Report of the Albany Pool Sustainability Committee

Presented to the AUSD Board of Education



Committee Members

- David Arkin
- Andrew Austin
- Charles Blanchard
- John Fahrner
- Bob Jacobs

- Andrew Lincoff
- Peggy McQuaid
- Nick Pilch
- Yvonne Tom



Architecture
Business
Construction Management
Engineering
Environmental Assessment
Pool Management

Acknowledgments

- Superintendent Marla Stephenson
- Assistant Superintendent Laurie Harden
- Tom Murphy, Facilities Manager
- Dave Burke, Bollo Construction
- Steve Newsom, LPA

Committee Assignment Provide Advice to the Superintendent Regarding:

- Sustainable technology options and costs for Albany Pool
- Possible grants for sustainable technology
- The business plan prepared by Sports Management Group considering utility costs and the state of the economy

Findings

- Albany Pool water heating is a major cost can be greatly reduced with pool covers, solar water heating, co-generation, and small boilers
- Solar photovoltaic systems are a better match for AHS than for Albany Pool
- Chlorination is necessary but a complementary ultraviolet (UV) system will reduce chloramines and improve indoor swimming experience
- Pool facility can be run profitably (!)

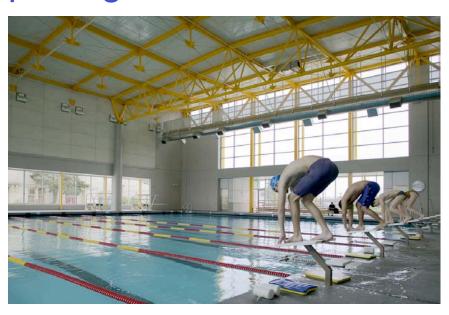
Challenge: Reduce AHS Electricity Costs and Pool Gas Costs

Design team will need to put together an

integrated package

Options include:

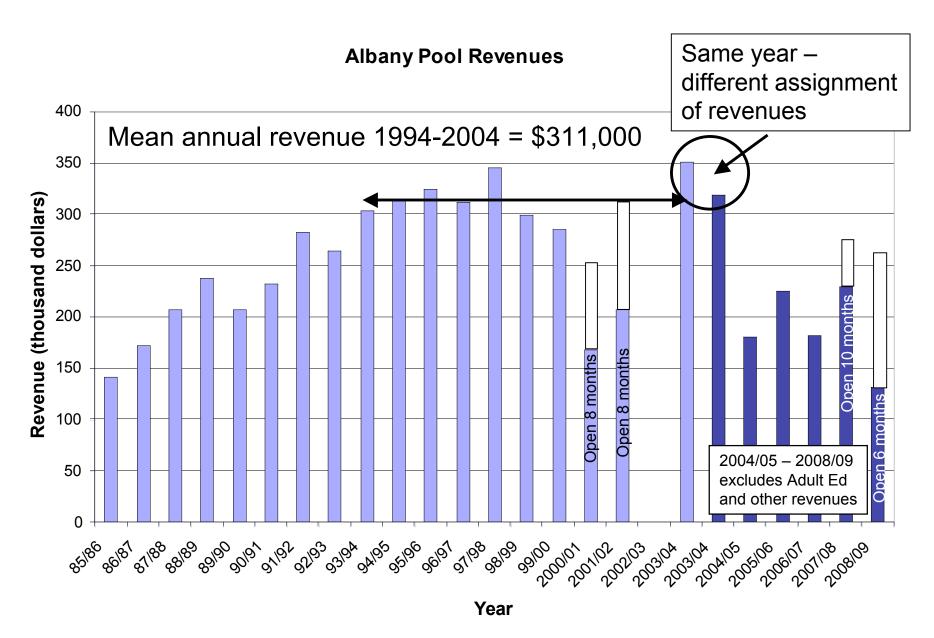
- Optimize bldg envelope
- Pool covers
- More co-generation
- Solar water heating
- Solar photovoltaic
- Right-sizing equipment
- Spend Measure E bond and modernization monies to save money on annual operations



Historical Keys to Success of Albany Pool

ALBANY POOL 1311 Portland Ave. Albany, CA 94706 LATE FALL 2008 November 3 - December 20, 2008 www.freewebs.com/allaboutalbanypool/ 510) 559 - 6640

