

# Sharing the Lane

Columbia Association and Howard County  
Explore a Potential Aquatic Facility  
Partnership Approach

March 2017



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## **Introduction**

This report is the result of collaborative work between Howard County Government (the County) and Columbia Association (CA) to define and explore the possibility of a future partnership to bring a new indoor aquatic facility to the community. While neither the County nor CA has specific plans, programs or funding for such a facility, the goal of the collaborative work was to explore the feasibility of siting, constructing and operating a new indoor aquatics facility and, through that process, understand the components that would have to be addressed, should capital and operating funding become available in the future.

A small group of professional staff members from the County and CA (the “Work Team”) met seven times over 10 months. There was a core group of Work Team members that included management staff with expertise in planning, recreation and construction. This core group was supplemented by additional management staff with expertise in finance and law. The Work Team also engaged with senior leadership at Howard County Community College to explore partnership opportunities.

The desire for a new indoor aquatics facility has been raised by community members, with particular interest from those who swim competitively or have family members who swim competitively. Those interested in having such a facility constructed in Howard County, and more specifically in Columbia, have advocated for the facility to include a 50-meter pool.

This report examines two options for indoor, competitive-level aquatics facilities: a 50-meter option and a 25-yard option.

## Planning Framework and Research Findings

This section of the report provides a summary of the findings included in the existing County and CA aquatics plans and studies related to the need or desire for additional indoor aquatics facilities. In addition, this section includes an overview of the case studies of new indoor aquatics facilities that involved partnerships of two or more entities to construct and/or to operate the facility, as well as interviews with industry experts related to trends in 50-meter pool construction.

### CA's Aquatics Master Plan (2012)

The Aquatics Master Plan documents existing conditions; assesses the future needs of users of Columbia aquatics venues/programs; and makes recommendations for future investments. It includes policies, system-wide principles, recommended strategies and defined priorities.

One of the seven policy statements, which provide high-level guidance for the Columbia aquatics program and the implementation of the plan, states: *"The system should expand indoor pool capacity and employ a partnership approach."*

In addition to policy guidance, the plan recommends implementation strategies for capital investments; programming; and enhancements to marketing and communications. Under the heading of "capital investments", one of the issues addressed in the plan relates to indoor pool capacity as follows:

#### ***"Unmet Need for Indoor Pool Capacity***

*There is insufficient year-round indoor pool capacity to meet the needs of aquatics user groups during peak times during the non-summer months. Unmet need for indoor pool time is highest at peak times of the day — early morning, late afternoon and early evening when there are competing desires for lessons, lap swimming and other programming needs. There is also a waiting list for the Columbia Clippers and for some lesson programs. In addition, the wide array of indoor pool user groups, ranging from aqua-aerobics to competitive swimmers of various ages, leads to disagreements about pool temperatures to meet the needs of all user groups within the existing indoor pool facilities."*

The plan recommends that CA *"Expand year-round, indoor aquatics facilities to address the unmet demand for indoor pool time and the needs of the wide range of year-round swimmers and programming."*

The plan also recommends that CA complete a feasibility study of the potential to enclose one of CA's existing 23 outdoor pools. The plan also includes what is stated as a "contingent strategy" and further explains that such contingent strategies are: *"useful in cases if and when certain conditions materialize — in this case, partnerships with adequate funding. If that future condition does not materialize, this strategy would remain unused. Without this strategy, we run the risk of being unprepared should CA be able to build the necessary partnership."*

The contingent strategy is stated this way in the plan:

*"Partner to Develop a 50-Meter Pool. Build partnerships with other entities such as Howard County, the Howard County Public School System and Howard Community College to enable the planning, design and construction of a new indoor aquatics complex that includes a 50-meter*

*pool. There are a number of benefits to having a 50-meter indoor aquatic facility. However, these types of facilities are expensive and are rarely constructed by an individual community. The Columbia Association will move ahead with a project of this magnitude only through financial partnerships with other entities.”*

