

“When we build, let us think that we build forever. Let it not be for present delight nor for our use alone. Let it be such work as our descendants will look upon with praise and thanksgiving in their hearts.”

– John Ruskin (1819-1900)



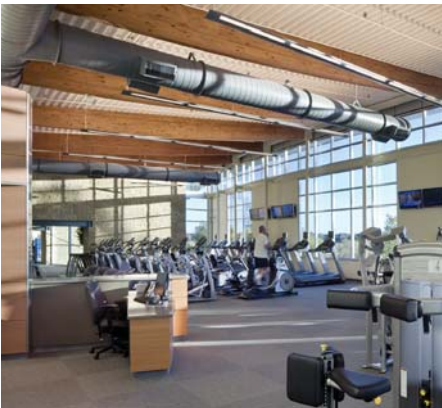
AQUATICS & INDOOR RECREATION

2012 PARKS, RECREATION, TRAILS & OPEN SPACE
VISIONING MASTER PLAN

4.1 INTRODUCTION

Cedar Hill is committed to providing state-of-the-art facilities—such as the Government Center—in order to maintain the high quality of life expected in a premier city. Part of maintaining our diverse culture and remaining an anchor for economic development in the Best Southwest is that we provide premier recreation facilities that attract and retain residents. Indoor recreation facilities and aquatic centers are prime opportunities for providing places for families to flourish and can become hubs for community life.

It is our vision that recreation facilities include state-of-the-art amenities and be integrated into Cedar Hill's park environments by being linked with neighborhoods, parks, and other landmarks via trails, bikeways, and greenbelts. The design of indoor recreation and aquatic facilities should provide a near-seamless interface between the natural and built environments. The use of large, full-height windows; large doors to provide open-air opportunities; and overhangs for shade will provide transparency to buildings both visually and physically. This will allow nature to flow into buildings and places of indoor recreation. Furthermore, the use of natural materials and forms as included in the branding theme (see Chapter 1) will add an organic element to these places while providing aesthetic coordination with park, trail, and streetscape elements.



Goals

- Provide safe, family-friendly environments for indoor recreation & aquatics that meet the needs of Cedar Hill's diverse culture, including all age groups, abilities, and socioeconomic categories.
- Develop facilities and programs that reflect new trends in indoor recreation and aquatics, while anticipating the future growth of the community.
- Practice sustainability by developing facilities that are energy efficient; structures that follow the principles of LEED (Leadership in Energy and Environmental Design); and improve the operations, maintenance and efficiency of existing facilities.
- Conveniently locate recreation and aquatic facilities and connect each to the City-wide trail and bikeway systems.
- Consider alternative approaches, including partnerships with Cedar Hill Independent School District and nearby cities.

Purpose

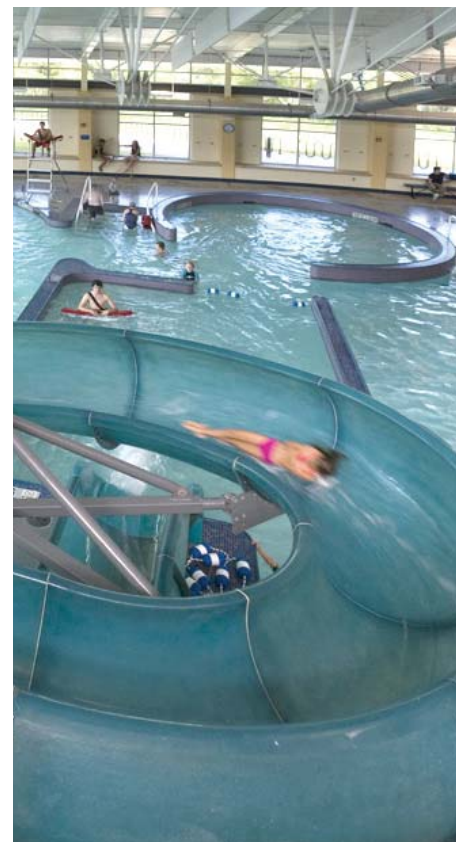
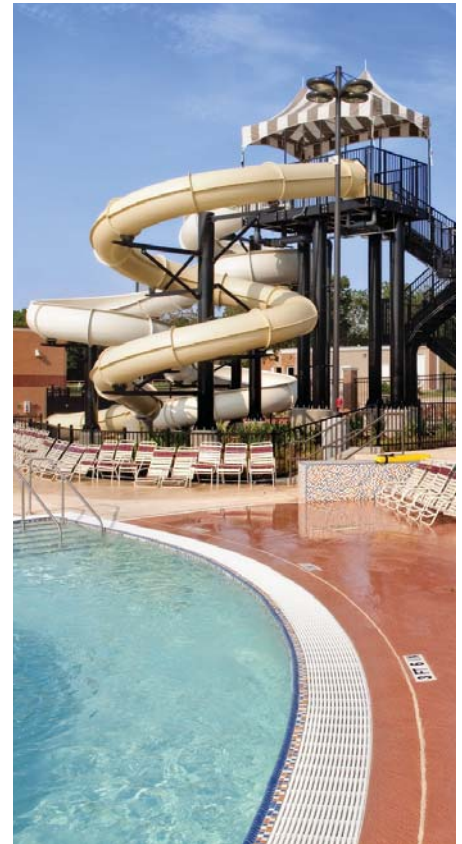
The purpose of this section of the Master Plan is to analyze the City's existing indoor recreation and aquatic facilities (the Recreation Center, the Senior Center, and the Crawford Park Pool), determine the needs of