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Laps + Water Walk/Run 6:00 - 7:55 a.m.	Laps + Water Walk/Run 6:00 - 7:30 a.m.	Laps + Water Walk/Run 6:00 - 7:30 a.m.	Laps + Water Walk/Run 6:00 - 7:55 a.m.	Laps + Water Walk/Run 6:00 - 7:30 a.m.	Laps + Water Walk/Run 7:00 - 7:55 a.m.	
Calisthenics 8:00 - 9:00 a.m.			Calisthenics 8:00 - 9:00 a.m.	ALBANY UNIFIED SCHOOL DISTRICT	Laps - 1/2 pool Adult Intermediate Adult Advanced 8:00 - 9:00 a.m	
Back Care 9:00 - 10:00 a.m.		ALBANY	Back Care 9:00 - 10:00 a.m.	PHYSICAL EDUCATION 7:40 A.M 9:00 A.M.	Adult Beginning 9:00 - 10:00 a.m. Shallow end Independent Exercise 9:00 - 10:00 a.m DEEP ONLY	
Arthritis Exercise 10:00 - 11:00 a.m.	ALBANY UNIFIED SCHOOL	UNIFIED SCHOOL DISTRICT PHYSICAL	Arthritis Exercise 10:00 - 11:00 a.m.	Parent and Tot 9:30 - 10:00 a.m. Independent Exercise Deep End Only	Parent & Tot Shallow End Only 10:00 - 11:30 a.m. Independent Exercise	
Independent Exercise Deep End Only	DISTRICT PHYSICAL EDUCATION	7:40 A.M 2:10 P.M.	Independent Exercise Deep End Only	9:00 - 10:15 a.m.	Deep End Only 10:00 - 11:30 a.m.	
8:00 - 11:00 a.m. Independent Exercise Whole Pool Available	7:40 A.M 3:10 P.M.		8:00 - 11:00 a.m. Independent Exercise Whole Pool Available	UNIFIED SCHOOL DISTRICT	Children's Classes 11:30 a.m 1:00 p.m.	Private Rental 11:30 a.m 1:00 p.m.
11:00 - 11:55 a.m.			11:00 - 11:55 a.m.	PHYSICAL EDUCATION 10:15 A.M 11:40 A.M.	Recreational Swim 1:05 - 2:25 p.m.	Recreational Swim 1:05 - 2:25 p.m.
Laps + Water Walk/Run 12:00 - 1:55 p.m.			Laps + Water Walk/Run 12:00 - 3:00 p.m.	Laps + Water Walk/Run 12:00 - 12:55 p.m.	Laps	Laps
Physical Therapy Innovations 2:00 - 3:30 p.m.				A.U.S.D. Adapted Aquatics 1:00 - 1:55 p.m.	2:30 - 4:00 p.m.	2:30 - 4:00 p.m.
Lap Swim - Half Pool Family Swim - Half Pool	Childrens Lessons 3:30 - 4:25 p.m.	Physical Therapy Innovations 2:30 - 4:00 p.m.	Childrens Lessons 3:30 - 4:25 p.m.	Physical Therapy Innovations 2:00 - 3:30 p.m.	FEES	
3:35 - 4:25 p.m.	590,000 pt. 000 (#60,000)		1000A.0.22 HOMER (0.18/0.04)	A.U.S.D. SWIM CLUB 3:30 - 4:25 p.m.	Lap Swim	\$5.00
Albany Blue Dolphins 4:30 - 5:30 p.m.	Albany Blue Dolphins 4:30 - 5:30 p.m.	Albany Blue Dolphins 4:30 - 5:30 p.m.	Albany Blue Dolphins 4:30 - 5:30 p.m.	Albany Blue Dolphins 4:30 - 5:30 p.m.	10 Swim Ticket Over 60/Disabled 10 Swim Ticket	\$45.00 \$4.50 \$40.00
Children's Lessons 5:30 - 6:25 p.m.	Laps 5:30 - 6:25 p.m.	Children's Lessons 5:30 - 6:25 p.m.	Laps 5:30 - 6:25 p.m.	Private Rental 5:30 - 6:25 p.m.	12047-940-95F	14000000
Aqua Aerobics - Shallow End Adult Advanced - Deep End Adult Intermediate - Deep End	Water Aerobics 1/2 + 1/2 6:30 - 7:30 p.m.	Aqua Aerobics - Shallow End Adult Advanced - Deep End Adult Intermediate - Deep End	Water Aerobics 1/2 + 1/2 6:30 - 7:30 p.m.	Laps + Water Walk/Run 6:30 - 7:25 p.m.	Child Recreational Swim 10 Swim Child Ticket	\$3.00 \$25.00
6:30 - 7:30 p.m.		6:30 - 7:30 p.m.			Drop - In (1 - 3 Classes)	\$7.00/class
Adult Beginning - Shallow End Independent Exercise - Deep End 7:30 - 8:30 p.m.	Physical Therapy Innovations 7:00 - 8:30 p.m.	Adult Beginning - Shallow End Independent Exercise - Deep End 7:30 - 8:30 p.m.	Physical Therapy Innovations 7:00 - 8:30 p.m.		Adult Classes (4+ Classes Senior Classes (4+ Classes)	\$5.00/class \$4.70/class
Laps + Water Walk/Run 8:35 - 9:25 p.m.	Laps + Water Walk/Run 8:35 - 9:25 p.m.	Laps + Water Walk/Run 8:35 - 9:25 p.m.	Laps + Water Walk/Run 8:35 - 9:25 p.m.	Please see program descripti	ons for additional information.	