The feasibility study to consider enclosure of an existing pool that was called for in the plan was undertaken and several pools were examined for the potential to convert them to indoor facilities. The result of the study was that, while it was feasible, the conversion of an existing outdoor pool to an indoor pool commensurate with modern facilities was a major undertaking that went far beyond enclosing an existing pool and in a few locations would require a completely new facility to be constructed. The results of the feasibility study found that such a project would cost between \$5 million and \$7 million and the resulting facilities only partially met the indoor pool needs of the community. It was decided that if CA were to earmark that amount of funding, it would be better to invest it in a new indoor facility, in partnership with other organizations.

### **Howard County Aquatics Feasibility Study (2008)**

Howard County Recreation and Parks commissioned an Aquatics Feasibility Study. The study was prepared by national aquatic consultants Councilman-Hunsaker to provide aquatic facility options that would help Howard County make informed decisions about construction and operation of additional aquatic facilities. The intention was to explore aquatic facilities with the goal of providing recreation and leisure activities and learn-to-swim programs for the community. The study was done in the context of existing aquatic facilities owned by the county as well as those owned by CA with the intention of identifying options to fill gaps in service rather than to compete with CA. The 2008 Aquatics Feasibility Study examined four concepts:

- An **outdoor addition** - an outdoor leisure pool to be added to an existing community center;
- A **combined community center** - a natatorium with an eight-lane 25-yard pool, a leisure pool and an outdoor leisure pool;
- An **outdoor aquatic center** - an outdoor leisure pool and an outdoor six-lane 25-yard pool; and
- An **indoor 50-meter pool** - a natatorium with a 50-meter pool.

Each concept included an analysis of the necessary support spaces such as locker rooms, restrooms, equipment storage and mechanical rooms. The concepts included various features such as waterslides, spraygrounds, pavilions, current channels, diving areas, bulkheads and/or spectator seating. The study of these concepts included the development of project pro forma to estimate project expenses and revenues, cash flow, the percentage of operating expenses recuperated by operating revenues and annual debt service.

Based on the results of that analysis, two strategies were recommended by the consultant:

- **Strategy A** received the highest recommendation and included adding four pools: a combined community center in Western Howard County and another in Laurel; an outdoor addition in Ellicott City; and an outdoor aquatic center in Elkridge.

- **Strategy B**, considered the “cost sustainable” (less costly) option, included the construction of an outdoor addition in Western Howard County, an outdoor aquatic center in Ellicott City, an outdoor aquatic center in Elkridge and an outdoor addition in Laurel.

The study did not recommend a 50-meter pool in either of these strategies since the goal of the Howard County Department of Recreation and Parks is to provide recreation and leisure activities and a 50-meter pool is geared towards competitive swimmers. However, in the study report, the consultant states that if Howard County did want to pursue a 50-meter facility, it should not do so alone and should consider partnerships to help with the capital cost and the ongoing required subsidy that would be needed to operate a 50-meter pool.

## **County Identified Case Studies**

More recently, in 2015, Howard County Recreation and Parks staff undertook research into partnership approaches in use in other communities to build or use new aquatics facilities. Five case studies were identified based on recommendations from the county’s former aquatics consultant, Councilman-Hunsaker.

The data collected focused on sharing facility use, if and how capital investments had been made jointly, and how maintenance and operating responsibilities were delineated. The approaches varied. In three cases, capital investment was shared among the partnering entities including partnerships between a local government and a local school system and in one case, a community college. In two of the five cases, only operating agreements were made between the municipal government and either a swim team or a community college. In those agreements, the swim club and the community college paid for specific use rights and those entities did not provide any capital funding. In all cases, one organization, the government entity, managed the operation of the facility. One partnership agreement included the establishment of a five-member committee, with representation for the municipal government and the school system, which was responsible for setting usage policies and procedures to allocate the use of the facility.

