



GAME PLAN

PROPER PROJECT PREPARATION

NOVEMBER 29, 2012

Hastings+Chivetta

ARCHITECTURE • PLANNING • ENGINEERING

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PRESENTATION OBJECTIVES

- UNDERSTAND THE PRE-DESIGN AND PROGRAMMING PHASE
- DETERMINE HOW TO BUILD A PROJECT TEAM
- RECOGNIZE DIFFERENT METRICS USED TO PREDICT SPACE DEMAND
- BUILD COMPREHENSIVE AND ACCURATE PROJECT BUDGETS



PRESENTATION OUTLINE

I. INTRODUCTION

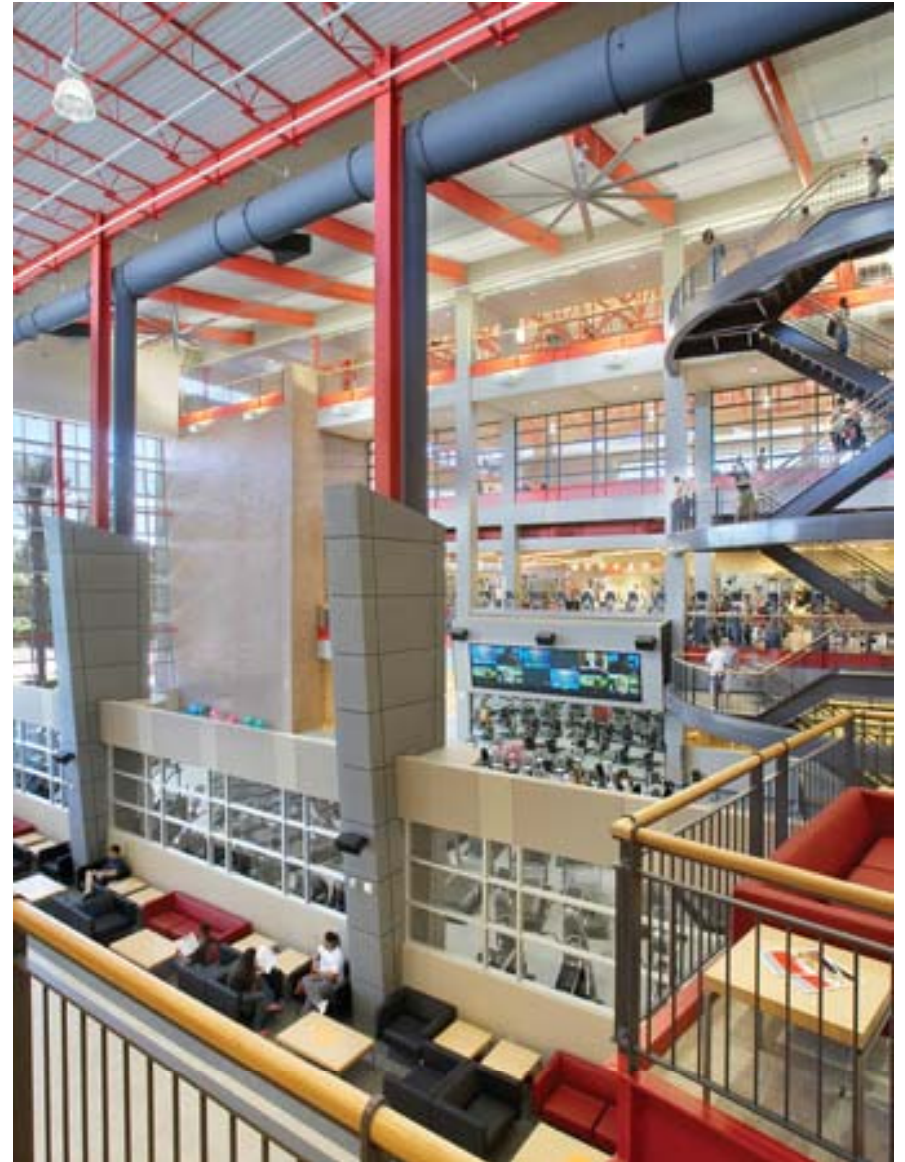
- PROJECT OVERVIEW

II. PROCESS

- TEAM FORMATION
- ASSESSMENT OF RESOURCES
- PROJECT REQUIREMENTS
- PROGRAM/DESIGN CONCEPTS
- FINAL REPORT (GAME PLAN)

III. EXAMPLE

IV. SUMMARY



A hand is shown in the foreground, holding a piece of white chalk and drawing on a chalkboard. The hand is positioned as if it has just finished drawing or is about to start. On the chalkboard, there are several 'X' and 'O' symbols arranged in a pattern that resembles a game board or a tactical diagram. Arrows are also drawn, indicating movement or flow. The background is a solid grey color.

I INTRODUCTION

PROCESS ANALOGY



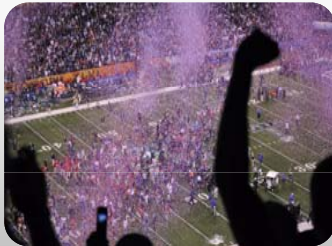
PRE-DESIGN

- THE GAME PLAN



DESIGN & CONSTRUCTION

- IN THE GAME



OCCUPANCY

- POST GAME CELEBRATION

ONE CHANCE TO GET IT RIGHT

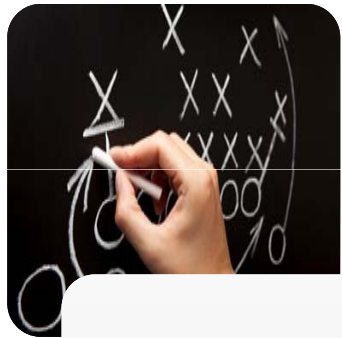
- EVERY PROJECT IS 'ONE AND DONE'
 - NO 'TOMORROW'
 - NO 'NEXT YEAR'
- ONE OPPORTUNITY TO SUCCEED
- PRE-DESIGN PHASE IS KEY
 - FOUNDATION FOR ENTIRE PROJECT





II PROCESS

PROJECT PHASES



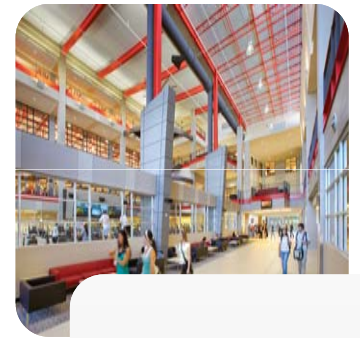
Pre-Design
(Game Plan)



Design



Construction



Occupancy

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

PRE-DESIGN PHASE



PRE-DESIGN PHASE



TEAM FORMATION

PROJECT CHAMPION

- STRONG PROJECT ADVOCATE
- LEADERSHIP POSITION
 - MAYOR
 - COLLEGE PRESIDENT
 - RESPECTED FIGURE
- NETWORKED COMMUNICATOR
- CONSENSUS BUILDER
- FUNDRAISING ABILITY