AUSD and Community Needs

- K-12 physical education
- Albany Adult School
- Children's classes
- Other community uses



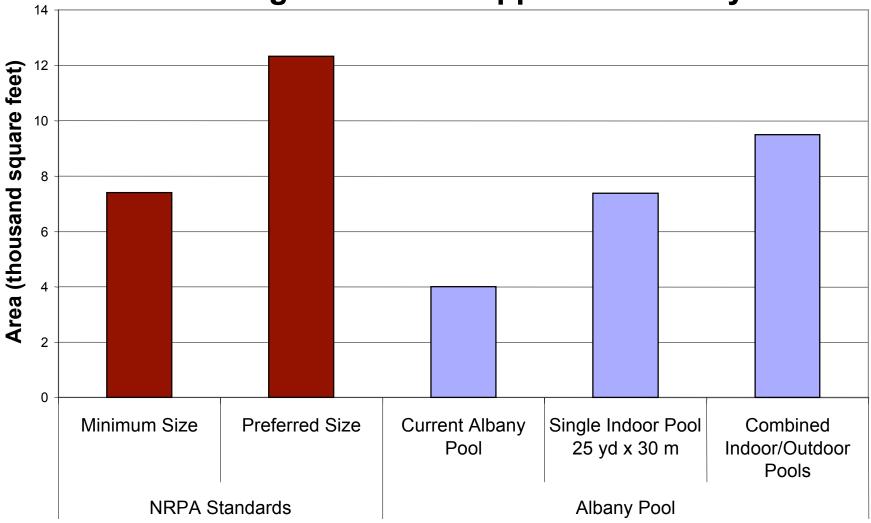




Pool design should address all needs – and operating plan should earn money for AUSD



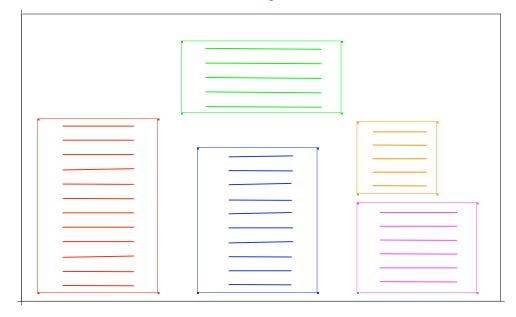
National Recreation and Park Association Standards for Swimming Pool Areas Applied to Albany





Pool Sizes – A Simple Comparison

Current Albany Pool 100 ft x 40 ft



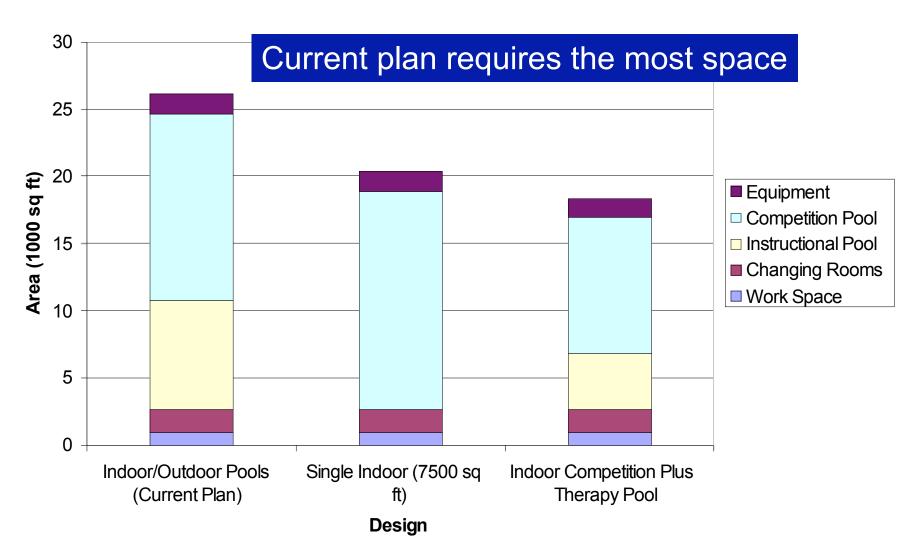
Small therapy or instructional pool 50 ft x 40 ft

