and entertainment spending and adult participation in activities. B\*K also uses information produced by the National Sporting Goods Association (NSGA) to overlay onto the demographic profile to determine potential participation in various activities.

### **Service Areas:**

The information provided includes the basic demographics and data for the Primary and Secondary Service Area with comparison data for the State of Colorado and the United States.

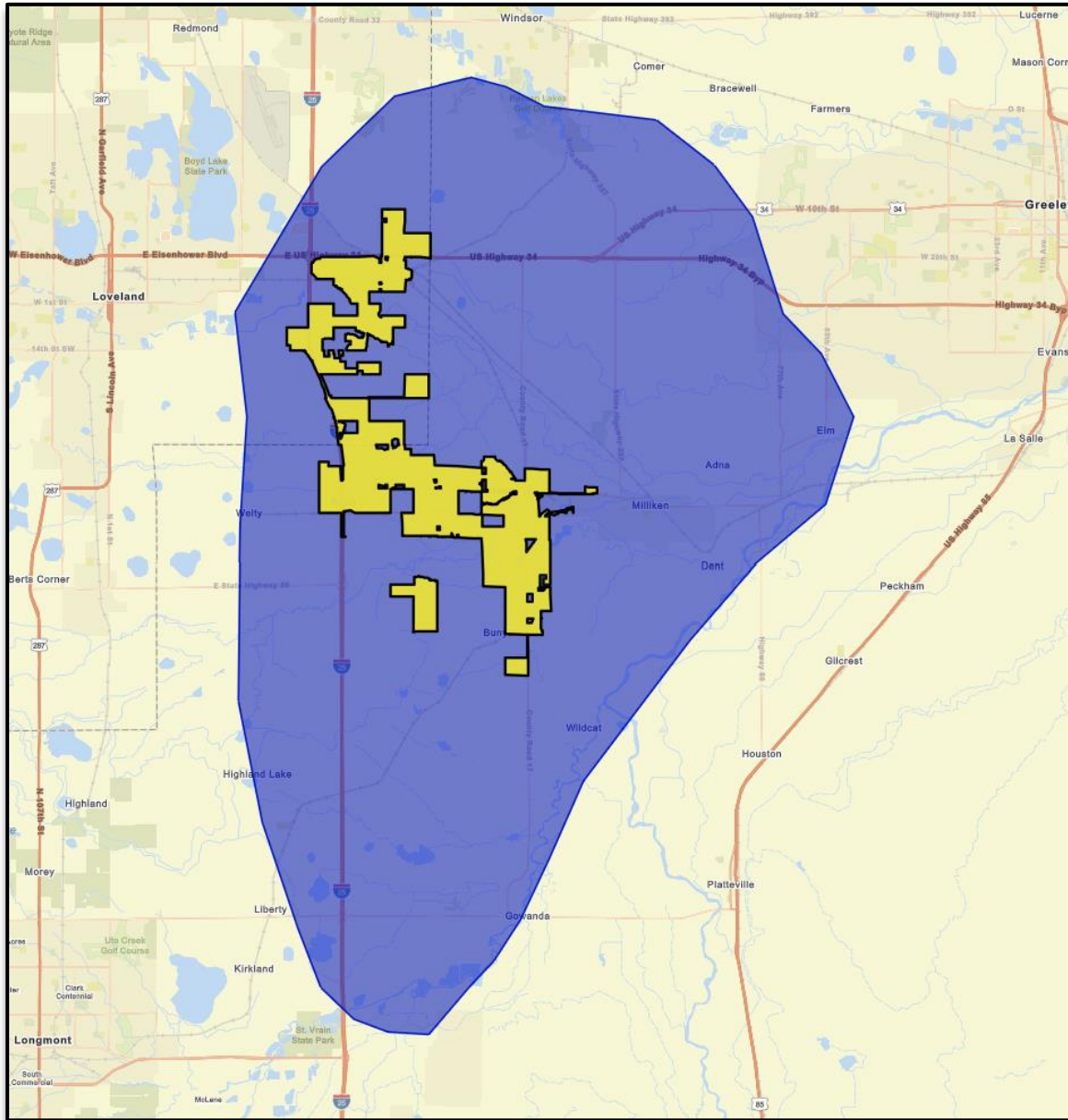
Primary Service Areas are defined as the distance people will travel on a regular basis (a minimum of once a week) to utilize recreation facilities. Use by individuals outside of this area will be much more limited and will focus more on special activities or events.

Service areas can flex or contract based upon a facility's proximity to major thoroughfares. Other factors impacting the use as it relates to driving distance are the presence of alternative service providers in the service area. Alternative service providers can influence participation, membership, daily admissions and the associated penetration rates for programs and services.

Service areas can vary in size with the types of components in the facility.



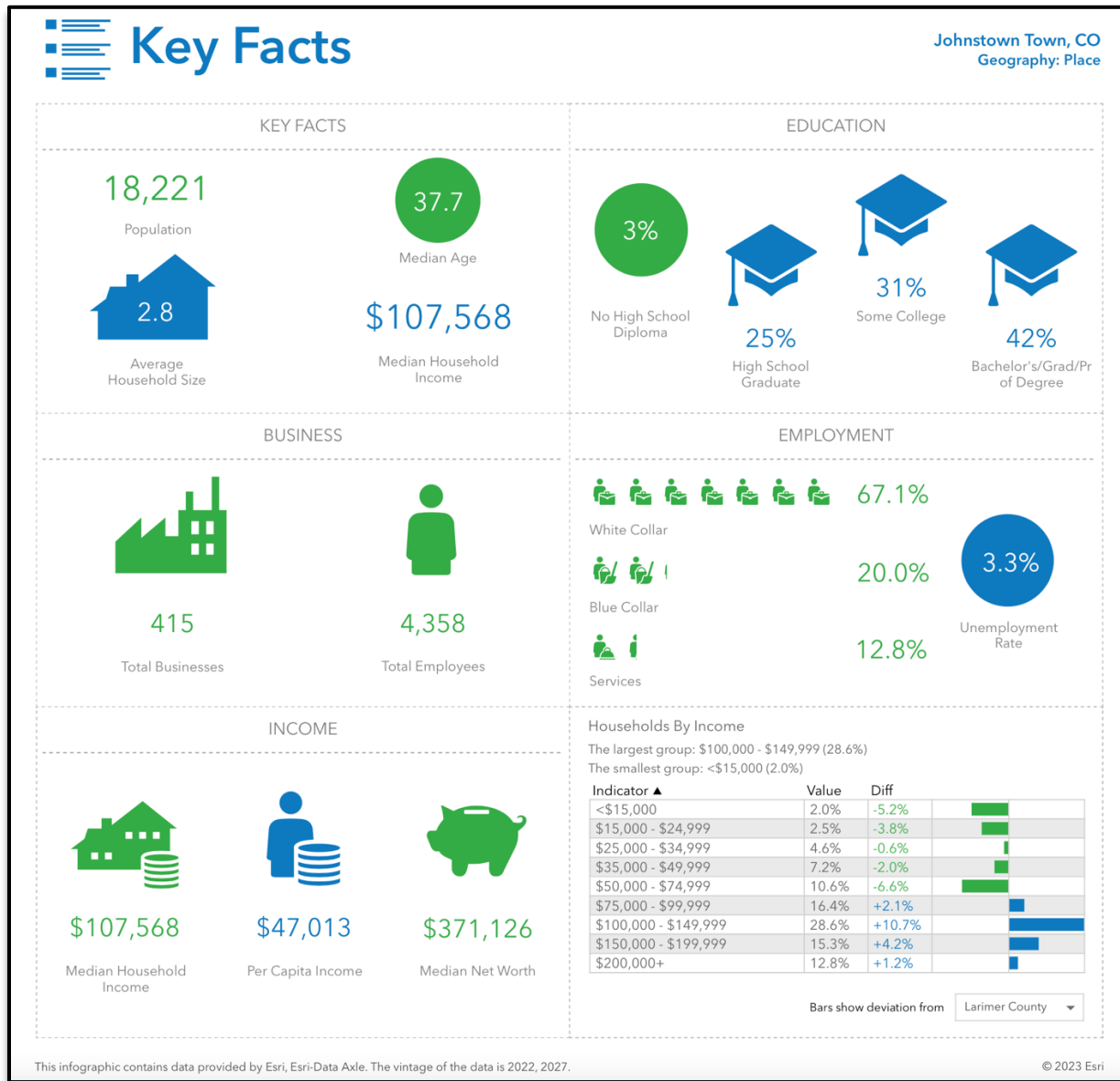
## Service Area Maps



- Yellow Boundary – Primary Service Area (Johnstown)
- Blue Boundary – Secondary Service Area (15-minute drive time)



# Infographic



- Households by Income comparison uses the Primary Service Area and compares it to Larimer County.

## Demographic Summary

	Primary Service Area	Secondary Service Area
<b>Population:</b>		
2020 Census	17,303 <sup>1</sup>	48,021 <sup>2</sup>
2022 Estimate	18,221	54,732
2027 Estimate	20,380	60,305
<b>Households:</b>		
2020 Census	6,185	16,760
2022 Estimate	6,573	19,178
2027 Estimate	7,310	21,107
<b>Families:</b>		
2020 Census	4,491	12,613
2022 Estimate	5,186	15,191
2027 Estimate	5,756	17,581
<b>Average Household Size:</b>		
2020 Census	2.80	2.86
2022 Estimate	2.77	2.85
2027 Estimate	2.79	2.85
<b>Ethnicity (2022 Estimate):</b>		
Hispanic	16.5%	17.9%
White	81.2%	80.3%
Black	0.7%	0.7%
American Indian	0.9%	0.8%
Asian	1.6%	1.4%
Pacific Islander	0.1%	0.1%
Other	5.2%	5.8%
Multiple	10.4%	11.0%
<b>Median Age:</b>		
2020 Census	34.6	34.8
2022 Estimate	37.7	37.1
2027 Estimate	37.6	36.8
<b>Median Income:</b>		
2022 Estimate	\$107,568	\$106,991
2027 Estimate	\$118,576	\$118,007

<sup>1</sup> From the 2010-2020 Census, the Primary Service Area experienced a 5.18% increase in population.

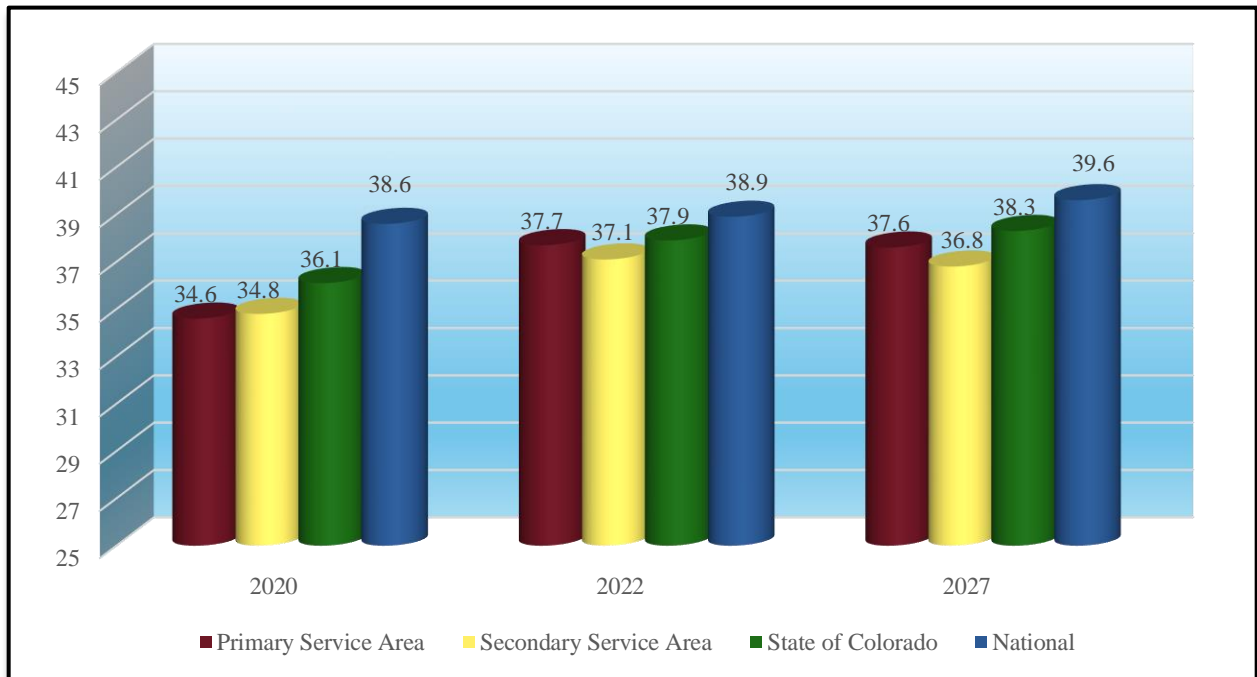
<sup>2</sup> From the 2010-2020 Census, the Secondary Service Area experienced a 5.88% increase in population.

**Age and Income:** The median age and household income levels are compared with the national number as both of these factors are secondary determiners of participation in recreation activities. The lower the median age, the higher the participation rates are for most activities. The level of participation also increases as the median income level goes up.

**Table A – Median Age:**

	2020 Census	2022 Projection	2027 Projection
Primary Service Area	34.6	37.7	37.6
Secondary Service Area	34.8	37.1	36.8
State of Colorado	36.1	37.9	38.3
Nationally	38.6	38.9	39.6

**Chart A – Median Age:**



The median age in the Primary Service Area is marginally lower than the State of Colorado and the National number. A lower median age typically points to the presence of families with children. Parks and recreation activities, programs and events draw a large demographic but tend to be most popular with youth and their parents. Grandparents are becoming an increasing part of the household though, as they care for and are involved with their grandchildren.

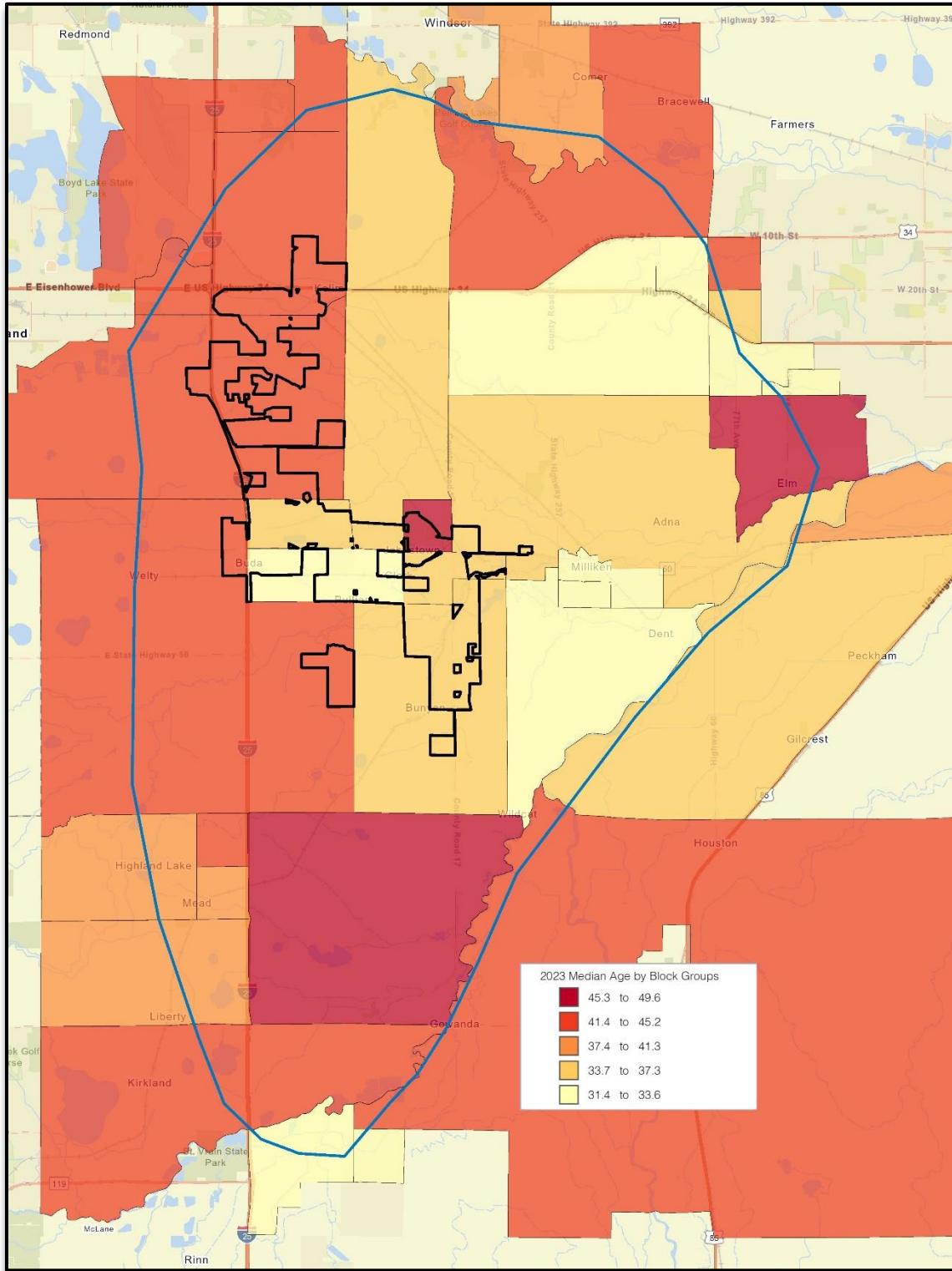
The following chart provides the number of households and percentage of households in the Primary and Secondary Service Area with children.

**Table B – Households w/ Children**

	<b>Number of Households w/ Children</b>	<b>Percentage of Households w/ Children</b>
Primary Service Area	2,329	37.5%
Secondary Service Area	6,504	39.3%
State of Colorado	--	29.9%

The information contained in Table-B helps further outline the presence of families with children. As a point of comparison in the 2020 Census, 30.7% of households nationally had children present.

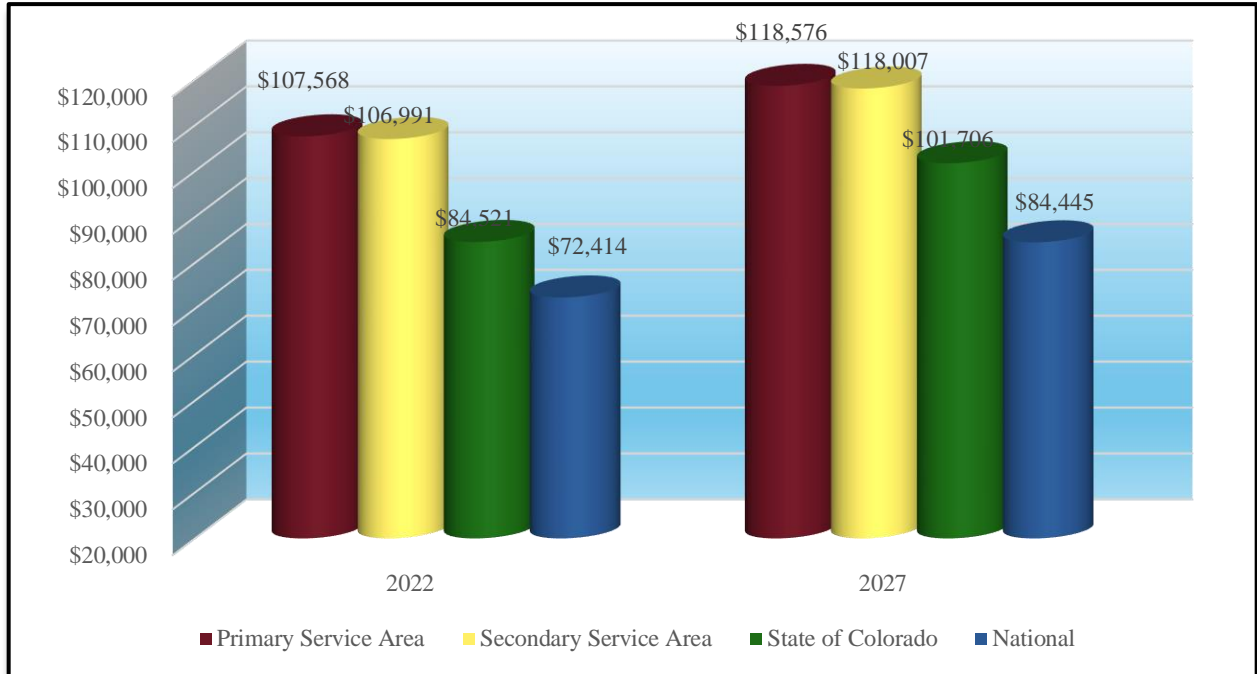
# Map B – Median Age by Census Tracts



**Table C – Median Household Income:**

	<b>2022 Projection</b>	<b>2027 Projection</b>
Primary Service Area	\$107,568	\$118,576
Secondary Service Area	\$106,991	\$118,007
State of Colorado	\$84,521	\$101,706
Nationally	\$72,414	\$84,445

**Chart B – Median Household Income:**



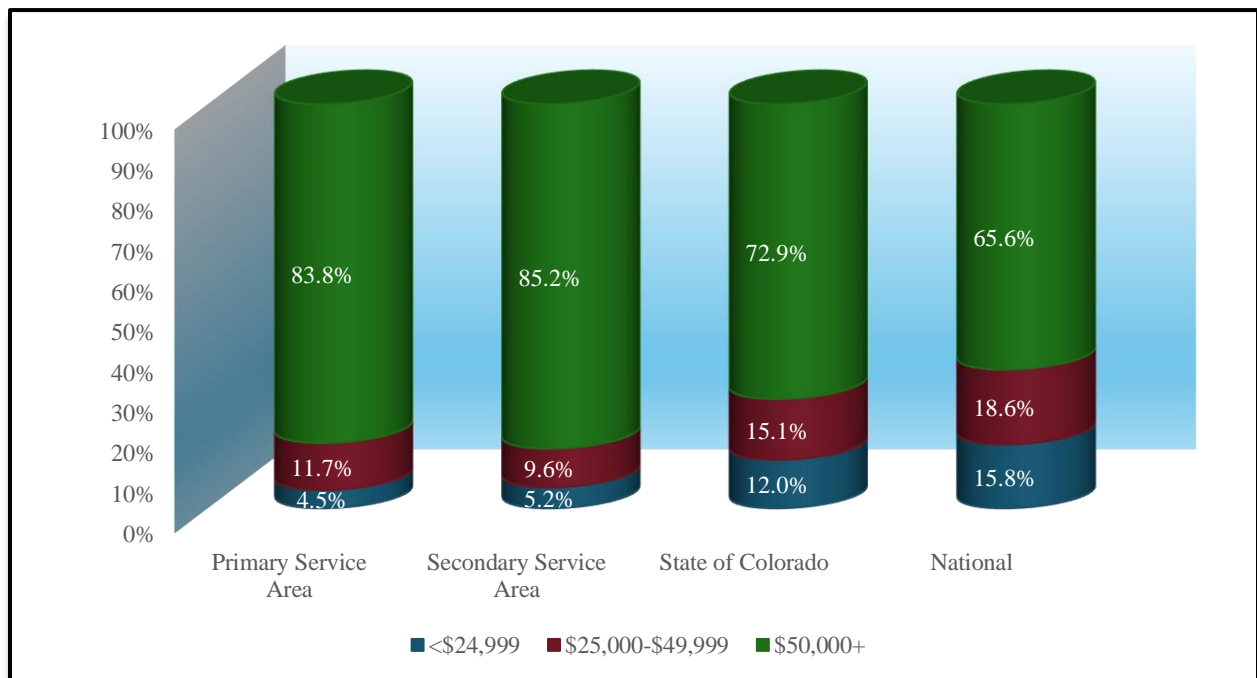
Based on 2022 projections for median household income the following narrative describes the service areas:

In the Primary Service Area, the percentage of households with median income over \$50,000 per year is 83.8% compared to 61.6% on a national level. Furthermore, the percentage of the households in the service area with median income less than \$25,000 per year is 4.5% compared to a level of 18.0% nationally.