TEAM FORMATION

STEERING COMMITTEE

- MAJOR DECISION MAKING BODY
- PROJECT VISIONARIES
- PROJECT LEADERSHIP
- MILESTONE REVIEW COMMITTEE
- PARTICIPATION FOR LIFE OF PROJECT
- FINAL APPROVAL BODY



TEAM FORMATION

STEERING COMMITTEE

MUNICIPAL

MAYOR

CITY MANAGER

CITY ATTORNEY

CITY COUNCIL REP

CITIZEN REPRESENTATIVE

PARKS/RECREATION DIRECTOR

PARK BOARD REP

PUBLIC WORKS DIRECTOR

CITY PLANNER

HIGHER ED

PRESIDENT

VP BUSINESS

VP STUDENT AFFAIRS

VP ADVANCEMENT

STUDENT REPRESENTATIVE

ATHLETICS DIRECTOR

RECREATION DIRECTOR

DIRECTOR OF FACILITIES

CAMPUS ARCHITECT

TEAM FORMATION

WORKING COMMITTEE

- DAY-TO-DAY REVIEW COMMITTEE
- INTERFACE WITH PROFESSIONAL TEAM
- PROJECT EXPERTISE
- SOME OVERLAP WITH STEERING COMMITTEE
- PARTICIPATION FOR LIFE OF PROJECT
- STEERING COMMITTEE LIAISONS



TEAM FORMATION

WORKING COMMITTEE

MUNICIPAL

CITY MANAGER

PARKS/RECREATION DIRECTOR

PROGRAM COORDINATOR

FITNESS DIRECTOR

AQUATICS DIRECTOR

PUBLIC WORKS DIRECTOR

HEAD OF MAINTENANCE

CITY PLANNER

HIGHER ED

RECREATION DIRECTOR

ATHLETICS DIRECTOR

FITNESS DIRECTOR

AQUATICS DIRECTOR

INTRAMURAL SPORT DIRECTOR

OUTDOOR PROGRAM DIRECTOR

HEAD OF MAINTENANCE

CAMPUS ARCHITECT

TEAM FORMATION

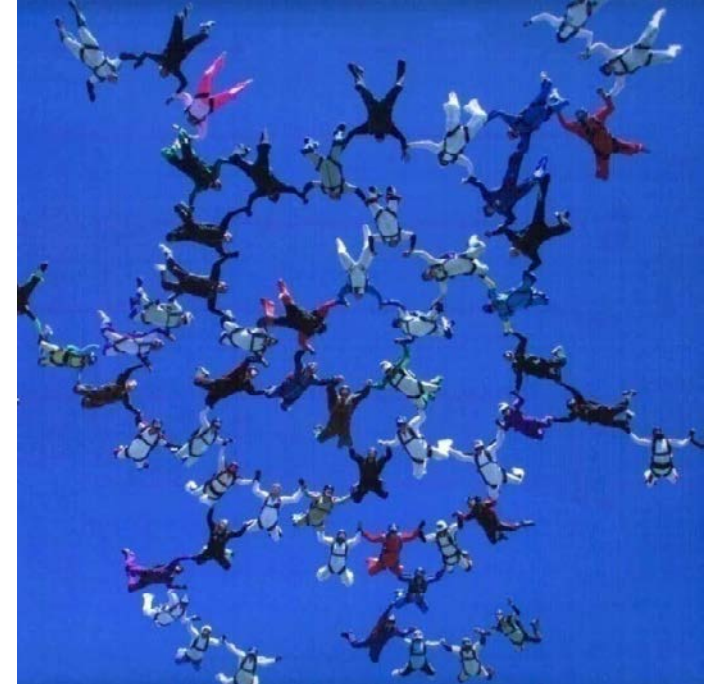
CONSULTING TEAM

MAJOR PARTIES	KEY PLAYERS
OWNER	PROJECT CHAMPION STEERING COMMITTEE WORKING COMMITTEE
ARCHITECT / ENGINEER	ARCHITECT CIVIL ENGINEER STRUCTURAL ENGINEER MEP ENGINEER
SPECIALISTS	PROGRAMMER OPERATIONS CONSULTANT AQUATICS CONSULTANT SUSTAINABILITY CONSULTANT CONSTRUCTION MANAGER
THIRD PARTY	HAZARDOUS MATERIAL ABATEMENT CONSULTANT SURVEYOR GEOTECHNICAL CONSULTANT

TEAM FORMATION

SELECT A QUALIFIED CONSULTING TEAM

- REQUEST FOR QUALIFICATIONS (RFQ)
 - QUALIFICATION EVALUATION
 - DUE DILIGENCE
 - RESEARCH, REFERENCE CHECK
 - INTERVIEW CANDIDATES
 - MAKE SELECTION
- REQUEST FOR PROPOSAL (RFP)
 - REVIEW AND NEGOTIATE
- AWARD CONTRACT



PRE-DESIGN PHASE



ASSESSMENT OF RESOURCES

- EXISTING FACILITY ANALYSIS

- PHYSICAL BUILDINGS
- SITE

- MARKET ANALYSIS

- MARKETPLACE COMPETITION

- FINANCIAL CAPACITY

- TAX REVENUE
- STUDENT FEE POTENTIAL
- DONOR SUPPORT

ASSESSMENT OF RESOURCES

EXISTING FACILITY ANALYSIS

- ASSESS EXISTING PHYSICAL FACILITIES
 - ARCHITECTURAL
 - STRUCTURAL
 - MECHANICAL/ELECTRICAL
- DETERMINE FACILITIES CONDITION INDEX (FCI)
 - $FCI = \text{RENOVATION/REPLACEMENT COST}$
 - $>.51$ MAJOR