## **Industry Interviews**

To learn about recent trends around the country related to pool construction, enhancement features and programming, CA staff, as part of the Aquatics Master Plan process, contacted a dozen industry experts and conducted interviews. The people consulted included aquatics management experts; consultants; aquatics design professionals; and recreation and aquatics association staff members. In addition, interviews were conducted with two other planned communities (Reston and The Woodlands) and one jurisdiction – Portland, Oregon. The experts and community officials were asked a series of questions including one about trends in construction of 50-meter indoor pool facilities. Here are some of the responses relevant to the current indoor aquatics partnership discussions.

### **What are some recent trends related to pool construction?**

- For indoor pools, it is increasingly unusual to build just a pool. They are usually built in conjunction with other indoor recreation amenities such as gyms, weight/cardio areas and walk/jog tracks to provide other revenue producing elements and increase the level of traffic through the facility.

### **What are the trends in the construction of 50-meter pools?**

- Jeff Nordorf and Kevin Post (with Counsilman-Hunsaker, an aquatics consultant firm — designers, engineers and operational specialists) said they are not aware of any communities that are building 50-meter pools due to the high capital cost. They said the only 50-meter pools they are aware of are being built by universities or by school/municipal partnerships.
- Ken Ballard (with Ballard\*King & Associates, Ltd., a recreation facility planning and operations consulting firm with a national practice) states that there are fewer and fewer indoor 50-meter pools being built due to the high cost of development and operation. Those that are built often have a number of equity partners to help pay for the construction and operating costs. He states that outdoor 50-meter pools are also expensive but have lower costs to build and operate than indoor pools. In our area of the country, however, they are only seasonal pools and this limits their value and use.
- Another expert stated that as a result of high operating costs, indoor 50 meter pools are usually not developed by local communities. Most are built by universities, counties or through partnerships.
- Mick Nelson (the Facilities Development Director at USA Swimming, the national governing body for the sport of swimming) stated that the trend is to start with a feasibility study that focuses on a 3-pool complex consisting of a large 50-meter or 8-lane 25-yard pool; a smaller warmer water teaching pool; and an even smaller rehab pool. In most cases, after these analyses are completed, the conclusion is that the budget restrictions and operational expense dictate selecting the 25-yard pool.
- Coleman (Senior Vice President, Project Management & Development at American Resort Management—a development, consulting, operation and management firm for indoor and outdoor water parks, family entertainment centers and destination resort properties) stated that 50-meter pools generally are not being constructed.

### **What are the most critical factors needed to plan and implement 50-meter pools as revenue neutral or positive?**

- Ballard (Ballard\*King & Associates, Ltd.) stated that it is very rare for an indoor 50-meter pool to be revenue neutral or positive. He states that to maximize revenue you need 3-4 high schools and a large USA Team (hopefully two) that uses the facility as their home pool and, more importantly, are willing to pay fees per lane hour that will generate a strong revenue stream. There also need to be local and regional meets that are held at least 12-15 times a year, for which a considerable user fee is paid. Developing a broader base beyond just swimming to include diving, water polo, synchro and other sports is also important. Then there must be strong usage by the general public and generation of revenue from daily admissions and annual passes. In addition there must be a full complement of aquatic programs and services that are fee-based. This all requires a strong marketing program. Obviously expenses must also be controlled, but for these types of facilities you are talking primarily about staffing and utilities. Most indoor pools operate at a considerable loss.

## Facility Options Defined

The Work Team defined two options. Both options included all the ancillary aquatic facilities commonly found in modern competition level indoor facilities. These include a main competition pool; an additional leisure or teaching pool; a therapy/rehabilitation pool; a hot tub/spa as well as spectator space; functional and common space including party or classroom space; locker rooms; and administrative areas.

Option A is defined as a 50-meter facility. The main pool would be built to national competition standards, which are defined as a 50 meter pool with eight or 10 lanes with 2.5 meter (8 feet) wide lanes. Option B would also be suitable for competition and would be defined as a 25-yard pool with eight or 10 lanes with 2.5 meter (8 feet) wide lanes. The standards for both of these competition level pools are from USA Swimming.