In the Secondary Service Area, the percentage of households with median income over \$50,000 per year is 85.2% compared to 61.6% on a national level. Furthermore, the percentage of the households in the service area with median income less than \$25,000 per year is 5.2% compared to a level of 18.0% nationally.

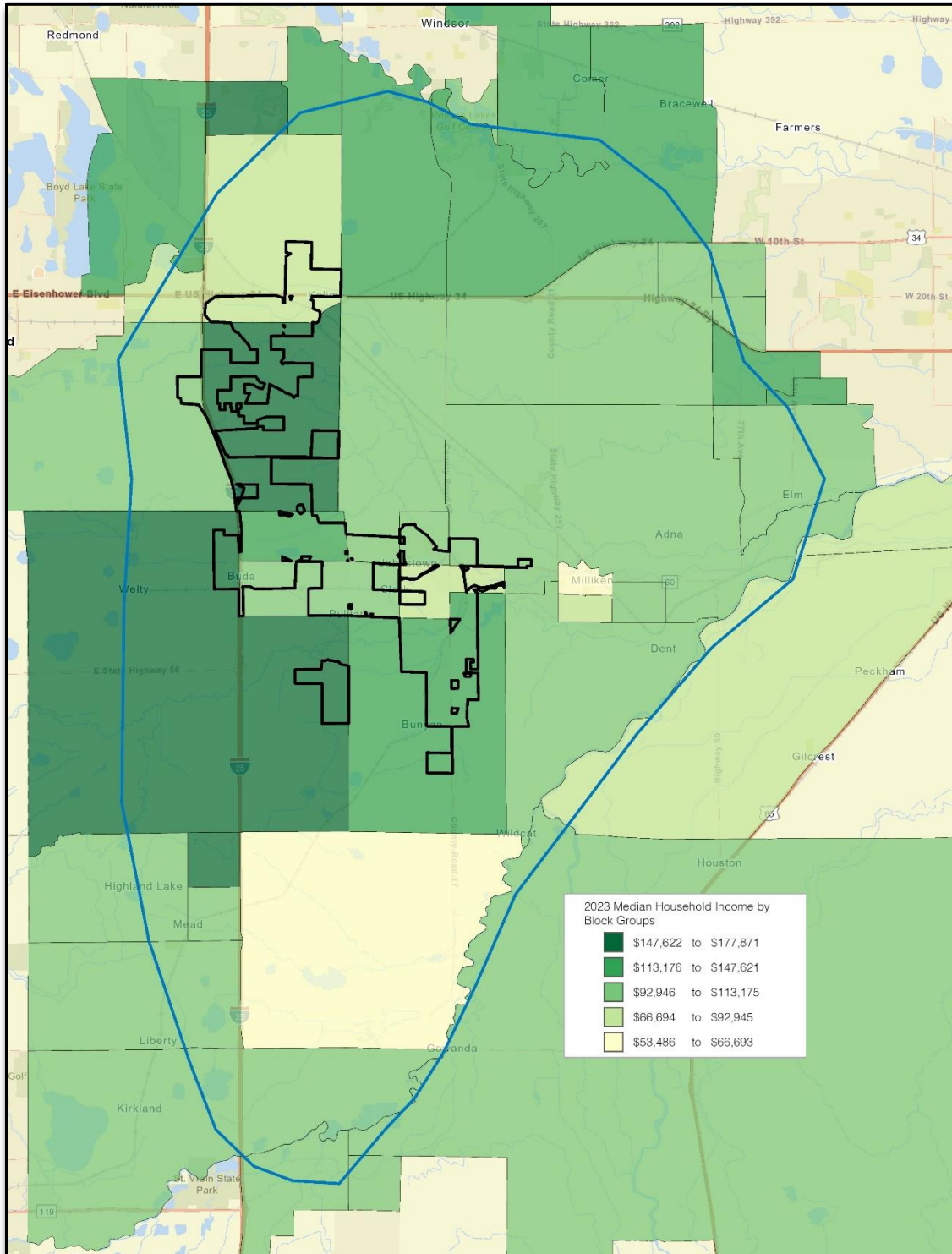
While there is no perfect indicator of use of an aquatic facility, the percentage of households with more than \$50,000 median income is a key indicator. Therefore, those numbers are significant and balanced with the overall cost of living.

**Chart C – Median Household Income Distribution**





# Map C – Household Income by Census Tracts



In addition to taking a look at the Median Age and Median Income, it is important to examine Household Budget Expenditures. In particular, reviewing housing information; shelter, utilities, fuel and public services along with entertainment & recreation can provide a snapshot into the cost of living and spending patterns in the services areas. The table below looks at that information and compares the service areas.

**Table D – Household Budget Expenditures<sup>3</sup>:**

Primary Service Area	SPI	Average Amount Spent	Percent
Housing	125	\$35,786.85	31.3%
<i>Shelter</i>	125	\$28,697.97	25.1%
<i>Utilities, Fuel, Public Service</i>	125	\$7,088.87	6.2%
Entertainment & Recreation	128	\$4,702.94	4.1%

Secondary Service Area	SPI	Average Amount Spent	Percent
Housing	127	\$36,392.53	31.6%
<i>Shelter</i>	128	\$29,393.52	25.5%
<i>Utilities, Fuel, Public Service</i>	124	\$6,999.01	6.1%
Entertainment & Recreation	128	\$4,689.27	4.1%

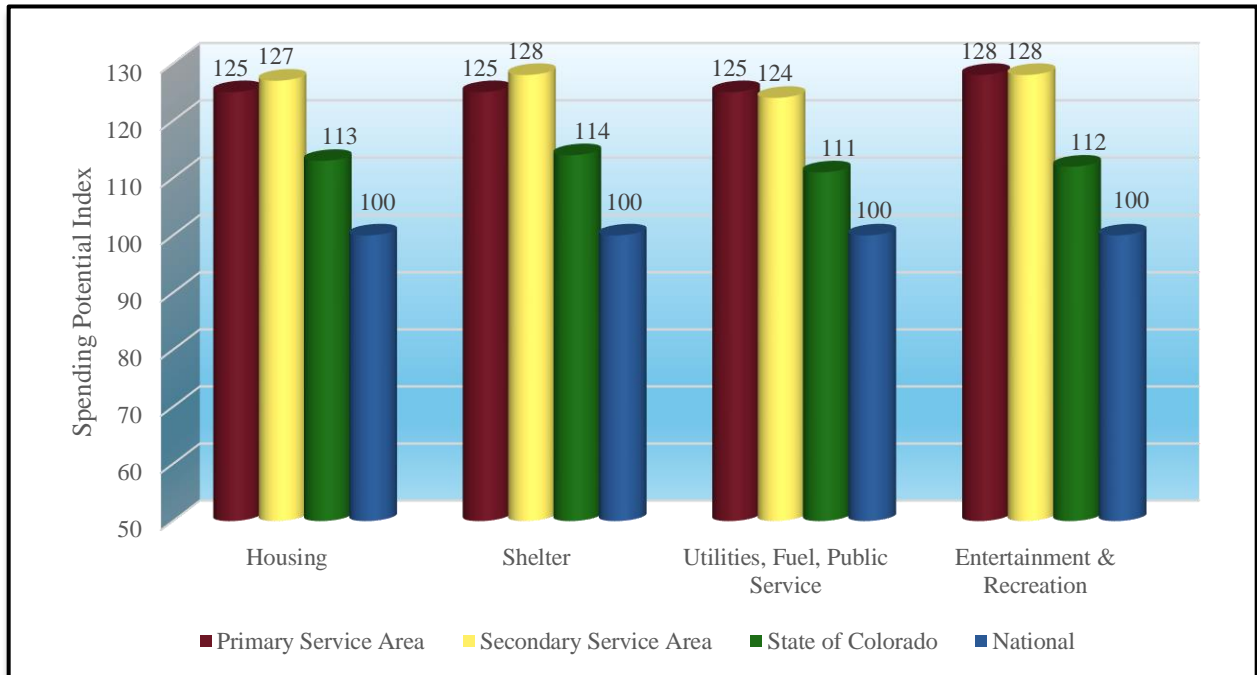
State of Colorado	SPI	Average Amount Spent	Percent
Housing	113	\$32,316.90	31.9%
<i>Shelter</i>	114	\$26,016.47	25.7%
<i>Utilities, Fuel, Public Service</i>	111	\$6,300.43	6.2%
Entertainment & Recreation	112	\$4,113.53	4.1%

**SPI:** Spending Potential Index as compared to the National number of 100.  
**Average Amount Spent:** The average amount spent per household.  
**Percent:** Percent of the total 100% of household expenditures.

**Note:** Shelter along with Utilities, Fuel, Public Service are a portion of the Housing percentage.

<sup>3</sup> Consumer Spending data are derived from the 2018 and 2019 Consumer Expenditure Surveys, Bureau of Labor Statistics. ESRI forecasts for 2022 and 2027.

**Chart D – Household Budget Expenditures Spending Potential Index:**



The consistency between the median household income and the household budget expenditures is important. It also points to the fact that compared to a National level the dollars available, the money being spent in the Primary Service Area is significantly higher. This could point to the ability to pay for programs and services offered at a recreation facility of any variety.

The total number of housing units in the Primary Service Area is 6,434 and 96.1% are occupied, or 6,185 housing units. The total vacancy rate for the service area is 0%. As a comparison, the vacancy rate nationally was 11.6%. Of the available units:

- For Rent 0.4%
- Rented, not Occupied 0.0%
- For Sale 0.0%
- Sold, not Occupied 0.0%
- For Seasonal Use 0.0%
- Other Vacant 0.0%

The total number of housing units in the Secondary Service Area is 18,074 and 92.7% are occupied, or 16,760 housing units. The total vacancy rate for the service area is 2%. As a comparison, the vacancy rate nationally was 11.6%. Of the available units:

- For Rent 1.1%
- Rented, not Occupied 0.0%
- For Sale 0.0%
- Sold, not Occupied 0.1%
- For Seasonal Use 0.1%
- Other Vacant 0.3%

**Recreation Expenditures Spending Potential Index:** Finally, through the demographic provider that B\*K utilizes for the market analysis portion of the report, we can examine the overall propensity for households to spend dollars on recreation activities. The following comparisons are possible.

**Table E – Recreation Expenditures Spending Potential Index<sup>4</sup>:**

<b>Primary Service Area</b>	<b>SPI</b>	<b>Average Spent</b>
Fees for Participant Sports	141	\$184.61
Fees for Recreational Lessons	138	\$220.75
Social, Recreation, Club Membership	131	\$369.87
Exercise Equipment/Game Tables	142	\$88.86
Other Sports Equipment	140	\$11.30

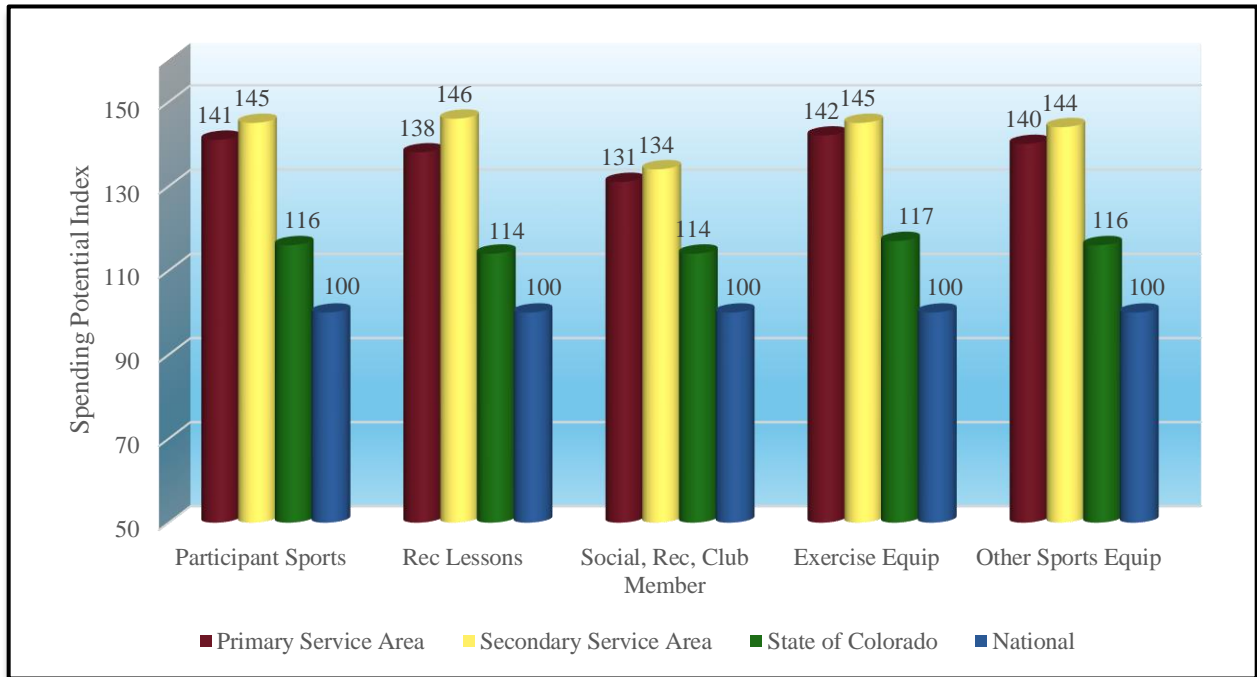
<b>Secondary Service Area</b>	<b>SPI</b>	<b>Average Spent</b>
Fees for Participant Sports	145	\$190.20
Fees for Recreational Lessons	146	\$233.77
Social, Recreation, Club Membership	134	\$378.75
Exercise Equipment/Game Tables	145	\$91.01
Other Sports Equipment	144	\$11.64

<b>State of Colorado</b>	<b>SPI</b>	<b>Average Spent</b>
Fees for Participant Sports	116	\$151.59
Fees for Recreational Lessons	114	\$181.96
Social, Recreation, Club Membership	114	\$322.49
Exercise Equipment/Game Tables	117	\$73.39
Other Sports Equipment	116	\$9.35

**Average Amount Spent:** The average amount spent for the service or item in a year.  
**SPI:** Spending potential index as compared to the national number of 100.

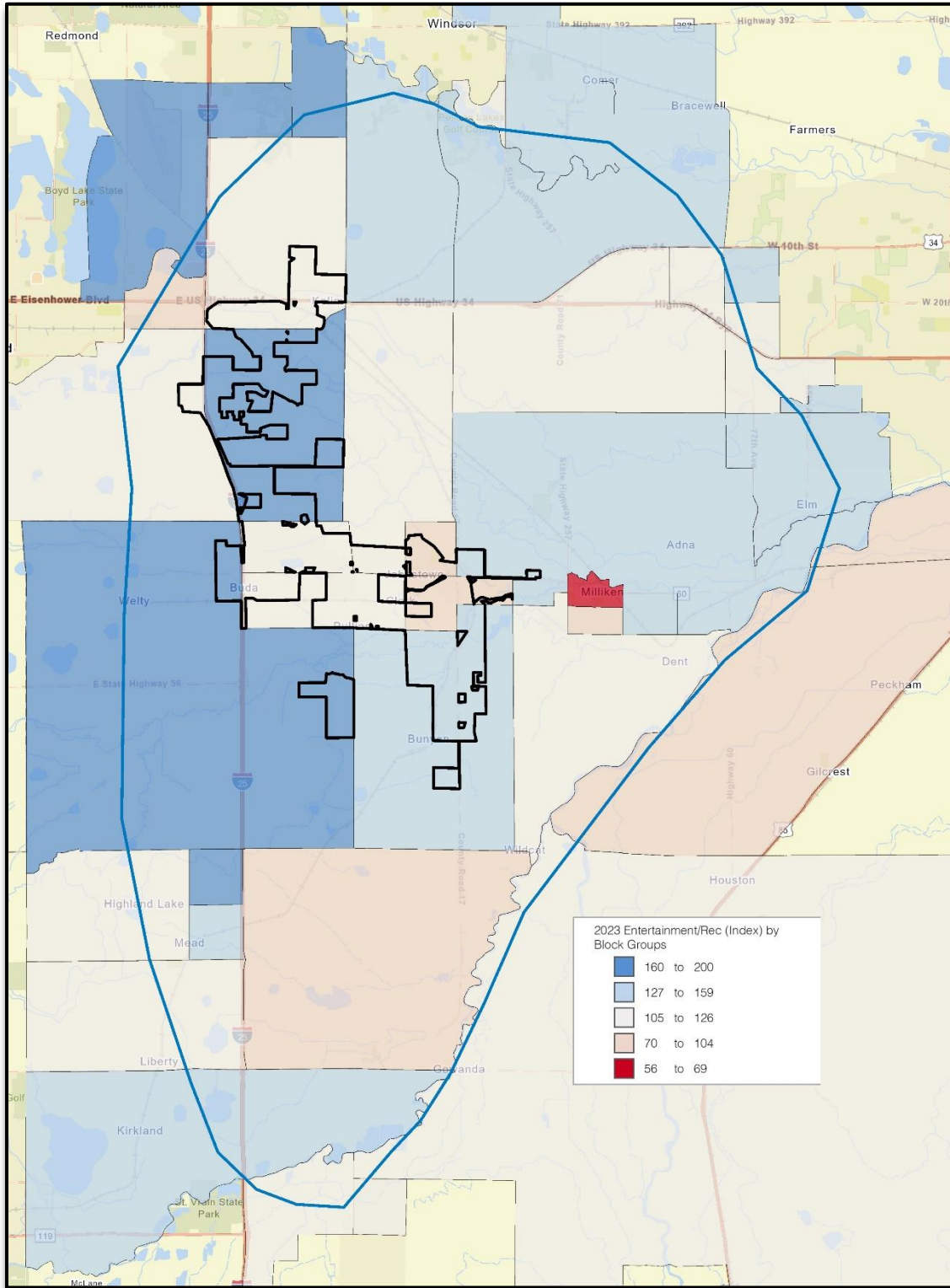
<sup>4</sup> Consumer Spending data are derived from the 2018 and 2019 Consumer Expenditure Surveys, Bureau of Labor Statistics.

**Chart E – Recreation Spending Potential Index:**



Again, there is a great deal of consistency between median household income, household budget expenditures and now recreation and spending potential.

# Map D – Recreation Spending Potential Index by Census Tract



**Population Distribution by Age:** Utilizing census information for the Primary and Secondary Service Areas, the following comparisons are possible.

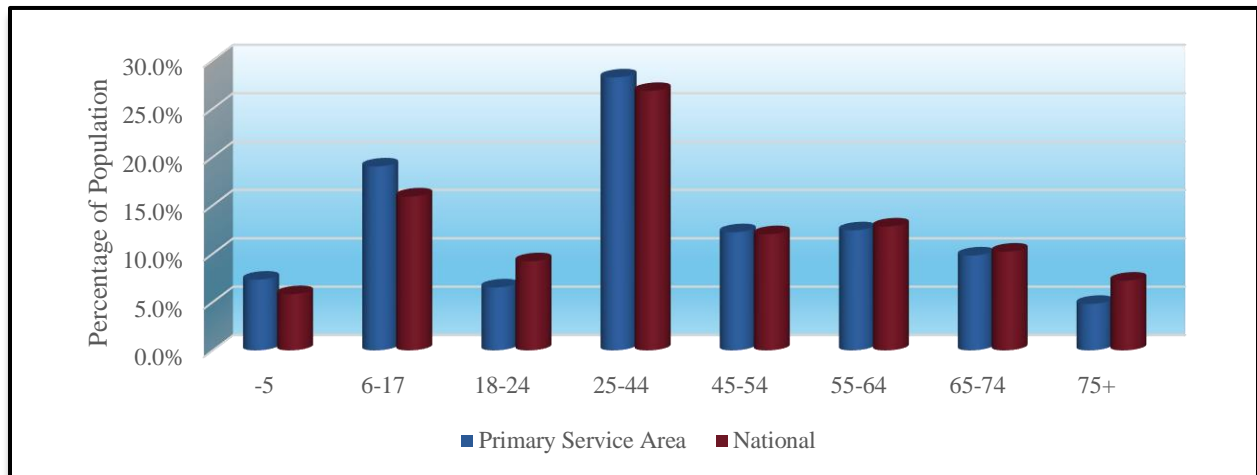
**Table F – 2022 Primary Service Area Age Distribution**

(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
0-5	1,321	7.3%	5.8%	+1.5%
5-17	3,452	19.0%	15.9%	+3.1%
18-24	1,182	6.5%	9.2%	-2.7%
25-44	5,137	28.2%	26.8%	+1.4%
45-54	2,216	12.2%	12.0%	+0.2%
55-64	2,253	12.4%	12.8%	-0.4%
65-74	1,790	9.8%	10.2%	-0.4%
75+	870	4.8%	7.2%	-2.4%

**Population:** 2022 census estimates in the different age groups in the Primary Service Area.  
**% of Total:** Percentage of the Primary Service Area population in the age group.  
**National Population:** Percentage of the national population in the age group.  
**Difference:** Percentage difference between the Primary Service Area population and the national population.