ASSESSMENT OF RESOURCES

SITE ANALYSIS

■ ANALYSIS

- SIZE
- LOCATION
- ACCESS
- PARKING
- CIRCULATION

■ TECHNICAL ASSESSMENT

- SURVEY
- ENVIRONMENTAL
- GEOTECHNICAL STUDY



ASSESSMENT OF RESOURCES

MARKET ANALYSIS

■ IDENTIFY ALTERNATIVES

- PRIVATE CLUBS
- YMCA
- COMMUNITY CENTERS
- PEER COMPARISON

■ ASSESS RESOURCES

- FACILITIES/LOCATION
- PROGRAMS
- COST

■ DIFFERENTIATING FACTORS



INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

ASSESSMENT OF RESOURCES

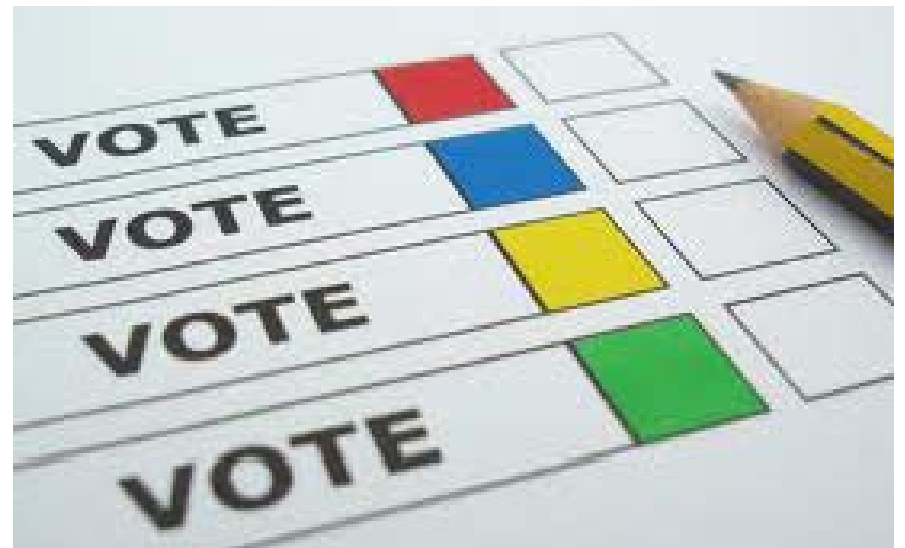
FINANCIAL CAPACITY

■ CURRENT

- BOND RATING
- DEBT SERVICE
- TAXATION RATE
- STUDENT FEES

■ FUNDRAISING POTENTIAL

- FEE/TAX TOLERANCE
- PRIVATE DONOR SUPPORT
- THIRD PARTY PARTNERSHIP

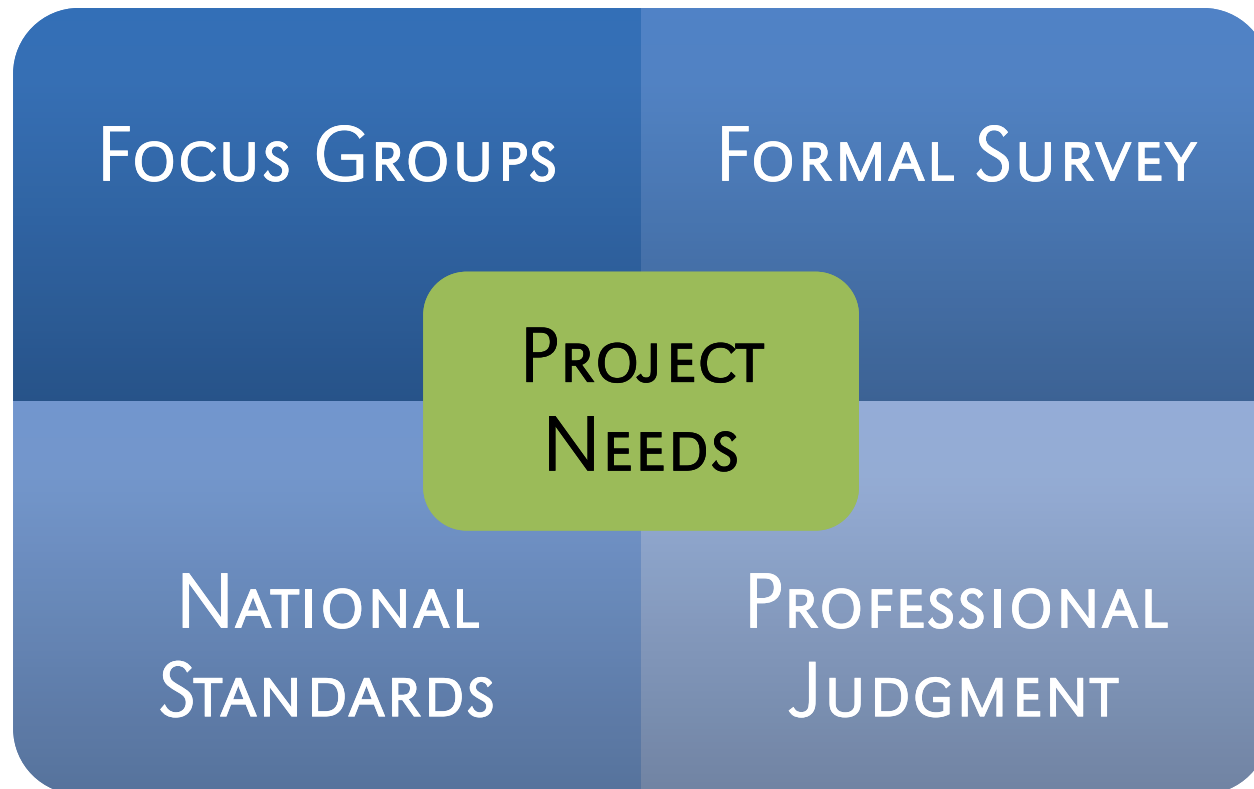