the community relating to indoor recreation and aquatics, and develop priorities and cost estimates for future projects.

Pertinent Citizen Input

The Citizen Attitude Survey included several questions regarding indoor recreation and indoor/outdoor aquatic facilities. The following serves as an overview of some of the more relevant results.

- When asked about the frequency of participation in various activities, there was a high percentage of regular indoor fitness activity users (57%). This was the highest level of use for any indoor activity.
- When asked what one recreation facility Cedar Hill is lacking, the top three responses were:
 1. Indoor Pool/Aquatic Center (36%)
 2. Outdoor Pool/Aquatic Center (20%)
 3. Trails/Bike Lanes on Roads (11%)
- In response to the question “What would you consider the most important recreation facility to construct?” some of the most common responses were:
 - Indoor Pool (30%)
 - Trails (13%)
 - Children’s Spray Park (10%)
- When asked what actions at Crawford Pool would they support, most people (79%) wanted to revamp and modernize the pool to better meet the needs of residents.
- A vast majority (81%) of people strongly support or support expanding the current Recreation Center to include an indoor aquatic component.



4.2 Existing Facility Inventory

RECREATION CENTER

- Built in 2003
- 54,000 square feet
- Amenities:
 - Double Gymnasium
 - Fitness Area
 - Elevated 3 lane walking/jogging track
 - Game Room
 - Drop-in Child Care
 - Multipurpose Rooms with Kitchen
 - Aerobics Exercise Room
 - Support Lockers and Showers



Aerial image of the Cedar Hill Recreation Center.

Observations & Suggestions

The current center has served the City well since its opening and in order to maintain this high level of service some modifications are offered for consideration. These include:

- Maximize the utilization of current lobby space.
- Locate the control desk closer to entrance for better control of existing center as well as aquatic expansion.
- Position the control desk to allow visual monitoring of all areas of the lobby.
- Improve and expand the cardio area and provide better and more energy-efficient lighting.
- During renovation, consider replacement of tile with an improved flooring as patching may be problematic.
- Make the storage area more accessible to increase the efficiency of staff use.
- Rework the staff area to allow better communication between staff and close proximity to the control desk.
- Replace meeting room floors.
- Consider methods to control access into meeting rooms section of the center from recreation areas and the lobby (card, vicinity readers, etc.).
- Use landscape to soften the hardscape entrance sequence to the building.
- Improve acoustics in the gymnasium, which will also reduce transfer of sound to the lobby from the gymnasium.
- Improve and upgrade locker rooms for efficiency and general appearance.
- Update the lounge area with new furniture, flooring, and lighting.
- Use appropriate and effective sustainable design practices in the renovation/expansion phase.



Level of Service Analysis

In reviewing the needs of the community to determine the size and need of the aquatic expansion and recreation center renovation, four different variables were analyzed. These four influences include:

1. National Park and Recreation Association Standards.
2. Benchmarking of facilities provided by other cities in the Metroplex.
3. Results of citizen surveys that directly addressed recreation center and indoor aquatic needs.
4. Evaluation of trends in the recreation/aquatic industry.

The following section expands on the first two of these items. Citizen Attitude Survey results can be found in the appendix and a discussion of relevant trends can be found on pages 2-20 and 2-21.

NRPA Standards

The National Recreation and Park Association (NRPA), in their publication “Recreation, Park and Open Space Standards and Guidelines,”¹ defines recreation and park standards in this manner:

“Community recreation and park standards are the means by which an agency can express recreation and park goals and objectives in quantitative terms, which in turn, can be translated into spatial requirements for land and water resources. Through the budget, municipal ordinances, cooperative or joint public-private efforts, these standards are translated into a system for acquisition, development and management of recreation and park resources.”