**Chart F – 2022 Primary Service Area Age Group Distribution**



The demographic makeup of the Primary Service Area, when compared to the characteristics of the national population, indicates that there are some differences with a smaller population in the age groups 18-24, 55-64, 65-74 and 75+. The greatest positive variance is in the 5-17 age group with +3.1%, while the greatest negative variance is in the 18-24 age group with -2.7%.



**Table G – 2022 Secondary Service Area Age Distribution**

(ESRI estimates)

Ages	Population	% of Total	Nat. Population	Difference
0-5	4,009	7.3%	5.8%	+1.5%
5-17	10,665	19.5%	15.9%	+3.6%
18-24	3,911	7.2%	9.2%	-2.1%
25-44	15,369	28.1%	26.8%	+1.3%
45-54	6,765	12.4%	12.0%	+0.4%
55-64	6,546	12.0%	12.8%	-0.8%
65-74	4,967	9.1%	10.2%	-1.1%
75+	2,499	4.6%	7.2%	-2.6%

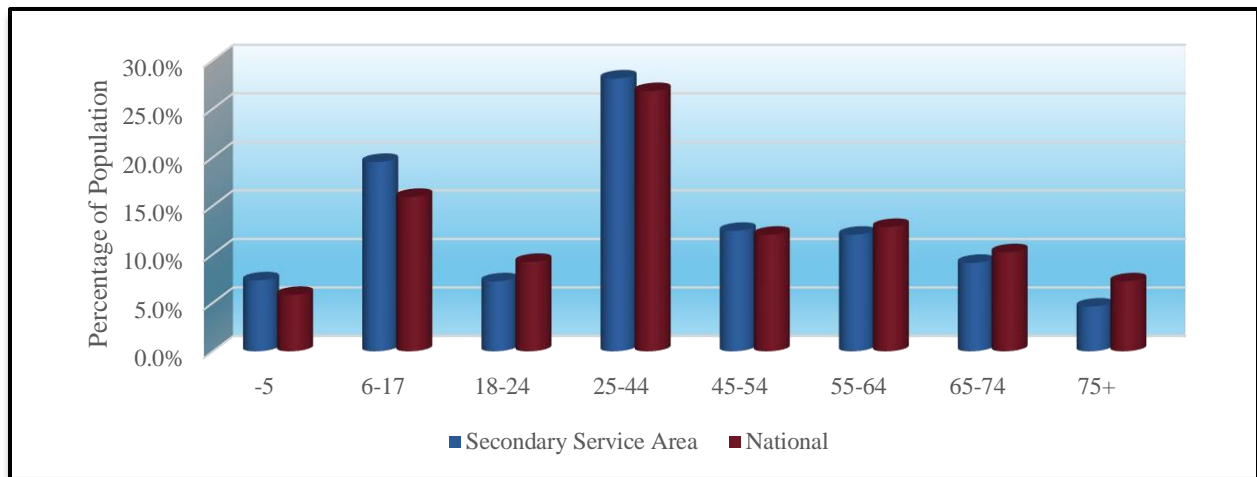
**Population:** 2022 census estimates in the different age groups in the Secondary Service Area.

**% of Total:** Percentage of the Secondary Service Area population in the age group.

**National Population:** Percentage of the national population in the age group.

**Difference:** Percentage difference between the Secondary Service Area population and the national population.

**Chart G – 2022 Secondary Service Area Age Group Distribution**



The demographic makeup of the Secondary Service Area, when compared to the characteristics of the national population, indicates that there are some differences with a larger population in the Under 5, 5-17, 25-44, and 45-54 age groups. A smaller population in the 18-24, 55-64 and 65-74 age groups. The greatest positive variance is in the 5-17 age group with +3.6%, while the greatest negative variance is in the 75+ age group with -2.6%.

**Population Distribution Comparison by Age:** Utilizing census information from the Primary and Secondary Service Area, the following comparisons are possible.

**Table H – 2022 Primary Service Area Population Estimates**

(U.S. Census Information and ESRI)

Ages	2020 Census	2022 Projection	2027 Projection	Percent Change	Percent Change Nat'l
-5	1,584	1,321	1,508	-4.8%	-8.3%
5-17	3,722	3,452	3,877	+4.2%	-8.5%
18-24	976	1,182	1,275	+30.6%	-8.9%
25-44	5,396	5,137	5,762	+6.8%	+3.3%
45-54	2,218	2,216	2,465	+11.1%	-17.8%
55-64	1,844	2,253	2,247	+21.9%	+2.5%
65-74	1,112	1,790	2,063	+85.5%	+58.2%
75+	466	870	1,186	+154.5%	+46.3%

**Chart H – Primary Service Area Population Growth**

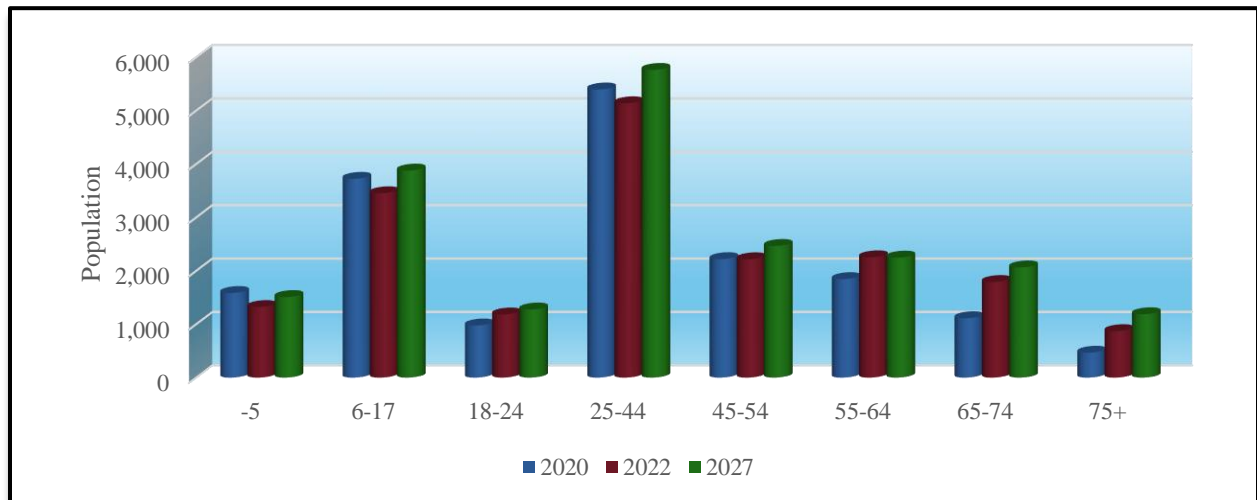


Table-H illustrates the growth or decline in age group numbers from the 2020 census until the year 2027. It is projected that all age categories except under 5 will see an increase in population. The population of the United States as a whole is aging, and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

**Table I – 2022 Secondary Service Area Population Estimates**

(U.S. Census Information and ESRI)

<b>Ages</b>	<b>2020 Census</b>	<b>2022 Projection</b>	<b>2027 Projection</b>	<b>Percent Change</b>	<b>Percent Change Nat'l</b>
-5	4,121	4,009	4,510	+9.4%	-8.3%
5-17	10,364	10,665	11,654	+12.4%	-8.5%
18-24	2,868	3,911	4,111	+43.3%	-8.9%
25-44	14,224	15,369	17,288	+21.5%	+3.3%
45-54	6,800	6,765	7,312	+7.5%	-17.8%
55-64	5,455	6,546	6,335	+16.1%	+2.5%
65-74	2,843	4,967	5,679	+99.8%	+58.2%
75+	1,359	2,499	3,422	+151.8%	+46.3%

**Chart I – Secondary Service Area Population Growth**

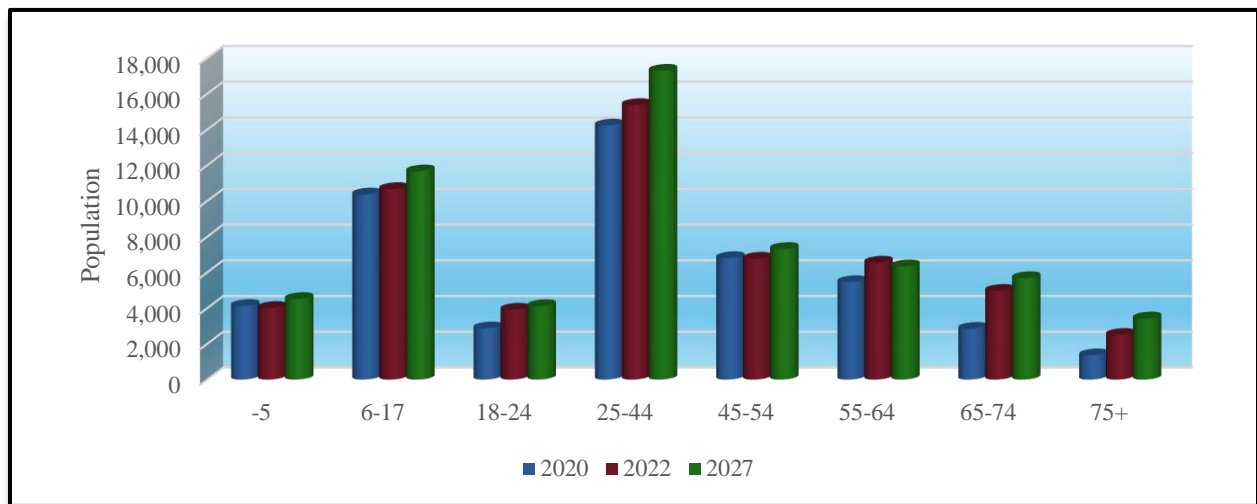


Table-I illustrates the growth or decline in age group numbers from the 2020 census until the year 2027. It is projected that all age categories will see an increase in population. The population of the United States as a whole is aging, and it is not unusual to find negative growth numbers in the younger age groups and significant net gains in the 45 plus age groupings in communities which are relatively stable in their population numbers.

Below is listed the distribution of the population by race and ethnicity for the Primary and Secondary Service Area for 2022 population projections. Those numbers were developed from 2020 Census Data.

**Table J – Primary Service Area Ethnic Population and Median Age 2022**

(Source – U.S. Census Bureau and ESRI)

<b>Ethnicity</b>	<b>Total Population</b>	<b>Median Age</b>	<b>% of Population</b>	<b>% of CO Population</b>
Hispanic	2,999	27.3	16.5%	22.0%

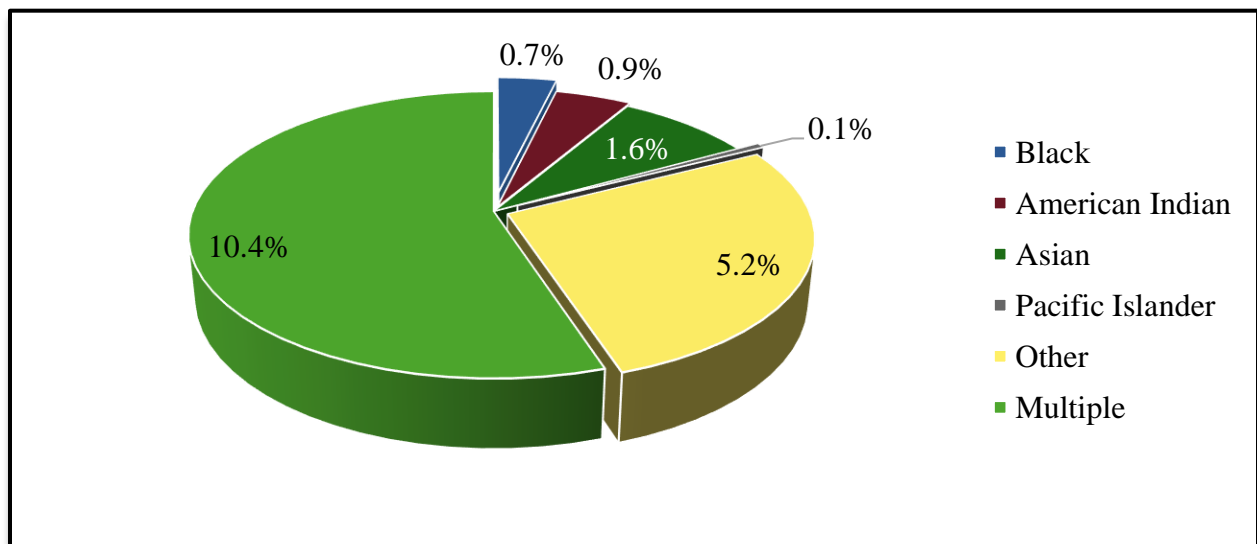
**Table K – Primary Service Area by Race and Median Age 2022**

(Source – U.S. Census Bureau and ESRI)

<b>Race</b>	<b>Total Population</b>	<b>Median Age</b>	<b>% of Population</b>	<b>% of CO Population</b>
White	14,790	39.9	81.2%	70.2%
Black	126	32.5	0.7%	4.1%
American Indian	162	41.0	0.9%	1.3%
Asian	282	36.2	1.6%	3.5%
Pacific Islander	12	20.0	0.1%	0.2%
Other	950	30.2	5.2%	8.1%
Multiple	1,899	19.4	10.4%	12.6%

2022 Primary Service Area Total Population: 18,221 Residents

**Chart J – 2022 Primary Service Area Population by Non-White Race**



**Table L – Secondary Service Area Ethnic Population and Median Age 2022**

(Source – U.S. Census Bureau and ESRI)

<b>Ethnicity</b>	<b>Total Population</b>	<b>Median Age</b>	<b>% of Population</b>	<b>% of CO Population</b>
Hispanic	9,785	26.1	17.9%	22.0%

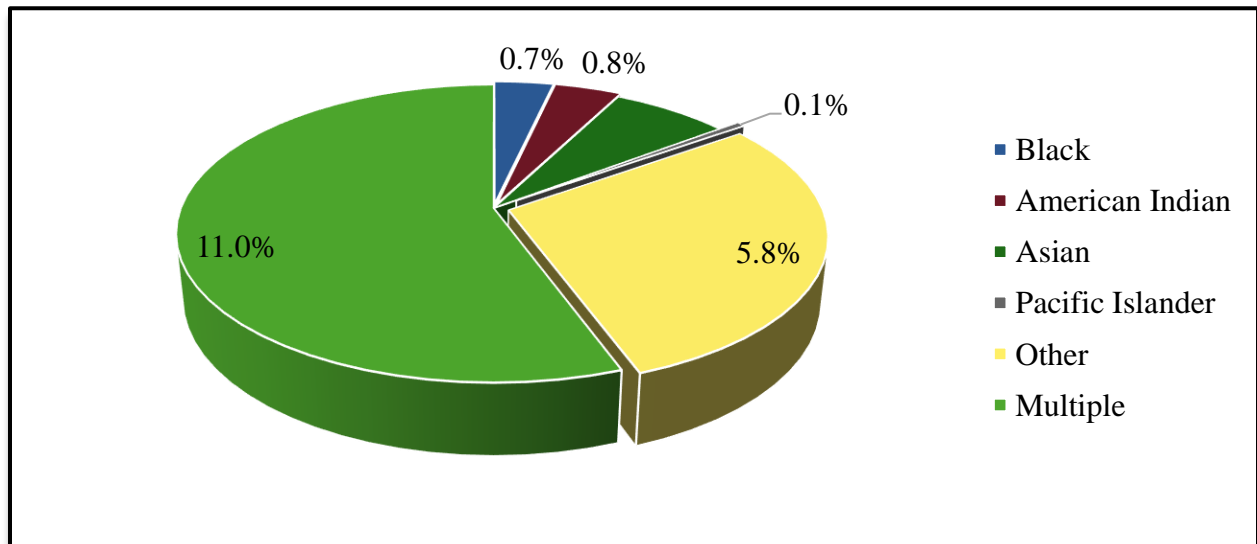
**Table M – Secondary Service Area by Race and Median Age 2022**

(Source – U.S. Census Bureau and ESRI)

<b>Race</b>	<b>Total Population</b>	<b>Median Age</b>	<b>% of Population</b>	<b>% of CO Population</b>
White	43,937	39.7	80.3%	70.2%
Black	376	29.6	0.7%	4.1%
American Indian	441	38.7	0.8%	1.3%
Asian	754	36.2	1.4%	3.5%
Pacific Islander	37	29.2	0.1%	0.2%
Other	3,160	28.5	5.8%	8.1%
Multiple	6,028	19.6	11.0%	12.6%

2022 Secondary Service Area Total Population: 54,732 Residents

**Chart K – 2022 Secondary Service Area Population by Non-White Race**



### C. Tapestry Segmentation

Tapestry segmentation represents the 4<sup>th</sup> generation of market segmentation systems that began 30 years ago. The 65-segment Tapestry Segmentation system classifies U.S. neighborhoods based on their socioeconomic and demographic compositions. While the demographic landscape of the U.S. has changed significantly since the 2000 Census, the tapestry segmentation has remained stable as neighborhoods have evolved.

There is value including this information for Johnstown, CO. The data assists the organization in understanding the consumers/constituents in their service area and supply them with the right products and services.

The Tapestry segmentation system classifies U.S. neighborhoods into 65 unique market segments. Neighborhoods are sorted by more than 60 attributes including; income, employment, home value, housing types, education, household composition, age and other key determinates of consumer behavior.

The following pages and tables outline the top 5 tapestry segments in each of the service areas and provide a brief description of each. This information combined with the key indicators and demographic analysis of each service area help further describe the markets that the Primary and Secondary Service Area looks to serve with programs, services, and special events.

For comparison purposes the following are the top 10 Tapestry segments, along with percentage in the United States:

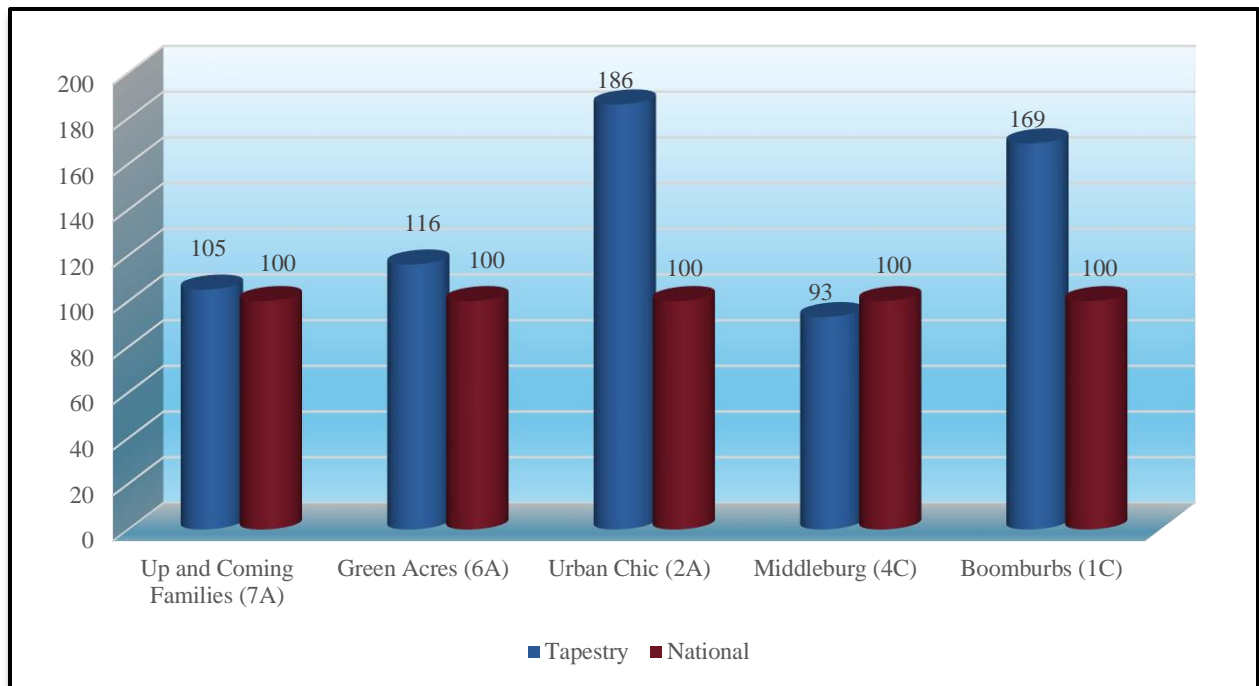
1. Green Acres (6A)	3.2%
2. Southern Satellites (10A)	3.1%
3. Savvy Suburbanites (1D)	3.0%
4. Workday Drive (4A)	2.9%
5. Middleburg (4C)	<u>2.9%</u>
	<b>15.1%</b>
6. Salt of the Earth (6B)	2.9%
7. Up and Coming Families (7A)	2.5%
8. Midlife Constants (5E)	2.5%
9. Comfortable Empty Nesters (5A)	2.4%
10. Old and Newcomers (8F)	<u>2.3%</u>
	<b>12.6%</b>

**Table N – Primary Service Area Tapestry Segment Comparison**

(ESRI estimates)

	Primary Service Area		Demographics	
	Percent	Cumulative Percent	Median Age	Median HH Income
Up and Coming Families (7A)	30.9%	30.9%	31.4	\$72,000
Green Acres (6A)	20.5%	51.4%	43.9	\$76,800
Urban Chic (2A)	14.9%	66.3%	43.3	\$109,400
Middleburg (4C)	12.2%	78.5%	36.1	\$59,800
Boomburbs (1C)	11.0%	89.5%	34.0	\$113,400

**Chart L – Primary Service Area Tapestry Segment Entertainment Spending:**



**Up and Coming Families (7A)** – A young, diverse and mobile market. Hardworking families trying to get ahead, they seek technology. Careful shoppers fill spare time with family activities.