PRE-DESIGN PHASE



PROJECT REQUIREMENTS

PROJECT NEED DETERMINENTS



PROJECT REQUIREMENTS

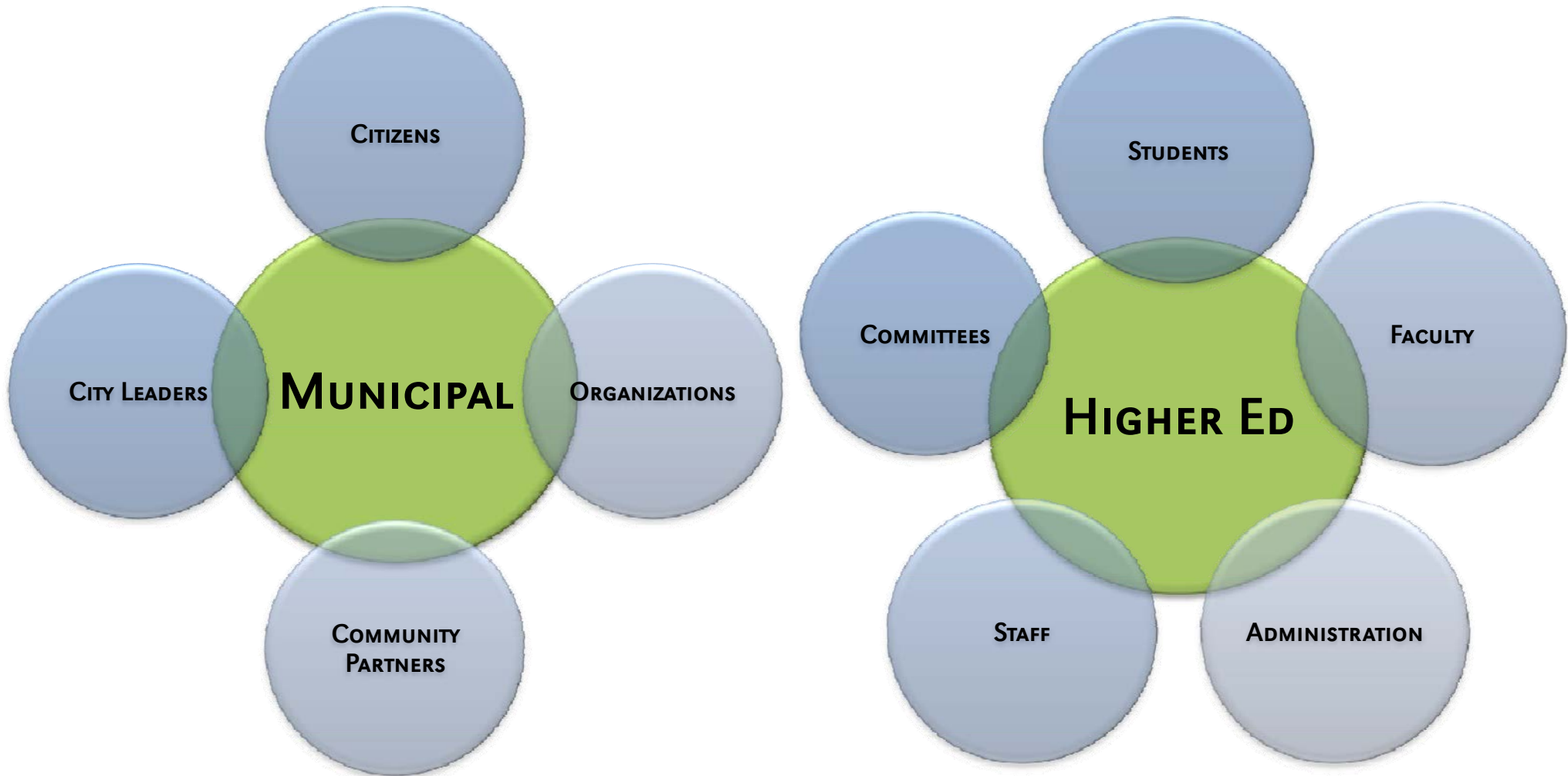
ESTABLISH PROJECT GOALS

- ENGAGE PROJECT STAKEHOLDERS
 - STEERING COMMITTEE
 - WORKING COMMITTEE
 - FOCUS GROUPS
- CONDUCT FOCUS GROUP SESSIONS
 - REVIEW AND REFINE
 - FINALIZE PROJECT GOALS
- FORM BASIS OF PROJECT



PROJECT REQUIREMENTS

FOCUS GROUPS



INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

PROJECT REQUIREMENTS

FOCUS GROUP SURVEY

■ INFORMAL SURVEY

- INITIAL INDICATORS
- PRELIMINARY PRIORITIES
- ONLY ONE MEASURE
- NOT STATISTICALLY VALID

What major goal should be accomplished with this project?

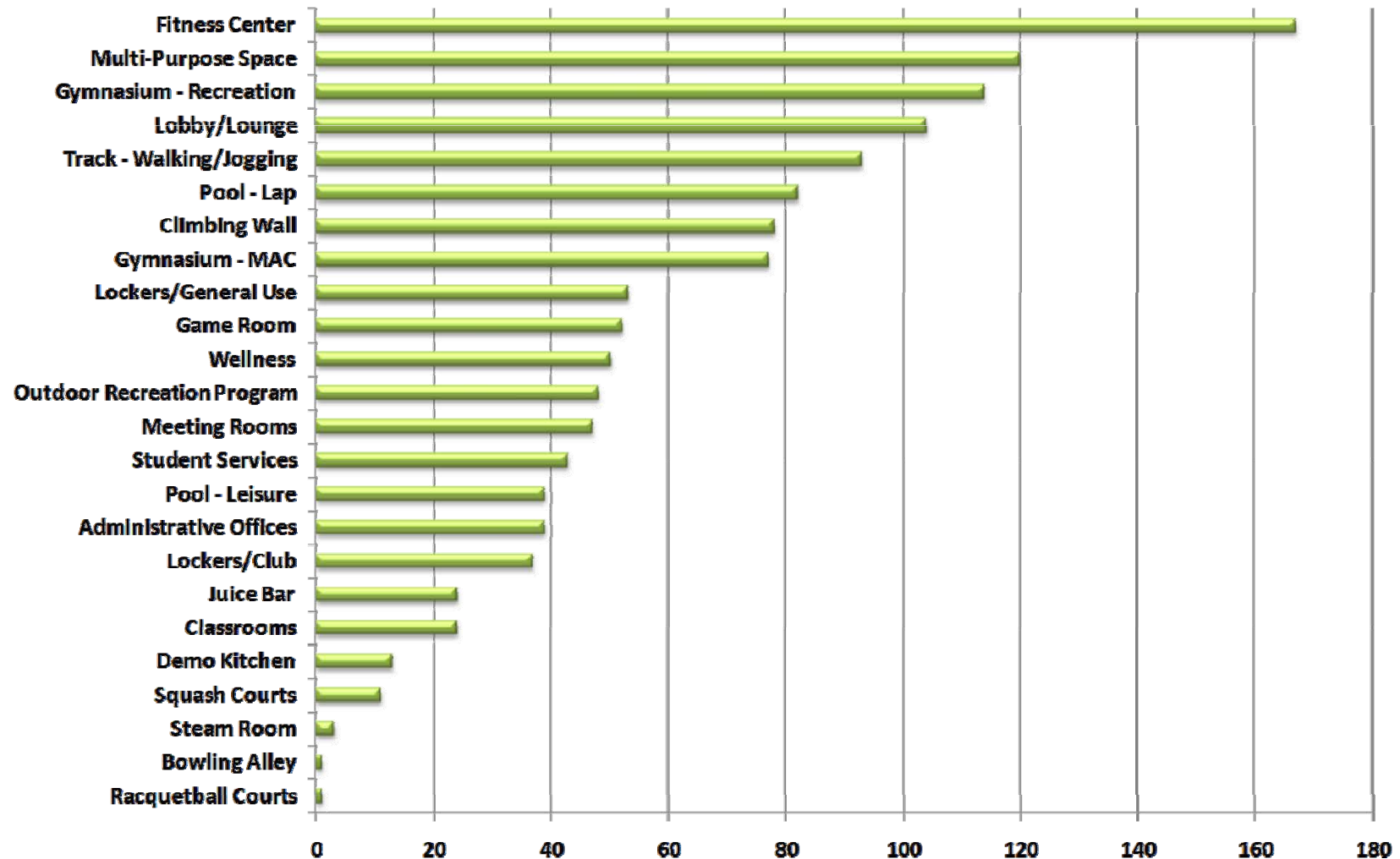
What is your personal goal or objective for this project?