The publication further describes the role standards have in determining the community’s acceptable minimum for facility provision, correlating needs to spatial requirements, and providing justification for expectations and needs.

Recognizing that national and state standards are general in nature and speak to minimums, Cedar Hill has established its own goals. These goals are consistent with being a premier city that is committed to maintaining our high level of service as the community grows.

1 1990, edited by R.A. Lancaster

The NRPA Standards are as follows:

- Community Center (20,000 square feet). 1 facility/20,000 pop.
- Community Center (10,000 square feet). 1 facility/20,000 pop.
- Swimming Pool (approximately 4,000 square feet water surface). 1 facility/25,000

Benchmark Analysis

Since the NRPA standards are very general, benchmarks have been developed based on Metroplex cities that provide premier recreation services consistent with Cedar Hill. Benchmarks were established by developing ratios of square footage per population. This research allowed us to see a broad overview of other cities with cutting edge facilities. The selection of benchmark cities included:

Allen	Grapevine	Lewisville
Coppell	Hurst	McKinney
Grand Prairie	Keller	North Richland Hills

Recreation Center Benchmarks

Several of the comparison recreation centers included indoor aquatics; these square footages have been included in the comparison numbers. Comparison facilities included both built and facilities in the planning or construction phases. Results ranged from a low of 0.32 square feet per person to a high of 1.92 square feet. The average is approximately 0.95 square feet per person for the comparable cities (see Figure 4.1).

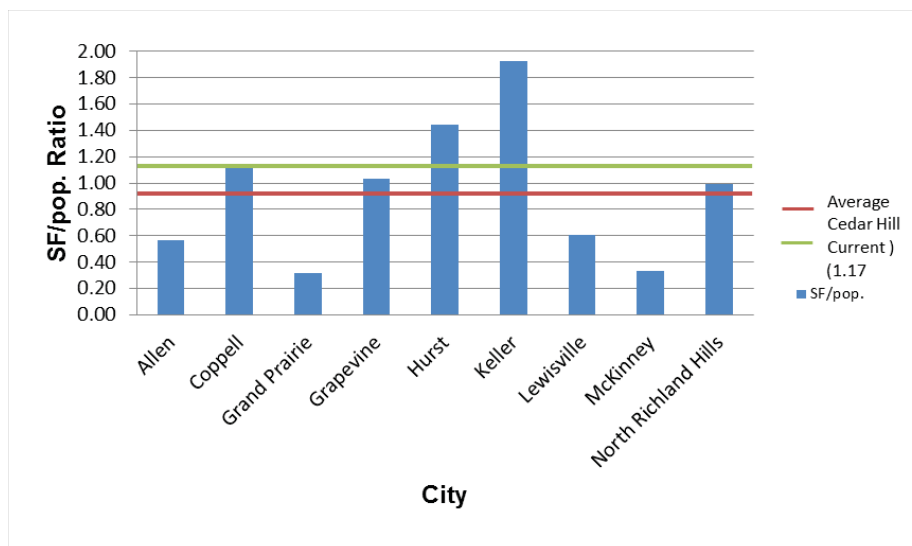


Figure 4.1

Recreation Center Benchmark Analysis

Based upon the current population, the current level of service for recreation center space in Cedar Hill is 1.17 square feet per person. In order to stay on target with the benchmark level of service (0.95 square feet per person) as the City grows to its projected 88,956 build-out population, there is a need for a total of 84,500 square feet of recreation center space (including the existing Recreation Center) to be comparable to the benchmark cities used in this report.