**Green Acres (6A)** – Lifestyle that features self-reliance. Enjoy maintaining home/yard, being outside and playing sports. Most households no longer have children. Conservative and cautious.

**Urban Chic (2A)** – Professionals living an exclusive lifestyle. Environmentally aware and like to live “green.” Embrace city life with museums, arts, culture and sports.



**Middleburg (4C)** – This group is conservative and family-oriented. A younger market that is growing. Prefers to buy American for a good price. Participate in sports and outdoor activities.

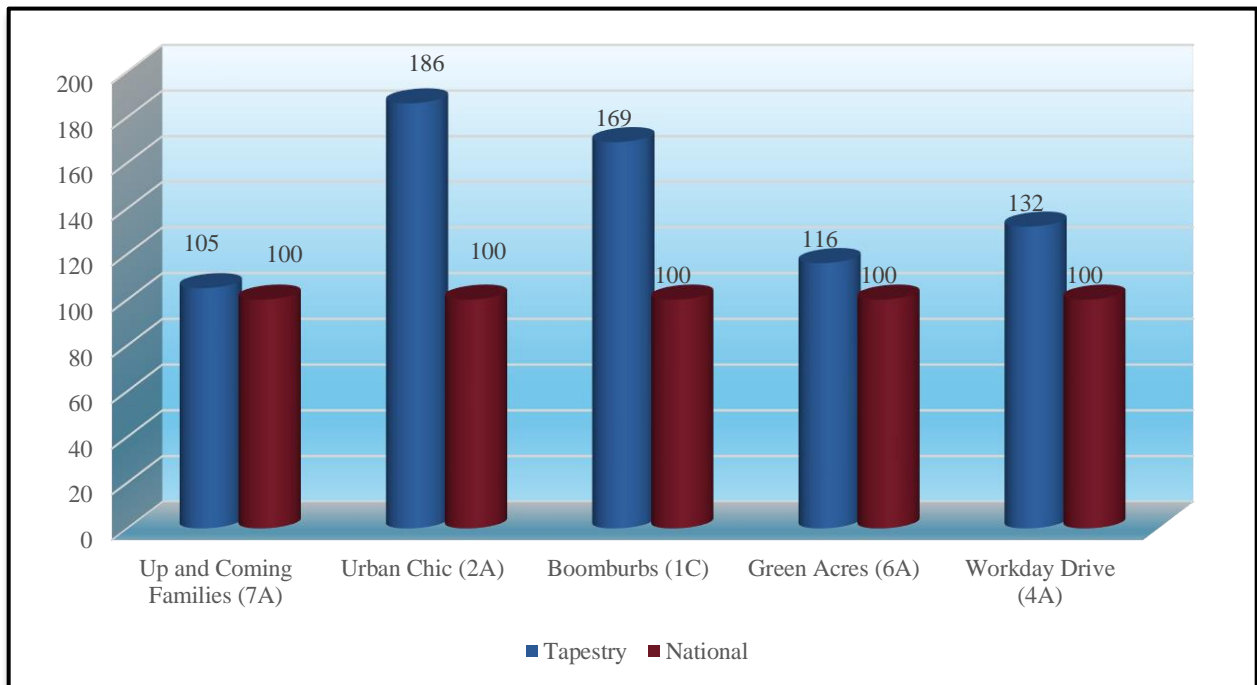
**Boomburbs (1C)** – A new growth market with many young professionals with families. Fitness is a priority, including club memberships. Enjoy all sports and generous supporters of the arts.

**Table O – Secondary Service Area Tapestry Segment Comparison**

(ESRI estimates)

	Secondary Service Area		Demographics	
	Percent	Cumulative Percent	Median Age	Median HH Income
Up and Coming Families (7A)	32.0%	32.0%	31.4	\$72,000
Urban Chic (2A)	21.3%	53.3%	43.3	\$109,400
Boomburbs (1C)	14.1%	67.4%	34.0	\$113,400
Green Acres (6A)	11.3%	78.7%	43.9	\$76,800
Workday Drive (4A)	5.3%	84.0%	37.0	\$90,500

**Chart M – Secondary Service Area Tapestry Segment Entertainment Spending:**



**Up and Coming Families (7A)** – A young, diverse and mobile market. Hardworking families trying to get ahead, they seek technology. Careful shoppers fill spare time with family activities.

**Urban Chic (2A)** – Professionals living an exclusive lifestyle. Environmentally aware and like to live “green.” Embrace city life with museums, arts, culture and sports.

**Boomburbs (1C)** – A new growth market with many young professionals with families. Fitness is a priority, including club memberships. Enjoy all sports and generous supporters of the arts.

**Green Acres (6A)** – Lifestyle that features self-reliance. Enjoy maintaining home/yard, being outside and playing sports. Most households no longer have children. Conservative and cautious.

**Workday Drive (4A)** – An affluent family-oriented segment. They have a hectic life chasing children. Outdoor activities and sports are a way of life.

**Market Potential Index for Adult Participation:** In addition to examining the participation numbers for various outdoor activities through the National Sporting Goods Association, the 2020 Survey and the Spending Potential Index for Entertainment & Recreation, B\*K can access information about Sports & Leisure Market Potential. The following information illustrates annual participation rates for adults in outdoor activities.

**Table P – Market Potential Index (MPI) for Participation in Activities in Primary Service Area**

<b>Adults participated in:</b>	<b>Expected Number of Adults</b>	<b>Percent of Population</b>	<b>MPI</b>
Aerobics	1,259	9.4%	112
Baseball	389	2.9%	99
Basketball	977	7.3%	108
Exercise Walking	4,599	34.2%	110
Running/Jogging	1,786	13.3%	119
Pilates	422	3.1%	100
Softball	239	1.8%	94
Swimming	2,361	17.6%	112
Volleyball	407	3.0%	115
Yoga	1,529	11.4%	110
Zumba	479	3.6%	109

**Expected # of Adults:** Number of adults, 18 years of age and older, participating in the activity in the Service Area.

**Percent of Population:** Percent of the service area that participates in the activity.

**MPI:** Market potential index as compared to the national number of 100.

This table indicates that the overall propensity for adults to participate in activities is greater than the national number of 100. In many cases, when a participation number is lower than the National number, this is due to a lack of facilities or an inability to pay for services and programs.

**Table Q – Market Potential Index (MPI) for Participation in Activities in Secondary Service Area**

<b>Adults participated in:</b>	<b>Expected Number of Adults</b>	<b>Percent of Population</b>	<b>MPI</b>
Aerobics	3,951	9.9%	118
Baseball	1,218	3.0%	104
Basketball	3,000	7.5%	111
Exercise Walking	13,828	34.5%	111
Running/Jogging	5,601	14.0%	126
Pilates	1,421	3.5%	113
Softball	706	1.8%	93
Swimming	7,185	17.9%	115
Volleyball	1,207	3.0%	115
Yoga	4,948	12.4%	119
Zumba	1,575	3.9%	121

**Expected # of Adults:** Number of adults, 18 years of age and older, participating in the activity in the Service Area.

**Percent of Population:** Percent of the service area that participates in the activity.

**MPI:** Market potential index as compared to the national number of 100.

This table indicates that the overall propensity for adults to participate in activities is greater than the national number of 100. In many cases, when a participation number is lower than the National number, this is due to a lack of facilities or an inability to pay for services and programs.

## **D. Demographic Summary**

The following summarizes the demographic characteristics of the service areas.

- The population within the Primary Service Area is such that it would need to rely on additional areas. The Secondary Service Area for the Town of Johnstown is such that they would support an outdoor aquatic facility. B\*K typically looks for a population of greater than 50,000 within the primary service area as a key indicator.
- The median age in the Primary and Secondary Service Areas is marginally lower than the State and National numbers. A lower median age points to young families with children, which are significant participants in recreation and aquatic programs. As such, the median age is a benefit to the project.
- The Primary and Secondary Service Areas have a large percentage of households with children (37-39%) which is greater than the state and national average (30.7%).
- The Primary and Secondary Service Areas have a significantly higher median household income than the state of Colorado (+20k) and the national (+30k) average. Income level is important when it comes to price point for programs and services, subsequently the cost recovery level of a facility. The income level suggests that the service areas will be able to support a facility.
- The Household Budget Expenditures and the Recreation Spending Potential are consistent with the median household income. The consistency is important for the financial performance of the future facility. It is also important to note, specific to recreation, that those dollars are currently being spent with other providers by Town residents.
- The age distribution in the Town of Johnstown is such that 26.2% is under the age of 18 and 27.0% is over the age of 55. These are two age groups that will be significant users of aquatic programs and services. Additionally, it is projected that age categories are projected to be relatively stable through 2027, with limited increases/decreases.
- The top 2 tapestry segments accounts for over 50% of the population in Johnstown. Both of these groups exceed the national level with recreation activity. The remainder are also near or above this activity level.,
- The Market Potential Index in the Primary and Secondary Service Areas is higher than the national number of 100 for swimming.

## **E. Participation**

In addition to analyzing the demographic realities of the service areas, it is possible to project possible participation in recreation and sport activities.

**Participation Numbers:** On an annual basis, the National Sporting Goods Association (NSGA) conducts an in-depth study and survey of how Americans spend their leisure time. The data is collected in one year and the report is issued in June of the following year. This information provides the data necessary to overlay rate of participation onto the Primary and Secondary Area to determine market potential.

The information contained in this section of the report, utilizes the NSGA's 2019 & 2021 data. The COVID-19 Pandemic had a significant impact on participation of sports and activities. Many indoor facilities were closed for a substantial part of the year. Team sports and leagues did not operate and individuals sought different ways to fill their time. As a result, participation from 2020 to 2021 varied widely in nearly all activities tracked. Many of the activities bounced back from the 2020 participation, however not all have. Some of this may be a trend, while some of it is still a reflection on reduced offerings by departments.

B\*K takes the national average and combines that with participation percentages of the Primary and Secondary Service Area based upon age distribution, median income, region and National number. Those four percentages are then averaged together to create a unique participation percentage for the service area. This participation percentage, when applied to the population of the Primary and Secondary Service Area, then provides an idea of the market potential for outdoor recreation.

**Table A –Participation Rates in the Primary Service Area**

	<b>Age</b>	<b>Income</b>	<b>Region</b>	<b>Nation</b>	<b>Average</b>
Swimming	16.2%	19.5%	17.6%	15.6%	17.2%
Did Not Participate	20.8%	20.5%	20.1%	20.6%	20.5%

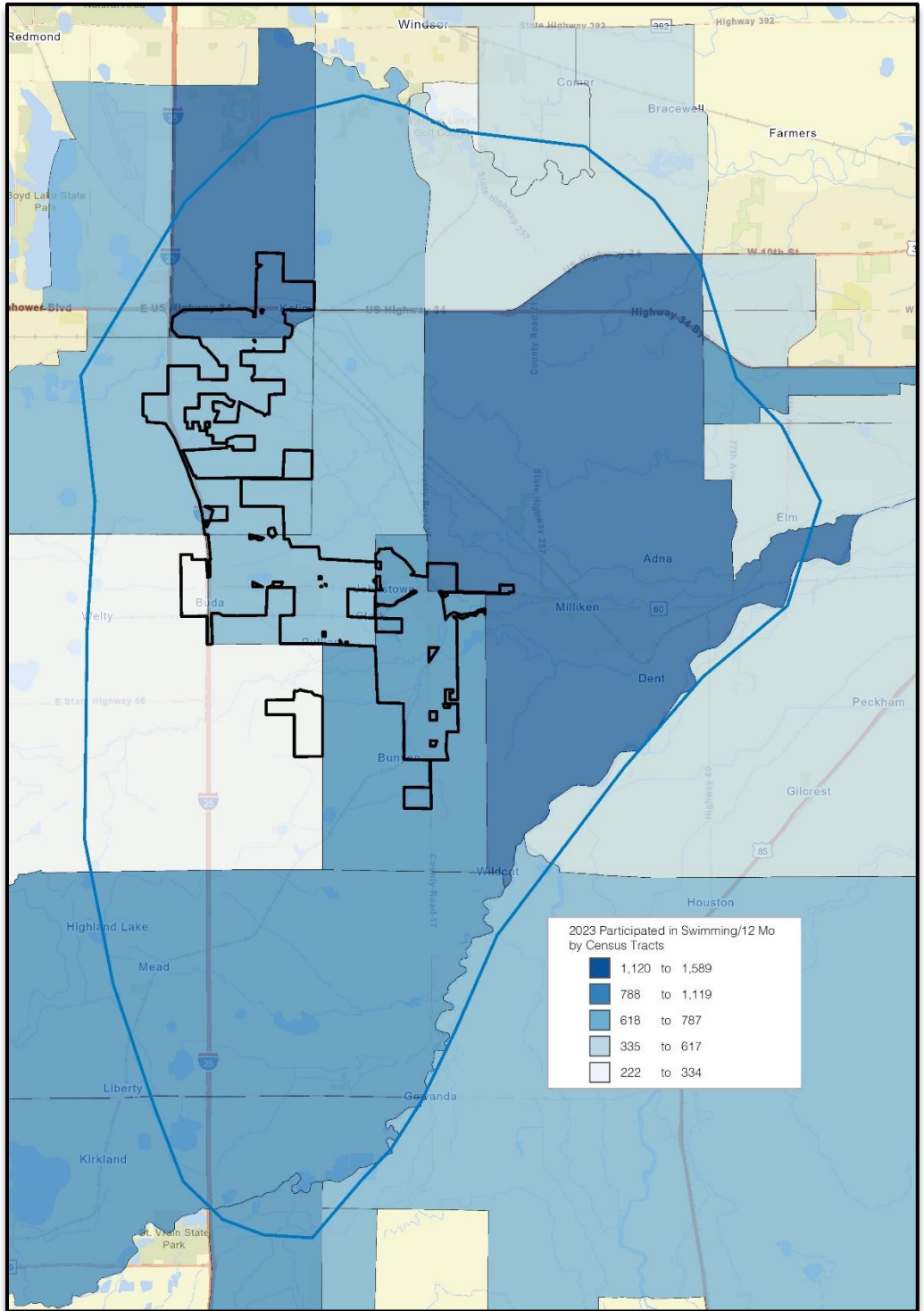
**Table B –Participation Rates in the Secondary Service Area**

	<b>Age</b>	<b>Income</b>	<b>Region</b>	<b>Nation</b>	<b>Average</b>
Swimming	16.2%	19.5%	17.6%	15.6%	17.2%
Did Not Participate	20.9%	20.5%	20.1%	20.6%	20.5%

- Age:** Participation based on individuals ages 7 & Up of the Service Area.
- Income:** Participation based on the 2022 estimated median household income in the Service Area.
- Region:** Participation based on regional statistics (Mountain).
- National:** Participation based on national statistics.
- Average:** Average of the four columns.



# Map D – Swimming Participation by Census Tract



**Anticipated Participation Number:** Utilizing the average percentage from Table-A and B above plus the 2020 census information and census estimates for 2022 and 2027 (over age 7) the following comparisons are available.

**Table C –Participation Growth or Decline for Indoor Activities in Primary Service Area**

	<b>Average</b>	<b>2020 Population</b>	<b>2022 Population</b>	<b>2027 Population</b>	<b>Difference</b>
Swimming	17.2%	2,597	2,813	3,141	544
Did Not Participate	20.5%	3,094	3,351	3,742	648

**Table D –Participation Growth or Decline for Indoor Activities in Secondary Service Area**

	<b>Average</b>	<b>2020 Population</b>	<b>2022 Population</b>	<b>2027 Population</b>	<b>Difference</b>
Swimming	17.2%	7,253	8,448	9,288	2,036
Did Not Participate	20.5%	8,643	10,067	11,069	2,426

**Note:** These figures do not necessarily translate into attendance figures for various activities or programs. The “Did Not Participate” statistics refers to all 58 activities outlined in the NSGA 2021 Survey Instrument.

**Table E – Participation Frequency Swimming**

The NSGA classifies swimming based on how often individuals participate:

	<b>Frequent</b>	<b>Occasional</b>	<b>Infrequent</b>
Swimming Frequency	110+	25-109	6-24
Swimming Percentage of Population	6.5%	39.7%	53.8%

In Table-E one can look at swimming and how it is defined with respect to visits being Frequent, Occasional, or Infrequent and then the percentage of population that participates.

**Table F – Participation Numbers in Primary Service Area**

	<b>Frequent</b>	<b>Occasional</b>	<b>Infrequent</b>	<b>Total</b>
Swimming Frequency	112	67	15	
Population	183	1,117	1,513	
<b>Visits</b>	20,476	74,815	22,698	117,989

Table-F takes the frequency information one step further and identifies the number of times individuals may participate in the activity, applies the percentage from Table-E to the 2020 swimming population (2,813) and then gives a total number of swimming days. This would indicate that a total of 117,989 swimming days are available within the Primary Service Area market. It is also important to note that those are being absorbed, on some level, by the other service providers in the area.

**Table G – Participation Numbers in Secondary Service Area**

	<b>Frequent</b>	<b>Occasional</b>	<b>Infrequent</b>	<b>Total</b>
Swimming Frequency	112	67	15	
Population	549	3,354	4,545	
<b>Visits</b>	61,498	224,696	68,172	354,366

Table-G takes the frequency information one step further and identifies the number of times individuals may participate in the activity, applies the percentage from Table-E to the 2020 swimming population (8,448) and then gives a total number of swimming days. This would indicate that a total of 354,366 swimming days are available within the Secondary Service Area market. It is also important to note that those are being absorbed, on some level, by the other service providers in the area.

The NSGA identifies participation in all activities that they track as frequent, occasional, and infrequent as illustrated in Table F & G. It is also important to further identify the uses of those categories.

**Frequent Swimmers** (6.5% of total swimming population) – These participants are largely the individuals participating in programs like club swimming. They can be described as competitive athletes of all variety to include multi-sport athletes. These participants are interested in traditional flat-water facilities, i.e., lap pools. Their preference is for deep water (greater than 6 feet) and cooler water temperatures (between 76-80).

**Occasional Swimmers** (39.7% of total swimming population) – These participants are the in between group of swimmers. The individuals on the high end of the uses per year are interested in swimming, or aquatic activities, as a means of exercise and prefer water like that of frequent swimmers. As you make your way to the mid-point and lower level of participation the reason for aquatic participation changes. Those individuals are either interested in aquatic participation for exercise/therapy or strictly the entertainment and social aspects of being in a pool. Those individuals on the mid and lower level of participation are interested in a different kind of water. They are more interested in a warmer water temperature (82-86 degrees) and shallow water (less than 4 feet up to a zero-depth entry).

**Infrequent Swimmers** (53.8% of total swimming population) – These participants are strictly interested in the social and entertainment aspects of swimming. They typically do not use participation in aquatic programs as a means of exercise, but rather socialization. The water that they are interested in is identical to the lower end of the occasional swimmers. However, they are also interested in a “wow-factor” which plays a key role in determining which facility they spend time at.

The NSGA also collects information based on purpose of participation. Within activities, participation is either categorized as "organized" or "unorganized." Organized activities could include; swim lessons, dive lessons, swim team, water polo team, etc. Unorganized activities could include; water walking, lap swimming, open/free swim, etc. The percentages can be applied to the total number of swimmer days to determine market for organized and unorganized activities.

<b>Primary Service Area</b>	<b>Percentage</b>	<b>Number of Swimmer Days</b>
Organized	10%	11,799
Unorganized	90%	106,190

<b>Secondary Service Area</b>	<b>Percentage</b>	<b>Number of Swimmer Days</b>
Organized	10%	35,437
Unorganized	90%	318,929

**Participation by Ethnicity and Race:** The table below compares the overall rate of participation nationally with the rate for Hispanics and African Americans. Utilizing information provided by the National Sporting Goods Association's 2021 survey, the following comparisons are possible.

**Table H – Comparison of National, African American and Hispanic Participation Rates in Primary Service Area**

<b>Indoor Activity</b>	<b>Primary Service Area</b>	<b>National Participation</b>	<b>African American Participation</b>	<b>Hispanic Participation</b>
Swimming	17.2%	15.6%	6.8%	13.3%
Did Not Participate	20.5%	20.6%	21.6%	24.4%

There is a not significant Black population in the Primary Service Area. As such, these numbers may not play a factor with regards to overall participation. However, the Hispanic population (16%) should be considered.

**Table I – Comparison of National, African American and Hispanic Participation Rates in Secondary Service Area**

<b>Indoor Activity</b>	<b>Secondary Service Area</b>	<b>National Participation</b>	<b>African American Participation</b>	<b>Hispanic Participation</b>
Swimming	17.2%	15.6%	6.8%	13.3%
Did Not Participate	20.5%	20.6%	21.6%	24.4%

There is a not significant Black population in the Primary Service Area. As such, these numbers may not play a factor with regards to overall participation. However, the Hispanic population (17%) should be considered.

**National Summary of Sports Participation:** The following chart summarizes participation for indoor activities utilizing information from the 2021 National Sporting Goods Association survey.