Identify from the list below, in order of priority; the top 10 program components that you think should be included in the project:

- | | |
|---|---|
| <input type="checkbox"/> Lobby/Lounge | <input type="checkbox"/> Parking |
| <input type="checkbox"/> Fitness Space - Cardio | <input type="checkbox"/> Picnic Area |
| <input type="checkbox"/> Fitness Space - Weights | <input type="checkbox"/> Pool - Indoor Competitive |
| <input type="checkbox"/> Game Room | <input type="checkbox"/> Pool - Indoor Recreation |
| <input type="checkbox"/> Gymnasium - Recreational | <input type="checkbox"/> Pool - Outdoor Competitive |
| <input type="checkbox"/> Gymnasium - MAC | <input type="checkbox"/> Pool - Outdoor Recreation |
| <input type="checkbox"/> Ice Rink | <input type="checkbox"/> Outdoor Adventure |
| <input type="checkbox"/> Multi-Purpose Space | <input type="checkbox"/> Softball Fields |
| <input type="checkbox"/> Meeting Rooms | <input type="checkbox"/> Soccer Fields |

PROJECT REQUIREMENTS

FOCUS GROUP PRIORITIES



INTRODUCTION

PROCESS

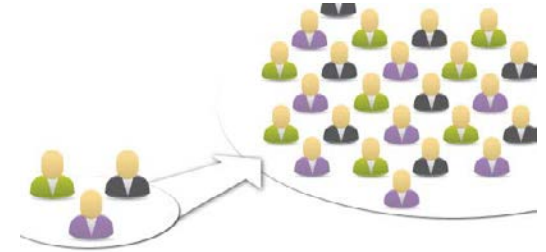
EXAMPLE

SUMMARY

PROJECT REQUIREMENTS

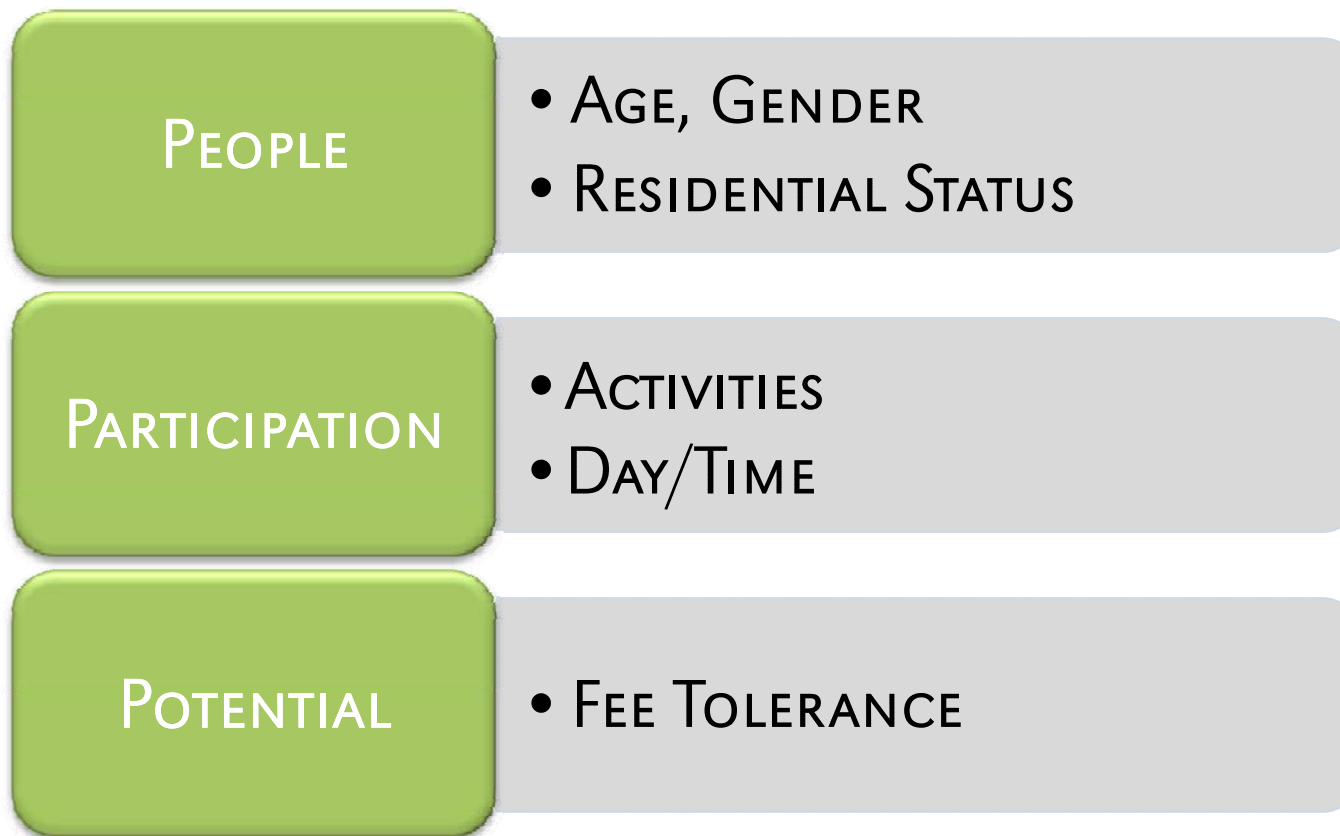
FORMAL SURVEY

- WEB BASED
 - MASS E-MAIL DISTRIBUTION
- STATISTICALLY SIGNIFICANT SAMPLE
- INCENTIVIZE
 - REGISTER TO WIN PRIZE FOR PARTICIPATION
- BASIS FOR PROJECT REQUIREMENTS
 - PRIORITIES
 - NEEDS
 - FINANCIAL SUPPORT



PROJECT REQUIREMENTS

SURVEY COMPONENTS



PROJECT REQUIREMENTS

SAMPLE SURVEY

1. Are you currently using any recreation, fitness, or aquatic facilities offered ON CAMPUS at JMU?

- ☐ Yes (please answer Questions #1a, #1b, and #1c)
- ☐ No (please skip to Question #2)

1a. From the following list please check ALL the recreational facilities and activities you have participated in while enrolled at JMU. (Please check ALL you participate in.)

