Aquatic Facilities Study 2012

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City of Alexandria, VA

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Mission Statement

To be a vibrant, safe, and attractive city of opportunity through the development of effective and efficient recreation programs, facilities, and parks for all citizens and visitors to enjoy.

Source:
Department of Parks, Recreation, and Cultural Activities

City of Alexandria, VA

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1.0 Background

Introduction

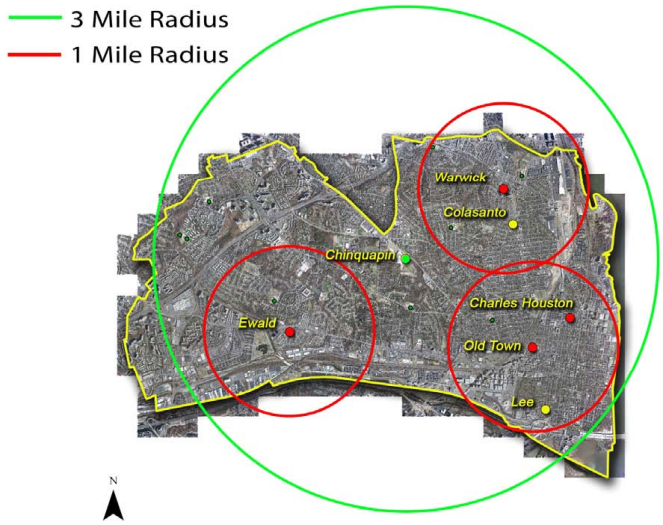
Aquatics are an important part of recreation nationwide. Aquatics often lead the list of desired public recreational amenities in city wide park plans. Additionally, a strong aquatics program is vitally important for all children and adults to learn to swim–especially in a community adjacent to a large river like the Potomac.

The City of Alexandria currently operates and maintains a system of five (5) aquatic facilities at the following sites:

Chinquapin	Indoor	(Community Size Pool)
Old Town	Outdoor	(Community Size Pool)
Warwick	Outdoor	(Community Size Pool)
Ewald	Outdoor	(Neighborhood Size Pool) May Close FY 2013
Charles Houston	Outdoor	(Neighborhood Size Pool)

These additional aquatic facilities were once in operation, but have now been closed:

Nannie J. Lee	Outdoor	(Neighborhood Size Pool)
Nicholas Colasanto	Outdoor	(Neighborhood Size Pool)



Existing Five Pool Aquatic System

Life Expectancy – 5 to 10 Years

Annual Attendance – 120,000

Annual Operating Costs - $1,600,000

Annual Revenue - $500,000

Annual Operating Subsidy - $1,100,000

Annual Operating Subsidy (Per User) $9.17

In an urban community like Alexandria service radius sizes need to be reduced due to density of population. Using a three mile service radius for Chinquapin (Indoor) – it is apparent that it is centrally located to serve the entire community. In using a one mile service radius for Warwick, Old Town, Ewald, and Charles Houston (Outdoor) – it is

apparent that that there were and are overlaps in service on the east side – while there are gaps in service on the west side.

With the exception of Charles Houston, the majority of these pools are 30+ years old with outdated infrastructure that does not meet current standards. Lee and Colasanto are currently closed due to budget reductions. Ewald is proposed for closure in FY2013. Most of the existing facilities have limited opportunities for expansion and limited parking as currently designed.

In response to these conditions, the City contracted with Kimley-Horn and Counsilman-Hunsaker to prepare a City-wide Aquatic Facilities Study with the following objectives:

A) Confirm the aquatic programming needs of the Community;

B) Verify the types and quantity of facilities to meet these needs;

C) Evaluate the most appropriate locations for facilities based on traffic patterns and use;

D) Determine the financial impact of the construction and operation costs of the facilities;

E) Recommend an aquatic facility system to meet the City's needs for the next 30 years.

Study Methodology

At the request of the City, the aquatic facility study was developed in two phases consisting of the following tasks:

Phase One

TASK I – PRELIMINARY NEEDS ANALYSIS

A. Reviewed City provided data on existing pools, visited existing and potential pool sites, and reviewed 2002 facility audit of the existing pools.

B. Compiled a map exhibit and list of other area providers of aquatic facilities within a twenty-five mile radius that included the type of facility, admission costs, date opened, and location.

C. Conducted research and compiled demographic information necessary to appropriately evaluate the community composition, including population, age distribution, income, weather analysis and economic considerations that could affect the project's viability.

D. Prepared presentation documenting findings, provide benchmark aquatic recreation facility data on three or four similar sized communities (in Virginia and/or Nationwide), and facilitate a discussion on the economic sustainability of potential implementation scenarios. Benchmarking data included preliminary financial impact.

TASK II - PRELIMINARY FINANCIAL IMPACT ANALYSIS

A. Prepared an initial program statement including potential amenities and spaces that may be considered as part of any repairs, renovations or replacement aquatics facilities.

B. Provided a preliminary financial impact analysis based solely upon bench mark data and history collected by the Consultant Team and the preliminary program of potential amenities and spaces to be considered. Data included:

    a. Outline of areas that are under served.
    b. Outline of areas that are under utilized
    c. Outline of first dollar cost impacts regarding repairs, renovations and replacement facilities

C. Presented the initial findings of the financial impact analysis to the City in an internet meeting work session to receive comments and direction.

D. Presented the findings to date to the Park and Recreation Commission at in-person public meetings to receive comments and direction on findings and work to date.

E. The final comments and direction were then incorporated into the preferred facility options and the corresponding financial impact analysis for completion of the Phase 2 Aquatic Facilities Study.

Phase Two

TASK III – NEEDS ANALYSIS

A. Met with City representatives, and stakeholders, including designated community groups and/or individuals involved in the project to analyze needs and determine objectives. Conducted individual interviews as necessary with local education administrators and/or athletic directors, private and public recreation providers, health professionals, competitive swim groups, swim coaches, instructors, activity programmers, youth and seniors groups, and others as requested in order to ascertain existing levels of service and the perceived needs of various user groups in the community.

B. In addition to individual interviews, participated in one public meeting to develop a common vocabulary with the public, review the types of current-day aquatic programming, and to document the types of aquatic programming and facilities the

public would like to have in the future. This discussion included images with commentary on features of other aquatic facilities, background information on historic and contemporary issues in the industry, and an open-forum question-and-answer session to discuss concerns and needs of those individuals and groups attending the meetings. The results of the interviews and public workshop, as well as the information generated in Task I, were used to finalize an aquatic needs analysis.

TASK IV - CONCEPTUAL PLAN

A. Based on the completed aquatic needs analysis, prepared a toolbox of aquatic facility options to meet the needs of the community. These concepts consisted of a variety of aquatic facilities including indoor/outdoor, competition, recreation (large / medium/ small family aquatic facilities), and splash pads.

B. Prepared an opinion of probable construction cost for each toolbox option. Recent project bid figures of similar projects were used as well as national estimating guides and local cost adjustment factors. The hard construction cost figures were supplemented by a development cost factor, which included such "soft" costs as professional fees, survey, geotechnical report, document reproduction, advertisement for bids and all anticipated expenses related to the administration of the project. The sum of these two cost figures is the total project cost so that the City will have a comprehensive overview before making an informed decision about the project. The toolbox options and costs were presented to the City in an internet meeting work session to receive comments and direction.

C. Following the meetings, the findings were documented and reviewed with the City, prior to making final revisions to the toolbox options.

TASK V - FINANCIAL IMPACT ANALYSIS

A. Prepared a preliminary Financial Impact Analysis inclusive of the following information:

1. Other Area Aquatic Providers
2. Market Area Demographics Population, Age, Income
3. Area Aquatic User Groups
   - Historic Usage and Project Level of Growth
4. Facility Management Outline
   - Facility Operating Schedule
   - Facility Capacity Limits
   - Organization Chart Wage Structure
5. Opinion of Probable Revenue
   - Market Penetration
   - Seasonal Usage
   - Develop Fee Structure Options (Low, Medium, High)
   - Opinion of Attendance by User Group Opinion of Revenue

6. Opinion of Probable Expenses
    - Labor Demand
    - Chemical Demand
    - Supply Demand
    - Maintenance and Repair Demand
    - Utility Demand
7. Opinion of Financial Impact

B. The findings of the financial impact analysis were presented to the City in an internet meeting work session to receive comments and direction.

TASK VI – FINAL REPORT AND PRESENTATION

Using the information gathered from the process above, prepared a final Aquatic Facilities Study to document the recommended facilities and improvements to the City of Alexandria aquatic program. Recommendations included:

A. Location of all aquatic facilities with recommendations for types of facilities and simple guidelines for site selection criteria (i.e. population, demographics, service area, adequate space/infrastructure/parking and combined with other park facilities such as community centers/athletic field areas/community parks.)

B. A list and description of other area providers and a description of the types of current-day aquatic programming.

C. Recommendations for improvements to existing aquatic facilities to remain (if applicable).

D. Cost estimates for each facility including planning, design & construction.

E. Implementation scenarios and recommended phasing plan.

F. Financial Impact Analysis inclusive of detailed operating expenses and potential revenue based upon pricing structures.

Planning for Diverse Aquatic User Groups

As we look at city-wide aquatic systems, it is important to include a variety of opportunities to meet the needs of all types of aquatic users. Aquatic users are typically defined by four main groups, each with a different needed configuration for aquatic spaces and different water temperatures. These uses and their characteristics are as follows:

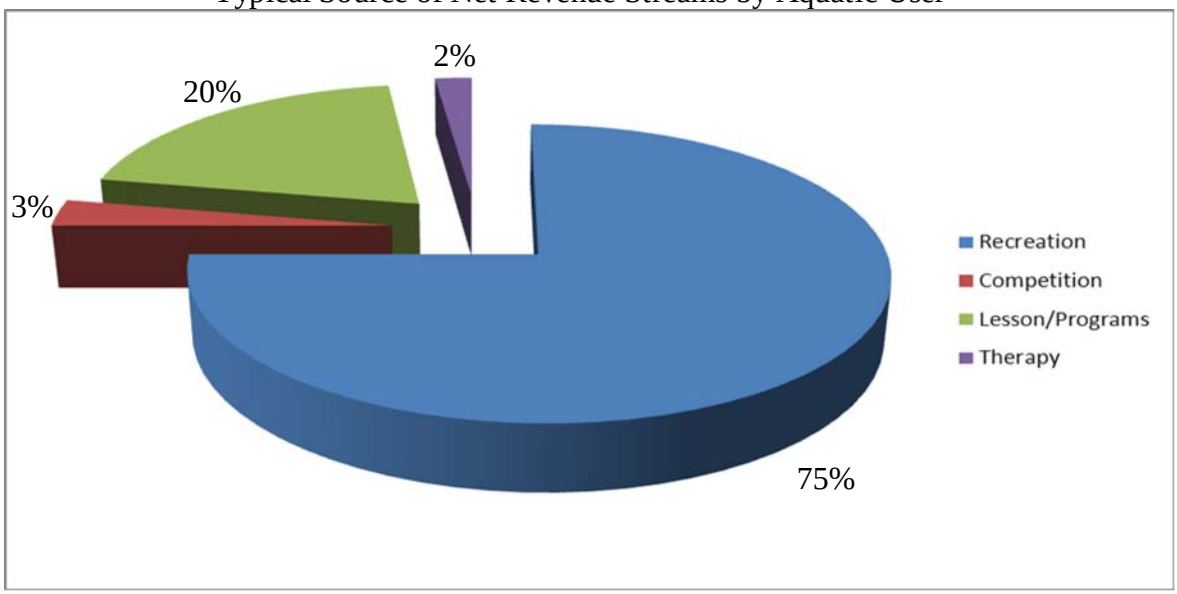
- Recreation (Warmer and shallower water with vertical water sprays, toys, and slides)

- Lesson/Programs Warmer water with a variety of depths for instructional programs)
- Competition (Colder and deeper water with specific lengths and widths of lanes)
- Therapy (Very warm water with depths suitable for water aerobics)

A survey by the National Sporting Goods Association states that the recreational group makes up over 90% of all aquatic users, and includes a variety of age groups-from tots to seniors. Trends show that most recreational swimming happens during the summer months and therefore supports the need for outdoor aquatics. Even communities located in areas with cold winters and short summers still desire outdoor swimming facilities for summer use.

The recreational user group prefers to have shallower and warmer water to allow for extended stays and socialization. Research by Counsilman-Hunsaker also shows that Recreation users provide 75% of the net revenue that can be generated from aquatics.

Typical Source of Net Revenue Streams by Aquatic User



Source: Counsilman-Hunsaker

New recreational aquatic facilities incorporate fun features, similar to playground equipment, for children to play and interact with; waterslides suitable for multiple age groups from tots to teens and adults; various water depths from zero-depth beach entries to plunge pools or diving areas; and other popular features for all age groups such lazy rivers and current channels. Additionally, modern recreational aquatic facilities include more creature comforts for extended stays such as shade areas, lounge chairs, picnic tables, lockers, and concession areas.