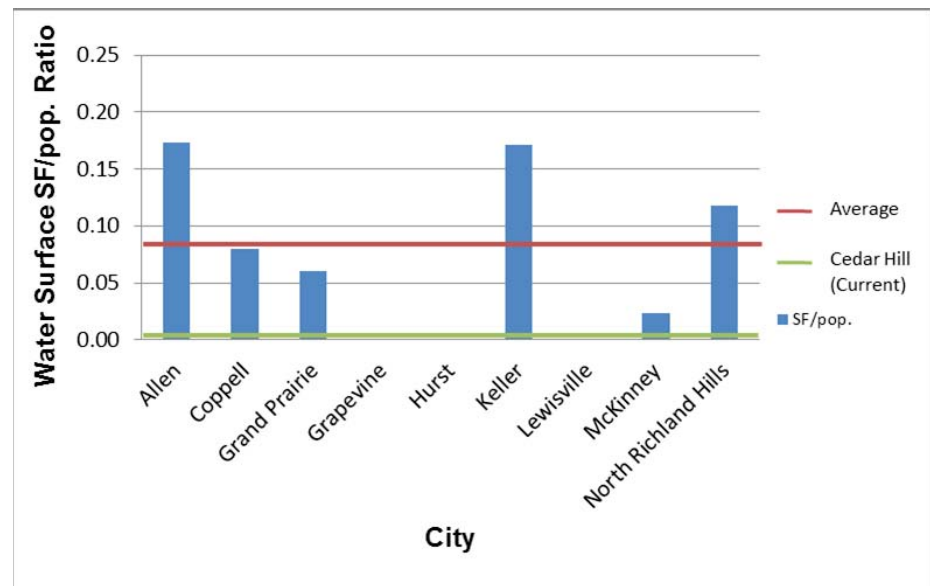
Indoor Aquatic Benchmarks

When comparing indoor aquatic facilities, the water surface of indoor pools on a square foot per population basis was analyzed. This provides a more precise measure of aquatic level of service than the size of the structure covering the indoor water. The average indoor aquatic water surface area of these benchmark cities is .075 square feet per person.

Based upon the projected 88,956 build out population of Cedar Hill, this translates to a need of 6,670 square feet of water surface area.

Figure 4.2

Indoor Aquatics Benchmark Analysis



Summary of Evaluation Factors & Recommendations

Based upon review of the influences mentioned previously, it is clear that the citizens' priorities and the actual needs of the community based upon industry trends and city benchmarks are consistent.

An indoor aquatic center is needed and is a citizen priority. Such a center should be sized at approximately 6,500 square feet of water surface area. It is recommended that it be attached to the west side of the existing Recreation Center.

The deficiencies of the current Recreation Center should be addressed as individual projects prior to or as one project in conjunction with the aquatic expansion (see Page 4-5).

Preliminary Concept

Figure 4.3 and Figure 4.4 illustrate a design approach that may have merit for the future expansion of the Recreation Center. The concepts are not to provide a final solution, but merely give a sense of options, scale, and estimate of probable cost.

Figure 4.3

Cedar Hill Recreation Center Expansion Concept (First Floor)