- ☐ Free weights
- ☐ Weight machines
- ☐ Running or walking on the indoor running track
- ☐ Sport courts (i.e. basketball, volleyball, soccer)
- ☐ Racquetball
- ☐ Cardiovascular equipment (i.e. treadmills, Stairmasters, ellipticals)
- ☐ Group fitness classes
- ☐ Swimming pool
- ☐ Indoor intramural sports (i.e. basketball, volleyball, etc.)
- ☐ Sport clubs (soccer, volleyball, rugby, etc)
- ☐ Climbing wall
- ☐ Other: _____

PROJECT REQUIREMENTS

SAMPLE SURVEY

4. We are trying to determine what students would want in a campus recreation center as well as how often and what times this new facility would be used. If the campus recreation center was expanded and the facility was available to you on a daily basis, which activities would you participate in and how often each week. *CHECK ONLY ONE BOX FOR EACH ACTIVITY. IF YOUR ANSWER IS "NEVER" FOR PART A, YOU CAN SKIP PART B.*

ACTIVITY	PART A					PART B						
	How often would you participate?					What time of day would you be most likely to participate?						
	Daily	2-4/ Week	Once/ Week	Once/ Month	Never	6-8 a.m.	8-12 a.m.	12-1 p.m.	1-4 p.m.	4-6 p.m.	6-9 p.m.	9-12 p.m.
Free weights												
Weight machines												
Circuit/Functional Fitness/TRX Training Area												
Stretching/Abdomin al Area												
Treadmills												
Ellipticals												
Stairmasters												
Stationary Bikes												
Rowers												
Healthy Cooking Classes												

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

PROJECT REQUIREMENTS

SAMPLE SURVEY

5. How important are the following criteria in deciding whether or not you would use a campus recreation center at JMU?
SELECT ONE FOR EACH CRITERIA.

	Very important	Somewhat important	Somewhat unimportant	Not at all important
Facilities and equipment that are available with no wait				
Parking is within close proximity to facility				
Bus stop is close				
Hours of operation				
Quality of equipment				
Safe, secure, and clean				
Welcoming Environment				

6. Please check the one statement in both #6a and #6b that best describes your student level at the University.

6a. Full time (12 hours or more)

Part time (less than 12 hours)

6b. Freshman

Sophomore

Junior

Senior

Graduate Student

7. Which one of the following best describes where you live?

- | | |
|--|--|
| <input type="checkbox"/> On Campus Bluestone | <input type="checkbox"/> On Campus Lakeside |
| <input type="checkbox"/> On Campus Village | <input type="checkbox"/> On Campus ISAT |
| <input type="checkbox"/> On Campus Hillside | <input type="checkbox"/> Off Campus Port Road area |
| <input type="checkbox"/> Off Campus Downtown | <input type="checkbox"/> Off Campus Neff Ave area |
| <input type="checkbox"/> Off Campus | |

Other: _____

PROJECT REQUIREMENTS

SAMPLE SURVEY

Recreation Option A: \$150 Fee Includes some renovations to Lancer Hall and the following additional components:	Recreation Option B: \$100 Fee Includes some renovations to Lancer Hall and the following additional components:	Recreation Option C: \$75 Fee Includes some renovations to Lancer Hall and the following additional components:
One 3-court gymnasium with wood floors	One 3-court gymnasium with wood floor	One 2-court gymnasium with wood floor
One multi-activity court (indoor soccer, floor hockey, etc.)	One multi-activity court (indoor soccer, floor hockey, etc.)	
Elevated jogging track	Elevated jogging track	Elevated jogging track
Large weight and fitness training area	Large weight and fitness training area	Large weight and fitness training area
Large multi-purpose rooms for aerobics, martial arts, etc.	Large multi-purpose rooms for aerobics, martial arts, etc.	Large multi-purpose rooms for aerobics, martial arts, etc.
Large rock climbing wall	Rock climbing wall	
Comprehensive wellness center: fitness assessment testing lab, instructional kitchen, classrooms	Wellness component: fitness testing lab, instruction kitchen, classroom	
Juice bar	Juice bar	Juice bar
Social lounge and game room	Social lounge	
Leisure pool		
Whirlpool and sauna		
Meeting room		
Sports club offices		