Lessons/programming aquatic facilities can include areas for instruction for swim lessons, lifeguard training, water safety, scuba diving, etc. Each of these groups needs appropriate spaces for teaching and training. These spaces are often incorporated into competitive and recreational style pools. Swim lessons are typically the largest of the

instructional groups and are considered a life-safety skill that children need to learn. Some communities have even made learning swim a requirement at their public school programs. New recreational style pools have increased children's desires to participate in swim lessons in order to be allowed to play and interact with their peers. Lesson/programming users typically provide 20% of the revenue from aquatic facilities.

The competition user group requires a pool that meets the dimensions of the regulating agency including the NFSHS (High School Standards), NCAA (Collegiate Standards), USA Swimming (Club Team Standards), and FINA (International Standards). They also prefer deeper and colder water to increase the competitive abilities of the pool. The primary distance for competitive swimming in the United States is 25 yards. Only FINA and USA Swimming's summer program requires a 50 meter dimension. Competition groups are a small but dedicated group of users who have demonstrated that they will drive long distances for practicing and competitive meets. One metric often seen in planning for competition pools for high school swim teams is to provide one competition pool per public high school. While it is true that a year round indoor competition pool facility can generate year round revenue and user fees – the cost of operating such a facility greatly reduces the net income generated. Counsilman-Hunsaker has found that competition users typically generate about 3% of the net revenue from aquatic facilities.

Therapy usage is currently the fastest growing aquatic user group. New research provides evidence of the benefits of aquatic exercise. While aerobic dance and cycling have decreased by 17.3% and 23.2%, respectively, from 1998-2007, aquatic exercise increased by 25% from 2004-2007. This group requires a small body of warm water that can offer a variety of classes and programs from water aerobics to exercise lap swimming. Therapy and wellness program usage typically generates about 2% of the net revenue from aquatic facilities.

When developing a new aquatic system, all user groups and types of aquatic facilities should be considered. A mix of indoor and outdoor as well as competitive and recreational will complement each other and provide for better aquatic services. Locations of these facilities are also important. Use of aquatic facilities is based on peoples' willingness to travel. Typically, people are more willing to drive to larger indoor facilities, while smaller outdoor facilities need to be more conveniently located. Special use facilities are not as greatly impacted by travel times due to their uniqueness.

National Trends in Aquatics

Until the 1950's and 1960's many neighborhood public pools were filled daily with potable water and drained. Concerns over infectious disease outbreaks resulted in more stringent sanitation codes. Additionally, as the codes became more stringent and liability concerns increased – many public pools began to lose features such as diving boards and small water slides due to increased depth and clearance requirements. Increased operating costs and ever-increasing competition for recreation time led to decreased pool attendance and the closure of many pools throughout the United States.

Beginning in the late 1970's and early 1980's, the "water park" concept was developed with more exciting water features such as wave pools, a variety of water slides, and lazy rivers. Innovative public operators began to incorporate some of these features into their municipal aquatic facilities or build municipal waterparks to re-attract aquatic recreation users and to increase revenue with higher admissions to offset the cost of operations.

In Northern Virginia two agencies (Prince William County and the Northern Virginia Regional Park Authority) built waterparks 15-20 years ago and have continued to add waterpark features to many of their old fashioned municipal pools. This hybrid of an old fashioned pool, combined with water slides, water play structures, lazy rivers, current channels, etc. is known primarily by the term of "Family Aquatic Center."

These two innovative agencies neighboring the City of Alexandria (like other agencies across the country) have proven that by incorporating fun recreational water features into their facilities they were able to:

A) Meet the current trends and needs of the recreational aquatic users – increasing attendance.

B) Encourage and increase participation in learn-to-swim programs – children want to learn to swim so they can have fun at their waterpark or family aquatic center.

C) Elevate pricing and generate revenue to sustain the operations expenses of providing facilities and programs for aquatic therapy and fitness users as well as swim teams.

<u>Current successful trends in aquatic design for municipalities are as follows:</u>

- Larger and Fewer Facilities
- Family Aquatic Facilities (Multiple Bodies of Water)
  - Competition
  - Recreation (Slides, Lazy Rivers, Water Play Structures, etc.)
  - All age groups
- Spraygrounds (Spray Parks)
- Indoor / Outdoor Mega Aquatic Facilities (Coupled with Recreation Centers)
- Pay for Play (Public users are willing to pay for higher quality and more diverse aquatic recreation experiences)

Approaches to Aquatic Planning

There are three primary approaches to providing for the aquatic programming needs for municipalities:

<u>Neighborhood Approach</u> – Offer numerous smaller facilities with one body of water for each neighborhood.

- Pros
  - Closer proximity to residents.
  - Lower capital costs for each facility (phasing).
- Cons
  - Greater operating costs with multiple aquatic centers.
  - Keeping multiple aquatic centers sustainable with the economy.

Community Approach – Offer multiple medium facilities each with multiple bodies of water located throughout the community.

- Pros
  - Greater experience for residents.
  - Net operations would be reduced compared to Neighborhood Approach.
- Cons
  - Higher capital cost for each facility compared to Neighborhood Approach.
  - Non-resident users may over crowd the facility.

Central Approach – Offer one centralized facility with several bodies of water to serve the entire community.

- Pros
  - Aquatic Master Plan would be realized sooner.
  - Community hub profile.
- Cons
  - Longer drive time for most residents.
  - Higher admission fees over what residents might expect to pay.

Why One Type of Aquatic Facility (Indoor) Doesn't Work

A. Most aquatic users are recreational users who swim seasonally in the summer and they prefer to swim outside in warmer water with a variety of water recreation features (slides, rivers, water play structures, etc.) Even residents in cold climates look forward swimming outdoors in the summer time.

B. Indoor pools are two to three times more expensive to build and operate per SF than outdoor seasonal pools.

C. A well-designed outdoor family aquatic center will generate more revenue in 90-100 days than an indoor pool programmed for year round use.

D. Competition or Lap Pools are not the most conducive to lesson programming for learn to swim (water too cold and too deep), for recreation swimming (water too cold and too deep and no fun features), and for water aerobics (water too cold and too deep.)

2.0 Existing Conditions

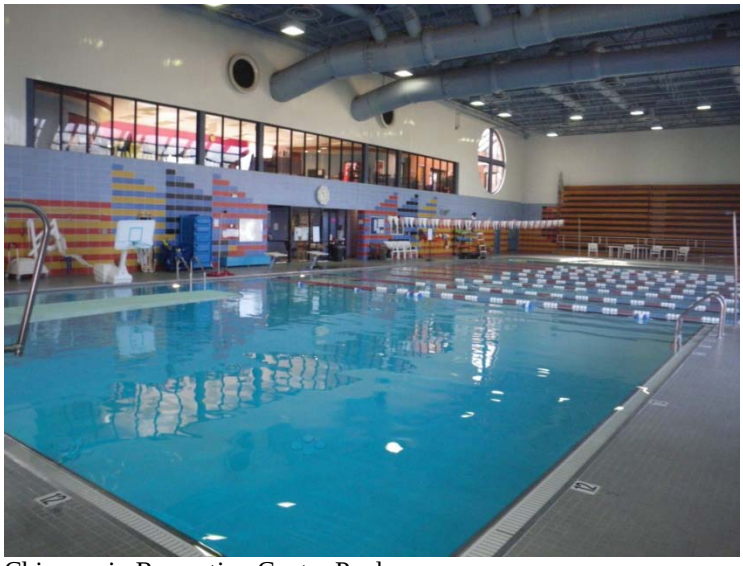
Existing Pool Findings

A review of the existing pool system finds that Chinquapin Recreation Center is well located to service the entire city as central indoor aquatic facility. The west side of the City is underserved with only Ewald (a small pool with limited visibility and appeal – now scheduled for closure in FY 2013.) The east side of the City is over served in numbers of pools (Warwick, Old Town, and Houston). However, the existing pools do not provide the required level of services needed and are overcrowded.

When developing this aquatic facility study for the City of Alexandria, a variety of community-wide user groups were met with and considered (See Appendix A). The findings from site visits, meeting with the health department, analysis of other area providers, staff discussions, and user group meetings were as follows for the existing pools open at the time of this study:

Chinquapin Recreation Center

In meeting with the various users of Chinquapin it became apparent that the Chinquapin Recreation Center and its indoor aquatic facilities are crowded and do not have sufficient space for all user groups (lesson programming, therapy users and exercise swimmers, and the high school swim team. In addition, the pool was not constructed to proper competition meet dimensions. The entire Chinquapin recreation center and pool have been in and out of proposed City budgets for major repairs and total reconstruction. The facility should be replaced in the next 5-10 years.



Chinquapin Recreation Center Pool

Opened in 1985

8 Lane x 25M with Diving "L"

Centrally Located

2010 Attendance 80,000
(Includes Recreation Center)

Pool Length Non-Compliant for Competitive Meets

Traffic Congestion with Adjacent High School and Limited Parking

Old Town Pool

In meeting with Old Town Pool users and others, Old Town Pool is one of the most popular (and over-crowded) pools in the City of Alexandria. The pool is used for summer swim leagues, lesson programming, and recreation. The pool has been kept up to date to meet health department requirements. However, the facility has no modern recreation features (slides, sprays, play structures); limited deck space and shade; and an outdated bathhouse without concessions.

Old Town Pool

Opened in 1975

8 Lane x 25Y with Diving "L"

Located on East Side

2010 Attendance 16,302
(Open in Summer Only)

Lack of Recreational Amenities
(No slides or water play elements)

Outdated Bathhouse

Warwick Pool

Warwick currently serves as a neighborhood pool in the far northeast side of town and there is no room for parking or expansion. To increase usage and alleviate crowding at Old Town – the City staff has directed day camp groups to Warwick. The park land is not owned but leased by the City. Additionally, the pool is located on a hillside and has ongoing structural issues. If there is no future pool, a sprayground would be desirable.

Warwick Pool

Opened in 1979

Irregular "L" Shaped Pool with
Diving and Wading Pool

Located in Far North East

2010 Attendance: 16,806
(Due to Day Care Groups)

Lack of Recreational Amenities
(No slides or water play elements)

Outdated Bathhouse

Ewald Pool

In meeting with neighborhood users and others, Ewald is very lightly used and lacks good accessibility and visibility. It is the only pool on the west side of the City. A small group of users would like to keep the pool. Additionally, they stated that the entire park needed to be redeveloped and revitalized. The pool is scheduled for closure in FY 2013.

Ewald Pool

Opened in 1969

Small Rectangular Pool
(1,800 SF)

Only Pool on West Side

2010 Attendance: 704

Lack of Recreational Amenities
(No slides or water play elements)

Outdated Bathhouse

Charles Houston Pool

The newest pool in Alexandria is Charles Houston Pool built on the old model of trying to attach a small recreation pool to each recreation center. The pool was almost not built but additional funds were found to add it a memorial to young men who lost their lives swimming in the nearby Potomac. The pool is attractive but lacks enough seating and shade and is overcrowded by day camp users. The pool is suitable for swim lessons and small group programming.

Charles Houston Pool

Opened in 2009

Small Multi-Use Pool
(1,800 SF)
- Zero Depth Entry
- Spray Bar
- Two Fitness Lap Lanes

South East Side

2010 Attendance: 4,862

Lack of Amenities
(Shade, Lounges, Picnic Tables)

Additional Observations

1) The YMCA has a small indoor pool between Old Town and Warwick.
2) All pool sites are close to bus stops and bicycle route circulation.
3) East side is over served by pools and the west side is underserved by pools.
4) Density of Alexandria's neighborhoods needs to be considered in locating pools and setting service zone radius.
5) City has been heavily redeveloped during the past 10-15 years.
6) The Regional Park Authority has a commercial style water park located at Cameron Run Park on Eisenhower Ave. (Great Waves).
7) The idea of a joint venture with hotels and an aquatic venue on the Potomac water frontage has lost some momentum.
8) If a commercial development was done with aquatics along the water front, the venue that has the most commercial potential (and that is not a duplication of service) is a Great Wolf style hotel/water park resort.
9) Residential pools in the city do not really impact the usage of larger public outdoor and indoor aquatic facilities.
10) All existing outdoor pools (except Charles Houston) are very old pools that have been renovated multiple times. It is time to replace the pools rather than put more money into the existing pools, which are functionally and physically obsolete.
11) The city has two major private high schools in addition to the one public high school. One private school has a pool.
12) The City of Alexandria will be getting a splash pad at part of private development improvements at Potomac Yard.

Nannie J. Lee (Small Outdoor Pool -Closed)

- Opened in 1969.
- 1,800 SF rectangular outdoor pool.
- Closed since 2008.
- Site has opportunity for therapy programming and senior use if rebuilt and converted to an indoor pool.

Nicholas Colasanto (Small Outdoor Pool –Closed)

- Opened in 1969.
- Located in Del Ray neighborhood/arts district.
- 1,800 SF rectangular pool
- No bathhouse.
- Closed in 2010.
- Site has opportunity for redevelop as a Gateway Plaza to Del Ray.
    - Decorative art piece
    - Interactive fountain

Comparable City Aquatic Systems

In 1990, the National Recreation and Parks Association published a recommendation for the number of public pools needed in any U.S. community based on population alone: one pool for every 20,000 residents.[1] Although this never became the national standard due to variables such as other providers, income, and various age group programming at different types of pools.

Current trends are to provide larger facilities with programming for all user groups - more typically on average one pool for every 45,000 to 50,000 residents.