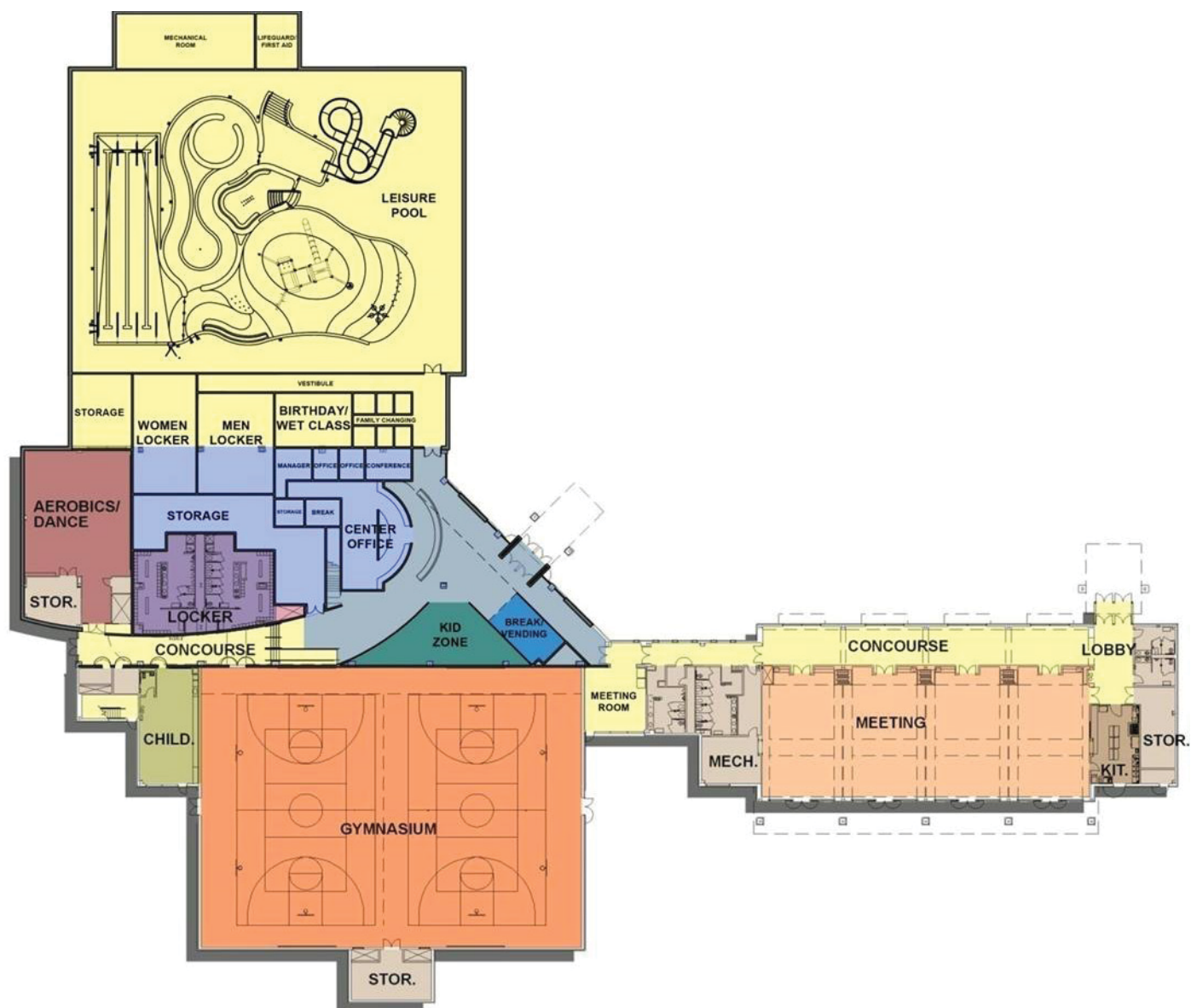
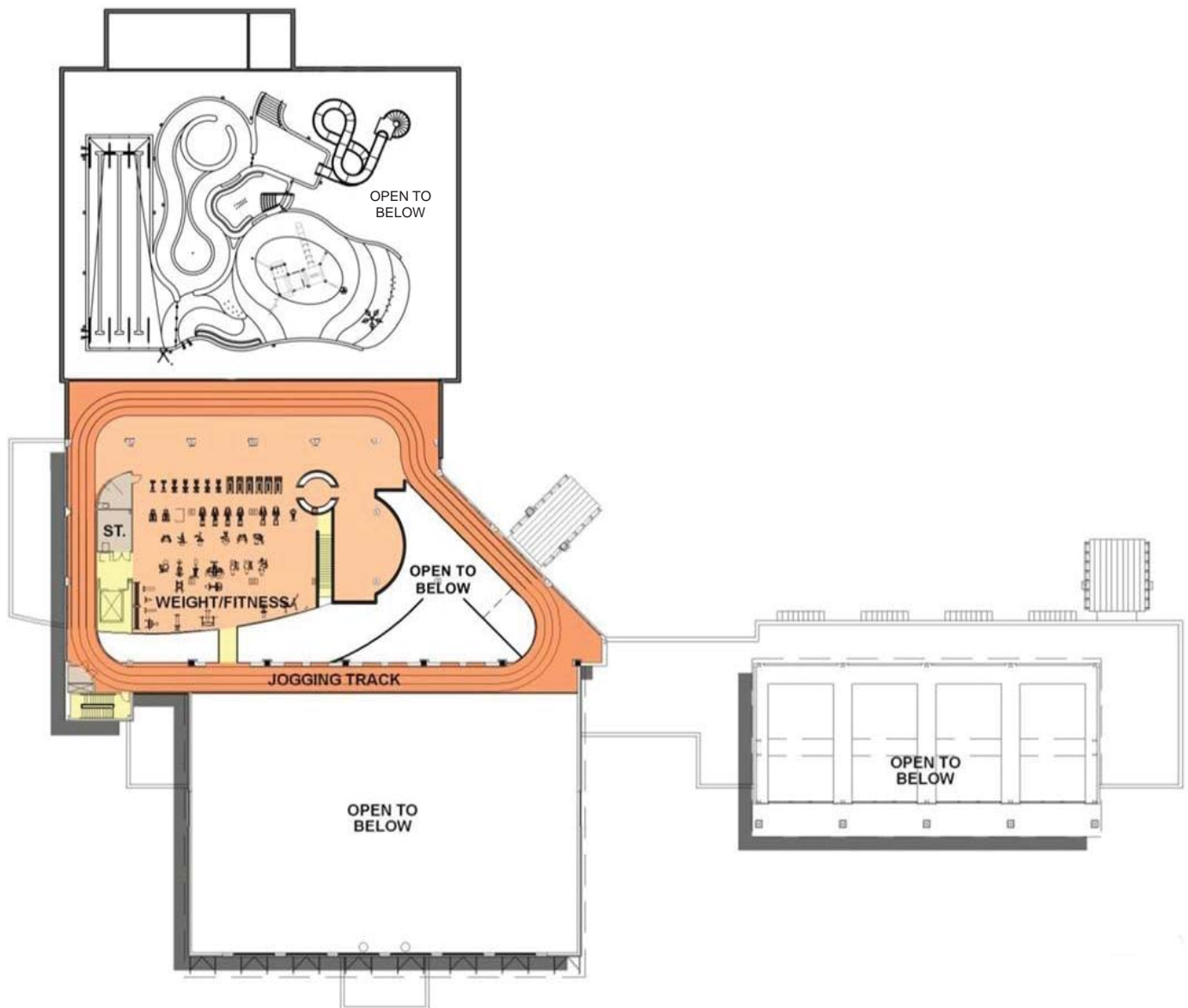