Below is a table that provides an overview comparison of the two options.

Features	Options	
	A	B
Main Pool Type	National Competition Standards	Competition Standards
Main Competition Pool Size	50-Meter x 25-Yard Pool	25-Yard x 2.5-Meter Pool
Main Competition Pool Lanes	With movable bulkhead (divider), this option can be configured in ten 50-meter lanes (suitable for long course competition) or as 20 25-yard lanes (suitable for short course competition).	Ten 25-yard lanes suitable for short course competition & practice.
Ample Deck Space	Yes	Yes
Athlete and Spectator Seating	Yes	Yes
Additional Leisure/Teaching Pool	Yes	Yes
Spa/Hot Tub	Yes	Yes
Additional Therapy/Rehab Pool	Yes	Yes

## Challenges

Some of the challenges to a potential partnership approach include such items as: how facility access would work since CA is a membership organization and the County is a government entity; how rates would be set given the different organization types and associated users; who would operate the facility and oversee the programming; how income and expenses would be shared; and how liability issues would be addressed. In addition to the facility operational issues there are also issues of location, land availability and funding. Related to the location of the facility, CA serves Columbia and the surrounding community whereas the County serves all of Howard County. From CA's perspective, a new indoor aquatics facility that was funded (or partially funded) by CA would ideally be located in Columbia or its nearby environs. Developable land is needed to site a new facility. In addition, capital and operating funding must be identified.

## **Estimated Land Requirements and Location Parameters**

### **Building Envelope**

Based on comparable projects, the building envelope for the 50-meter pool option was estimated to be approximately 50,000 square feet and the 25-yard pool option was estimated to be approximately 35,000 square feet.

### **Land Requirements**

Land requirements for a new indoor aquatics facility would require a buildable site with significant land for parking. Parking is assumed to be surface parking.

Based on comparable projects, parking requirements and other factors, the Work Team determined the site for the options would have to be five to seven acres. Location parameters would include a substantially flat land area, appropriate zoning and roadway access to an arterial or major collector rather than a local/neighborhood street. The Work Team defined the required general location as “in Columbia or nearby environs.”

Based on a review of Howard County and CA owned properties, no suitable sites were uncovered. The amount of useable and uncommitted land in Columbia is constrained. CA’s land holdings are comprised overwhelmingly of restricted open space lands. CA does have a few remaining developable parcels, but most are too small in size for the potential pool project and/or have poor site conditions for development.

Howard County does not own any property that would be suitable in and around Columbia. While the County does own property at the Long Reach Village Center, that land is planned to be redeveloped for commercial and other uses and an indoor pool facility would require the majority of the site. The County is in the process of implementing the 15-year master plan for Blandair Regional Park, which is located in Columbia. However, those approved plans do not include an indoor aquatics facility.

In the future, there may be other lands that the County acquires, but there is no timetable or certainty that these lands will become available. These sites include parcels owned by Howard Research and Development (HRD) that are being reserved for schools that may be needed in the future. In addition, from time to time, HRD turns over open space to CA. However, these lands are predominantly non-buildable, environmentally sensitive or natural area sites.

### **Estimated Capital Costs**

The Work Team reviewed capital investments related to recently completed projects in other communities. Based on this review, the group identified a square foot cost based on these comparable aquatics facilities. The estimated capital cost of a new indoor aquatics facility would be approximately \$400 per square foot including the building and site development costs (not including land acquisition). This would equate to an initial capital investment of approximately \$14 million to \$20 million depending on the facility option selected. These cost estimates are in line with the lower end of indoor aquatics facility costs based on the Work Team’s research.

## Potential Operating Parameters

### Operating Options Employing a Partnership Approach

Below are three operating options and the Work Team's assessment of them.