When benchmarking comparable cities to Alexandria, cities were selected based on their location (East Coast or South) and/or population.

Charlotte, NC

Charlotte is the largest city in North Carolina and the 17th largest city in the U.S. The city is located halfway between the Appalachian Mountains and the Atlantic Ocean. The weather is classified as subtropical characterized by long and almost tropical summers, with temperatures reaching freezing only a few times in the winter (and with rare snowfall). The population is 643,000. Average income is $78,542. Median age is 34.08. Aquatics include six municipal pools: two outdoor pools; four indoor pools. The jewel in the aquatic crown is the Mecklenburg County Aquatic Center, a partnership between the City of Charlotte and Mecklenburg County. The center includes an indoor 50-meter competition pool, 25-yard therapeutic pool, fitness center, and hot tub.

Savannah, GA

Savannah is a coastal city located on the Atlantic Ocean with a high tourism rate as well as a risk for hurricanes. The weather is classified as subtropical characterized by long and almost tropical summers, with temperatures reaching freezing only a few times in the winter (and with rare snowfall). The population of Savannah is 132,177. Average income is $50,162. Median age is 32.39. Aquatics include nine municipal pools: six outdoor pools; three indoor pools.

Wilmington, NC

Wilmington is a port city on the Atlantic Ocean with a high tourism rate as well as a risk for hurricanes. The weather is classified as humid subtropical, typical of the southeastern US. The population of Wilmington is 86,981. Average income is 63,775. Median age is 35.1. Aquatics include three outdoor municipal pools.

Memphis, TN

Memphis is in the southwestern corner of the state of Tennessee south of the confluence of the Wolf and Mississippi rivers. The weather is classified as seasonal with four distinct seasons. The population of Memphis is 607,690. Average income is $54,936. Median age is 33.46. Aquatics include 17 municipal pools: 13 outdoor pools; four indoor pools.

Springfield, MA

Springfield is the most populous city in Western New England; it sits on the eastern bank of the Connecticut River. The weather is classified as a humid continental climate with four distinct seasons and precipitation evenly distributed throughout the year. The population of Springfield is 154,334. Average income is $51,384. Median age is 33.04. Aquatics include 13 pools: two outdoor pools; 11 indoor pools.

Arlington, VA

Arlington is situated in Northern, VA, on the south bank of the Potomac River directly across from Washington, D.C. The weather is classified as a humid continental climate with four distinct seasons and precipitation evenly distributed throughout the year. The population of Arlington is 208,145. Average income is $126,781. Median age is 34.76. Aquatics include 4 pools: three indoor pools; one outdoor pool.

Fairfax County, VA

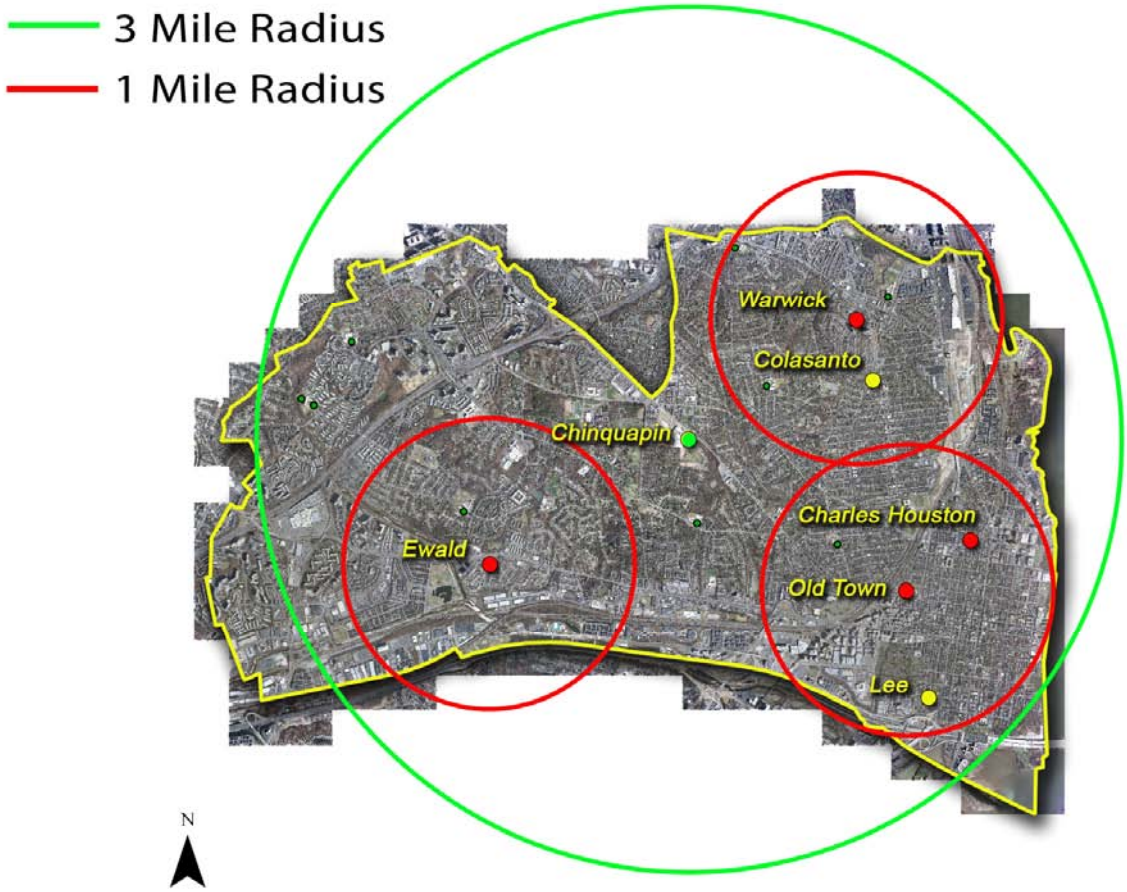
Located near Washington, D.C., Fairfax County is bounded on the north and southeast by the Potomac River. The weather is classified as a humid continental climate with four distinct seasons and precipitation evenly distributed throughout the year. The population of Fairfax County is 1,112,341. Average income is $135,776. Median age is 37.76. Aquatics include 9 indoor pools.

POOLS BY POPULATION

City	Income	Median Age	Population	Municipal Pools	Residents per Pool
Charlotte, NC	$78,542	34.08	643,000	6	107,167
Savannah, GA	$50,162	32.39	132,177	9	14,686
Wilmington, NC	$63,775	35.1	86,981	3	28,994
Memphis, TN	$54,936	33.46	607,690	17	35,746
Springfield, MA	$51,384	33.04	154,334	13	11,872
Alexandria, VA	$50,606	39.1	139,718	5	27,944
Arlington, VA	$126,781	34.76	208,145	4	52,036
Fairfax County, VA	$135,776	37.76	1,112,341	9	123,593
AVERAGE	**76,495**	**35**	**385,548**	**8**	**47,452**

Source: Counsilman-Hunsaker

Existing Pool Locations and Service Areas

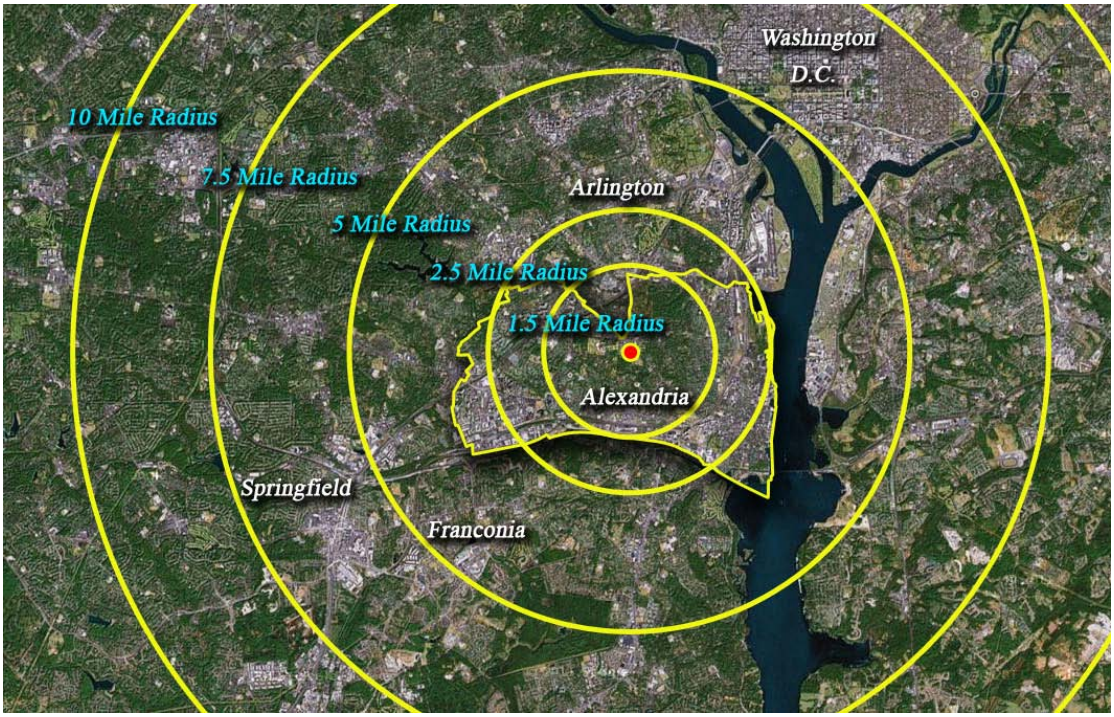


3.0 Demographics (2010 Census Data)

Counsilman-Hunsaker gathered preliminary demographic information prior to the series of meetings for this study. As concepts and implementation strategies were developed for Phase II of the study, the updated demographic data for 2010 was utilized to evaluate pool sites on a more detailed level that would consider specific neighborhood composition, age groups, etc. Levels of service were then be evaluated and attendance projections made. The initial general information is as follows:

- 2000 Census Population: 128,300
- 2010 Census Population: 139,718
- 23% increase projected for public schools over next 5 years
- Median Age: 39.1
- Highest age groups: 0-5 and 34-44
- Per Capita Income: $50,606
  - 82% over national average
- Median Household Income: $79,874
  - 55% over national average

Prior to the series of meetings, Counsilman-Hunsaker gathered preliminary demographic information for Alexandria, VA, per a 10-mile radius (total market area) surrounding 3210 King Street, Alexandria, VA. This address was used as the city center to analyze population, income, and age groups within the 10-mile radius. The resident market area was divided into the following distance rings:



Population

The following table presents a summary of market area population according to radii surrounding 3210 King Street. The population base for the city is projected to increase from 139,718 in 2010 to 162,200 by 2015. Distance rings analyzed show that the total 10-mile market area is projected to increase in population.

MARKET AREA POPULATION BY DISTANCE

Radius	Population						Average Annual Change			
	2000		2010		2015		2000-2010		2010-2015	
	Number (000's)	Percent of Total	Number (000's)	Percent of Total	Number (000's)	Percent of Total	Number (000's)	Percent Percent	Number (000's)	Percent Percent
0 to 1.5 Miles	48.5	3.2%	53.8	3.4%	58.4	3.5%	0.5	1.0%	0.9	1.7%
1.5 to 2.5 Miles	104.1	6.8%	117.1	7.3%	125.5	7.5%	1.3	1.2%	1.7	1.4%
2.5 to 5 Miles	298.5	19.5%	325.6	20.3%	354.0	21.2%	2.7	0.9%	5.7	1.7%
Subtotal	**451.1**	**29.5%**	**496.5**	**31.0%**	**537.9**	**32.3%**	**4.5**	**1.0%**	**8.3**	**1.6%**
5 to 7.5 Miles	549.5	35.9%	573.3	35.7%	593.7	35.6%	2.4	0.4%	4.1	0.7%
7.5 to 10 Miles	527.9	34.5%	533.9	33.3%	535.6	32.1%	0.6	0.1%	0.3	0.1%
Subtotal	**1,077.3**	**70.5%**	**1,107.2**	**69.0%**	**1,129.3**	**67.7%**	**3.0**	**0.3%**	**4.4**	**0.4%**
Total (0-25 Miles)	**1,528.4**	**100.0%**	**1,603.7**	**100.0%**	**1,667.3**	**100.0%**	**7.5**	**0.5%**	**12.7**	**0.8%**
Alexandria, VA	128.3		139.7		162.2		1.1	0.9%	4.5	3.0%

Source: Demographics Now

The following table presents a summary of market area population according to each existing pool site showing a 2.5-mile radius and a 5-mile radius.