Figure 4.4

Cedar Hill Recreation Center Expansion Concept (Second Floor)



4.3 Existing Facility Inventory

SENIOR CENTER

- Built in 1967, renovated and expanded in 1987 and 1997
- Approximately 4780 square feet
- Attendance has grown by 265% over last 8 years, currently ~10,000 seniors
- Amenities:
 - Kitchen
 - Game Room
 - Multipurpose Classroom
 - Library/Reading Room/Craft Room Combination



Observations & Suggestions

The Senior Center has been expanded/remodeled twice. The facility has been extremely well maintained but the lack of rooms is limiting the growth of the center. It has a dedicated parking lot, but the approach from the road is somewhat difficult to maneuver. The center is experiencing great attendance success, which in turn creates a need for an expanded facility. In fact, attendance for many of the programs is being limited by the size and makeup of the center. The City may consider expansion of the center that would provide a divisible multipurpose room, adequate toilets, additional classrooms and adequate facility storage for the multiple uses in this facility. Other needs include a secure area for staff and an area for specialty equipment.



Level of Service Analysis

In reviewing the needs of the community to determine senior center needs, three different variables were analyzed:

1. Benchmarking of facilities provided by other cities in the Metroplex.
2. Results of citizen surveys that directly addressed senior needs.
3. Evaluation of trends for senior centers.

The following section expands on the first of these items. Citizen Attitude Survey results can be found in the appendix and a discussion of relevant trends can be found on pages 2-20 and 2-22.

Benchmark Analysis

The Senior Center has seen exceptional growth in attendance, but any further growth will be capped by the size of the facility. In comparing senior center sizes of benchmark cities¹, the ratios range from 0.10 square feet to 0.72 square feet per capita, with the average of 0.23 square feet per capita. Cedar Hill's current level of service is 0.10 square feet per capita. This is below average and with a projected population of 88,956, it is recommended that the City expand its Senior Center space to a total of 20,378 square feet in keeping with the benchmark city average.

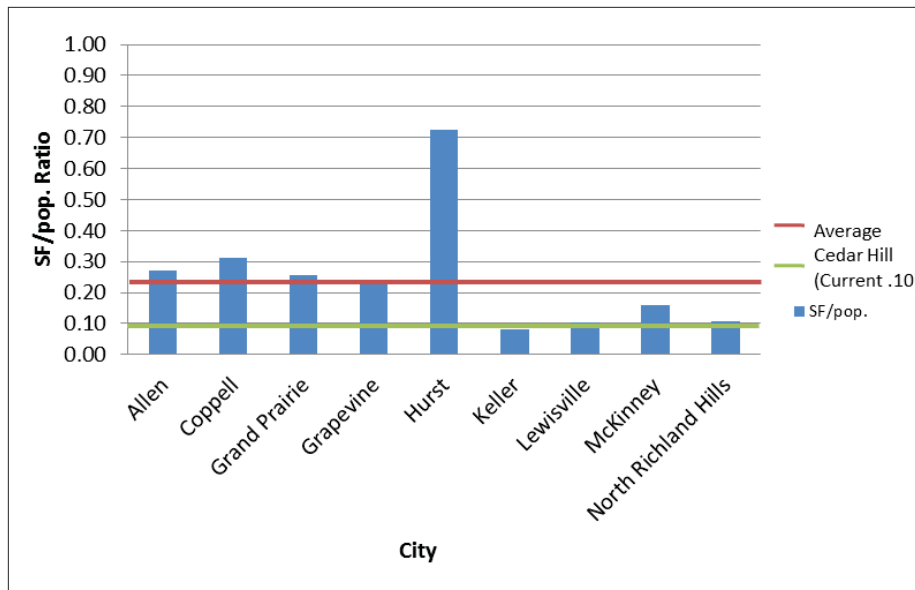


Figure 4.5

Senior Center Benchmark Analysis

Summary of Recommendations

Based upon this analysis and the utilization of the current Senior Center, there are at least two viable options:

- **Option One** – Expand the current Senior Center by 4,000 square feet by adding ADA-compliant toilets, a multipurpose room, and storage areas. Concurrently build a new senior wing onto the Recreation Center of approximately 7,000 to 8,000 square feet. This would have dedicated classrooms, kitchen, game room, and support areas for the senior group. It would be physically connected to the current Recreation Center to allow easy access to the amenities of the center.
- **Option Two** – Construct a new 20,000 square-foot Senior Center with multipurpose rooms, kitchen, crafts, library, storage, fitness room, and normal support areas. The existing Senior Center would be vacated and replaced by this new facility. Location options include the current Senior Center site or a site adjacent to the Recreation Center.



¹ These benchmark cities are listed on page 4-7.

4.4 Existing Facility Inventory

CRAWFORD PARK POOL

- Built in 1986
- Amenities:
 - 25-yard Competition Pool
 - Diving Board Area
 - Tot Pool
 - Limited Deck Area
 - Bathhouse and Office
 - Outdoor Pool Pump Equipment Area
 - 4,750 square feet of water surface area



Observations & Suggestions

Crawford Park is a mature park that has a very natural setting and is an historic asset for the city. Crawford Pool occupies the southwest section of the park and includes the pool and associated parking.

The existing bathhouse/lockers and pool equipment areas could all use extensive renovation or replacement if the pool is maintained. There is no shade around the pool and the deck width is very limited. The existing pool is approaching its useful life with 10-15 years being a good estimate for the remaining useful life of the facility and is therefore a good candidate for replacement.

Level of Service Analysis

Analyzing outdoor aquatic center needs involved three different variables. These are:

1. Benchmarking of facilities provided by other cities in the Metroplex.
2. Results of citizen surveys that directly addressed outdoor aquatic needs.
3. Evaluation of trends for outdoor aquatics.

The following section expands on the first of these items. Citizen Attitude Survey results can be found in the appendix and a discussion of relevant trends can be found on pages 2-21.

Benchmark Analysis

Benchmark cities³ have an average of 0.19 square feet of water surface per capita. Cedar Hill currently provides approximately 0.10 square feet of water surface per capita. In order to meet demands of the current population, this would translate to approximately 8,800 square feet of water surface needed. Considering the build out population (88,956) this translates to a need of approximately 16,900 square feet of water surface.

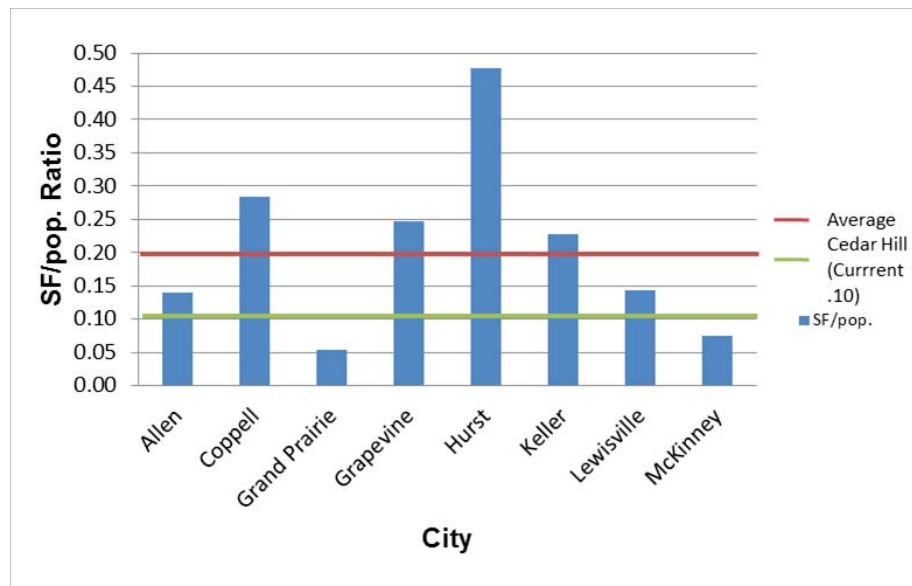


Figure 4.6

Outdoor Aquatics Benchmark Analysis

³ These benchmark cities are listed on page 4-7.