- **Option 1** - The County operates the facility and CA provides a grant for a portion of the operating costs (or vice versa). There would be joint lap swimming and programming as well as programming specific to each organization.  
*Assessment:* This option where one entity operates the facility and the other provides a portion of the operating funds is the predominant model that is used in other partnerships reviewed by the Work Team.
- **Option 2** - The County and CA share operation of the facility with pre-determined hours and days for which either CA or the County would operate the facility. County pool members would use it when the County operated the facility and CA members would use it when CA operated the facility.  
*Assessment:* While this is an option in theory, in practice this would not result in consistent or convenient service to community members and, therefore, is not recommended.
- **Option 3** - Contract out operations to a third party.  
*Assessment:* This option would provide for consistent operation of the facility by a third party, and both the County and CA would relinquish operational control. The downside to this approach is that there would be three parties in the mix and this might make it difficult for the contractor to address concerns of all parties. In addition, third-party operation would result in a loss of flexibility by the County and CA to make programming changes to meet customer needs in a timely manner, and discrete programs currently offered by CA and the County at other pools might be not be able to be replicated.

### Membership Fees and Rates

The new indoor aquatics facility would have both annual membership and daily use fees that will require coordination between CA and the County so that, from a user's perspective, all participants would be assessed equally. Although there is currently some variation between CA and the County regarding annual and daily usage fees, the consensus of the Work Team was that adjustments could be made by both parties that would allow for consistent annual membership and daily use rates by the County and CA. The Work Team defined some additional operating assumptions related to fees and rates, which are listed below:

- CA members would pay for and use the new facility as they do with other Columbia pools – by being a member of a pool or other membership plan. Fees set by CA should be comparable to County rates.
- Pool usage would be tracked by type of user (County or CA).
- Daily rates would be equal for County users and CA members.
- Swim teams would rent the facility by the hour.
- The price of any programming (lessons, classes) would be the same for County and CA users.

## **Operating Income and Expenses**

**Operating Income:** Income would be derived from memberships, attendance, potential sponsorships, special events, parties and swim meets. Class and other program fees would be shared based on attendance and usage by membership type (for instance, CA or County).

**Operating Expenses:** The estimated base operational costs for running the swimming facility for swimming (operating supplies, staffing, utilities, repairs and maintenance, insurance, other) based on hours of operation 5:30am to 9pm, seven days a week, would be approximately \$1 million for the 50-meter pool option and \$800,000 for the 25-yard pool option. This does not include debt service or expenses related to programming such as lessons, parties, events, swim meets or classes, as that level of detail is beyond the scope of this preliminary effort to assess the parameters of a potential partnership.

All community pools that the Work Team surveyed operate at a loss. High construction and operating expenses make it cost prohibitive to operate at a profit. Capital costs for construction are high and user fees cannot cover the cost of retiring the debt. However, you may ask, for argument's sake, what if capital costs were not considered in the equation and only the operating expenses and income were considered? Would the facility be able to cover its operating costs (putting aside debt service)? The answer is: not usually. Based on national experience and confirmed by Howard County and CA experience, pools do not cover their operating costs. In addition, based on the experience of pool operators and reinforced by CA's interviews with experts from around the country, large indoor facilities are not able to cover the operating costs even when receiving fees for swim meets and competition. Pools are subsidized as community benefits much like other recreation facilities or like public libraries.

## **Howard Community College – Potential Participation**

Similar to CA and the County, Howard Community College (HCC) does not have plans, programs or funding in the near future to build a new athletic facility with a pool. The college's current athletic facility that includes a 25-meter pool with six swim lanes is aging. Plans for a new facility were included in HCC's most recent master planning process. However, subsequently, because of budgetary constraints, HCC has determined that a new athletic facility is a secondary building priority and needed academic buildings are a higher priority. As a result, a new athletic facility likely will not be considered until at least 2022.