MARKET AREA POPULATION 2.5 and 5 MILE RADIUS

Radius	Population						Average Annual Change			
	2000		2010		2015		2000-2010		2010-2015	
	2.5 Miles (000's)	5.0 Miles (000's)	2.5 Miles (000's)	5.0 Miles (000's)	2.5 Miles (000's)	5.0 Miles (000's)	Number (000's)	Percent Percent	Number (000's)	Percent Percent
Chinquapin	152.6	451.1	180.1	511.3	205.6	576.8	2.8	1.7%	5.1	2.7%
Old Town	86.8	407.5	99.3	450.6	111.8	496.2	1.2	1.4%	2.5	2.4%
Warwick	123.8	488.4	144.6	558.0	163.8	628.0	2.1	1.6%	3.9	2.5%
West Side	146.4	448.4	169.1	507.4	192.5	572.0	2.3	1.5%	4.7	2.6%
John Ewald	144.6	443.0	167.5	497.0	191.0	556.9	2.3	1.5%	4.7	2.7%
Colasanto	112.3	480.6	132.5	546.7	150.7	614.7	2.0	1.7%	3.6	2.6%
Nannie J Lee	73.8	377.6	82.3	419.5	91.7	462.5	0.9	1.1%	1.9	2.2%
Alexandria, VA	128.3		139.7		179.3		1.1	0.9%	7.9	5.1%

Source: Demographics Now

Income

To a certain degree, the likelihood of residents to use public aquatic facilities depends on their ability to pay admission and program fees. In the following table, the U.S. national average is set at 1.00. Index refers to the percentage higher or lower than the national average. Alexandria, VA, is 91% higher than the national average regarding resident per capita income and 52% higher regarding median household income.

MARKET AREA INCOME				
	Per Capita Incomes		Median Household Incomes	
Radius	Dollars	Index	Dollars	Index
0 to 1.5 Miles	$55,675	2.10	$91,687	1.74
1.5 to 2.5 Miles	$48,228	1.82	$79,261	1.51
2.5 to 5 Miles	$46,444	1.75	$75,716	1.44
5 to 7.5 Miles	$45,867	1.73	$71,258	1.35
7.5 to 10 Miles	$45,206	1.71	$71,313	1.36
Alexandria, VA	$50,606	1.91	$79,874	1.52
Total U.S.	$26,464	1.00	$52,599	1.00
Source: Demographics Now				

In the following table, Per Capita and Median Household Incomes were analyzed for each existing pool site.

MARKET AREA INCOME				
	Per Capita Incomes		Median Household Incomes	
Radius	Dollars	Index	Dollars	Index
Chinquapin	$47,050	1.68	$80,098	1.54
Old Town	$55,916	2.00	$91,879	1.77
Warwick	$51,052	1.82	$86,748	1.67
West Side	$43,227	1.54	$75,535	1.45
John Ewald	$43,399	1.55	$76,197	1.46
Colasanto	$54,152	1.94	$89,575	1.72
Nannie J Lee	$59,661	2.13	$94,502	1.82
Alexandria, VA	$49,202	1.76	$80,931	1.56
Total U.S.	$27,985	1.00	$52,041	1.00
Source: Demographics Now				

Age Distribution

Age distribution is another population characteristic used to determine the level of use of any type of program. Research has shown that younger age groups are more likely to engage in competitive and recreational activities, while middle-aged and older patrons enjoy wellness and fitness programming. The following table provides the number of residents and the percentage of total population for each age group compared to the U.S. column, which identifies national averages for each age group. The 0-19 age group, as a percentage of population, is below the national average; 23.1% compared to 27.1%; however, there are 276,000 children in the surrounding 10-mile area. Median age is 39.1 compared to the national average of 36.7 due to above national averages in age groups 25-54.

MARKET AREA AGE DISTRIBUTION

Age	0-1.5 Miles		1.5-2.5 Miles		2.5-5 Miles		5-7.5 Miles		7.5-10 Miles		Alexandria, VA		Total
Groups	#	%	#	%	#	%	#	%	#	%	#	%	U.S.
Under 5	3,841	7.1%	8,341	7.1%	21,717	6.7%	34,129	6.0%	33,216	6.1%	11,421	7.7%	6.8%
5 to 9	3,705	6.9%	7,952	6.8%	19,782	6.1%	32,299	5.6%	31,781	5.8%	10,455	7.1%	6.6%
10 to 14	2,699	5.0%	5,796	5.0%	16,322	5.0%	29,481	5.1%	31,115	5.7%	7,208	4.9%	6.7%
15 to 19	1,793	3.3%	4,882	4.2%	16,187	5.0%	33,228	5.8%	33,459	6.1%	5,203	3.5%	7.0%
Subtotal	**12,038**	**22.4%**	**26,971**	**23.0%**	**74,008**	**22.7%**	**129,137**	**22.5%**	**129,571**	**23.6%**	**34,287**	**23.1%**	**27.1%**
20 to 24	1,872	3.5%	5,889	5.0%	20,861	6.4%	44,760	7.8%	33,247	6.1%	5,991	4.0%	7.0%
25 to 34	7,677	14.3%	16,962	14.5%	49,326	15.1%	95,015	16.6%	69,133	12.6%	21,168	14.3%	13.3%
35 to 44	11,174	20.8%	22,901	19.6%	57,878	17.8%	85,054	14.8%	74,356	13.6%	30,185	20.4%	14.0%
45 to 54	8,712	16.2%	17,525	15.0%	48,055	14.8%	81,922	14.3%	80,998	14.8%	22,674	15.3%	14.5%
55 to 64	6,106	11.3%	13,330	11.4%	39,679	12.2%	69,956	12.2%	70,609	12.9%	16,362	11.0%	11.2%
65 to 74	3,419	6.4%	7,609	6.5%	21,755	6.7%	40,332	7.0%	43,650	8.0%	9,551	6.4%	6.7%
75 to 84	1,842	3.4%	3,765	3.2%	9,633	3.0%	19,059	3.3%	36,678	6.7%	5,012	3.4%	4.3%
85 and over	971	1.8%	2,129	1.8%	4,441	1.4%	8,098	1.4%	10,033	1.8%	2,892	2.0%	1.9%
Median Age	39.7		39.1		38.5		37.8		38.4		39.1		36.7

Source: DemographicsNow

The following table provides the number of residents and the percentage of total population for each age group per existing pool site.

MARKET AREA AGE DISTRIBUTION 2.5 MILE RADIUS

Age	Chinquapin		Old Town		Warwick		West Side		John Ewald		Colasanto		Nannie J Lee		Alexandria, VA		Total
Groups	#	%	#	%	#	%	#	%	#	%	#	%			#	%	U.S.
Age 0 to 4	13,362	7.4%	7,100	10.2%	10,348	9.8%	12,676	10.6%	12,497	10.6%	9,271	9.6%	5,376	9.3%	12,319	9.0%	6.9%
Age 5 to 9	11,344	6.3%	6,224	8.9%	8,688	8.2%	10,527	8.8%	10,334	8.7%	7,755	8.0%	4,721	8.2%	9,981	7.3%	6.7%
Age 10 to 14	7,458	4.1%	4,235	6.1%	5,630	5.3%	7,387	6.2%	7,251	6.1%	5,032	5.2%	3,497	6.1%	6,099	4.4%	6.5%
Subtotal	**32,164**	**17.9%**	**17,559**	**25.2%**	**24,666**	**23.3%**	**30,590**	**25.7%**	**30,082**	**25.4%**	**22,058**	**22.8%**	**13,594**	**23.6%**	**28,399**	**20.7%**	**20.1%**
Age 15 to 19	5,916	3.3%	3,303	4.7%	4,428	4.2%	6,220	5.2%	6,091	5.1%	3,809	3.9%	2,846	4.9%	4,449	3.2%	6.7%
Age 20 to 24	9,158	5.1%	4,540	6.5%	7,766	7.3%	9,503	8.0%	9,396	7.9%	6,741	7.0%	3,833	6.7%	7,117	5.2%	6.9%
Age 25 to 29	17,968	10.0%	8,564	12.3%	16,006	15.1%	16,243	13.6%	16,054	13.6%	14,287	14.8%	6,849	11.9%	15,178	11.0%	7.0%
Age 30 to 34	21,577	12.0%	10,861	15.6%	18,783	17.8%	18,613	15.6%	18,434	15.6%	16,883	17.5%	8,481	14.7%	18,814	13.7%	6.6%
Age 35 to 39	17,854	9.9%	9,244	13.3%	14,916	14.1%	15,997	13.4%	15,878	13.4%	13,535	14.0%	7,261	12.6%	15,938	11.6%	6.5%
Age 40 to 44	14,040	7.8%	7,634	11.0%	11,268	10.7%	12,994	10.9%	12,917	10.9%	10,308	10.7%	6,208	10.8%	12,335	9.0%	6.7%
Age 45 to 49	11,921	6.6%	6,992	10.1%	9,259	8.8%	11,433	9.6%	11,465	9.7%	8,622	8.9%	5,855	10.2%	10,223	7.4%	7.1%
Age 50 to 54	10,816	6.0%	6,613	9.5%	8,500	8.0%	10,400	8.7%	10,460	8.8%	8,082	8.4%	5,785	10.1%	9,029	6.6%	7.1%
Age 55 to 59	9,834	5.5%	6,231	9.0%	7,842	7.4%	9,332	7.8%	9,366	7.9%	7,608	7.9%	5,508	9.6%	8,402	6.1%	6.4%
Age 60 to 64	8,792	4.9%	5,578	8.0%	6,921	6.5%	8,351	7.0%	8,325	7.0%	6,757	7.0%	4,906	8.5%	7,538	5.5%	5.4%
Age 65 to 69	6,422	3.6%	3,988	5.7%	4,886	4.6%	6,087	5.1%	6,127	5.2%	4,795	5.0%	3,646	6.3%	5,470	4.0%	4.2%
Age 70 to 74	4,385	2.4%	2,792	4.0%	3,234	3.1%	4,177	3.5%	4,191	3.5%	3,155	3.3%	2,538	4.4%	3,762	2.7%	3.1%
Age 75 to 79	3,320	1.8%	2,058	3.0%	2,284	2.2%	3,211	2.7%	3,196	2.7%	2,243	2.3%	1,941	3.4%	2,828	2.1%	2.4%
Age 80 to 84	2,619	1.5%	1,534	2.2%	1,760	1.7%	2,603	2.2%	2,521	2.1%	1,698	1.8%	1,450	2.5%	2,330	1.7%	1.9%
Age 85 Plus	3,312	1.8%	1,773	2.5%	2,032	1.9%	3,308	2.8%	3,000	2.5%	1,949	2.0%	1,609	2.8%	3,072	2.2%	2.0%
Median Age	35.8		37.5		35.2		35.9		36.1		35.8		38.8		36.0		37.1

Source: DemographicsNow

Weather

Given the sensitivity of water sports to weather conditions, it is appropriate to include an assessment of local weather patterns in the market analysis. The weather patterns in the following chart will not inhibit participation in seasonal aquatics. In fact, highs in the 80s in the summer will promote use at outdoor pools. These factors are used when determining user days in the financial models.

CLIMATOLOGICAL DATA Alexandria, VA				
	Temperatures			Precipitation
Month	Average	High	Low	Inches
January	35	42	29	2.7
February	38	46	29	2.7
March	47	57	38	3.2
April	57	67	46	2.7
May	66	76	57	3.7
June	76	85	67	3.4
July	80	89	71	3.8
August	79	87	70	3.9
September	71	80	63	3.3
October	60	69	50	3.0
November	50	58	41	3.1
December	39	47	32	3.1
Source: Weatherbase				

Density and Transportation

Since Alexandria is immediately across the Potomac River from Washington, D.C. there is a tremendous amount of commuter traffic that backs up on major thoroughfares through town. Additionally, the population of Alexandria is much denser than the surrounding suburban communities. The increased density and traffic congestion creates a path of least resistance for many west side residents and perimeter residents to use easier to get to aquatic facilities in neighboring communities. Swim team users are willing to drive for up to 25-30 miles to access indoor lap pools for practices and competitions. While recreation, instruction, and therapy users prefer to utilize aquatic facilities closer to their neighborhood and within the community. In consideration of these factors we recommend that all proposed pool sites be:

1) Near or adjacent to public transportation.
2) Located as central as possible within the pool facilities service radius.

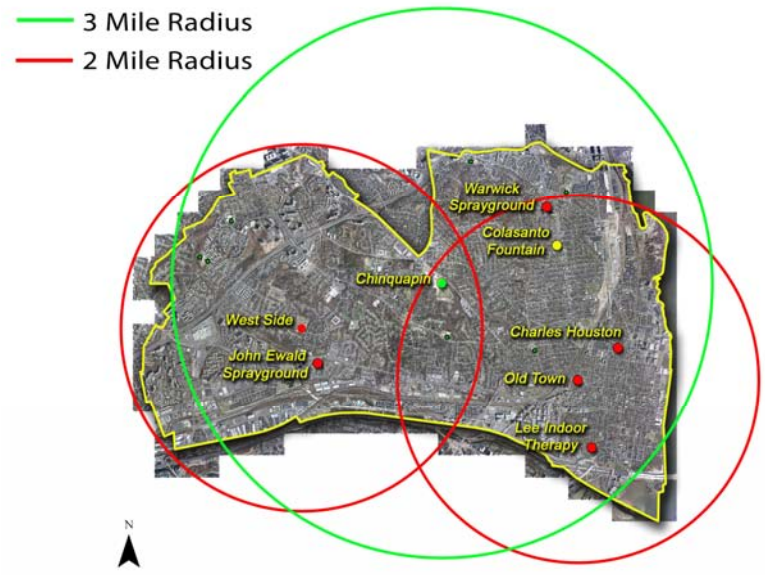
4.0 Recommendations

In consideration of the study findings, current funding discussions, travel time and accessibility, and the need to address all user groups in a financially sustainable manner – the recommended aquatic system from this study is a Modified Three Pool System consisting of:

- Chinquapin: $28,365,000. New recreation center with new indoor 25-yard by 25-meter competition pool and indoor leisure pool, including a new fitness center with group exercise rooms, and multi-purpose rooms. (50 meter pool optional at additional cost)
- Old Town: $5,507,000. New modified medium family aquatic center and bathhouse with 8-lane 25-yard lap pool and separate children's area with zero depth entry, play structure, and water slide.
- West Side: $5,298,000. New modified medium family aquatic center and new bathhouse with 8-lane 25-yard lap pool and separate children's area with zero depth entry, play structure, and water slide.