INTRODUCTION

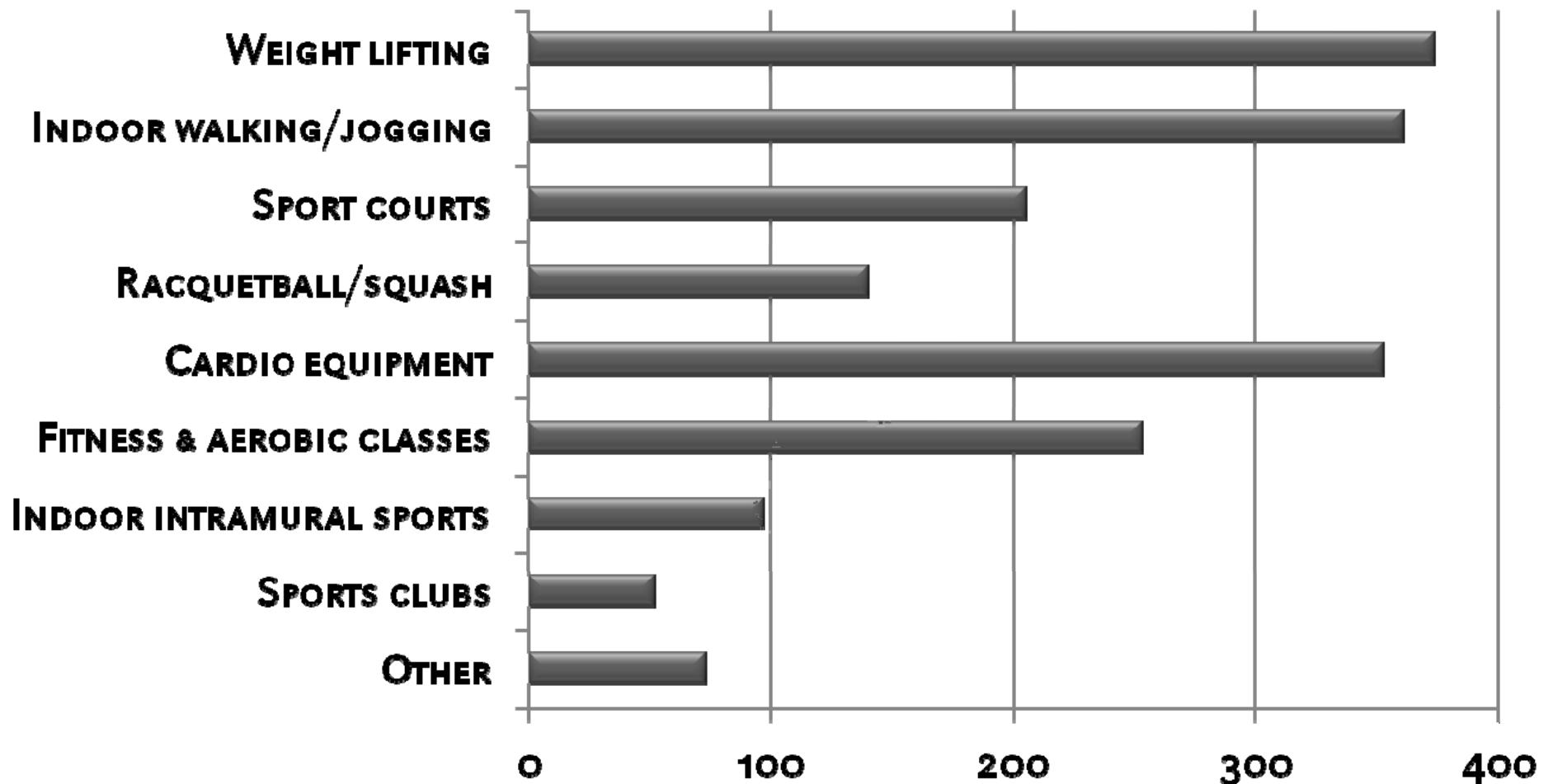
PROCESS

EXAMPLE

SUMMARY

PROJECT REQUIREMENTS

SURVEY RESULTS



PROJECT REQUIREMENTS

SURVEY RESULTS

How often would you participate?	BASKETBALL	FREE WEIGHTS	WEIGHT MACHINES	FITNESS - CARDIO	RACQUETBALL	SQUASH	BADMINTON	VOLLEYBALL	LAP SWIMMING	RECREATIONAL SWIMMING	WATER AEROBICS	ICE HOCKEY
NEVER	379	113	103	29	377	501	354	319	306	279	341	421
ONCE A MONTH (1 X MO.)	110	78	75	53	132	25	138	123	131	184	115	68
ACTUAL = 0.231 /WK	25	18	17	12	30	6	32	28	30	43	27	16
ONCE A WEEK	29	110	115	77	16	4	34	66	56	49	59	20
ACTUAL = 1 /WK	29	110	115	77	16	4	34	66	56	49	59	20
2 - 4 TIMES A WEEK	13	200	208	253	7	1	3	16	21	15	15	9
ACTUAL = 3 /WK	39	600	624	759	21	3	9	48	63	45	45	27
DAILY	1	31	31	120	0	1	3	8	18	5	2	14
ACTUAL = 7 /WK	7	217	217	840	0	7	21	56	126	35	14	98
TOTAL SURVEYS	532	532	532	532	532	532	532	532	532	532	532	532
1/WK OR MORE PARTIC.	43	341	354	450	23	6	40	90	95	69	76	43
1/WK OR MORE PERCENT	8%	64%	67%	85%	4%	1%	8%	17%	18%	13%	14%	8%
TOTAL WEEKLY VISITS	100	945	973	1688	67	20	96	198	275	172	145	161
TOTAL DAILY VISITS	14	135	139	241	10	3	14	28	39	25	21	23

PROJECT REQUIREMENTS

SURVEY RESULTS

WHAT TIME OF DAY?	BASKETBALL	FREE WEIGHTS	WEIGHT MACHINES	FITNESS - CARDIO	RACQUETBALL	SQUASH	BADMINTON	VOLLEYBALL	LAP SWIMMING	RECREATONAL SWIMMING	WATER AEROBICS	ICE HOCKEY
6 - 8 AM	2	31	32	40	1	2	1	1	25	7	4	2
8 AM - 12 PM	4	53	54	63	4	0	1	2	35	9	13	1
12 - 1 PM	3	6	5	3	1	0	1	1	6	2	2	0
1 - 4 PM	12	48	47	56	9	1	7	7	8	16	14	13
4 - 6 PM	33	146	141	146	37	7	36	47	37	52	60	31
6 - 9 PM	92	110	123	157	87	20	119	139	99	147	91	60
9 PM - 12 AM	7	25	27	38	16	1	13	16	16	20	7	4
TOTAL SURVEYS	532	532	532	532	532	532	532	532	532	532	532	532
PEAK USER GROUP	92	146	141	157	87	20	119	139	99	147	91	60

PROJECT REQUIREMENTS

SURVEY RESULTS

Demand-Based Requirements for Peak Need						
Activity	Peak Demand	Unit SF Need	Activity Type	Unit Need	Recom'd. Units	Total SF
FREE WEIGHTS	61.0	55/sf	Individual		61	3,355/sf
WEIGHT MACHINES	70.16	55/sf	Individual		70	3,850/sf
SUBTOTAL						7,205/sf
CARDIO MACHINES	92.0	50/sf	Individual		92	4,600/sf
SUBTOTAL						4,600/sf
AEROBICS	70	50/sf	Individual		70	3,500/sf
DANCE CLASSES	92	50/sf	Individual		92	4,600/sf
YOGA / PILATES	126	50/sf	Individual		126	6,300/sf
SPINNING / STATIONARY CYCLE	103	25/sf	Individual		103	2,575/sf
MARTIAL ARTS	56	50/sf	Individual		56	2,800/sf
SUBTOTAL						19,775/sf
CLIMBING WALL	78	36/sf	pairs	38.8	39	1,404/sf
BOULDERING WALL	46	36/sf	Individual		46	1,656/sf
SUBTOTAL						3,060/sf