**Table J – Sports Participation Summary**

Sport	Nat'l Rank <sup>5</sup>	Nat'l Participation (in millions)
Exercise Walking	1	125.0
Cardio Fitness	2	86.1
Strength Training	3	68.9
Exercising w/ Equipment	4	57.2
Hiking	5	48.8
Swimming	6	47.2
Running/Jogging	7	45.0
Bicycle Riding	8	42.8
Weight Lifting	9	37.5
Yoga	10	30.7
Fishing (fresh water)	11	29.5
Workout @ Club	13	24.6
Basketball	14	22.5
Golf	16	19.0
Target Shooting (live ammunition)	17	18.8
Hunting w/ Firearms	18	16.4
Boating (motor/power)	19	14.6
Soccer	20	14.5
Tennis	22	13.8
Kayaking	24	11.5
Baseball	26	11.3
Volleyball	27	10.8
Fishing (salt water)	29	9.6
Softball	30	9.3
Football (touch)	32	8.2
Canoeing	33	7.8
Hunting w/ Bow & Arrow	34	6.9
Football (tackle)	35	6.7
Mountain Biking (off road)	38	6.0
Football (flag)	41	5.4
Water Skiing	49	3.8
Pickleball	50	3.6

**Nat'l Rank:** Popularity of sport based on national survey.

**Nat'l Participation:** Population that participate in this sport on national survey.

<sup>5</sup> This rank is based upon the 58 activities reported on by NSGA in their 2021 survey instrument.

**National Participation by Age Group:** Within the NSGA survey, participation is broken down by age groups. As such B\*K can identify the top 3 age groups participating in the activities reflected in this report.

**Chart K – Participation by Age Group:**

<b>Activity</b>	<b>Largest</b>	<b>Second Largest</b>	<b>Third Largest</b>
Aerobics	35-44	25-34	45-54
Baseball	7-11	12-17	25-34
Basketball	12-17	25-34	18-24
Bicycle Riding	55-64	45-54	12-17
Billiards/Pool	25-34	34-44	45-54
Bowling	25-34	35-44	18-24
Cheerleading	12-17	7-11	18-24
Exercise Walking	55-64	65-74	45-54
Exercise w/ Equipment	25-34	45-54	55-64
Football (flag)	7-11	12-17	25-34
Football (tackle)	12-17	18-24	7-11
Football (touch)	12-17	25-34	7-11
Gymnastics	7-11	12-17	25-34
Lacrosse	12-17	7-11	18-24
Martial Arts MMA	7-11	25-34	12-17
Pickleball	12-17	65-74	18-24
Pilates	25-34	35-44	45-54
Running/Jogging	25-34	35-44	45-54
Skateboarding	12-17	18-24	7-11
Soccer	7-11	12-17	25-34
Softball	12-17	7-11	25-34
<b>Swimming</b>	<b>55-64</b>	<b>12-17</b>	<b>7-11</b>
Tables Tennis	25-34	18-24	12-17
Tennis	25-34	35-44	12-17
Volleyball	12-17	25-34	18-24
Weight Lifting	25-34	45-54	35-44
Workout at Clubs	25-34	35-44	45-54
Wrestling	12-17	25-34	7-11
Yoga	25-34	35-44	45-54
Did Not Participate	45-54	55-64	65-74

- Largest:** Age group with the highest rate of participation.
- Second Largest:** Age group with the second highest rate of participation.
- Third Largest:** Age group with the third highest rate of participation.

**National Sports Participation Trends:** Below are listed several sports activities and the percentage of growth or decline that each has experienced nationally over the last ten years (2012-2021).



**Table L – National Activity Trend (in millions)**

	<b>2012 Participation</b>	<b>2021 Participation</b>	<b>Percent Change</b>
Kayaking	7.2	11.5	+59.7%
Hunting w/ Bow & Arrow	5.1	6.9	+35.3%
Yoga	22.9	30.7	+34.1%
Skateboarding	5.4	6.7	+24.1%
Exercise Walking	102.1	125	+22.4%
Weight Lifting	31.1	37.5	+20.6%
Hiking	42.2	48.8	+15.6%
Running/Jogging	40	45	+12.5%
Wrestling	2.8	3.1	+10.7%
Mountain Biking (off road)	5.5	6	+9.1%
Bicycle Riding	39.3	42.8	+8.9%
Backpack/Wilderness Camping	11.7	12.4	+6.0%
Soccer	13.7	14.5	+5.8%
Water Skiing	3.6	3.8	+5.6%
Volleyball	10.3	10.8	+4.9%
Target Shooting (airgun)	4.9	5.1	+4.1%
Tennis	13.6	13.8	1.5%
Exercising w/ Equipment	57.7	57.2	-0.9%
Swimming	48.6	47.1	-3.1%
Fishing (fresh water)	30.8	29.5	-4.2%
Baseball	12.1	11.3	-6.6%
Golf	21.1	19	-10.0%
Fishing (salt water)	10.7	9.6	-10.3%
Softball	10.5	9.3	-11.4%
Football (touch)	9.3	8.2	-11.8%
Basketball	25.6	22.5	-12.1%
Target Shooting (live ammunition)	21.7	18.8	-13.4%
Boating (motor/power)	17	14.6	-14.1%
Football (tackle)	7.9	6.7	-15.2%
Hunting w/ Firearms	19.4	16.4	-15.5%
Football (flag)	6.7	5.4	-19.4%
Workout @ Club	35.2	24.6	-30.1%

**2012 Participation:** The number of participants per year in the activity (in millions) in the United States.

**2021 Participation:** The number of participants per year in the activity (in millions) in the United States.

**Percent Change:** The percent change in the level of participation from 2012 to 2021.

## **F. Trends & Providers**

**Aquatic Participation Trends:** Swimming is one of the most popular sports and leisure activities, meaning that there is a significant market for aquatic pursuits. Approximately 17.6% of the population in the Mountain region of the country participates in aquatic activities. This is a significant segment of the population.

Despite the recent emphasis on recreational swimming the more traditional aspects of aquatics (including swim teams, instruction and aqua fitness) remain as an important part of most aquatic centers. The life safety issues associated with teaching children how to swim is a critical concern in most communities and competitive swim team programs through USA Swimming, high schools, masters, and other community based organizations continue to be important. Aqua fitness, from aqua exercise to lap swimming, has enjoyed strong growth during the last ten years with the realization of the benefits of water-based exercise.

A competitive pool allows for a variety of aquatic activities to take place simultaneously and can handle aqua exercise classes, learn to swim programs as well competitive swim training and meets (short course and possibly long course). In communities where there are several competitive swim programs, utilizing a pool with 8 lanes or more is usually important. A competitive pool that is designed for hosting meets will allow a community to build a more regional or even national identity as a site for competitive swimming. However, it should be realized that regional and national swim meets are difficult to obtain on a regular basis, take a considerable amount of time, effort and money to run; can be disruptive to the regular user groups and can be financial losers for the facility itself. On the other side, such events can provide a strong economic stimulus to the overall community.

Competitive diving is an activity that is often found in connection with competitive swimming. Most high school and regional diving competition centers on the 1-meter board with some 3 meter events (non-high school). The competitive diving market, unlike swimming, is usually very small (usually 10% to 20% the size of the competitive swim market) and has been decreasing steadily over the last ten years or more. Thus, many states have or are considering the elimination of diving as a part of high school swimming. Diving programs have been more viable in markets with larger populations and where there are coaches with strong diving reputations. Moving from springboard diving to platform (5 meter and 10 meter, and sometimes 3 and 7.5 meters), the market for divers drops even more while the cost of construction with deeper pool depths and higher dive towers becomes significantly larger. Platform diving is usually only a competitive event in regional and national diving competitions. As a result, the need for inclusion of diving platforms in a competitive aquatic facility needs to be carefully studied to determine the true economic feasibility of such an amenity.

There are a couple of other aquatic sports that are often competing for pool time at competitive aquatic centers nationwide. However, their competition base and number of participants is often smaller and face barriers of entry fighting for pool time including a more organized competitive swimming community and existing agreements for pool space at facilities with pools large enough and deep enough to host them. Water polo is a sport that continues to be extremely popular in the west,

particularly in Colorado and whose numbers and participation rates are in many school districts are higher than those of swimming in high school athletics. Water polo uses a space of 25 yards or meters by 45-66 feet wide (the basic size of an 8 lane, 25-yard pool). However, a minimum depth of 6 foot 6 inches is required which is often difficult to find in more community based facilities. Floating cage water polo has become the standard in many regions and requires an even larger pool as the floating cages take up additional pool space. Artistic swimming also utilizes aquatic facilities for their sport and they also require deeper water of 7-8 feet. This also makes the use of some community pools difficult. As a result of the need for more deep water for aquatic sports many modern community aquatic centers are building multiple pools.

Without doubt the hottest trend in aquatics is the leisure pool concept. This idea of incorporating slides, lazy rivers (or current channels), fountains, zero depth entry and other water features into a pool's design has proved to be extremely popular for the recreational user. The age of the conventional pool in most recreational settings has greatly diminished. Leisure pools appeal to the younger kids (who are the largest segment of the population that swims) and to families. These types of facilities are able to attract and draw larger crowds and people tend to come from a further distance and stay longer to utilize such pools. This all translates into the potential to sell more admissions and increase revenues. It is estimated conservatively that a leisure pool can generate up to 30% more revenue than a comparable conventional pool and the cost of operation while being higher, has been offset through increased revenues. Of note is the fact that patrons seem willing to pay a higher user fee with this type of pool that is in a park like setting than a conventional aquatics facility.

Another trend that is growing more popular in the aquatic's field is the development of a raised temperature therapy pool for relaxation, socialization, and rehabilitation. This has been effective in bringing in swimmers who are looking for a different experience and non-swimmers who want the advantages of warm water in a different setting. The development of natural landscapes has enhanced this type of amenity and created a pleasant atmosphere for adult socialization.

The multi-function indoor aquatic center concept of delivering aquatics services continues to grow in acceptance with the idea of providing for a variety of aquatics activities and programs in an open design setting that features a lot of natural light, interactive play features and access to an outdoor sun deck. The placing of traditional instructional/competitive pools, with shallow depth/interactive leisure pools and therapy water, in the same facility has been well received in the market. This idea has proven to be financially successful by centralizing pool operations for recreation service providers and through increased generation of revenues from patrons willing to pay for an aquatics experience that is new and exciting. Indoor aquatic centers have been instrumental in developing a true family appeal for community-based facilities. The keys to success for this type of center revolve around the concept of intergenerational use in a quality facility that has an exciting and vibrant feel in an outdoor like atmosphere.

Also changing is the orientation of aquatic centers from stand-alone facilities that only have aquatic features to more of a full-service recreation center that has fitness, sports and community based amenities. This change has allowed for a better rate of cost recovery and stronger rates of use of the aquatic portion of the facility as well as the other “dry side” amenities.

**Aquatic Facilities Market Orientation:** Based on the market information, the existing pools, and typical aquatic needs within a community, there are specific market areas that need to be addressed with any aquatic facility. These include:

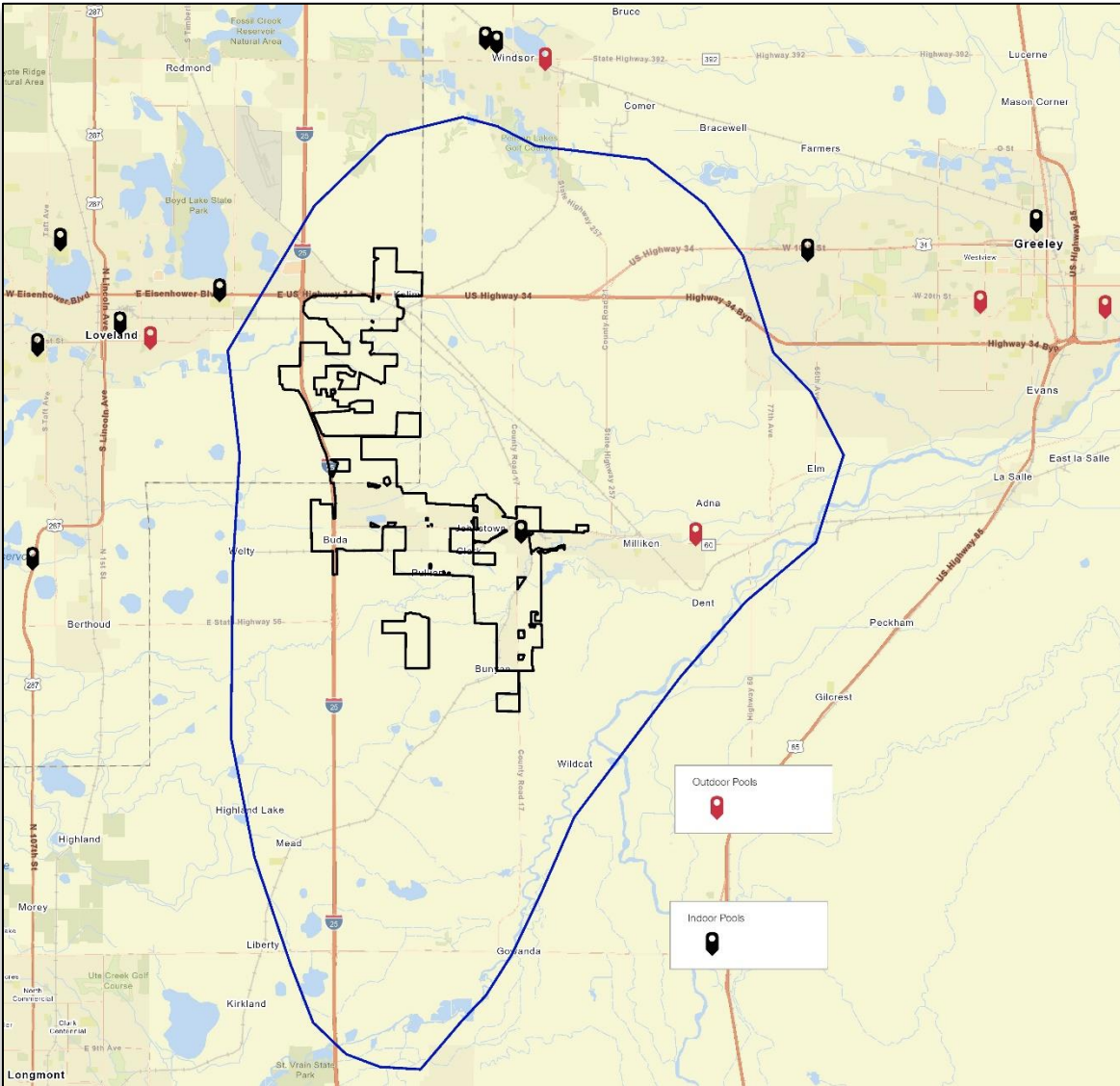
- 1. Leisure/recreation aquatic activities** - This includes a variety of activities found at leisure pools with zero depth entry, warm water, play apparatus, slides, seating areas and deck space. These are often combined with other non-aquatic areas such as concessions and birthday party or other group event areas.
- 2. Instructional programming** - The primary emphasis is on teaching swimming and lifesaving skills to many different age groups. These activities have traditionally taken place in more conventional pool configurations but should not be confined to just these spaces. Reasonably warm water, shallow depth with deeper water (4 ft. or more), and open expanses of water are necessary for instructional activities. Easy pool access, a viewing area for parents, and deck space for instructors is also crucial.
- 3. Fitness programming** - These types of activities continue to grow in popularity among a large segment of the population. From aqua exercise classes, to lap swimming times, these programs take place in more traditional settings that have lap lanes and large open expanses of water available at a 3 1/2 to 5 ft. depth.
- 4. Therapy** - A growing market segment for many aquatic centers is the use of warm, shallow water for therapy and rehabilitation purposes. Many of these services are offered by medically based organizations that partner with the center for this purpose.
- 5. Social/relaxation** - The appeal of using an aquatics area for relaxation has become a primary focus of many aquatic facilities. This concept has been very effective in drawing non-swimmers to aquatic facilities and expanding the market beyond the traditional swimming boundaries. The use of natural landscapes and creative pool designs that integrate the social elements with swimming activities has been most effective in reaching this market segment.
- 6. Special events/rentals** - There is a market for special events including kid’s birthday parties, corporate events, community organization functions, and general rentals to outside groups. The development of this market will aid in the generation of additional revenues and these events/rentals can often be planned for after or before regular hours or during slow use times. It is important that special events or rentals not adversely affect daily operations or overall center use.

Specific market segments include:

- 1. Families** – Within this market, an orientation towards family activities is essential. The ability to have family members of different ages participate in a fun and vibrant facility is essential.
- 2. Pre-school children** – The needs of pre-school age children need to be met with very shallow or zero depth water which is warm and has play apparatus designed for their use. Interactive programming involving parents and toddlers can also be conducted in more traditional aquatic areas as well.
- 3. School age youth** – A major focus of most pools is to meet the needs of this age group from recreational swimming to competitive aquatics. The leisure components such as slides, fountains, lazy rivers and zero depth will help to bring these individuals to the pool on a regular basis for drop-in recreational swimming. The lap lanes provide the opportunity and space necessary for instructional programs and aquatic team use.
- 4. Teens** – Another aspect of many pools is meeting the needs of the teenage population. Serving the needs of this age group will require leisure pool amenities that will keep their interest (slides) as well as the designation of certain “teen” times of use.
- 5. Adults** – This age group has a variety of needs from aquatic exercise classes to lap swimming, triathlon training and competitive swimming through the master’s program.
- 6. Seniors** – As the population of the United States and the service area continues to age, meeting the needs of an older senior population will be essential. A more active and physically oriented senior is now demanding services to ensure their continued health. Aqua exercise, lap swimming, therapeutic conditioning and even learn to swim classes have proven to be popular with this age group.
- 7. Special needs population** – This is a secondary market, but with the A.D.A. requirements and the existence of shallow warm water and other components, the amenities are present to develop programs for this population segment. Association with a hospital and other therapeutic and social service agencies will be necessary to reach this market.
- 8. Special interest groups** – These include swim teams (and other aquatic teams), school district teams, day care centers and social service organizations. While the needs of these groups can be great, their demands on an aquatics center can often be incompatible with the overall mission of the facility. Care must be taken to ensure that special interest groups are not allowed to dictate use patterns for the center.

With the proper pools and strong utilization of the aquatics area, it is possible to meet most of the varied market orientations as outlined above.

## Alternative Providers



### Outdoor Pools

Milliken Water Works  
 Chimney Park Pool  
 Winona Outdoor Pool  
 Centennial Pool  
 Discovery Bay Waterpark

### Indoor Pools

Windsor High School Pool  
 Windsor Community Recreation Center  
 Berthoud Recreation Center  
 Johnstown YMCA  
 Loveland High School Pool  
 Greeley Family FunPlex  
 Greeley Recreation Center  
 Mountain View Aquatic Center  
 Chilson Recreation Center  
 Dick Hewson Aquatic Center

### 3 – PUBLIC INPUT AND SURVEY

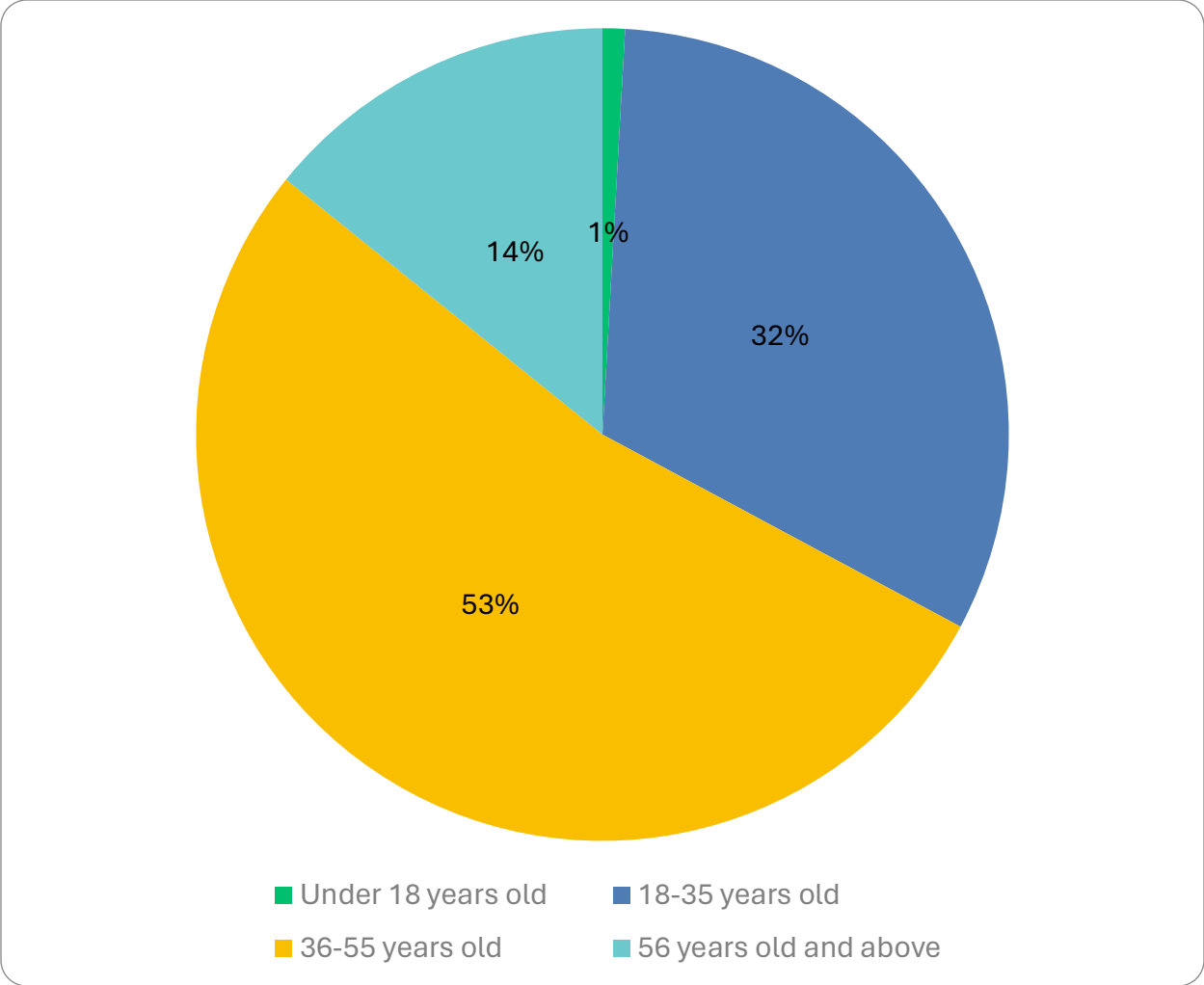
Throughout the process, the Consulting Team met with the steering committee, who guided the study in every phase. The steering committee offered local insights as to what programs and amenities are needed in the community, as well as assisted in determining the site best suited for the project, and the overall design direction of the master plan. Additionally, the consulting team held a public meeting on June 27, 2023, in which a presentation was given that



described various trends in aquatics as well as amenities and programming opportunities that exist today. All the details of this meeting are not contained in the report, but highlights that influenced the potential programming include the following:

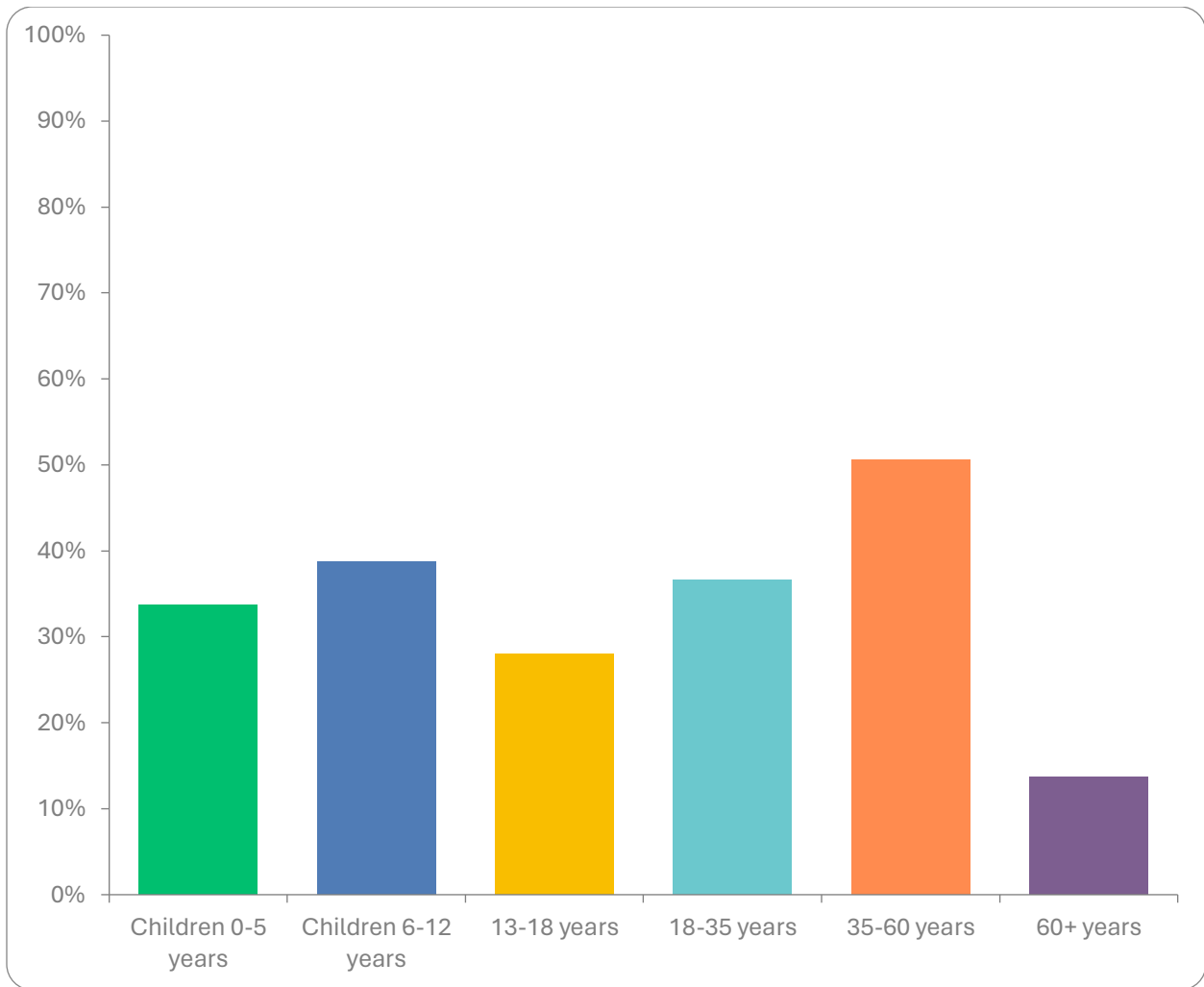
1. Milliken has the closest outdoor pool and targets the age group of 1 – 9 years old. It has both a lap pool and activity pool.
2. A more significant recreation pool is needed in the area with a Lazy River and more attractive amenities, which offers an area for swim lessons through Level 5.
3. The ability to host birthday parties is desired.
4. The facility should be significant enough to create a regional draw, while not becoming too aggressive in scope.
5. There was little optimism expressed about the facility being funded through a ballot measure. Grants and other sources would present more viable options.
6. Diving would be a key element to incorporate into the design.
7. There needs to be special attention given to the teen population. The YMCA currently experiences high levels of teen use which at times makes it uncomfortable for more mature users.
8. There also was a lengthy discussion about competition aquatics, and the need within the service area.
9. Proximity to existing facilities is important.
10. The design and site should have the ability to accommodate future expansion.
11. The target audience should include all age groups.

In a three-pronged approach to gather public input, the Consulting Team implemented an online survey in addition to the meetings mentioned above. In all, there were 677 respondents to the survey. Although not a statistically valid survey, the information gathered was considered and used in the final programming and design response. The following graphics represent some of the results submitted by those that chose to respond to the survey:

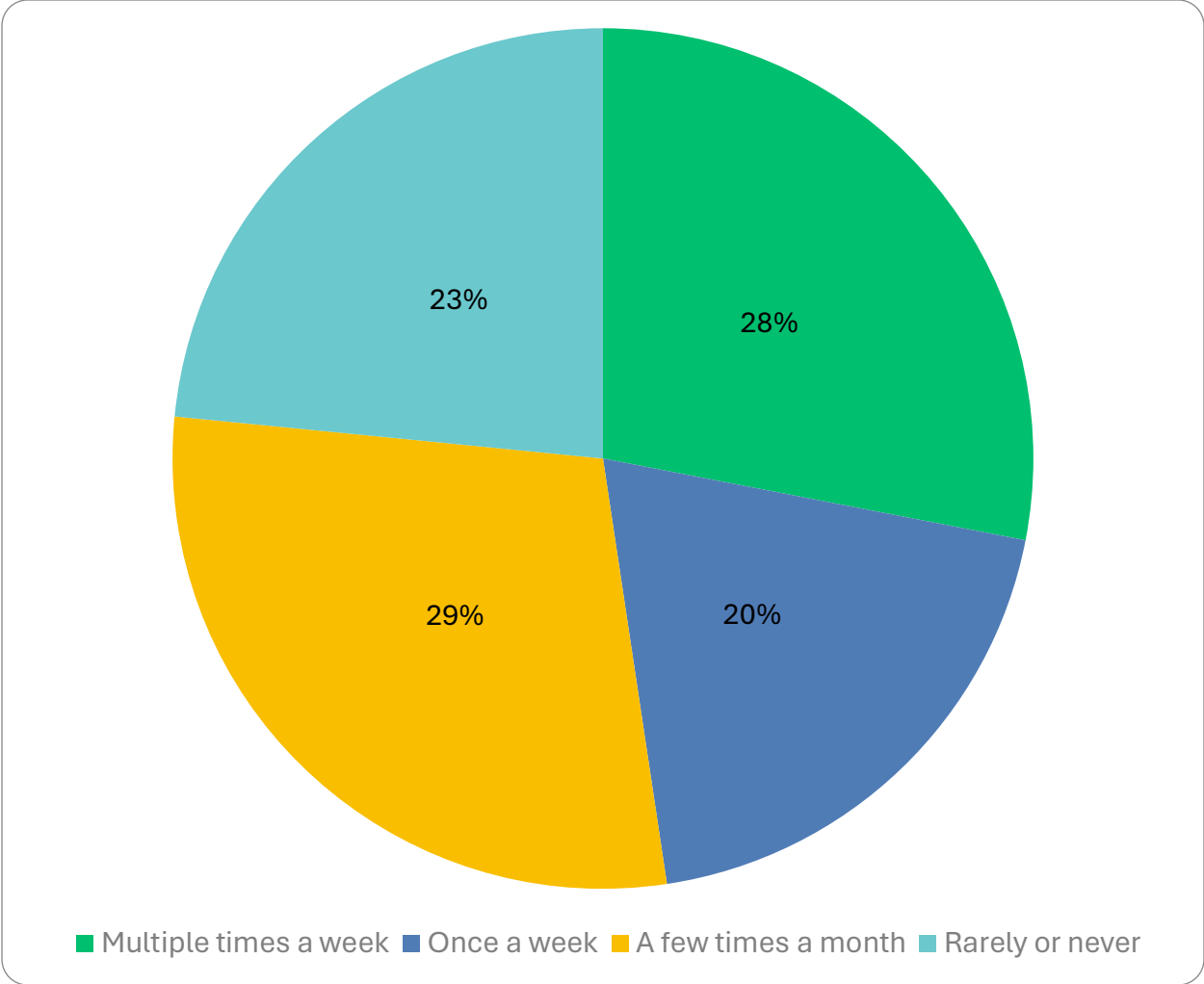


**Question: What is your age group?**

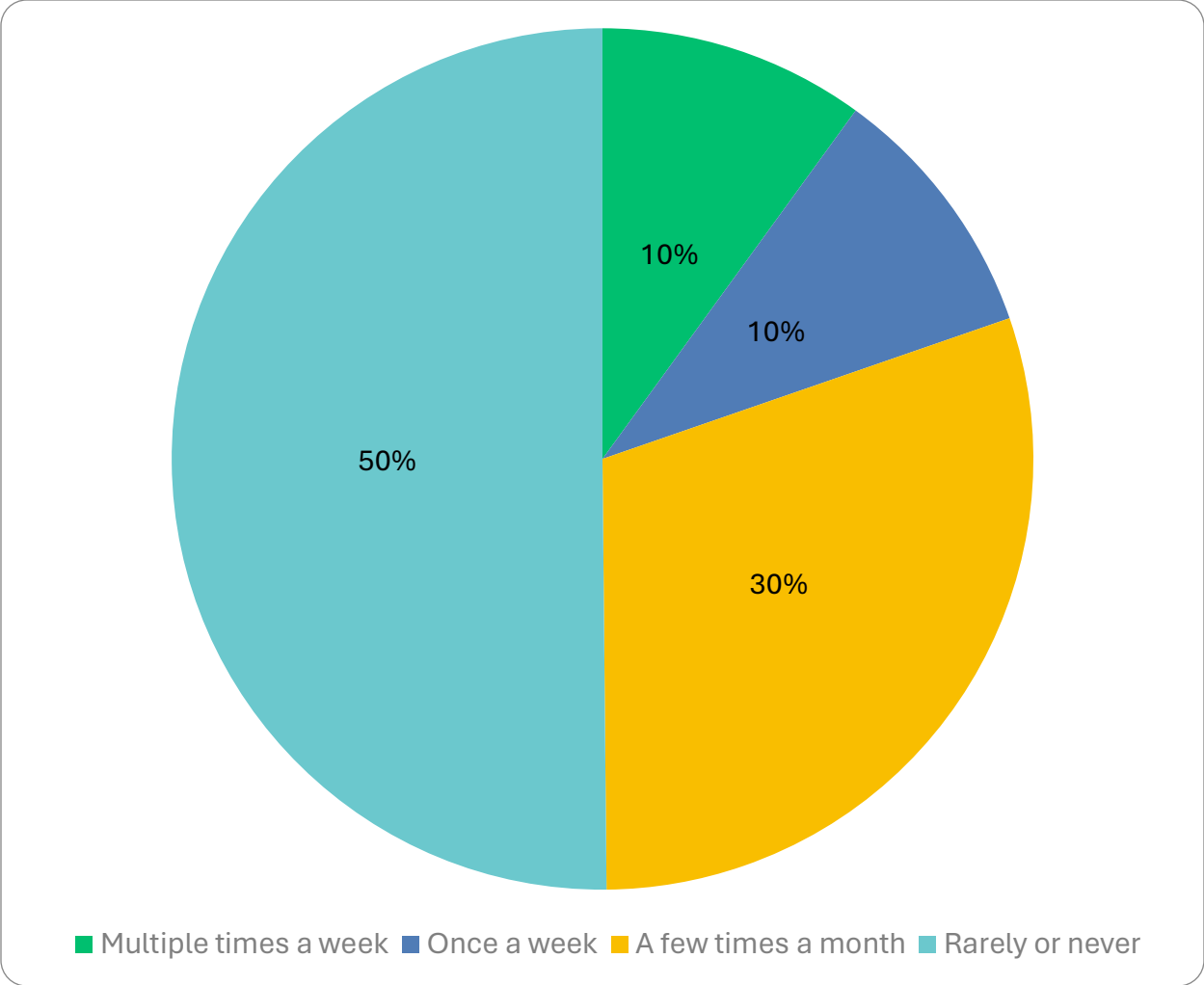




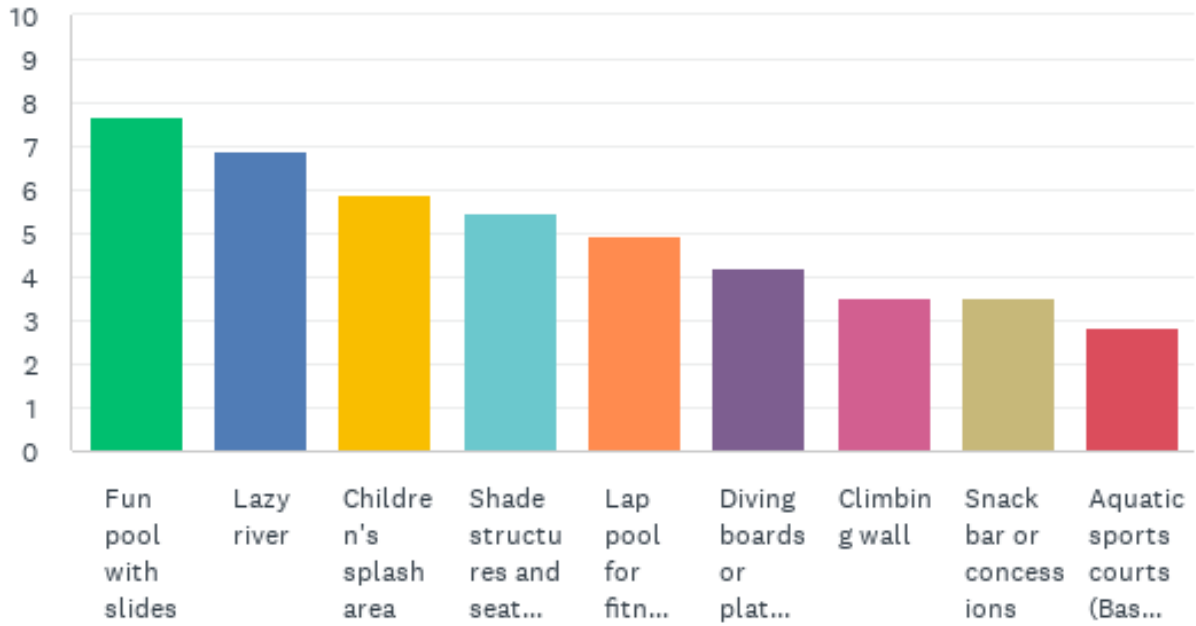
**Question: What is the age demographic in your household? (Select all that apply)**



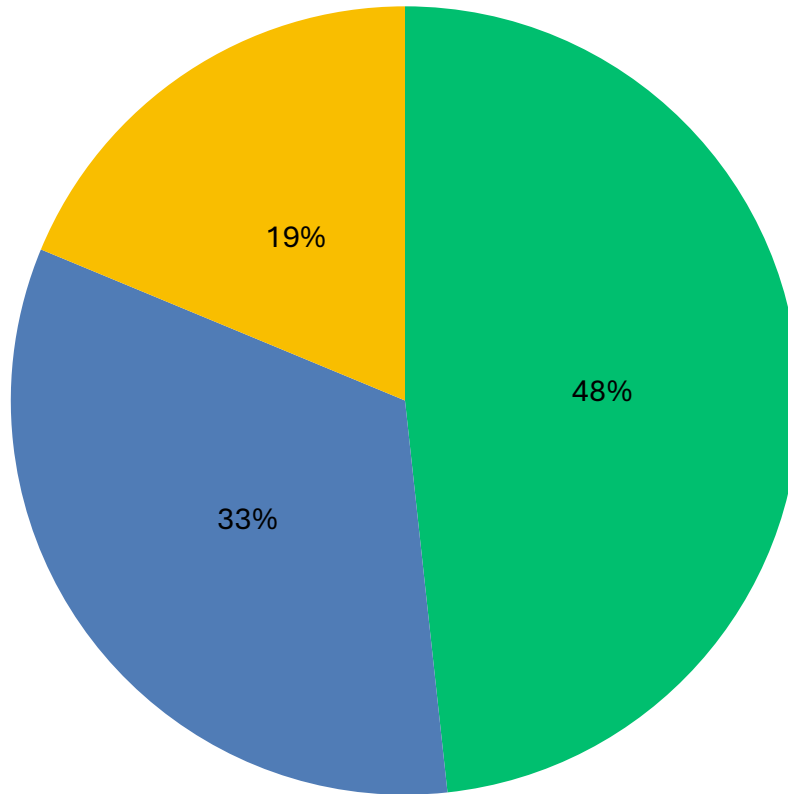
**Question: How often do you or your family visit aquatic facilities in the summer?**



**Question: How often do you or your family visit aquatic facilities in the winter?**

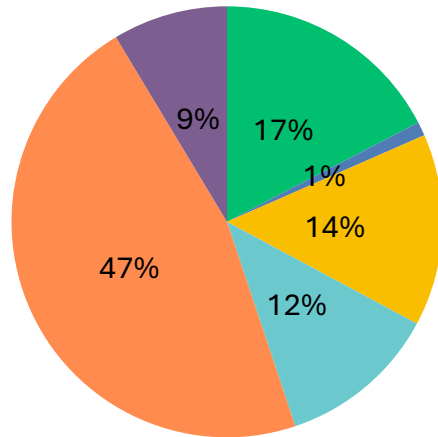


**Question: What types of amenities and features would you like to see in a new outdoor aquatic center?**



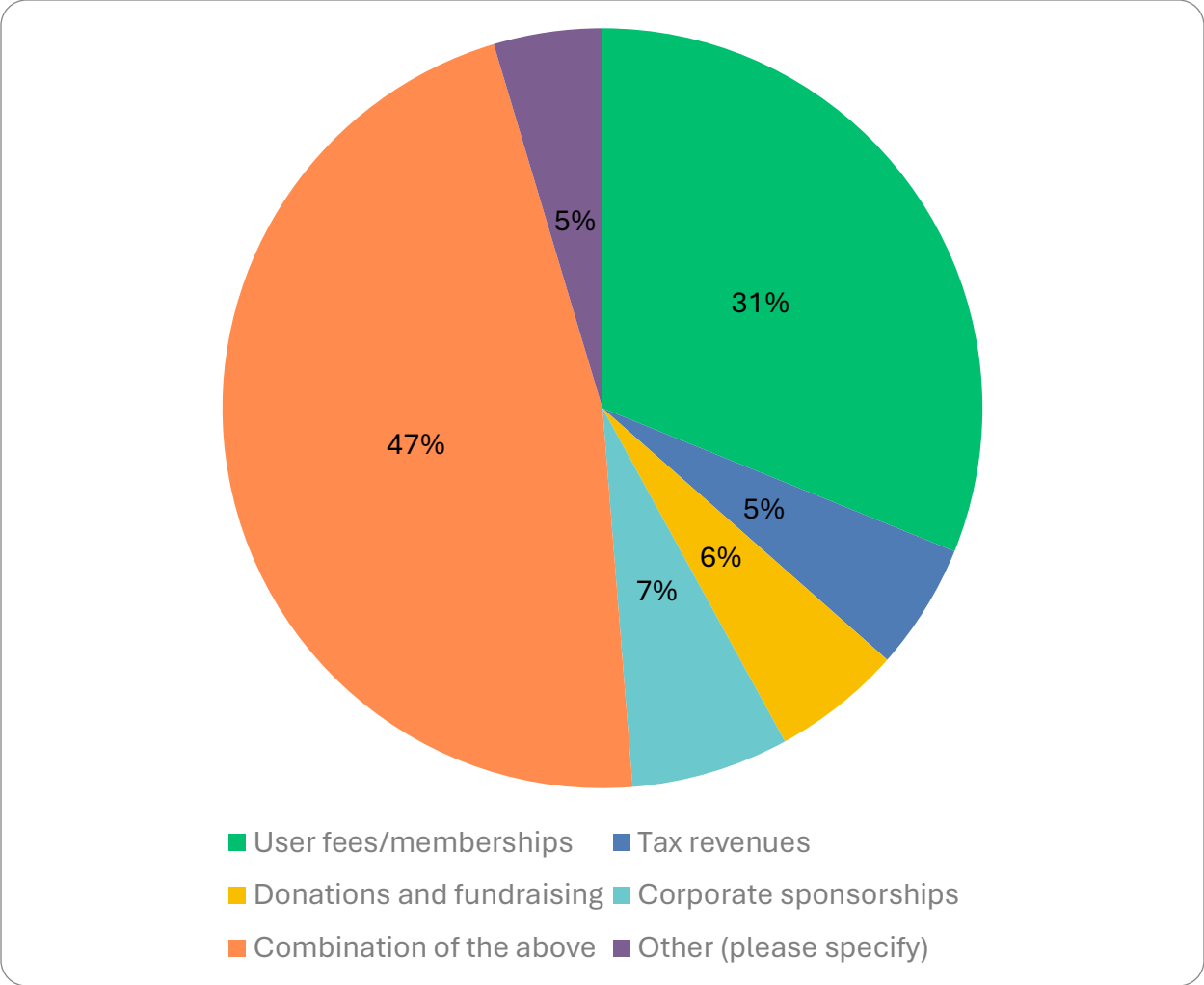
- Yes, I would be interested.
- No, I prefer open access for all user groups.
- Not sure/No preference