In 2015, when CA had previously discussed the possibility of potential partnering with HCC on a new indoor community aquatic facility, the response from the college leadership was that they had concerns about pool capacity in a shared-use facility and that any aquatic facility that serves college students would have to be on campus, as students do not have time or transportation to travel to an off-site location. Based on that previous discussion, the college was not included in the Work Team.

However, near the conclusion of the Work Team's efforts, CA reached back out to the college's leadership team to see if any conditions had changed. In response to those conversations, the college's leadership team confirmed that any new college indoor aquatic facility would need to be on campus. It

was also determined that, in concept, the college would have room to accommodate either of the two indoor pool options considered in this analysis.

In addition, the college leadership indicated that, in the future, HCC would be interested in exploring a potential partnership with CA and the County to bring a new aquatic facility to the community, on the grounds of the college. However, as has been articulated elsewhere in this report, similar to CA and the County, HCC does not have capital or operating funds to do this, and a new athletic facility with a pool is not a priority at this time. Should capital and operating funds become available, HCC leadership expressed interest in future exploration of the feasibility of a community aquatics center on HCC's campus through a partnership with CA and the County.

## **Findings/Recommendations**

Based on the Work Team's analysis and research, the most common size for indoor pools that are used for competition is the 25-yard pool (Option B). This option would provide a competition level pool that is less costly to construct. Option A (the 50-meter pool) would provide a higher level of competitive pool, more lane capacity, and operate and provide lane configuration options of 50 meters as well as 25 yards.

### **Capital Investment Sharing**

The actual details of an investment agreement would have to be worked out. The starting point would be equal investment by all parties. However, that would need to be modified based on further detailed analysis and also on land acquisition roles.

### **Facility Operation**

The Work Team finds that the most appropriate option would be for one organization to operate the new indoor aquatics facility while the other entity (or entities) would participate in cost-sharing through a grant. Given the County's more favorable liability terms, the Work Team finds that it may be more advantageous for the County to operate the facility. However, if a facility were built on campus at HCC, another option would be for the college to operate the facility.

### **Land**

No suitable, existing CA or County lands for such a facility were identified by the Work Team. In the future, should HCC funding for an HCC athletic facility become available, the potential for an aquatics facility partnership with HCC for an on-campus location should be more thoroughly investigated.

### **Timeframe**

In the short-term — five to ten years — the County, HCC and CA have committed their limited discretionary dollars to other capital and operating priorities. CA has large planned and programmed capital investments in a number of its facilities, which are older and must be updated to maintain and extend their useful life to serve the Columbia community. These include more than 42 buildings, many of which are over 40 years old. Related to aquatics, CA has made a commitment to renovate its three-pool, 11-lane indoor Columbia Swim Center to extend its useful life for another 10 to 15 years. This is

CA's largest indoor aquatics facility. This reinvestment will allow time to explore other options to expand indoor aquatics facilities and continue to explore a future shared aquatics venue with the County.

The County has many competing interests for capital dollars for everything from public safety and schools to storm water, transportation and library facilities. Capital projects are already planned and programmed for the next several years. Related to recreational investments, several large projects are underway and must be completed, including Troy Park and Blandair Regional Park. In response to the continued, steady increases in enrollment at HCC, the college has established priorities for academic buildings and other capital investments and these take priority over a new athletic/aquatic facility.

## **Conclusion**

In conclusion, while there is a spirit of cooperation between CA, the County and HCC, the Work Team finds that there are challenges to overcome to a potential partnership approach, including lack of identified capital and operating funding and operational protocols. The Work Team also finds that the earliest possible construction timeline, given the other financial commitments of the organizations, would be 10 years into the future (2027) and perhaps beyond that date. Should a location be identified for the facility and a decision made to move forward with funding obligations, then the Work Team suggests that planning and engineering for the facility begin three years prior to the desired completion of construction. The Work Team recommends that this potential partnership approach for an indoor aquatics facility be revisited again in three to five years to monitor changes and opportunities.