Pool Attendance Impact Analysis

The Pool Attendance Analysis (Table 4.1) illustrates the current Crawford Park Pool attendance. Considering the success of the Bad Konigshofen Aquatic Center in Arlington and the West Irving Aquatic Center, there is an opportunity to serve many more citizens with a new facility (see Figures 4.7 and 4.8)

Table 4.1 – Pool Attendance Analysis

Season	Open Swim	Rentals	Swim Lesson Participants	Aqua Zumba Montly / Day Passes
2009 - 2010	6,531	23	436	12
2010 - 2011	8,643	24	442	175

Figure 4.7 – Outdoor Aquatic Center Case Study #1

Bad Konigshofen Aquatic Center, City of Arlington (2006)

This aquatic center attracts an annual attendance of 90,000.



Figure 4.8 – Outdoor Aquatic Center Case Study #2

West Irving Aquatic Center, City of Irving (2009)

In its first year of operation, this aquatic center exceeded the attendance of the pool it replaced by over 200%.



Summary of Recommendations

Based upon the age, size, and location of the Crawford Park Pool, as well as the benchmarking of other cities for outdoor pools, the following is recommended:

- Construct a new outdoor aquatic center with approximately 10,000 square feet of water surface area that is more centrally-located within the City with easy access from trails and streets. Considering the national trend toward providing consolidated outdoor aquatic centers rather than multiple, smaller swimming pools with limited amenities, a single new outdoor aquatic center is a more sustainable approach that is more likely to recoup the taxpayers' investment.
- Maintain an outdoor aquatic presence in Crawford Park by replacing the current pool facility with a water spray park with proper shade and landscaping. This will allow the park to maintain its relaxed atmosphere while still providing an attractive aquatic amenity for the community.
- As the City continues to grow, the need for more outdoor aquatics will be realized. This can be accomplished by either expanding upon the new 10,000 square-foot outdoor aquatic center referenced above or construction of an additional outdoor aquatic center in a different area of need within Cedar Hill.

IMPLEMENTATION

4.5 Priorities & Costs

In order to meet existing and future indoor recreation and aquatic needs, several facility development and redevelopment actions are needed (see Table 4.2).

Priority One

The top priority is the enhancement and expansion of the existing Cedar Hill Recreation Center by 24,200 square feet to accommodate indoor aquatics (6,500 square feet of water surface area), supporting locker rooms, and mechanical areas. This will also include extensive renovations to the lobby, office, kids zone, and upstairs cardio area; storage and staff offices; gym improvements; locker room improvements; enhancements to meeting rooms; and improvements to landscaping and the building’s entrance.

Priority Two

Develop an outdoor aquatic center with 10,000 square feet of water surface area to replace the service provided by the Crawford Park Pool.

Priority Three

Expand the existing Senior Center by 4,000 square feet and perform minor renovations to the existing structure. Add dedicated senior space to the Recreation Center during its expansion.

Table 4.2 – Indoor Recreation & Aquatics Action Plan

Priority	Action
1	Recreation Center Expansion & Indoor Aquatics
2	Outdoor Aquatic Center
3	Senior Center Expansion
4	Convert Crawford Park Pool to a Water Spray Park

Potential Funding Sources

Municipal Bonds

Debt financing through the issuance of municipal bonds is the most common way in which to fund indoor recreation and aquatic projects. This type of funding is a strategy wherein a city issues a bond, receives an immediate cash payment to finance projects, and must repay the bond with interest over a set period of time ranging from a few years to several decades. There are two main types of municipal bonds, either of which can be used to fund the projects included in this chapter:

- ***General Obligation Bonds*** – This is the standard type of municipal bond and is repaid through property taxes. This is the most common form of municipal bond.
- ***Revenue Bonds*** – This type of bond is repaid through revenues generated by a facility, such as the user fees generated by a recreation center, senior center, aquatic centers, and other recreation facilities that charge entry or membership fees.

Texas Parks and Wildlife Department – Outdoor Recreation Grants

This program provides 50% matching grant funds to municipalities and could be used to develop or renovate outdoor aquatic centers. There are two funding cycles per year with a maximum award of \$500,000. Projects must be completed within three years of approval. Application deadlines are March 1st and August 1st each year.

Texas Parks and Wildlife Department – Indoor Recreation Grants

This program provides 50% matching grant funds to municipalities to construct recreation centers, senior centers, and other facilities. The grant maximum is \$750,000 per application. The application deadline is August 1st each year.

Cuts in the State budget have greatly impacted both of these grant programs. The probability of being able to rely on these programs as a significant source of funding is minimal.

Public/Private Partnerships

Partnerships with private entities to provide aquatic facilities and indoor recreation is an opportunity for the City. Examples of public/private partnerships include joint-funding projects, private operation of a public facility, and achieving sponsorship through selling naming rights.

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