Repair, Renovate, or Replace?

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Recreation Pool Planning Criteria Has Changed Over the Past 30 Years
Aquatic Recreation

Why is it changing?

- Many Different Ways to Spend Time
- Many Different Ways to Spend Money
1950 – 1980 Planning Criteria

- Old NRPA Standard - One Pool per 20,000 Population (Neighborhood Pool Concept)
- Typical Pool: 4-8 Lap Lanes, Diving Board, Wading Pool
- Admission $.50 to $1.00
- Most Used by Children and Lap Swimmers
Nationwide City Pool Issues
1980 - Present

- **Diving Board and Slide Removal**
  Changing / More Stringent Codes (TDH, ADA, VGB)

- **Pool Attendance Decreased**
  Competition for Recreation Time and $ (AC, TV, Movies, Video Games, Internet, Vacations)

- **Pool Closings**
  Decreased Attendance, Changing Codes, and Higher Operating Costs

- **Increased Pool Admission Prices**
  Need to Offset Increased Operating Expenses
Current Planning Criteria
1980 - Present

- New Standards – One Pool per 50,000 or More Population
  (Community Pool Concept)

- Typical Pool: More Fun Amenities
  (Water Slides, Lazy Rivers, and Children’s Play Structures)

- Admission $3.00 to $7.00

- Most Used by Families with Children - Something for Everyone!
Current Nationwide Aquatic Trends

• Use of **Splash Pads** to Replace Smaller Neighborhood Pools $250,000 to $500,000

• High-End **Indoor/Outdoor Recreation Center Pools**
  Costs $10M and Up!

• Replacement of Old Style Municipal Pools with New Style **Family Aquatic Centers**
  Costs $2M to $7M
What is a Splash Pad?

- An interactive children’s water play area characterized by 0” to 6” of water with vertical water sprays, geysers, water tunnels, spray cannons, etc.
- Other terms: “Water Sprayground”, “Interactive Fountain”, and Water Play Area
- Lifeguard and fencing not required
What is a Family Aquatic Center?

• More Fun Features (Water Slides, Lazy Rivers, and Children’s Play Features)
• Zero Beach Entry to 3’-6” Depth Pool
• Teen Features (Drop Slides, Diving Boards, etc.)
• More Amenities (Shade, Seating, Concessions)
• Areas for Lesson Programming, Lap Swimming, and Recreation

• Admission Cost $2 to $7
Current Types of Aquatic Programming

- Competitive
- Wellness
- Lesson Programming
- Recreation
Competitive Fields of Play

25 - Yard
6 25-Yard Lanes

50-Meter by 25-Yard
8 or 10 (50-Meter Lanes)
17-22 (Cross Course
25-Yard Lanes)
Competitive Uses

Swimming

Diving

Water Polo

Synchronized Swim
Wellness & Therapy

- Fastest Growing User Group
- Dedicated Pools
- Therapy Programs
- Water exercise classes
- Water Aerobics classes
- Fitness Classes
Lessons
(Instruction and Learn to Swim)
• Learn to Swim
• Water Safety Instruction and Lifeguard Instruction
• Life Safety Skills
• Survival Swimming
• Scuba
• Other Aquatic Skills
Recreation

• Tots
• Families
• Teens
• Young Adults / Seniors
• The "Family Aquatic Center" Concept
Today
Family Aquatic Center Survey (Recent Survey of 15 Facilities)

- Typical Adult Resident Admission $4-$8
- Typical Non-Resident Adult Admission $6-$8
- Average Child Admission $3-$5
- Child 3 and Under/Seniors – Typically Free
- Average Number of Staff (One Shift) 15-20
- Average Season Attendance 25,000 – 50,000
- Average Operations Cost Recovery Rate 80-90%
Types of Obsolescence

- Physical Obsolescence
  - Aging Facility
  - Codes and Standards

- Functional Obsolescence
  - Definition of Aquatics
  - User Expectations
Physical Audit
Process Overview – Physical Audit

- **Review Existing Information**
  - Facility Drawings
  - Prior Studies/Reports
  - Observations/Goals of City

- **Conduct On-Site Audit of Facility**
  - Pools and All Equipment
  - Support Facilities
  - Code Compliance including ADA Review

- **Review Findings with City**
  - Recommendations for Physical Issue Corrections
  - Recommendations for Addressing Functional Issues
  - Forecasting Remaining Life of Systems
  - Identification of “fatal flaws” or Major Concerns.
Change in Codes and Standards

- New Knowledge
  - Chloramines
  - RWI’s
- Modern Technologies
  - LEED
  - Reduced Maintenance
- Industry Expectations
  - Regulatory Agencies (NCAA, FINA, etc.)
  - User Environment