And, special use aquatic facilities to provide a higher level of service as follows:

- Warwick: $2,450,000. New outdoor interactive sprayground with support building and meeting space.
- Lee: $3,369,000. New indoor therapy pool.
- Ewald: $1,994,000. New outdoor interactive spray ground with support building.
- Colasanto: $831,769. New decorative interactive water feature to fit arts district.
- Charles Houston: $0. Existing lesson/play for low cost (subsidized) outreach.



Capital Cost -$48,655,000

Life Expectancy – 30 to 50 Years

Annual Attendance – 307,325

Annual Operating Costs - $3,545,000

Annual Revenue - $2,668,000

Annual Operating Subsidy - $877,000

Annual Operating Subsidy (Per User) $2.85

Recommended Modified Three Pool Aquatic System

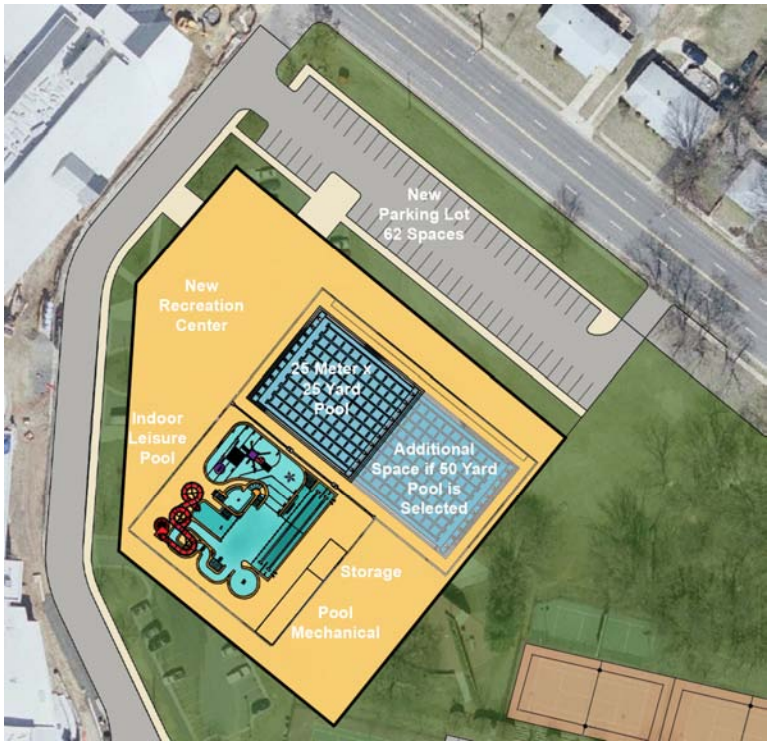
Using a three mile service radius for Chinquapin (Indoor) and a two mile service radius for enlarged and improved outdoor west side pool (TBD) and outdoor east side pool (Old Town) will provide coverage while minimizing operations and development costs.

Supplemental facilities include a sprayground for the west side (Ewald) and east side (Warwick); an interactive fountain at Colasanto; and a therapy pool at Lee.

Site Specific Concepts and Costs

Chinquapin – Cost $28,366,000

The recommendation for Chinquapin is a new state-of-the-art recreation center showcasing a 5,000 sq. ft. cardio fitness area and a 2,000 sq. ft. group fitness studio that can offer opportunities for Aerobics, Dance, Yoga, Power Yoga, Tai Chi, Qi Gong, Pilates, etc. The 3,000 sq. ft. indoor track provides a safe walking/jogging opportunity away from the nuisance of weather and the hassles of traffic. For community meetings, a 2,500 sq. ft. multi-purpose room and 400 sq. ft. kitchen completes this section of dry-side amenities.



Conceptual Plan of New Chinquapin Recreation Center w/ 25Yx25M Meter Pool and Leisure Pool

Indoor Leisure Pool

Indoor 25Yx25M Pool

Several reasons drive the recommendation for a completely new recreation center. First, due to the recommendation of rebuilding the aquatic spaces, and considering the age of

the facility, major construction of only half of the facility could cause damage to the remaining structure. Second, the center has currently re-purposed several areas due to change in the recreation experience. Since a major renovation is recommended for the aquatic space, re-designing the remaining spaces at this time will offer an enhanced experience for all users. The final reason is for safety and security. New age recreation centers are designed to allow staff visibility of all areas from one central control point.

The natatorium houses an indoor 25-yard by 25-meter competition pool. This pool is gaining in popularity in the competitive swimming market as it provides both short course lengths for training and swim meets. Spectator seating accommodates up to 400 viewers. If additional funding is available or a partner can be found the 25Yx25M pool can be enlarged to a 50M Indoor Pool. If the pool is enlarged it will increase construction costs and operational expenses.

The indoor 6,800 sq. ft. recreation pool contains zero-depth entry and a participatory play feature where spraying water, tunnels, and waterslides keep little ones busy. Three lap lanes accommodate fitness swimmers while the waterslide offers the excitement of climbing the steps, then plunging down into the waiting pool below. The current channel offers a floating experience or a water walking setting. Those yearning for pure relaxation can indulge in the quiet waters of the 200 sq. ft. spa. The 3,000 sq. ft. locker room offers family changing rooms and restrooms.

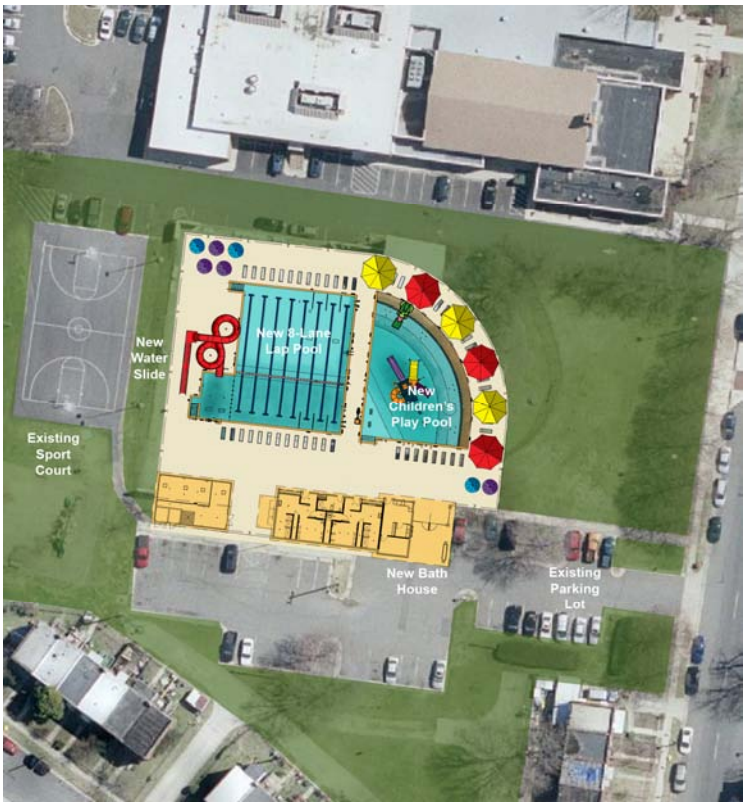
OPINION OF PROJECT COST: CHINQUAPIN			
Description	Unit	Amount	Opinion of Cost
Demolition			$775,000
Entrance		1,850	$421,563
Basic Lobby	Sq. Ft.	1,000	
Lobby Aesthetics	Sq. Ft.	600	
Front Desk	Sq. Ft.	250	
Administration		850	$172,188
Individual Offices (3)	Sq. Ft.	350	
Shared Office Space	Sq. Ft.	150	
Reception Area	Sq. Ft.	250	
Storage	Sq. Ft.	100	
Aquatic Center		29,650	$10,679,750
25 Meter by 25 Yard Pool	Sq. Ft.	6,200	
Springboard Diving	Quantity	2	
Competitive Natatorium	Sq. Ft.	12,000	
Balcony Seating (400 seats)	Sq. Ft.	3,000	
Leisure Pool (3 lanes)	Sq. Ft.	6,800	
Play Feature	Allowance	1	
Current Channel	Add. Cost	1	
Waterslide	Quantity	1	
Spa	Sq. Ft.	290	
Leisure Pool Natatorium	Sq. Ft.	13,000	
Pool Mechanical Room	Sq. Ft.	1,650	
Fitness Center		10,650	$2,299,688
Cardio/Weight/Stretching	Sq. Ft.	5,000	
Fitness Trainer Office	Sq. Ft.	150	
Group Fitness	Sq. Ft.	2,000	
Laundry	Sq. Ft.	200	
Track	Sq. Ft.	3,000	
Storage	Sq. Ft.	300	
Shared Areas		7,000	$1,812,500
Multi-Purpose Room	Sq. Ft.	2,500	
Storage	Sq. Ft.	300	
Kitchen	Sq. Ft.	400	
Locker Rooms	Sq. Ft.	3,000	
Family Changing Rooms	Sq. Ft.	300	
Second Floor Restrooms	Sq. Ft.	500	
Building Support		2,430	$700,000
Building Mechanical	Sq. Ft.	1,750	
Electrical	Sq. Ft.	450	
Janitor	Sq. Ft.	50	
Elevator	Sq. Ft.	80	
Elevator Machine	Sq. Ft.	100	
Efficiency		10,486	$1,887,480
Circulation and Walls (20%)	Sq. Ft.	10,486	
Total Building Construction Costs		**62,916**	**18,748,168**
Site Construction Costs (landscaping, utilities, walks)			$1,258,320
Furniture, Fixtures, Equipment			$378,000
Subtotal			$20,384,488
Inflation (3 years)	10.0%		$2,038,449
Contingency	10.0%		$2,242,294
Indirect Costs	15.0%		$3,699,784
Total Estimated Project Costs:			**$28,365,014**
Say			**$28,366,000**
Source: Counsilman-Hunsaker			

Old Town (East Side Recreation Pool) – Cost $5,510,000

The recommendation for Old Town is an outdoor 3,099 sq. ft. leisure pool / children's pool with zero-depth entry. This pool creates a congregating area where everyone can enter the pool with ease. Children can climb on, crawl across, or slide down the play structure. The separate 8 lane 25-yard (5,000 sq. ft.) lap pool accommodates a myriad of fitness programs, lap swimming, and activities. A large water slide offers the exertion of climbing the stairs and the exhilaration of sliding down into the waiting catch pool below. Six shade umbrellas create a colorful, festive touch while providing relief from UV rays. The bathhouse is 4,019 square feet. All facilities fit within the space occupied by the existing pool.

Eight Lane Lap Pool

Separate Children's Pool



Conceptual Plan for New Outdoor Pool

OPINION OF PROJECT COST: OLD TOWN			
Description	Unit	Amount	Opinion of Cost
Demolition			$150,000
Bathhouse		4,019	$863,544
Lobby/Entry	Sq. Ft.	140	
Managers Office	Sq. Ft.	100	
Guard Room / First Aid	Sq. Ft.	125	
Pool Mechanical	Sq. Ft.	900	
Building Mechanical	Sq. Ft.	300	
Storage	Sq. Ft.	500	
Locker Rooms	Sq. Ft.	1,080	
Family Changing Room (2)	Sq. Ft.	250	
Vending	Sq. Ft.	100	
Efficiency	Sq. Ft.	524	
Aquatics		8,099	$2,292,263
Leisure Pool	Sq. Ft.	3,099	
Participatory Play Feature	Allowance	1	
Tot Slide	Quantity	1	
Lap Pool (8 Lane 25 Yard)	Sq. Ft.	5,000	
Waterslide	Quantity	1	
Springboard Diving	Quantity	0	
Support			$408,853
Outdoor Deck	Sq. Ft.	12,149	
Fence	Linear Ft.	500	
Overhead Lighting	Sq. Ft.	20,248	
Equipment	Allowance	1	
Shade Structures	Quantity	6	
Total Building Construction Costs			**3,714,659**
Site Construction Costs (parking lot, landscaping, utilities, walks)			$242,668
Subtotal			$3,957,326
Inflation (3 years)	10.0%		$395,733
Contingency	10.0%		$435,306
Indirect Costs	15.0%		$718,255
Total Estimated Project Costs:			$5,506,620
Say			**$5,510,000**
Source: Counsilman-Hunsaker			

Warwick (East Side Sprayground) – Cost $2,450,000

The recommendation for Warwick features replacing the pod with an outdoor 3,000 sq. ft. interactive sprayground with support building and meeting space. Water spray features enhance the recreation value of a park or aquatic facility by featuring play elements located on a concrete splash pad, either with or without standing water. Because of minimal water depth, spraygrounds can, in most jurisdictions, be operated without certified lifeguards, thus making them a cost-effective addition. Spray elements can either be manipulated by children or pre-programmed with timers. One thirty foot diameter picnic. pavilion and three or four twenty foot diameter shade umbrellas will be provided for shade. Additionally, shade can be provided over the sprayground area for UV protection. The bathhouse/meeting room is 2,777 square feet.