Large competition pool (single indoor) 25 yd x 30 m 12 lanes

Competition-size outdoor pool 25 yd x 25 m 10 lanes

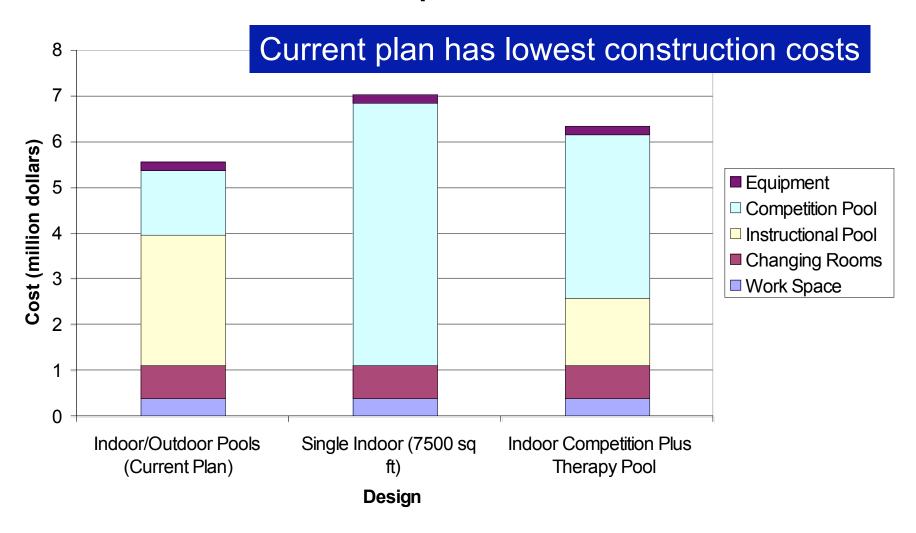
Indoor instructional pool 25 yd x 50 ft 6 lanes

Area Requirements for Three Design Options



Source: LPA presentation to AUSD, January 29, 2008 (adapted)

Probable Construction Costs for Three Design Options



Source: LPA presentation to AUSD, January 29, 2008 (adapted)

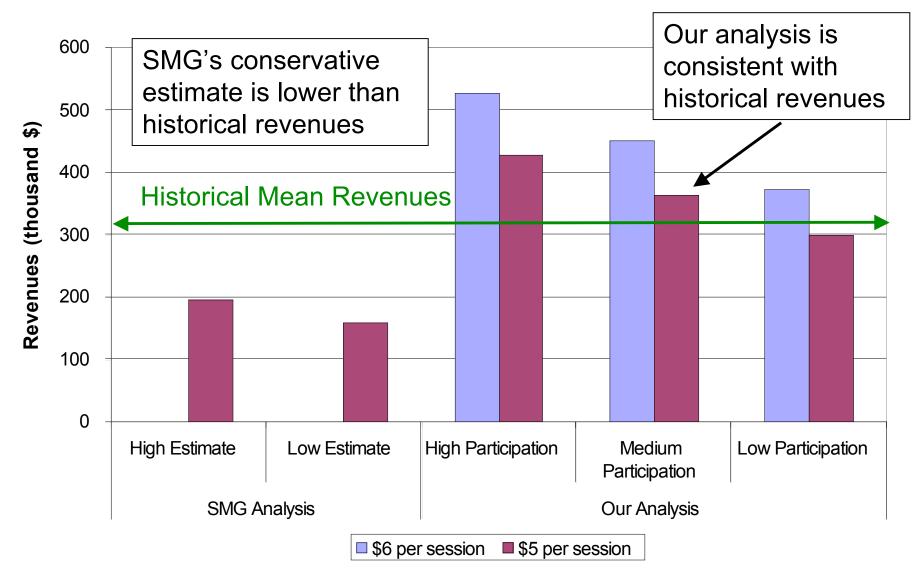
Operating Plan

- We constructed a "bottom-up" plan
- User schedules for indoor/outdoor and singleindoor pools based on historical and future use
- User schedules are for each quarter and summer, and for each day of week
- We computed income using ranges of fees and numbers of users
- We assigned staffing and computed costs pool pays for AUSD coaches and lifeguards for PE
- Conservative: we did not include savings in utility costs or Adult Ed ADA revenues