**Question: Would you be interested in having dedicated areas or times for specific user groups (e.g., adult-only hours, family hours, senior citizen hours, etc.) at the outdoor aquatic center?**

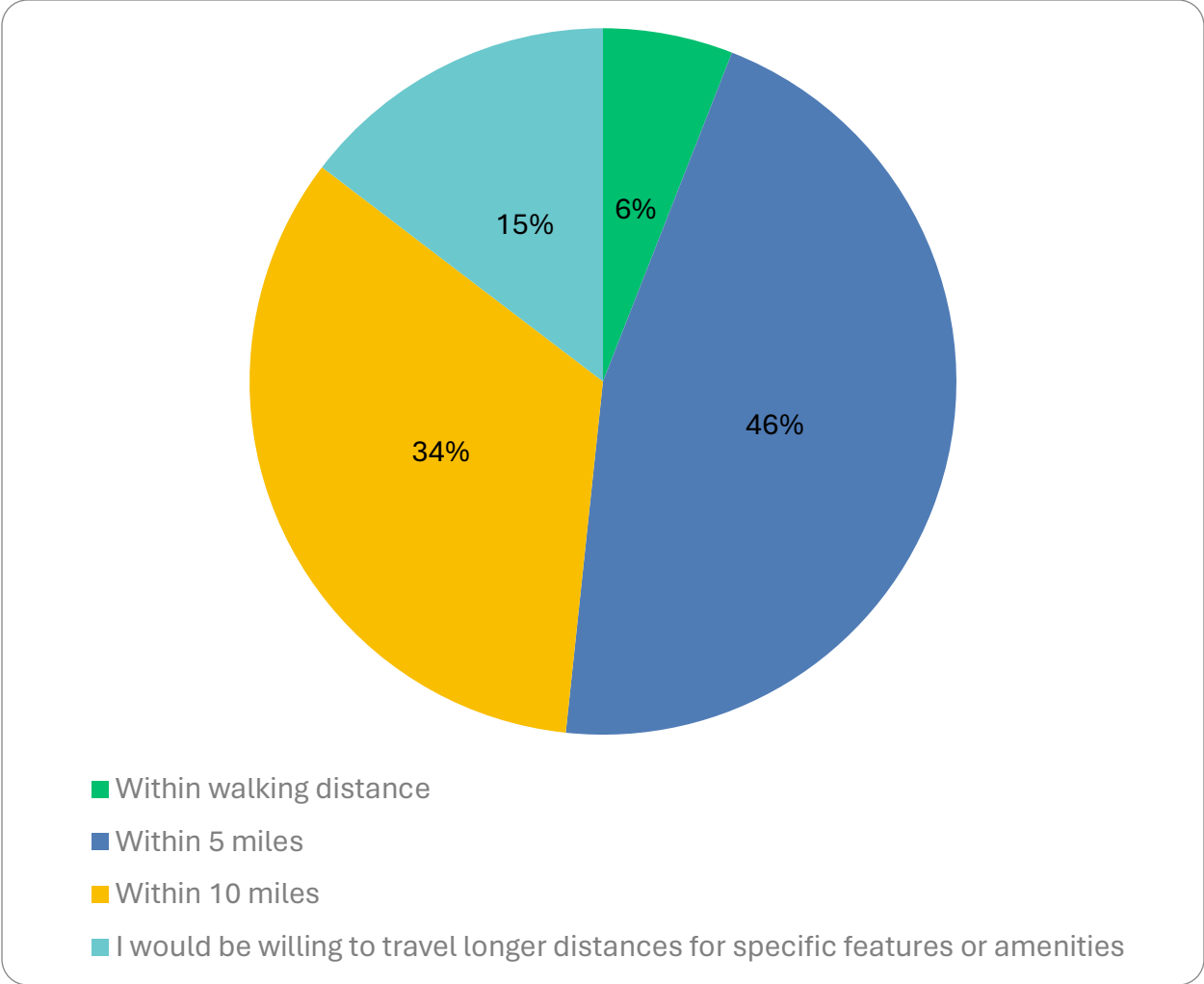


- Sales tax increase – this would provide dedicated funding that comes from everyone who shops in Johnstown - residents and visitors alike.
- Property tax increase – this would provide dedicated funding that comes from Johnstown residents only.
- Donations and fundraising
- Corporate sponsorships
- Combination of the above
- Other (please specify)

**Question: How would you prefer to fund the construction of the pool?**

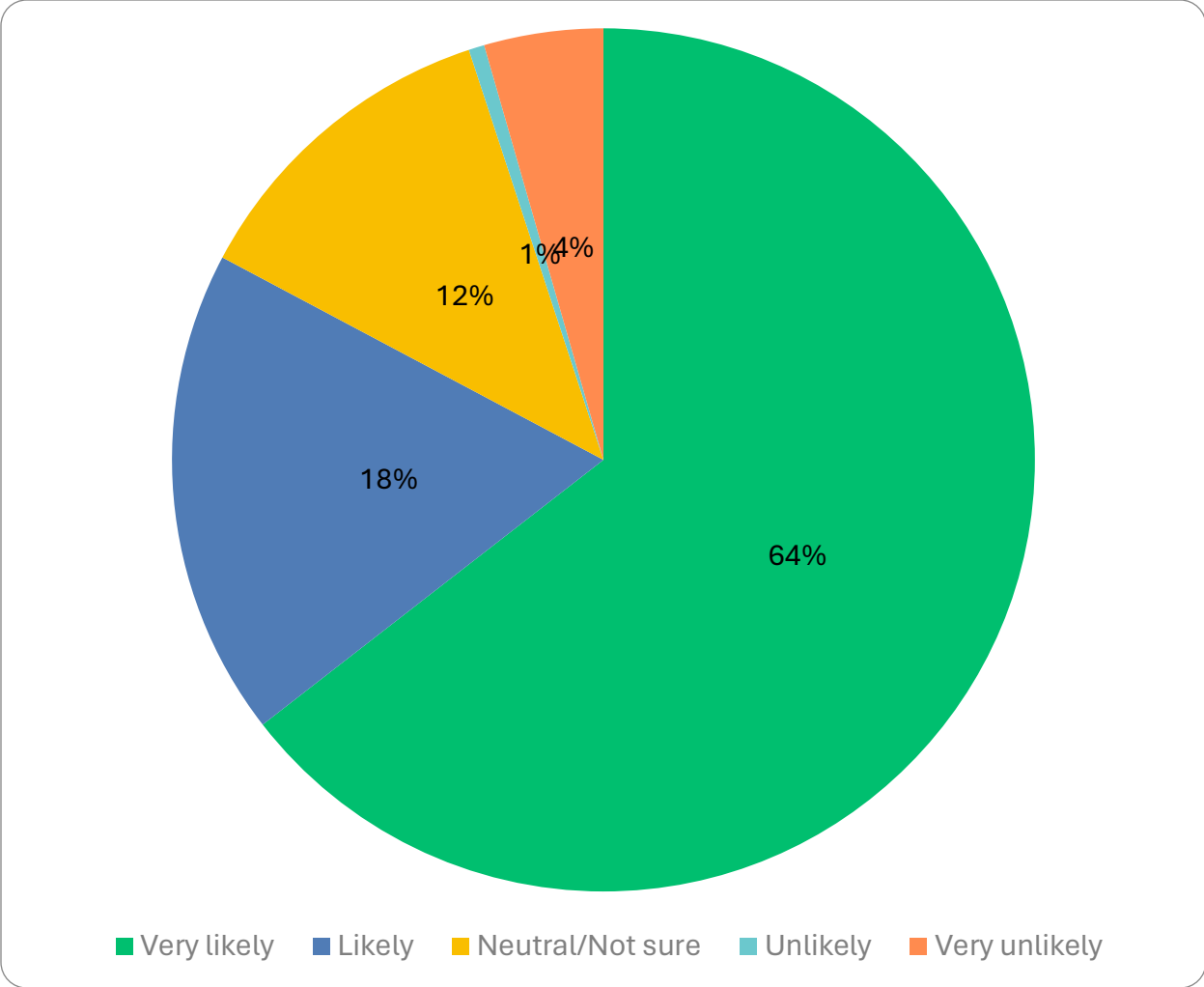


**Question: How would you prefer the outdoor aquatic center's operations and maintenance to be funded?**



**Question: How far would you be willing to travel to access the outdoor aquatic center?**





**Question: How likely are you to recommend the outdoor aquatic center to others in the community?**

## 4 – SITE SELECTION

### G. SITE EVALUATION

One of the most critical factors in the study is determining which site is most suitable to meet the current and future needs of the Service Area. Every community has its own needs, demographics, access, size requirements, as well as availability of land. The consulting team was directed to primarily consider two sites for the study:



1. The former Letford Elementary School Site.
2. The property at the Southeast corner of County Road 46 ½ and County Road 20 referred to within the Study as the Field Site.

A custom-tailored matrix has been implemented to help determine the most suitable candidate for future development of the Aquatics Center.

When the consulting team first set out to evaluate the two potential sites, there were several discussions with the steering committee with respect to vision for the facility, traffic and neighborhoods, connections to the Town center and adjacency to compatible amenities within the community. One of the main topics was whether the facility should be designed to focus solely on the immediate community of Johnstown, or have amenities and a location that would be a regional draw from outside the primary service area.

Through further dialogue with the advisory committee, it became evident that the need for the site to have easy vehicular access from all points of the service area was of prime importance, as was the ability to become a focal point of a larger park masterplan with potential for significant future expansion. Several weighting factors in the matrix were modified at this time, and another criterion evaluated. The final matrix of the two sites is included in the study with resulting figures that are quite close in comparison.

It is noteworthy that both sites considered in the matrix are currently owned by the Town of Johnstown, but neither has been studied with respect to inclusion in an overall parks masterplan for the community. However, as both sites are community owned, it is very likely both will be available when funding for the project is obtained. In brief, several attributes of each site include:

- Letford Site (Mature trees in place along with existing utilities)
- Field Site. (Plenty of room to grow, utility extensions would be needed for development)

Ultimately, it was determined that for the purposes of the study, the Field Site would best fit the needs of the facility program and support the future needs of the growing community. The following is a list of chief factors in this decision.

- Ability to accommodate future expansion.
- Quick access from CR 46 ½ and CR 17.
- Easy vehicular access from most locations in the service area.
- Great vehicular visibility
- Ability to be a focal point of robust development of the overall site.
- Proximity to existing recreational amenities.

The purpose of the site selection section of the study is to arrive at an unbiased determination of which of the two sites evaluated would be the best for the citizens of the service area in fulfilling their aquatic needs. Both sites would be excellent choices for developing an aquatic facility. Each option has distinct and unique properties that would benefit an aquatic facility.

Criteria	Average Weight Factor	Johnstown Weight Factor	Field Site Rating	Field Site Score	Letford Site Rating	Letford Site Score
1) Adequate Size (3-10 ac)			8 ac		5.0 ac	
a) Outdoor Component compatibility	6.3	20	8	160	4	80
Comments			Well suited for future park development		Noise and traffic concerns for surrounding neighborhoods	
b) Future expansion capability	6.75	20	10	200	2	40
Comments					Too small for Future Expansion	
2) Ownership/Acquisition			Town Owned		Town Owned	
a) Acquisition Time	8.88	10	10	100	8	80
Comments					Would have to negotiate land ownership from School District	
3) Proximity to existing Parks and Recreation facilities	3.63	10	9	90	5	50
Comments			Proximity to existing YMCA and potential future park development			
a) Operation and Maintenance Efficiency	4.13	8	7	56	6	48
Comments			Dependant on future operator		Town Has some other facilities close by	
4) Proximity to User Groups						
a) Neighborhoods	2.88	8	6	48	9	72
Comments			Within area of anticipated growth		Close to existing neighborhoods	
b) Seniors	1.88	8	5	40	5	40
Comments			Seniors dispersed throughout community		Close to existing neighborhoods	
c) Public Schools	2	8	5	40	7	56
d) Private Schools	1	1	5	5	5	5
e) Business Partners (hospitals, day care providers, etc.)	1.5	8	8	64	8	64
5) Land Use Compatibility			Requires Re-Zoning		Requires Re-Zoning	
a) Consideration of Community Master Plan (future)			TBD		TBD	
b) Consistency with Zoning Ordinance	1.5	10	5	50	5	50
c) Compatibility with Airport	0	0	0	0	0	0
Comments						
d) Compatibility with Adjacent Uses	2.5	8	10	80	8	64
Comments					Neighborhoods	
e) Business Development Potential	1.5	8	8	64	10	80
Comments					Potential pedestrian connector to Downtown	
f) Urban Renewal Potential	1.5	8	0	0	6	48
Comments					Potential tie with downtown	
g) Traffic issues	4	8	7	56	5	40
Comments			Decel lanes should mitigate any concerns		Could increase traffic on neighborhood streets	
h) Lighting issues	2.13	6	8	48	6	36
i) Noise issues	1.75	4	8	32	3	12
Comments					Proximity to existing neighborhoods	



6) Existing Constructions	2.5	2	5	10	5	10
Comments			Vacant		School previously demolishec	
7) Soil Conditions						
a) Foundation systems	1.63	3	8	24	8	24
Comments			Soils Conditions are unknown at this time		Soils Conditions are unknown at this time	
b) Excavation	1.25	3	9	27	6	18
Comments			Relatively flat. Surcharge could give good bearing capacity.		Potential for contamination from previous construction	
c) Groundwater	2.5	3	8	24	8	24
Comments			Fairly high, out of flood plain			
8) User Access						
a) Vehicular	3.38	8	10	80	7	56
Comments Approximately 10 min. driving time is optimal			Easy access, much of population within travel time		Near Commercial and Downtown Business Districts. Speed limits may introduce coniestion.	
b) Pedestrian	2.63	8	6	48	9	72
Comments Approximately one-half mile is optimal			Much of population within travel distance, but busy intersection may be dangerous for children		Very close proximity to existing neighborhoods	
c) Bicycle	3.63	8	4	32	9	72
Comments Approximately 15-18 min. cycling time is optimal			Easy access, large population within travel time, but surface crossing at both County Roads is of concern		Near Commercial and Downtown Business Districts as well as neighborhoods	
d) Public School Buses	2.13	8	7	56	7	56
Comments On-site bus drop-off, parking and turn around desired			Ample space to maneuver		Ample space to maneuver	
e) Public Transit System	2.13	8			9	72
Comments Easy access for pedestrians to and from bus stop, few improvements needed on site to accommodate			NA		NA	
9) Consistency with Greenway and Bicycle Master Plans	0	0	0	0	0	0
Comments			No masterplan currently in place		No masterplan currently in place	
10) Landscaping						
a) Existing Features	1.38	2	4	8	9	18
Comments			No existing landscaping on site		Many mature tress would be saved	
b) Potential Features	1.88	3	5	15	5	15
Comments						
c) Distinctive views	2	7	10	70	4	28
Comments			Hi visibility from County Roads		Site is located off of main arterials	
11) Environmental Issues						
a) Wetlands	0	0	0	0	0	0
b) Endangered species	0	0	0	0	0	0
c) Floodplains	2.5	10	8	80	10	100
12) Microclimate						
a) Solar Exposure	2.03	1	5	5	7	7
b) Wind Exposure	1.41	1	5	5	5	5
c) Natural Ventilation	1.78	1	5	5	5	5
d) Daylighting	1.91	1	5	5	5	5
<b>Total</b>	<b>90.5</b>	<b>230</b>		<b>1627</b>		<b>1452</b>
<b>Ranking</b>				<b>1</b>		<b>2</b>

# 5 – CONCEPT DESIGN

## H. Johnstown Aquatic Center

### *Field Site*

The concept plan illustrated in the study is placed on the north end of the Field Site, comprising approximately 8 acres along County Road 46 ½. The area described is the northernmost portion of a much larger site, much of which exists within a regulated floodway. Much of the site being studied has received dirt surcharge from adjacent developments, has been elevated, and does not exist within the floodplain or floodway.



The target audience for the purposes of the study is a diverse group of users of all ages and aquatic needs, with the exception of competitive swimming. It was expressed early on among the various stakeholders that the primary need in the community is for an Activity and Exercise Pool containing a Lazy River, Zero Depth Entry Area, an area to conduct swim lessons, an area for exercise lap swimming, and one that has attractions that will respond to the teen population in the service area. The diversity of ages that will simultaneously occupy the complex was a driving factor in the overall layout of amenities, and this philosophy is most apparent in the separation of the main bodies of water into a lap/ exercise zone, and an activity pool zone. Separation is not meant to isolate individuals in one zone or another, but to define areas where individual age groups will gravitate. This configuration sets up an area that is quieter in nature within the lap pool environment, and an activity zone that is brimming with excitement. The implementation of this design approach will make it a pleasant and entertaining experience for simultaneous use by the diverse set of anticipated users.

Vehicular access to the complex occurs via new curb cuts along County Road 46 ½ on the north and County Road 17 on the west. A detailed traffic study of the nature of the vehicular entrances is not within the scope of the study, but the potential for needed improvements along the main access roads are anticipated and included in the cost opinion contained within the study. The main entrance drives include the ability to bi-pass the parking field to access further development to the south. The main parking field connects the two vehicular entries with a centralized drop off area at the bath house/ main entry point. This configuration also allows multiple access points for emergency vehicles. The study suggests limiting the bather load to 600 individuals, and the responding parking is 150 spaces. This equates to 1 parking stall for every 4 bathers using the complex. It is to be noted that this particular use is not defined within the Town Planning Ordinance and will require verification as the project moves forward.

The bath house building serves as the main entry point to the complex for customers. There is a covered queueing area at the entry which passes an office where fees can be paid or ticketing occurs. Customers enter via an open-air breezeway between the main dressing area and mechanical components of the bath house. Upon entry, users are immediately greeted by a view of the splash pad, which will create excitement upon entry and visually draw the user in. Those who need a change of clothes will turn to the right, after having passed the lifeguard offices, toward the dressing room entries. Included are five full-service ADA compliant gender-neutral changing rooms which offer a shower, toilet, and lavatory. The men's and women's locker areas contain toilets toward the entries and showers with the dressing areas toward the rear of each space. The rooms are envisioned to be 'open air' with only supplemental exhaust air needed to draw fresh air into the spaces. Also within the locker room 'block' of space would be the first aid and lifeguard office, positioned to have excellent views of the bodies of water. Outdoor lockers and on-deck showers are provided at the dressing room entries.

The mechanical room 'block' west of the breezeway contains a multi-purpose room, pool equipment room, and storage area as well as a modest concession area. It is envisioned that the concessions will be supplemented by a controlled area set up for food trucks, which will provide the bulk of concessions for the center. The ability to access food outlets from both the paid (controlled) and non-paid sides of the perimeter fence will allow for community gathering spaces both outside and inside the aquatic environment. Directly adjacent to the concession outlets is a covered pavilion for shaded parties and general use.

Within the fence there are three main water attractions: the Splash Pad, the Activity Pool/ Lazy River, and the Multi -Use Lap and Exercise Pool.

### **Splash Pad**

The Splash Pad is primarily an attraction for toddlers and younger children. It is comprised of spray features which arise directly out of the deck of the pool and do not sit in a body of water. It was expressed through stakeholder discussions, that the center could be themed with an agricultural aesthetic which would respond to the context of the community with its agricultural roots. Features could be themed like farm animals, tractors, windmills and the like to present a fun and unique experience to the younger users. While a definitive selection of features is not determined, elements could include:

- Geysers/ ground sprays
- Spray tunnels
- Free-standing soakers
- O- Rings/ Spiral Tunnel
- Water Cannons
- Tumble Buckets
- Tot slide

### **Activity Pool**

The activity pool is the hub for excitement in the center. As designed it includes a zero-depth entry area, a quiet zone for the younger children, a multi-use sports pool with deeper water, a lazy river, and a two-flume slide tower (one tube slide and one body slide.) As with the Splash Pad, an agricultural theme could be implemented. Several amenities are envisioned to specifically attract the teen population, such as a climbing wall and water vortex. Other attractions which have not been specifically determined could include:

- Lily pad walk
- Basketball/ Volleyball
- Zip Line
- Bubble Pit
- Rain Drop
- Flow Curtain
- Pipe Shower
- Private Cabanas
- Lawn Area
- Lawn games
- Sun sails/ Umbrellas

### **Lap/Exercise Pool**

To the right upon entry is the Lap and Exercise Pool Zone. This area is separated from the balance of the activity zone by a low landscaping wall and rolling gates. It is envisioned that this quieter zone can be closed off during hours of operation that are not compatible and reduce guarding need. Elements in this Zone such as a 1-meter diving board would be a draw for teens and adults as well. Other elements could include:

- Drop Slide
- Spa with fountain wall
- Log Roll
- Private Cabanas
- Shade Sails / Umbrellas
- Diving Board

As mentioned in the Site Selection Section of the study, one of the main reasons the Field Site was preferred was the ability to expand over time. An area of open space has been preserved on the west fence line extending to County Road 17 for future expansion. The exact programming need for such an expansion has not been determined, but this area of land will ensure the ability to do so as Johnstown continues to develop and grow in the decades to come.