Shaded Water Sprayground

Water Spray/Play Features

Conceptual Plan of New Sprayground

OPINION OF PROJECT COST: WARWICK			
Description	Unit	Amount	Opinion of Cost
Demolition			$150,000
Bathhouse		2,777	$573,900
Lobby/Entry	Sq. Ft.	140	
Office	Sq. Ft.	150	
Meeting Room	Sq. Ft.	750	
Pool Mechanical	Sq. Ft.	400	
Building Mechanical	Sq. Ft.	150	
Storage	Sq. Ft.	200	
Locker Rooms	Sq. Ft.	400	
Family Changing Room	Sq. Ft.	125	
Vending	Sq. Ft.	100	
Efficiency	Sq. Ft.	362	
Aquatics		3,000	$637,500
Splash Pad	Sq. Ft.	3,000	
Interactive Play Features	Allowance	1	
Vault (Grey water/ Filtration)	Quantity	1	
Equipment (Irrigation/Filtration)	Quantity	1	
UV Sanitizer	Quantity	1	
Support			$324,000
Outdoor Deck	Sq. Ft.	4,500	
Fence	Linear Ft.	400	
Overhead Lighting	Sq. Ft.	7,500	
Equipment	Allowance	1	
Pavilion	Sq. Ft.	500	
Shade Structures	Quantity	4	
Total Building Construction Costs			**1,685,400**
Site Construction Costs (landscaping, utilities, walks)			$75,000
Subtotal			$1,760,400
Inflation (3 years)	10%		$176,040
Contingency	10%		$193,644
Indirect Costs	15%		$319,513
Total Estimated Project Costs:			$2,449,597
Say			**$2,450,000**
Source: Counsilman-Hunsaker			

West Side Pool – Cost $5,300,000

The recommendation for West Side pool features the same scenario as Old Town, which includes an outdoor 3,099 sq. ft. leisure pool / children's pool with zero-depth entry. This pool creates a congregating area where everyone can enter the pool with ease. Children can climb on, crawl across, or slide down the play structure. The separate 8 lane 25-yard 5,000 sq. ft. lap pool accommodates a myriad of fitness programs, lap swimming, and activities. A large water slide offers the exertion of climbing the stairs and the exhilaration of sliding down into the waiting catch pool below. Six shade umbrellas create a festive touch while providing relief from UV rays. The bathhouse is 4,019 square feet. Similar to Old Town Pool, the City should consider joint development with a West side public school.

Eight Lane Lap Pool

Separate Children's Pool

Conceptual Plan for New Outdoor Pool

OPINION OF PROJECT COST: WEST SIDE POOL			
Description	Unit	Amount	Opinion of Cost
Demolition			N/A
Bathhouse		4,019	$863,544
Lobby/Entry	Sq. Ft.	140	
Managers Office	Sq. Ft.	100	
Guard Room / First Aid	Sq. Ft.	125	
Pool Mechanical	Sq. Ft.	900	
Building Mechanical	Sq. Ft.	300	
Storage	Sq. Ft.	500	
Locker Rooms	Sq. Ft.	1,080	
Family Changing Room (2)	Sq. Ft.	250	
Vending	Sq. Ft.	100	
Efficiency	Sq. Ft.	524	
Aquatics		8,099	$2,292,263
Leisure Pool	Sq. Ft.	3,099	
Participatory Play Feature	Allowance	1	
Tot Slide	Quantity	1	
Lap Pool (8 Lane 25 Yard)	Sq. Ft.	5,000	
Waterslide	Quantity	1	
Springboard Diving	Quantity	0	
Support			$408,853
Outdoor Deck	Sq. Ft.	12,149	
Fence	Linear Ft.	500	
Overhead Lighting	Sq. Ft.	20,248	
Equipment	Allowance	1	
Shade Structures	Quantity	6	
Total Building Construction Costs			**3,564,659**
Site Construction Costs (parking lot, landscaping, utilities, walks)			$242,668
Subtotal			$3,807,326
Inflation (3 years)	10.0%		$380,733
Contingency	10.0%		$418,806
Indirect Costs	15.0%		$691,030
Total Estimated Project Costs:			$5,297,900
Say			**$5,300,000**
Source: Counsilman-Hunsaker			

Ewald (West Side Sprayground) – Cost $1,995,000

The recommendation for Ewald is the same scenario as Warwick, which removes the pool to feature an outdoor 3,000 sq. ft. interactive sprayground with support building (but no meeting space). Water spray features enhance the recreation value of a park or aquatic facility by featuring play elements located on a concrete splash pad, either with or without standing water. Because of minimal water depth, spraygrounds can, in most jurisdictions, be operated without certified lifeguards, thus making them a cost-effective addition. Spray elements can either be manipulated by children or pre-programmed with timers. One thirty foot diameter picnic. pavilion and three or four twenty foot diameter shade umbrellas will be provided for shade. Additionally, shade can be provided over the sprayground area for UV protection. The bathhouse is 1,478 square feet.

Shaded Water Sprayground

Water Spray/Play Features

Conceptual Plan of New Sprayground

OPINION OF PROJECT COST: EWALD			
Description	Unit	Amount	Opinion of Cost
Demolition			$85,000
Bathhouse		1,478	$311,600
Lobby/Entry	Sq. Ft.	140	
Office	Sq. Ft.	150	
Pool Mechanical	Sq. Ft.	400	
Building Mechanical	Sq. Ft.	70	
Storage	Sq. Ft.	100	
Restrooms	Sq. Ft.	300	
Family Changing Room	Sq. Ft.	125	
Efficiency	Sq. Ft.	193	
Aquatics		3,000	$637,500
Splash Pad	Sq. Ft.	3,000	
Interactive Play Features	Allowance	1	
Vault (Grey water/ Filtration)	Quantity	1	
Equipment (Irrigation/Filtration)	Quantity	1	
UV Sanitizer	Quantity	1	
Support			$324,000
Outdoor Deck	Sq. Ft.	4,500	
Fence	Linear Ft.	400	
Overhead Lighting	Sq. Ft.	7,500	
Equipment	Allowance	1	
Pavilion	Sq. Ft.	500	
Shade Structures	Quantity	4	
Total Building Construction Costs			**1,358,100**
Site Construction Costs (landscaping, utilities, walks)			$75,000
Subtotal			$1,433,100
Inflation (3 years)	10%		$143,310
Contingency	10%		$157,641
Indirect Costs	15%		$260,108
Total Estimated Project Costs:			$1,994,159
Say			**$1,995,000**
Source: Counsilman-Hunsaker			

Colasanto – Cost $832,000

The recommendation for Colasanto is a decorative interactive fountain feature and two shade umbrellas. The existing pool space adjacent to the art center can be turned into a plaza for public festivals, art display, and an interactive fountain – enhancing the Del Ray entry point while providing water play fun for neighbhorhood users and visitors during the summer months.

Interactive Fountain in Public Plaza – Can be Utilized Dry or Wet as Needed

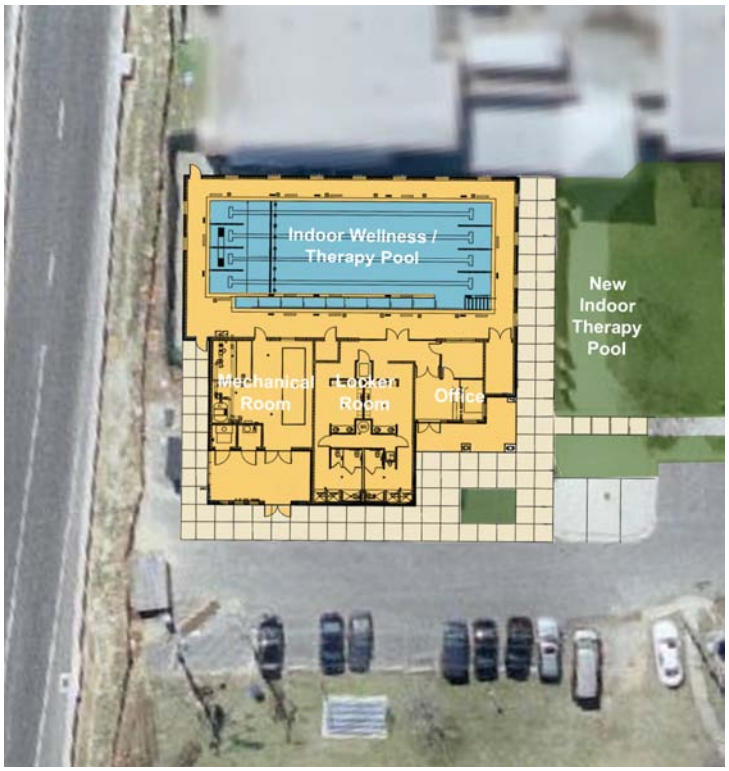
OPINION OF PROJECT COST: COLASANTO			
Description	Unit	Amount	Opinion of Cost
Demolition			$50,000
Bathhouse		600	$105,000
Pool Mechanical	Sq. Ft.	400	
Storage	Sq. Ft.	200	
Aquatics		1,200	$380,000
Fountain Feature	Sq. Ft.	1,200	
Interactive Play Features	Allowance	1	
Vault (Grey water/ Filtration)	Quantity	1	
Equipment (Irrigation/Filtration)	Quantity	1	
UV Sanitizer	Quantity	1	
Support			$32,750
Fence	Linear Ft.	200	
Overhead Lighting	Sq. Ft.	1,200	
Shade Structures	Quantity	2	
Total Building Construction Costs		**1,800**	**567,750**
Site Construction Costs (landscaping, utilities, walks)			$30,000
Subtotal			$597,750
Inflation (3 years)	10%		$59,775
Contingency	10%		$65,753
Indirect Costs	15%		$108,492
Total Estimated Project Costs:			$831,769
Say			**$832,000**
Source: Counsilman-Hunsaker			

Lee (Indoor Therapy Pool) – Cost $3,370,000

The recommendation for Lee is an indoor therapy pool. Retirees, seniors, and those with hydro therapy health needs will enjoy the indoor 1,800 sq. ft. therapy pool designed to assist those with strained muscles, arthritis, and other aquatic therapy needs. This pool is typically between 84 – 88 degrees, allowing for gentle exercise in the water. In order to maximize revenue potential and health benefits to the community, programming needs to concentrate on therapy associated with a medical provider.

Water Aerobics Class

Water Weight Training



Conceptual Plan of Lee Indoor Therapy Pool

OPINION OF PROJECT COST: LEE			
Description	Unit	Amount	Opinion of Cost
Demolition			$100,000
Public Spaces		1,750	$452,969
Basic Lobby	Sq. Ft.	150	
Check-in Desk	Sq. Ft.	75	
Office Space	Sq. Ft.	200	
Office Storage	Sq. Ft.	75	
Lifeguard/First Aid	Sq. Ft.	150	
Locker Rooms	Sq. Ft.	800	
Family Changing Room	Sq. Ft.	200	
Storage	Sq. Ft.	100	
Natatorium		3,750	$1,324,375
Wellness Pool	Sq. Ft.	1,800	
Wellness Pool Natatorium	Sq. Ft.	3,500	
Pool Storage	Sq. Ft.	250	
Support		750	$131,250
Pool Mechanical & Chemical	Sq. Ft.	500	
Building Mechanical	Sq. Ft.	250	
Efficiency		1,250	$225,000
Circulation and Walls (20%)	Sq. Ft.	1,250	
Total Building Construction Costs		7,500	**$2,233,594**
Site Construction Costs			$187,500
Furnishings & Equipment			$56,250
Subtotal			$2,477,344
Inflation (3 years)	10%		$247,734
Contingency	10%		$272,508
Indirect Costs	15%		$371,602
Total Estimated Project Costs:			$3,369,188
Say			**$3,370,000**
Source: Counsilman-Hunsaker			

Proforma

Capacity Analysis

The following table shows the contribution that the available capacity has to the projected attendance. Parking analysis is based on three guests per car.