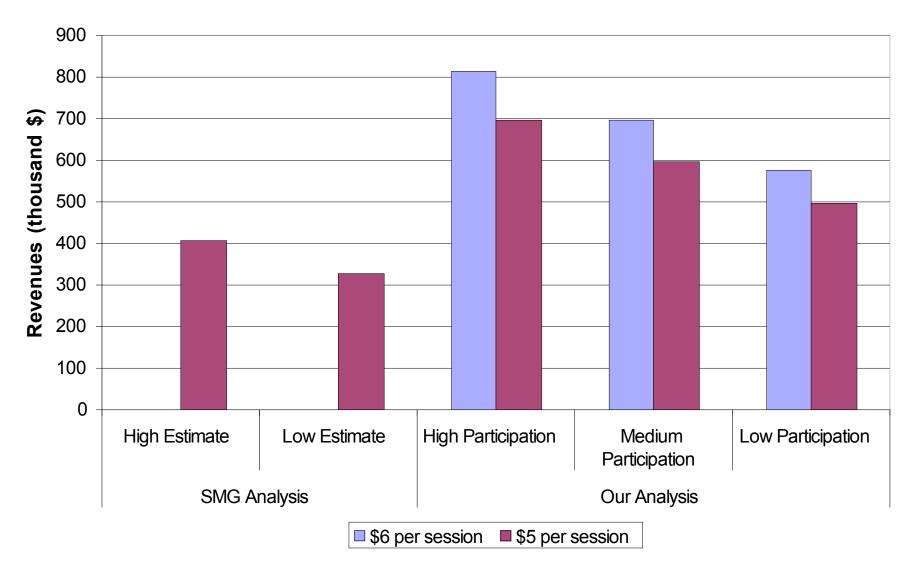
Participation, Income, and Parking

- Assigned historical number of participants to each activity (also studied +20%, -20%)
- Total non-K12: 99,609 person-visits (two-pools) or 64,313 person-visits (one pool) per year
- Average non-K12 is 21.3 people per hour (two pools) or 13.7 people per hour (one pool)
- If 85% drive, need 18 parking spaces (two-pool case) or 12 parking spaces (one-pool case)
- Small increase over current pool parking
- Maximum parking impact is for weekend swim meets (3 per year) – fewer people than current maximum (AHS commencement)

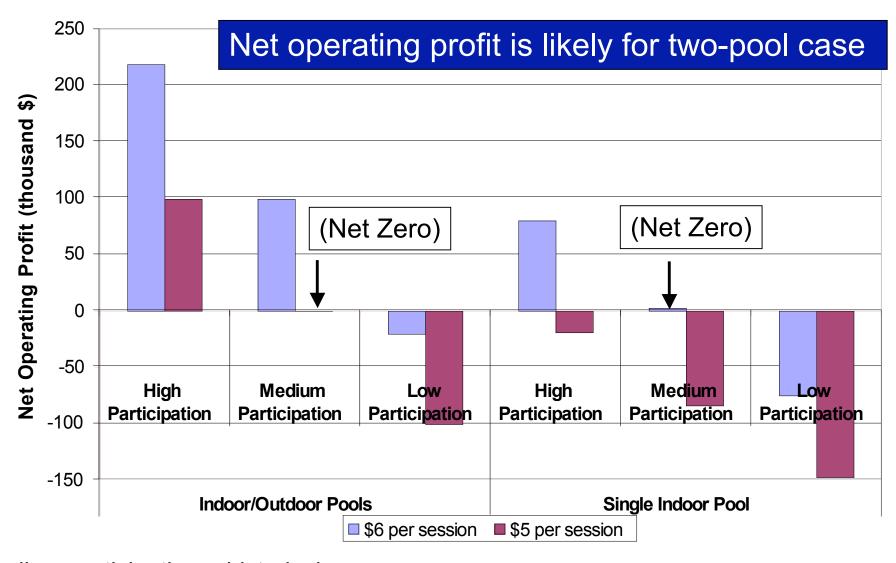
Projected Revenues for Alternate Design - Single Indoor Pool



Projected Revenues for Proposed Indoor/Outdoor Design



Projected Net Operating Profit or Loss



Medium participation = historical use High = 120%; low = 80%

Implications

- New pool can generate net revenue more from two-pool design
- Cost analysis shows that facility can pay for coaches and lifeguards for K-12 programs
- Energy efficiency and solar water heating will cut utility costs and further improve bottom line
- Two-pool design serves different needs of user groups – higher temperature for children's and adult classes, lower temperature for training and competition – provides more time for AHS use, and generates higher net revenue