**AREA CALCULATION**

ACTIVITY POOL WATER AREA	=	15,760 SF
LAP POOL WATER AREA	=	3,815 SF
SPA WATER AREA	=	575 SF
SPLASH PAD AREA	=	2,160 SF
<b>TOTAL WATER AREA</b>	<b>=</b>	<b>22,310 SF</b>
<b>DECK TOTAL AREA</b>	<b>=</b>	<b>60,775 SF</b>
<b>BUILDING AREA</b>	<b>=</b>	<b>10,041 SF</b>
<b>TOTAL BATHER LOAD</b>	<b>=</b>	<b>600 LIMITED</b>



ENLARGED SITE PLAN  
 JOHNSTOWN AQUATICS  
 Address: WELLS COUNTY RD 46, Johnstown, COLORADO  
 Issued: NOV. 14, 2023

PREPARED BY: [Name]
   
 CHECKED BY: [Name]
   
 DATE: [Date]
   
 SHEET NO. 08
   
 OF 102

# 6 – PROGRAM AREA SUMMARY AND COST OPINION

As the programming exercise neared completion, the Consulting Team began to assemble an opinion of anticipated costs associated with the project. The figures were derived from a number of sources and methods including historical data on a square foot basis, as well as real time costs of items experienced in the field for major aquatic elements. Because of the nature of many unknown aspect of the project such as soils conditions, existing utility locations, traffic patterns, as well as escalation projections, the costs contained in the report should be viewed as preliminary, based on 2023 market conditions, and subject to change. The soft cost figure contained here-in is a middle of the ground per cent which has been experienced with a project of this magnitude.

## Johnstown Field Site Aquatics Complex

Concept Design - Preliminary Estimate of Construction Costs

01/11/24

Item	Quantity	Unit	Unit Cost	Extension
<b>Demo Work</b>				
Misc existing demolition	1	ls.	\$ 5	\$ 120,000
			<b>Subtotal</b>	<b>\$ 120,000</b>
<b>SITE WORK</b>				
Earthwork / Site Prep	6	Ac	\$ 50,000	\$ 300,000
Site Lighting	3	Ac	\$ 25,000	\$ 75,000
New Parking Paving / striping / signage / curb cuts	3	Ac	\$ 200,000	\$ 600,000
Storm Water Retention	1	ls.	\$ 150,000	\$ 150,000
Access Road Improvements	1	ls	\$ 250,000	\$ 250,000
Utility Service Extension	1	ls	\$ 250,000	\$ 250,000
			<b>Subtotal</b>	<b>\$ 1,625,000</b>
<b>LANDSCAPE &amp; SOIL PREPARATION</b>				
Canopy Tree (4-5" cal)	40	ea	\$ 1,500	\$ 60,000
Mid-size Tree	10	ea	\$ 1,200	\$ 12,000
Ornamental Trees (10" Ht. min) (min 10%)	6	ea	\$ 1,750	\$ 10,500
Sod	9,000	sf	\$ 2	\$ 18,000
Landscape Buffer Enhancement (North and between amenities)	12,000	sf	\$ 4	\$ 48,000
Planting beds (0.2ac soil, mulch, plant material)	4,000	sf	\$ 8	\$ 30,000
Irrigation	20,000	sf	\$ 2	\$ 40,000
Seeding (non irrigated areas )	100,000	sf	\$ 0	\$ 25,000
			<b>Subtotal</b>	<b>\$ 243,500.00</b>
<b>Pool Deck</b>				
Concrete Pool Deck	60,775	sf	\$ 8	\$ 486,200
Pool Deck Drainage System	25,000	sf	\$ 3	\$ 75,000
Pool Deck Fencing	1,480	lf	\$ 150	\$ 222,000
Pool Deck Lighting	1	ls	\$ 60,000	\$ 60,000
			<b>Subtotal</b>	<b>\$ 843,200</b>
<b>SITE FURNISHINGS</b>				
Shade Sails	6	ea	\$ 12,000	\$ 72,000
Cabanas	10	ea	\$ 6,000	\$ 60,000
Large Umbrellas	14	ea	\$ 4,500	\$ 63,000
Picnic / Pavilion Shade structure	1	ea.	\$ 35,000	\$ 35,000
Furniture	1	ls.	\$ 50,000	\$ 50,000
On Deck Lockers	1	ls	\$ 3,250	\$ 3,250
On Deck Showers	4	ls	\$ 6,000	\$ 24,000
			<b>Subtotal</b>	<b>\$ 307,250</b>

**POOLS AND FEATURES**

**NEW OUTDOOR POOL**

Spray Pad	2,170	sf	\$	357	\$	774,690
4 Lane programming Pool	3,800	sf	\$	550	\$	2,090,000
Spa	460	sf	\$	1,650	\$	759,000
Activity Pool	22,000	sf	\$	550	\$	12,100,000

**POOL AMENITIES**

Sprays & Geysers	1	ls.	\$	75,000	\$	75,000
Play Structure	1	ls.	\$	250,000	\$	250,000
1 M Diving Board	1	ea.	\$	15,000	\$	15,000
Lazy River Mechanical	1	ea.	\$	60,000	\$	60,000
Water Slide and Tower	1	ea.	\$	425,000	\$	425,000
Water Slide Mechanical	1	ea.	\$	100,000	\$	100,000
Vortex	1	ea.	\$	25,000	\$	25,000

**POOL EQUIPMENT / FURNISHINGS**

Lifeguard Stands	5	ea.	\$	4,000	\$	20,000
Handicap Lift	2	ea.	\$	8,000	\$	16,000
Signage	1	ls.	\$	25,000	\$	25,000

**Subtotal \$ 16,734,690**

*Dewatering ( Not Needed )*

\$ -

**POOL TOTAL**

**\$ 16,734,690**

**POOL HOUSE BUILDING AND MECHANICAL ROOM**

New Building Finished Area	5,530	sf	\$	350	\$	1,935,500
New Building Exterior Overhang at entry	781	ls	\$	120	\$	93,720
New Enclosed Storage and Pool Equipmenmt Building	3,730	sf	\$	180	\$	671,400
FF&E / Security / LV	1	ls.	\$	150,000	\$	150,000

**Subtotal \$ 2,850,620**

**CURRENT DIRECT COST OPINION**

**\$ 22,724,260**

**ESCALATION NOT INCLUDED**

\$ -

**BID DATE DIRECT COST OPINION**

**\$ 22,724,260**

**GC COSTS**

Project General Conditions	6%		\$	1,363,456
Construction Contingency	5%		\$	1,136,213
Construction Contingency	14%		\$	3,181,396

**Item**

Construction Contingency

**Quantity Unit Unit Cost Extension**

5% \$ 1,136,213

**GC and SOFT COSTS**

**\$ 6,817,278**

**TOTAL CONSTRUCTION BUDGET**

**\$ 29,541,538**

**NOTES:**

**\$ 29,541,538**

1. This cost opinion is preliminary and based on past experience. Actual costs will vary based on final design and scope.
2. Soft Costs may include but are not limited to: permitting, tap fees, testing, survey, design/ legal fees, and FF&E.

# 7 – OPERATIONS ANALYSIS

## a. Operation Summary

All the information gathered to this point is used to develop an operational plan for the proposed facility. It is important to note again that B\*K is an operational and planning firm. As such we provide third party, independent analysis regarding operations, and have no financial gain associated with the facility being built and/or operated.



B\*K developed operational plans for the concept plan currently being developed by OLC and Counsilman-Hunsaker. The concept includes 3 bodies of water. The activity pool features a zero-depth pool, play structure, lazy river, vortex and tube water slide. The lap pool has 4 lanes with diving boards and separate exercise space. The spa is catered to adults. In addition the facility would have a runout water slide, splash pad, shade structures, rental cabanas, office, lifeguard space, locker rooms, concessions, and food truck area.

While this is a new pool within the market, alternative facilities exist within the area. Most of these facilities are indoor, and the outdoor pools do not have the amenities being considered for this center. While the amenities allow for a greater experience, the presence of other providers and preconceived notion of what a pool costs may challenge the operations.

B\*K takes a conservative approach when developing operational plans for proposed facilities. For the operational portion of the study with the Town of Johnstown the following assumptions were made.

- The final concept plan could impact part-time staffing levels and site could influence revenue.
- The first year of operation will be 2026 or later.
- Seasons:
  - Outdoor Pool – 12 Weeks
- The presence of other providers in the market will remain the same.
- The operator of the facility is the Town of Johnstown. The plan, specifically full-time staffing, identifies the costs associated with a stand-alone facility.
- Full-Time compensation has been compared to the Colorado market.
- Part-time rates are based on front desk, concessions and pool attendants at \$15.50/hr, lifeguards at \$17.25/hr and lead lifeguards at \$19.00/hr.
- Johnstown pays for water/sewer.
- No internal charge backs have been factored into this plan to account for; HR, IT Support, Building & Grounds, Marketing, etc.
- The operational plan is built from industry standards regarding staffing and best practices associated with aquatic operations.
- Bank charges are calculated at 3% of revenue generation expected to be from credit card usage.



Using the concept provided by OLC, B\*K developed an operational plan for the aquatic center. Using the best information available, combined with the Town’s operational goals, B\*K created the following 5-year projection.

	Year 1	Year 2	Year 3	Year 4	Year 5
Expenses	\$860,287	\$868,889	\$894,956	\$921,805	\$949,459
Revenue	\$632,340	\$663,957	\$697,155	\$711,098	\$725,320
	(\$227,947)	(\$204,932)	(\$197,801)	(\$210,707)	(\$224,139)
Percentage w/ Capital	73.5%	76.4%	77.9%	77.1%	76.4%
Capital (cumulative)	\$50,000	\$100,000	\$150,000	\$200,000	\$250,000

It is important to note that total expenses in this model reflect a \$50,000 annual allocation to a capital sinking fund. That fund is dedicated to improvements/repairs needed at the aquatic center, not a full facility replacement.

**Additional Recommendations**

- With the investment Johnstown is considering for an aquatic operations, a full-time recreation position should be created. While the majority of their time will be spent with the pool, such a position would be able to assist in other aspects of recreational programming. In addition, due to the complexity and size of the maintenance and operations associated with this size of an aquatic center, a full-time maintenance position is recommended.
- Annual allocation for capital/equipment replacement. These funds would be set aside annually to accumulate allowing Johnstown to replace critical components of the pool operation without impacting the overall Town budget. Items typically include pumps, motors, heaters and other mechanical systems.
- Purchase/Lease recreation management software. A solution should be implemented to assist with program registration, admission management, facility reservations, and point-of-sale transactions. Many of these fully integrate to financial software and/or Town websites.
- Develop aquatic operations manual. The document should include items such as:
  - Staff schedules and attendance policy
  - Lifeguard expectations and rotations
  - Inservice training requirements
  - Incident management and reporting
  - Cash handling procedures

### ***Additional Comments***

There are potential ways to narrow the associated expenses, but not significantly. There are also ways to increase the revenue, but regardless of the methods employed it is the opinion of B\*K that it will be extremely difficult in this market to recover the operating costs, let alone the operating costs plus the debt service. That is not to say that there isn't a market for these facilities and services, quite the contrary, but the market will struggle to financially support a facility.

While this plan was developed with the Town of Johnstown as the operator, the Town may choose to contract with another provider. The Town has existing relationships with the YMCA of Northern Colorado which currently operates the Johnstown YMCA adjacent to the proposed site of this aquatic center. Thompson Rivers Parks & Recreation District also serves Johnstown residents with recreational activities, and operates the outdoor pool in Milliken.

# 8 - OPERATION DETAIL

This section of the report analyzes the operation of the concept plan provided to B\*K by OLC.

## Outdoor Seasonal Family Aquatic Center

- Activity Pool (approximately 14,000 square feet)
  - Zero Depth Entry
  - Play Structure
  - Quiet Section
  - Active Section with AquaZip and/or other feature
  - Lazy River with tube slide, vortex and bubblepit
- Slide Tower
  - Runout slide
- Lap Pool (3,800 square feet)
  - 4-lane 25-yard Course
  - 1-meter Diving Boards
  - Exercise Area
- Spa (570 square feet)
- Splash Pad (2,300 square feet)
- Entry Building
  - Office
  - First Aid
  - Lifeguard Station
  - Locker Rooms
  - Family Changing Rooms
- Multipurpose Building
  - Classroom
  - Pool Equipment
  - Concessions
  - Storage
- Shade Structures
- Rental Cabanas
- Food Truck Area
- Parking with Drop Off

The assumptions above have been incorporated into the operations plan for the Town of Johnstown. Again, B\*K takes a conservative approach when developing operational plans for proposed facilities.

In addition:

- 12 Weeks (include Memorial Day and Labor Day weekends)
  - Tue – Sun Noon – 8pm
- Season Pass Structure
  - Resident Youth (2-17) \$80
  - Adult \$100
  - Household \$260
  - Senior (65+) \$80
  - Season Passes for non-residents would be 1.5 times the cost of residents
- Daily Admission Structure
  - Resident Under 2 Free
  - Youth \$8
  - Adult \$10
  - Senior \$8
  - Non-Resident rate would be 25% greater than residents
- Punch Pass Structure
  - Resident Under 2 Free
  - Youth \$72
  - Adult \$90
  - Senior \$72
  - Non-Resident rate would be 25% greater than residents
- Program Fees
  - Group Exercise Session \$30
  - Learn to Swim \$50
  - Birthday Parties \$200
  - Dive In Movie \$5.00/person
  - Little Swimmers \$5.00/family
- Rental Structure
  - Lap Pool \$300 for 2 hours
  - Activity Pool \$800 for 2 hours
- Most of the maintenance would be handled by Town of Johnstown staff. B\*K would recommend including winterizing and de-winterizing the new pool into the construction contract for at least the first 2 seasons.
- Full-time positions associated with maintenance are factored into the cost accounting model.
- The future pool operation would have a concession stand open during open swim hours. To maximize the revenue associated with the facility, food trucks would be accessible both from within the facility as well as outside allowing general public to access without paying admission to the pool.
- A Capital Improvement/Renovation Sinking Allocation of \$50,000 annually has been included.
- The utilities were factored based on 20,600 sq. ft of water surface and 10,500 indoor sq. ft. space (bathhouse and mechanical).
- Expenses for water and trash were included.



**Expense Model:** The expense model has been built with the best information available at the time of the study. The model reflects recommendations from B\*K as to how the Town might operate the facility in an efficient and effective manner.

Category	
Personnel	\$501,286
Commodities	\$119,639
Contractual	\$189,361
Sub-Total	\$810,361
Capital Replacement Allocation <sup>6</sup>	\$50,000
Total Expense	\$860,287

**Revenue Model:** The revenue model was built with the best information available at the time of the study. The model reflects how the Town might operate the facility with the intent of balancing cost recovery along with accessibility. It is important to note that the revenue figures do not reflect capacity.

Category	
Fees (passes/admissions)	\$429,030
Programs	\$56,270
Other <sup>7</sup>	\$147,040
Total Revenue	\$632,340

**5-Year Projection:** The following is a 5-year projection for the future operation. Year 1 is the first full season that the pool is available. The operation reflects reasonable weather patterns for all 5 years. The total operational expense includes the \$50,000 allocated to improvement allocation.

	Year 1	Year 2	Year 3	Year 4	Year 5
Expenses	\$860,287	\$868,889	\$894,956	\$921,805	\$949,459
Revenue	\$632,340	\$663,957	\$697,155	\$711,098	\$725,320
	(\$227,947)	(\$204,932)	(\$197,801)	(\$210,707)	(\$224,139)
Percentage w/ Capital	73.5%	76.4%	77.9%	77.1%	76.4%
Capital (cumulative)	\$50,000	\$100,000	\$150,000	\$200,000	\$250,000

<sup>6</sup> B\*K would recommend the Town begin an improvement account for outdoor pool. \$50,000 would be allocated annually to the account to build a balance that the Town could then access for pool improvements/repairs.

<sup>7</sup> The Other category includes concessions, birthday parties and rentals.

### Full Time Staffing

It is the opinion of B\*K that a full-time recreation position for aquatics is needed to accommodate the full operation. This position would spend the summer months overseeing the operations, and the shoulder seasons with start-up and limited access/use by swim team. Due to the number of seasonal staff required to operate the facility, a position dedicated to recruiting and retaining staff is critical. The operations will also have an impact on Public Works (parks maintenance), and a position may be necessary to adequately maintain the facility and surrounding area. One has been identified below and included in the overall expenses of the operation although these positions may be found in a different budget. This assumes that the facility is aligned with the current Town operations. As such there are no fees associated with HR, IT, landscaping, security, etc. If the facility were to operate as a true stand along operation, those numbers will need to be calculated into the operational expenses.

Positions	Pay Grade	Salary	Positions
Recreation Supervisor		\$75,000	1
Maintenance Tech		\$60,000	1
Benefit Factor	35%	\$47,250	
Total		\$182,250	

### Part Time Staffing

Positions	Hourly Rate	Hours	Total
Pool Manager	\$20.00	41	\$10,530
Lead Lifeguard	\$19.00	73	\$18,031
Lifeguard	\$17.25	732	\$164,039
Lead Front Desk	\$17.25	41	\$9,082
Front Desk	\$15.50	41	\$8,161
Pool Attendant	\$15.50	81	\$16,322
Lead Concessions	\$17.25	41	\$9,082
Concessions	\$15.50	41	\$8,161
Pool Cleaner	\$17.25	54	\$18,630
Aquatic Programs			\$20,076
Rentals Staff			\$7,920
Benefit Factor	10.0%		\$29,003
Total			\$319,036

- B\*K factored early arrival, late departure, for part-time staff to allow for setting the pool deck and provide training windows for lifeguards.
- In developing the operational plan B\*K accounted for lifeguards being present whenever individuals were in the pool, regardless of if they were part of a practice, lesson, group exercise, etc.

### NOTES:

- Although the season typically is 12 weeks, 13 full weeks of staffing has been included to account for orientation, training and assistance in opening/closing.
- Lifeguard training was not factored into the operational plan.
- Programs are not factored at capacity.
- Rentals are not factored in at capacity.
- Birthday parties are not factored in at capacity.
- It is the belief of B\*K that Johnstown, or operator of the facility will be well versed in these programs and rental opportunities. As such the initial focus of the operation should be to provide these programs and services with excellent customer service. As the facility moves into years 2 and 3, they can add other specialty programs.

## Projected Expenditures

<b>Commodities/Service &amp; Supplies</b>	
Office supplies (forms, ID, etc.)	\$1,000
Chemicals	\$56,727
Maintenance/Repair/Materials	\$5,000
Janitor Supplies	\$8,000
Recreation supplies (LTS, Water Ex, Lap)	\$5,000
Safety supplies (First Aid, rescue tubes)	\$3,000
Uniforms	\$4,500
Printing/Postage	\$2,000
Concessions (food/supplies) <sup>8</sup>	\$30,912
Other Misc. Exp.	\$2,000
Fuel/Mileage	\$1,500
<b>Sub-Total</b>	<b>\$119,639</b>

<b>Contractual</b>	
Utilities	\$93,354
Water/Sewer	\$40,000
Trash	\$5,000
Insurance (property & liability)	\$7,780
Communications (phone)	\$2,000
Contract services (HVAC, Fire Alarm, Misc)	\$10,000
Equipment Maintenance	\$3,000
Advertising	\$5,000
Training	\$4,000
Conference	\$2,000
Membership Dues/subscriptions	\$1,500
Bank charges	\$14,228
Other	\$1,500
<b>Total</b>	<b>\$189,361</b>

<b>Capital Replacement Fund</b>	
Annual Allocation	\$50,000
<b>Sub-Total</b>	<b>\$50,000</b>

<b>Totals</b>	
Staffing	\$501,286
Commodities	\$119,639.00
Contractual	\$189,361
Replacement Fund	\$50,000
<b>Total<sup>9</sup></b>	<b>\$860,287</b>

The following revenue opportunities developed by B\*K, are based on information provided by Johnstown, familiarity with the market, and experience as facility

<sup>8</sup> Factored at 50% of total revenue generation.

<sup>9</sup> This total does not include debt service.

operators. The projections are what B\*K feels the department could anticipate achieving in year 1 of the operation.

## Revenues

Category	
Fees	
Daily Admission	\$332,000
Punch Pass & Season Pass	\$14,220
Concessions/Vending	\$82,810
Sub-Total	\$429,030
Aquatic Programs	\$56,270
Sub-Total	\$56,270
Other	
Concessions	\$28,800
Other Aquatic	\$6,400
Birthday Parties	\$28,800
Cabanas	\$34,560
Sub-Total	\$147,040
<b>Total</b>	<b>\$632,340</b>

## 9 – NEXT STEPS

Methods to move the project forward and to procure funding need to be developed. We recommend that the current citizens advisory committee, comprised of volunteers from all walks of life who are interested in seeing that this project lives up to its complete potential, continue to serve in their current capacity. The



advisory committee would be charged with conducting ongoing community engagement, fundraising, campaigning, seeking out partnerships for ongoing operations, and reporting back to the Governing Bodies with recommendations as well as delivering a clear message to the community.

A governance structure for the Aquatics Center should be created through careful consideration. This structure could include the partners that participated in the study, or a new group of partners comprised of some or all of the former partners as well as new potential entities. Additional operational and equity partners should be sought out and considered. In the event multiple partners come forward, the consulting team recommends the engagement of a partnership facilitator as well as a legal team seasoned in both partnership agreements and State of Colorado legal issues in formation of overlay/ special districts and or public/ private partnership agreements.

If there are proposed modifications to be made to existing tax basis which would cover costs of ongoing operations, maintenance, and construction, a public relations firm should be engaged to deliver clear and unbiased information to the voting public within the anticipated service area.

Full design services will also be needed, so that bid-ready construction documentation and specifications are prepared at the time that full funding is available.

We look forward to continuing to work with Johnstown to fulfill its current and future aquatics needs.