CAPACITY ANALYSIS							
	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee
WET-SIDE CAPACITY							
Training (Available 25-Yard Lanes)							
Outdoor Lap	0	8	0	8	0	0	0
Indoor Leisure	3	0	0	0	0	0	0
Indoor Lap	11	0	0	0	0	0	0
Total	14	8	0	8	0	0	0
Estimated Training Holding Capacity	70	40	0	40	0	0	0
Daily Training Capacity	210	120	0	120	0	0	0
Recreation (Surface Area Sq. Ft.)							
Outdoor Leisure	0	3,099	0	3,099	0	0	0
Outdoor Lap	0	5,000	0	5,000	0	0	0
Indoor Leisure	6,800	0	0	0	0	0	0
Indoor Lap	6,200	0	0	0	0	0	0
Indoor Therapy	0	0	0	0	0	0	1,800
Indoor Spa	290	0	0	0	0	0	0
Spraypad/Fountain	0	0	3,000	0	3,000	1,200	0
Total	13,290	8,099	3,000	8,099	3,000	1,200	1,800
Estimated Recreation Holding Capacity	372	275	120	275	120	48	67
Daily Recreation Holding Capacity	930	688	300	688	300	120	167
Total Holding Capacity	442	315	120	315	120	48	67
Total Daily Facility Capacity	**1,140**	**808**	**300**	**808**	**300**	**120**	**167**

PARKING and SITE ANALYSIS							
	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee
Parking	171	70	27	70	27	11	15
Parking Sq. Ft.	73,000	30,000	12,000	30,000	12,000	5,000	7,000
Impervious Structure	62,916	24,267	10,277	24,267	8,978	1,800	7,500
Total Program Sq. Ft.	135,916	54,267	22,277	54,267	20,978	6,800	14,500
Total Sq. Ft. with Efficiency	176,691	70,547	28,960	70,547	27,271	8,840	18,850
Preferred Site Size Requirements (acres)	4.06	1.62	0.66	1.62	0.63	0.20	0.43
Recommended Site Size (acres)	5.27	2.11	0.86	2.11	0.81	0.26	0.56
Source: Counsilman-Hunsaker							

Recreation Program Revenue

Based on the recommendations, the following charts show recreation program revenue projections.

Per Capita Spending (Net)	Chinquapin	Old Town	Warwick	West Side	John Ewald	Colasanto	Nannie J Lee
Swim Meet Rental	$1,500.00	$800.00	$800.00	$800.00	$800.00	$0.00	$800.00
Swim Team	$4.00	$2.00	$0.00	$2.00	$0.00	$0.00	$0.00
High School Swim Team	$4.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Summer Swim Lessons	$9.00	$9.00	$9.00	$9.00	$9.00	$9.00	$9.00
Winter Swim Lessons	$9.00	$9.00	$9.00	$9.00	$9.00	$9.00	$9.00
Lifeguard Training	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00	$20.00
Masters Swim Team	$4.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Wellness Programming	$3.50	$0.00	$0.00	$0.00	$0.00	$0.00	$3.50
Personal Training	$15.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Group Exercise	$4.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Meetings	$150.00	$0.00	$150.00	$0.00	$0.00	$0.00	$0.00
Birthday Party	$55.00	$45.00	$25.00	$45.00	$0.00	$0.00	$30.00
Private Rental	$35.00	$25.00	$15.00	$25.00	$25.00	$0.00	$25.00
Opinion of Revenue (Net)	Chinquapin	Old Town	Warwick	West Side	John Ewald	Colasanto	Nannie J Lee
Swim Meet Rental	$27,000	$3,200	$0	$3,200	$0	$0	$0
Swim Team	$180,000	$4,000	$0	$4,000	$0	$0	$0
High School Swim Team	$14,400	$0	$0	$0	$0	$0	$0
Summer Swim Lessons	$54,000	$21,600	$0	$21,600	$0	$0	$13,500
Winter Swim Lessons	$180,000	$0	$0	$0	$0	$0	$18,000
Lifeguard Training	$8,000	$0	$0	$0	$0	$0	$0
Masters Swim Team	$48,000	$0	$0	$0	$0	$0	$0
Wellness Programming	$5,250	$0	$0	$0	$0	$0	$13,125
Personal Training	$52,500	$0	$0	$0	$0	$0	$0
Group Exercise	$40,000	$0	$0	$0	$0	$0	$0
Meetings	$15,000	$0	$3,000	$0	$0	$0	$0
Birthday Party	$13,200	$3,600	$1,000	$3,600	$0	$0	$600
Private Rental	$1,750	$1,000	$75	$1,000	$125	$0	$750
Total User Group Revenue	**$639,100**	**$33,400**	**$4,075**	**$33,400**	**$125**	**$0**	**$45,975**

USER GROUP REVENUE							
Visits per Program Day	Chinquapin	Old Town	Warwick	West Side	John Ewald	Colasanto	Nannie J Lee
Swim Meet Rental	1	1	-	1	-	-	-
Swim Team	150	40	-	40	-	-	-
High School Swim Team	40	-	-	-	-	-	-
Summer Swim Lessons	100	40	-	40	-	-	25
Winter Swim Lessons	100	-	-	-	-	-	10
Lifeguard Training	10	-	-	-	-	-	10
Masters Swim Team	40	-	-	-	-	-	-
Wellness Programming	10	5	-	5	-	-	15
Personal Training	10	-	-	-	-	-	-
Group Exercise	40	-	-	-	-	-	-
Meetings	2	-	1	-	-	-	-
Birthday Party	2	2	2	2	2	-	2
Private Rental	1	1	1	1	1	-	1
Programming Days	Chinquapin	Old Town	Warwick	West Side	John Ewald	Colasanto	Nannie J Lee
Swim Meet Rental	18	4	-	4	-	-	-
Swim Team	300	50	-	50	-	-	-
High School Swim Team	90	-	-	-	-	-	-
Summer Swim Lessons	60	60	-	60	-	-	60
Winter Swim Lessons	200	-	-	-	-	-	200
Lifeguard Training	40	-	-	-	-	-	-
Masters Swim Team	300	-	-	-	-	-	-
Wellness Programming	150	20	-	20	-	-	250
Personal Training	350	-	-	-	-	-	-
Group Exercise	250	-	-	-	-	-	-
Meetings	50	-	20	-	-	-	-
Birthday Party	120	40	20	40	-	-	10
Private Rental	50	40	5	40	5	-	30

Per Capita Spending

Per capita spending is the projection of revenues that will be generated from annual attendance. The formula reflects the category for admission, the rate of each category, and the percentage of attendance that might be expected from that category. Attendance projections reflect the number of people who will attend the facility during the course of operations.

PER CAPITA - INDOOR			
Category	Rate	Percent of Visits	Per Visit Unit
Residents			
Adult (18 & Older)	8.00	12%	0.96
Children (3-17)	6.00	10%	0.60
Free	0	2%	-
Non-Resident			
Adult	10.00	8%	0.80
Child	8.00	7%	0.56
Annual Pass			
Resident			
Individual	320.00	17%	1.36
Family	650.00	15%	0.81
Non-Resident			
Individual	400.00	16%	1.83
Subtotal / Average		100%	7.69
Food / Merchandise			$ 0.05
Total Per Capita			**$7.74**
Source: Counsilman-Hunsaker			

PER CAPITA - OUTDOOR			
Category	Rate	Percent of Visits	Per Visit Unit
Residents			
Adult (18 & Older)	5.00	19%	0.95
Children (3-17)	5.00	21%	1.05
Free	0	5%	-
Non-Resident			
Adult	7.50	11%	0.83
Child	7.50	17%	1.28
Season Pass			
Resident			
Individual	90.00	12%	0.36
Family	200.00	10%	0.18
Non-Resident			
Individual	110.00	5%	0.22
Subtotal / Average		100%	4.86
Food / Merchandise			$ 0.05
Total Per Capita			**$4.91**
Source: Counsilman-Hunsaker			

Revenue

The following table takes into consideration the revenue streams from special user group spending and general attendance, resulting in an opinion of revenue for each option. Attendance is multiplied by per capita and added to special user group spending.

OPINION OF REVENUE							
	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee
Attendance							
2011	183,308	41,394	12,022	43,118	10,860	6,627	9,997
2012	188,014	42,311	12,336	44,233	11,148	6,809	10,208
2013	192,721	43,229	12,651	45,348	11,436	6,991	10,418
2014	197,427	44,147	12,965	46,462	11,724	7,172	10,629
2015	202,134	45,065	13,280	47,577	12,012	7,354	10,840
Per Capita Spending (3% Annual Increase)	$7.74	$4.91	$0.00	$4.91	$0.00	$0.00	$7.74
Special User Group Spending	$639,100	$33,400	$4,075	$33,400	$125	$0	$45,975
Revenue 2011	$2,057,765	$236,718	$4,075	$245,188	$125	$0	$123,344
2012	$2,137,843	$247,461	$4,075	$257,182	$125	$0	$127,344
2013	$2,220,105	$258,473	$4,075	$269,503	$125	$0	$131,442
2014	$2,304,553	$269,757	$4,075	$282,154	$125	$0	$135,638
2015	$2,391,187	$281,311	$4,075	$295,133	$125	$0	$139,932
Source: Counsilman-Hunsaker							

Expenses

The following table reflects a summary of all operating expenses, assumptions and estimates detailed by the expense category.

OPINION OF EXPENSE							
	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee
Facility Staff							
Full Time Allocation	$114,450	$49,050	$16,350	$49,050	$16,350	$16,350	$65,400
Recreation Coordinator	$55,000	$0	$0	$0	$0	$0	$0
Full Time Benefits	$59,308	$17,168	$5,723	$17,168	$5,723	$5,723	$22,890
Summer Employment	$304,911	$169,740	$0	$169,740	$0	$0	$73,485
Winter Employment	$589,082	$4,807	$0	$4,807	$0	$0	$216,373
Training	$9,000	$2,000	$0	$2,000	$0	$0	$3,000
Total Labor	**$1,131,750**	**$242,765**	**$22,073**	**$242,765**	**$22,073**	**$22,073**	**$381,148**
Contractual Services							
Insurance	$171,332	$33,310	$12,250	$32,260	$9,975	$4,160	$26,415
Repair and Maintenance	$71,000	$13,800	$6,200	$13,300	$5,000	$2,100	$8,500
Total Contractual Services	**$242,332**	**$47,110**	**$18,450**	**$45,560**	**$14,975**	**$6,260**	**$34,915**
Commodities							
Operating Supplies	$42,600	$8,280	$3,720	$7,980	$3,000	$1,260	$5,100
Chemicals	$50,179	$11,816	$2,236	$11,816	$2,236	$639	$7,256
Advertising	$35,000	$5,000	$1,000	$5,000	$1,000	$0	$5,000
Total Commodities	**$127,779**	**$25,096**	**$6,956**	**$24,796**	**$6,236**	**$1,899**	**$17,356**
Utilities							
HVAC	$203,110	$6,270	$4,333	$6,270	$2,305	$0	$24,975
Electricity	$166,819	$22,136	$10,453	$21,207	$7,597	$3,494	$6,252
Pool Heating	$32,000	$12,600	$0	$12,600	$0	$0	$14,500
Trash Service	$9,360	$2,160	$720	$2,160	$720	$720	$3,120
Telephone	$4,320	$900	$360	$900	$360	$0	$1,620
Water & Sewer	$153,722	$44,449	$9,006	$45,656	$8,193	$4,875	$9,833
Total Utilities	**$569,332**	**$88,515**	**$24,871**	**$88,793**	**$19,175**	**$9,089**	**$60,300**
Total Operating Expenses	**$2,071,192**	**$403,485**	**$72,349**	**$401,914**	**$62,458**	**$39,320**	**$493,719**
Capital Replacement Fund	$141,900	$27,600	$12,300	$26,500	$10,000	$4,200	$16,900
Total Annual Expense	**$2,213,092**	**$431,085**	**$84,649**	**$428,414**	**$72,458**	**$43,520**	**$510,619**

Part Time Labor Analysis

LABOR ANALYSIS																			
	Hours Per Day							Cost Per Hour		Days per Season			Total Employer Expense						
Job Description	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee	Hourly Rate	Rate with overhead	Indoor	Outdoor	Spraygroundd	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee
Summer																			
Cashier	27	10	0	10	0	0	0	15.00	$17.25	90	90	100	41,918	15,525	0	15,525	0	0	0
Pool Manager	16	10	0	10	0	0	13	18.00	$20.70	90	90	100	29,808	18,630	0	18,630	0	0	24,219
Lifeguard	108	80	0	80	0	0	26	16.00	$18.40	90	90	100	178,848	132,480	0	132,480	0	0	43,056
Rec Attendant	27	0	0	0	0	0	0	15.00	$17.25	90	90	100	41,918	0	0	0	0	0	0
Maintenance	8	2	0	2	0	0	4	15.00	$17.25	90	90	100	12,420	3,105	0	3,105	0	0	6,210
Summer Total	186	102	0	102	0	0	43						$304,911	$169,740	$0	$169,740	$0	$0	$73,485
Winter																			
Cashier	22	0	0	0	0	0	0	15.00	$17.25	265	10	50	100,568	0	0	0	0	0	0
Pool Manager	16	4	0	4	0	0	13	18.00	$20.70	265	10	50	87,768	828	0	828	0	0	71,312
Lifeguard	55	16	0	16	0	0	26	16.00	$18.40	265	10	50	268,180	2,944	0	2,944	0	0	126,776
Rec Attendant	21	0	0	0	0	0	0	15.00	$17.25	265	10	50	95,996	0	0	0	0	0	0
Maintenance	8	6	0	6	0	0	4	15.00	$17.25	265	10	50	36,570	1,035	0	1,035	0	0	18,285
Winter Total	122	26	0	26	0	0	43						$589,082	$4,807	$0	$4,807	$0	$0	$216,373
Annual Labor Expense													**$893,993**	**$174,547**	**$0**	**$174,547**	**$0**	**$0**	**$289,858**

Full Time Labor Analysis

	Chinquapin	Old Town	Warwick	West Side	Ewald	Colasanto	Lee	Total
	35%	*15%*	*5%*	*15%*	*5%*	*5%*	*20%*	*100%*
Aquatics Director	$25,200	$10,800	$3,600	$10,800	$3,600	$3,600	$14,400	$72,000
Aquatics Coordinator (2)	$38,500	$16,500	$5,500	$16,500	$5,500	$5,500	$22,000	$110,000
Aquatics Program Specialist	$15,750	$6,750	$2,250	$6,750	$2,250	$2,250	$9,000	$45,000
Aquatic Maintenance (2)	$35,000	$15,000	$5,000	$15,000	$5,000	$5,000	$20,000	$100,000
Total	**$114,450**	**$49,050**	**$16,350**	**$49,050**	**$16,350**	**$16,350**	**$65,400**	**$327,000**

Cash Flow

The following table represents projections of gross operating performance for all options based on revenue projections and expense estimates.