Background for Audit
Aquatic Systems Audit

- Pool structure and finishes
- Recirculating system, piping, fittings, and valves
- Filtration system, mechanical and overflow recovery system
- Water chemistry treatment system
- Pump, flow meters, gauges, and controls, etc.
- Deck equipment
Functional Audit
Feasibility Study Process

• Needs Assessment
  – Community Outreach
  • Common Vocabulary, Vision
  – Evaluate Existing Area Providers
  – Research Area Demographics
  – Identify Potential User Groups

• Program Requirements
  – Develop Options for Programming
  – Develop Project Cost Estimates
  – Identify Potential Partnerships

• Operations Plan
  – Opinion Of Revenue
  – Opinion Of Operating Expenses
  – Determine Cashflow
Data Collection
Information Needed To Make A Knowledgeable Decision

• What is Included
  – Who is Going To Use It
  – How They Are Going To Use It
  – What Elements They Need
  – Specific Cost of Each Amenity

• How It Will Be Operated
  – Funding Requirements
  – Fee Schedule
  – Revenue
  – Expenses
  – Operating Performance
Experience

Changes in Expectation

- Entertainment value
- Extreme
- Creature comforts
- Activity specific design solutions
- Increased customer service
- Active and Passive Recreation
Creation of Active Water Spaces
Creation of Passive Water Spaces
What Are Our Choices?

1. Emergency Mode -- Stay Open
2. Repair Existing Pool
3. Renovate Facility
4. Replace Facility
Emergency Mode
Repair Option

- New “1960” Pool
- Responds to the Physical Obsolescence
- Does Not Respond to Functional Obsolescence
Repair - Code Issues

- Filtration Rate Requirements
- Chemical Storage Requirement
- Backwash Discharge
- ADA Issues
- Starting Block Depths
- Depth Under Diving Boards
- Diving Tank Issues
Standards Affecting Aquatic Design

- American National Standards Institute
- American Public Health Association
- American Red Cross
- ASHRAE
- Aquatic Exercise Associates
- Council for National Cooperation in Aquatics
- Consumer Product Safety Commission
- Federation Internationale de Natation Amateur
- Illuminating Engineering Society of North America
- National Collegiate Athletic Association
- National Electric Code
- National Fire Prevention Association
- National Recreation and Park Association
- National Sanitation Foundation
- National Spa and Pool Institute
- National Swimming Pool Institute
- Royal Life Saving Society
- State Boards of Health, Water Quality, Amusements
- United States Diving
- United States Lifesaving Association
- United States Swimming
- United States Synchronized Swimming
- United States Water Polo Association
- World Water Park Association.
Affects on Older Pools

- Water Depths
- Slope of Pool
- Turnover Rate
- Filtration Requirements
Renovate Facility

Decide Best Use of Money
Physical Obsolescence Addressed
Functional Obsolescence Addressed
Replace Facility
Comparing Indoor to Outdoor Aquatics

Three Primary Areas Impacted:
– Programming
– Design Approach
– First Dollar Cost & Financial Operation
Programming

Outdoor Facilities
• User Groups
  – Recreational
  – Competitive
  – Instruction/Fitness
• Seasonal
• Destination Oriented
Indoor Facilities

- Year-round
- Greater Competition for Recreation Users
- Multi User Group Programming
- User Group Representation
- Hours of Operation
Facility Design

• Size
  – Outdoor
    • Large Expansive Areas Between Attractions
    • Lower First and Second Dollar Costs
  – Indoor
    • Significantly Increased First Dollar Costs
      – Building
      – HVAC
      – Material Selection
    • Small Foot Print Design Challenges
      – Traffic Patterns
      – Facility Capacity
    • Amenities
      – Flexible Design To Maximize Revenue Potential
Lindbergh High School -- Repair

Project Cost: $380,000
Rolla -- Repair

Immediate Repair: $575,000
Comprehensive Repair: $740,000
Rolla -- Replace

Project Cost: $2,100,000
Edmond - Repair

Immediate: $585,000
Comprehensive: $1,295,000
Renovation

Replace
City of Edmond’s Pelican Bay

Project Cost: $3,900,000
Town of Addison, TX – Existing
Town of Addison, TX

Project Cost: $2,500,000
Englewood

Project Cost: $6,297,630
Wilson pool - Existing
Wilson pool - Renovate

Project Cost: $3,000,000
Beachwood - Existing
Beachwood - Renovate
Beachwood - Replace

Project Cost: $5,200,000
Hatfield, PA - Existing
Hatfield, PA - Replace

Project Cost:
$5,300,000
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