OPINION OF CASHFLOW					
	2011	2012	2013	2014	2015
Chinquapin					
Project Cost	$28,366,000				
Attendance	183,308				
Revenue	$2,057,765	$2,137,843	$2,220,105	$2,304,553	$2,391,187
Expense	$2,071,192	$2,122,972	$2,176,046	$2,230,448	$2,286,209
Operating Cashflow	($13,427)	$14,870	$44,059	$74,106	$104,978
Recapture Rate	**99%**	**101%**	**102%**	**103%**	**105%**
Capital Replacement Fund	$141,900	$141,900	$141,900	$141,900	$141,900
Debt Service	($2,276,161)	($2,276,161)	($2,276,161)	($2,276,161)	($2,276,161)
Cashflow	($2,431,488)	($2,403,191)	($2,374,003)	($2,343,956)	($2,313,083)
Old Town					
Project Cost	$5,510,000				
Attendance	41,394				
Revenue	$236,718	$247,461	$258,473	$269,757	$281,311
Expense	$403,485	$413,572	$423,911	$434,509	$445,372
Operating Cashflow	($166,767)	($166,112)	($165,438)	($164,752)	($164,061)
Recapture Rate	**59%**	**60%**	**61%**	**62%**	**63%**
Capital Replacement Fund	$27,600	$27,600	$27,600	$27,600	$27,600
Debt Service	($442,137)	($442,137)	($442,137)	($442,137)	($442,137)
Cashflow	($636,504)	($635,848)	($635,175)	($634,489)	($633,798)
Warwick					
Project Cost	$2,450,000				
Attendance	12,022				
Revenue	$4,075	$4,075	$4,075	$4,075	$4,075
Expense	$72,349	$74,158	$76,012	$77,912	$79,860
Operating Cashflow	($68,274)	($70,083)	($71,937)	($73,837)	($75,785)
Recapture Rate	**6%**	**5%**	**5%**	**5%**	**5%**
Capital Replacement Fund	$12,300	$12,300	$12,300	$12,300	$12,300
Debt Service	($196,594)	($196,594)	($196,594)	($196,594)	($196,594)
Cashflow	($277,169)	($278,977)	($280,831)	($282,732)	($284,679)

	2011	2012	2013	2014	2015
West Side					
Project Cost	$5,300,000				
Attendance	43,118				
Revenue	$245,188	$257,182	$269,503	$282,154	$295,133
Expense	$401,914	$411,961	$422,260	$432,817	$443,637
Operating Cashflow	($156,725)	($154,780)	($152,757)	($150,663)	($148,505)
Recapture Rate	**61%**	**62%**	**64%**	**65%**	**67%**
Capital Replacement Fund	$26,500	$26,500	$26,500	$26,500	$26,500
Debt Service	($425,286)	($425,286)	($425,286)	($425,286)	($425,286)
Cashflow	($608,511)	($606,566)	($604,543)	($602,449)	($600,291)
Ewald					
Project Cost	$1,995,000				
Attendance	10,860				
Revenue	$125	$125	$125	$125	$125
Expense	$62,458	$64,020	$65,620	$67,261	$68,942
Operating Cashflow	($62,333)	($63,895)	($65,495)	($67,136)	($68,817)
Recapture Rate	**0%**	**0%**	**0%**	**0%**	**0%**
Capital Replacement Fund	$10,000	$10,000	$10,000	$10,000	$10,000
Debt Service	($160,084)	($160,084)	($160,084)	($160,084)	($160,084)
Cashflow	($232,417)	($233,979)	($235,579)	($237,220)	($238,901)
Colasanto					
Project Cost	$832,000				
Attendance	6,627				
Revenue	$0	$0	$0	$0	$0
Expense	$39,320	$40,303	$41,311	$42,343	$43,402
Operating Cashflow	($39,320)	($40,303)	($41,311)	($42,343)	($43,402)
Recapture Rate	**0%**	**0%**	**0%**	**0%**	**0%**
Capital Replacement Fund	$4,200	$4,200	$4,200	$4,200	$4,200
Debt Service	($66,762)	($66,762)	($66,762)	($66,762)	($66,762)
Cashflow	($110,282)	($111,265)	($112,272)	($113,305)	($114,364)
Lee					
Project Cost	$3,370,000				
Attendance	9,997				
Revenue	$123,344	$127,344	$131,442	$135,638	$139,932
Expense	$493,719	$506,062	$518,714	$531,682	$544,974
Operating Cashflow	($370,375)	($378,718)	($387,271)	($396,043)	($405,042)
Recapture Rate	**25%**	**25%**	**25%**	**26%**	**26%**
Capital Replacement Fund	$16,900	$16,900	$16,900	$16,900	$16,900
Debt Service	($270,418)	($270,418)	($270,418)	($270,418)	($270,418)
Cashflow	($657,693)	($666,035)	($674,589)	($683,361)	($692,359)

Recommended Phasing and Funding Considerations

Phasing provides guidance for future facility implementation that can take place over time. Although, all of the City's current aquatic facilities are functionally and physically obsolete by today's standards – it is our understanding that the City currently has not identified funding to implement the aquatics plan.

Currently, the City has identified approximately $6 million in projected budgets for repairs and building maintenance plus $3 million for spray parks at Chinquapin. The Chinquapin Center is over 25 years old, the indoor competition pool is not a regulation pool and cannot be used for competition meets, and both the pool and building need to be replaced within the next 5-10 years. Based upon the upcoming needed replacement of Chinquapin Center and Indoor Pool, it is our opinion that $9 million should not be spent on Chinquapin when it is scheduled for replacement.

Additionally, in 2012, the City funded and is the process of preparing plans to replace the K-8 school adjacent to Old Town Pool (East Side). The oldest and most highly attended outdoor pool for the City of Alexandria is Old Town Pool. During the initial school planning, we prepared a concept for the replacement of Old Town Pool that will fit in the space currently occupied by the existing pool. Having the pool adjacent to the middle school provides multiple benefits including the opportunity for shared utility services, shared parking, shared open space, and the potential for learn-to-swim classes for middle school students.

The second most highly attended outdoor pool in the City is Warwick due to heavy ay camp programming by the City. Unfortunately, Warwick is located on leased land and the pool has experienced structural issues over the years (most pools built on hillsides have structural issues.) During the public meetings for this study, local residents, although passionate about their pool did express interest in having a sprayground if a new pool was not feasible. Therefore, it is our opinion that doing a new sprayground at Warwick would be the best approach for the City and the best way to serve the residents.

To get a start on the implementation of the Aquatic Facilities Master Plan and in light of the considerations noted above – we suggest that the City consider reallocation of the current budgetary funding of approximately $9 million to accomplish Phase I of the Aquatic Facilities Master Plan as follows:

Phase I (East Side)

Item A	Replace Old Town Pool	$5,510,000
Item B	Upgrade Warwick with Sprayground	$2,450,000
Item C	Make Minimum Repairs to Chinquapin	$ 832,000*
		$8,792,000

*Note: Repair money spent on Chinquapin should be minimized since the entire facility needs to be replaced. If more money has to be spent than what we have shown for Phase I –the scope of the work for Warwick can be reduced.

To serve the Ewald users in a similar manner to Warwick –we prepared a site specific plan to show a sprayground and reconfigured parking for improved access and visibility. Eliminating the pool and lowering the grades where the existing pool are will greatly improve connectivity of open space, visibility, and security at the Ewald site. This information can be used by the park staff as the future master plan for Ewald is reprogrammed and master planned with public participation.

The west side of City of Alexandria does not currently have the same level of service for aquatics as the east side. This is typical of older towns where multiple pools may be present in the older park of town (east side) and few or no pools in the newer parks of town (west side.) Additionally there is very low usership at Ewald Pool. In our opinion this is due to the current location and size of the existing pool at Ewald, the number of apartment pools, and the physical barrier of I395 that drives recreation users west to other recreation providers.

Based upon the synergy of the similar school projects, the need to have expanded and improved pool facilities on the west side of town, and the need to provide an equal level of service to the entire City – we suggest the balance of the aquatic plan be phased as follows:

Phase II (West Side)

Item 2A	Replace Ewald Pool at West Side	$5,300,000
Item 2B	Upgrade Ewald Pool with a Sprayground	$1,995,000
		$7,295,000

Since there is no current funding identified for the west side improvements, new funding will need to be identified and budgeted. The funding required to implement the Aquatic Facilities Master Plan for the west side, is much smaller than the funding required to replace the Chinquapin Center and Pool, and therefore should be easier for the City to budget for.

Once the east and west sides are complete - we recommend that the next phase of the plan be to replace Chinquapin Center and Pool. Chinquapin is the newest of the larger City pools and it will be the most costly to replace. Although the City will be without an indoor pool during the replacement of Chinquapin–having new expanded outdoor facilities on the east and west sides of town will help provide service while a new and expanded Chinquapin Center and pool are constructed.

For Phase IV, we suggest the Colasanto interactive fountain be completed and the Lee site be redeveloped as a small indoor therapy pool for wellness programming. Due to the smaller size of the project and the type of special use programming it will provide – there may be opportunities for special grant funding or a partnership with local hospital or wellness care providers for the Lee Indoor Therapy Pool.

Phase III (Central/City-Wide)

Item 3A	Replace Chinquapin Center and Pool	$28,366,000

Phase IV (East Side/City-Wide)

Item 4A	Lee Indoor Therapy Pool	$3,370,000
Item 4B	Colasanto Interactive Fountain	$832,000
		$4,202,000

The total cost of the recommended plan (Phases I, II, III, and IV) as outlined above would be $48,655,000.

Other Scenarios

While implementing these recommendations is our suggested approach to serving the aquatic community, it is important to consider and evaluate the implications of other scenarios. These scenarios are important to consider when evaluating the recommended plan:

1. **Do Nothing**: Invest no capital money and close existing pools due to non-compliance with new regulations and guidelines.
2. **Maintain As-Is.** Continue to operate the pools, making needed repairs to continue operation for the remainder of the pools useful life (5-10 years?).
3. **Replace As-Is**. Rebuild the 1970's model aquatic plan by replacing all pools in their current locations and configurations.
4. **Recommended:** Replace all pools with modern aquatic facilities and relocate to better serve the entire community.

When evaluating these scenarios, the capital investment must be considered along with the overall value of the investment. Some criteria that are used to evaluate the value are: life expectancy, operating subsidy, annual visits or usage. The following chart summarizes some of the key points that must be considered when making this decision:

	Do Nothing	Maintain As-Is	Replace As-Is	Recommended
Capital Cost	$0	$9,960,000	$37,800,000	$48,655,000
Life Expectancy	0	5-10 Years	30-50 Years	30-50 Years
Annual Attendance	0	120,000	120,000	307,325
Annual Operating Costs	$0	$1,600,000	$1,600,000	$3,545,000
Annual Revenues	$0	$500,000	$500,000	$2,668,000
Annual Operating Subsidy	$0	$1,100,000	$1,100,000	$877,000
Subsidy Per Visit	$0.00	$9.17	$9.17	$2.85

Please note that "Do Nothing" ,"Maintain As-Is", and "Replace As-Is" are not recommended as none of them meet the current or future needs of the aquatic users.

Final Considerations

In Spring 2012, in the City of Alexandria, lesson progams had sign-ups of 500 children with a waiting list of an additional 300. Learning to swim is an essential life-safety skill –especially in a community adjacent to the Potomac River.

Currently, existing pools do not have the capacity to accommodate overflowing day camp users. Further closures will continue to impact day camp user programs.

Fiscal budgets are tight nationwide and the City of Alexandria is in the process of evaluating national trends of user fees supporting programs so that they can remain available to meet the communities needs in fiscally sustainable manner.

Historically, the City of Alexandria has a reputation for providing for a high-level of recreation services to the community including aquatics. In 2011 the *City of Alexandria Parks Needs Assesement* documented indoor and outdoor aquatics as one of the top five unmet needs of the City.

The intent of Aquatic Facilties Study and the recommendations associated with it should be used as a tool and resource to assist the public and decision makers in developing final budgeting and plans to create a new, diverse and well-thought out aquatic system that will serve the citizens of the City of Alexandria for the next 30-50 years.

City of Alexandria – Goal of Aquatics

The goal of aquatics is to promote water safety awareness while providing a broad array of programs, activities, and services to meet the needs and interests of a diverse community and facilitate the development of healthy lifestyles related to aquatic based programming.

Source: The City of Alexandria 2010 Aquatics Business Plan