PROJECT REQUIREMENTS

NATIONAL PLANNING STANDARDS



NIRSA

○ WWW.NIRSA.ORG



COUNCIL OF EDUCATIONAL FACILITY PLANNERS
INTERNATIONAL

○ WWW.CEFPI.ORG



NATIONAL SPORTING GOODS ASSOCIATION

○ WWW.NSGA.ORG



NATIONAL HEALTH & EXERCISE SCIENCE ASSOCIATION

○ WWW.NHESA.ORG

PROJECT REQUIREMENTS

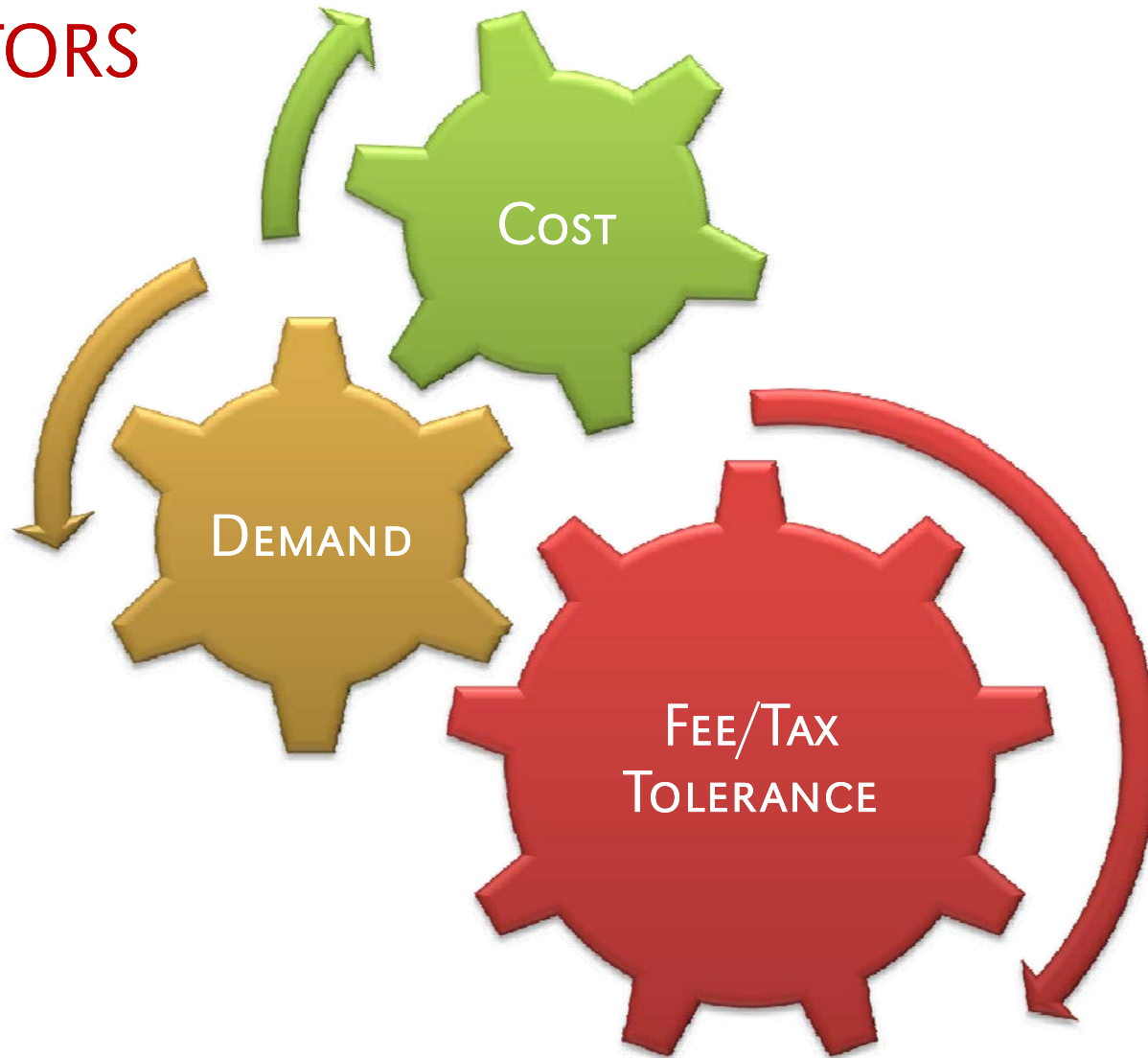
PROFESSIONAL JUDGMENT

- 'BIG PICTURE' EVALUATION
- EXPERIENCE SHARING
- PEER COMPARISON
 - NEIGHBORING COMMUNITIES
 - CONFERENCE OR ASPIRANT SCHOOLS
- POLITICAL FACTORS
 - HISTORY
 - PERCEPTIONS
- FINALIZE PROJECT REQUIREMENTS



PROJECT REQUIREMENTS

MAJOR FACTORS



INTRODUCTION

PROCESS

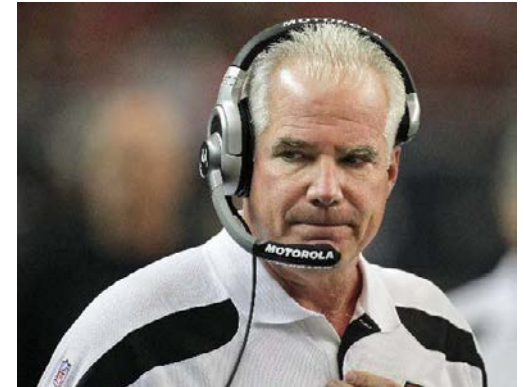
EXAMPLE

SUMMARY

PROJECT REQUIREMENTS

DECISION – GO/NO GO

- MOMENT OF TRUTH
- FACTORS
 - LEVEL OF SUPPORT
 - POLITICAL FORCES
 - RISKS AND OPPORTUNITIES
 - TIMING
 - ECONOMY
- PREPARATION PAYS OFF
- PROCEED WITH CONFIDENCE



PRE-DESIGN PHASE



PROGRAM/DESIGN CONCEPTS

BUILDING PROGRAM

- SPACE REQUIREMENTS
 - QUANTITY
 - ITEMIZED ROOM LIST
 - NET AREA TOTAL
 - GROSS AREA CALCULATION
- QUALITY
- TECHNICAL REQUIREMENTS
- ADJACENCY



PROGRAM/DESIGN CONCEPTS

SPACE REQUIREMENTS

No.	COMPONENT TYPE	QUANTITY	UNIT	SF	TOTAL SF
1.00	ACTIVITY SPACE				44,961 SF
1.01	GYMNASIUM (3 COURT)	1	ROOM	18,500 SF	18,500 SF
1.02	GYMNASIUM STORAGE	2	ROOMS	300 SF	600 SF
1.03	SUSPENDED RUNNING TRACK	1	TRACK	5,367 SF	5,367 SF
1.04	RACQUETBALL COURT	2	COURTS	800 SF	1,600 SF
1.05	CLIMBING WALL	1	AREA	397 SF	397 SF
1.06	BOULDERING WALL	1	AREA	260 SF	260 SF
1.07	CLIMBING WALL OFFICE	1	ROOM	117 SF	117 SF
1.08	CIRCUIT & FREE WEIGHTS	2	AREAS	3,500 SF	7,000 SF
1.09	CIRCUIT & FREE WEIGHT STORAGE	1	ROOM	300 SF	300 SF
1.10	CARDIO & STRETCHING	1	AREA	4,216 SF	4,216 SF
1.11	MP ROOM - LARGE	1	ROOM	2,531 SF	2,531 SF
1.12	MP ROOMS STORAGE	1	ROOM	395 SF	395 SF
1.13	MP ROOM - SMALL	1	ROOM	2,283 SF	2,283 SF
1.14	MP ROOMS STORAGE	1	ROOM	242 SF	242 SF
1.15	QUIET FITNESS AREA	1	AREA	1,153 SF	1,153 SF

PROGRAM/DESIGN CONCEPTS

SPACE REQUIREMENTS

PROGRAM SUMMARY			
1.00	ACTIVITY SPACE		44,961 SF
2.00	NATATORIUM		15,022 SF
3.00	OUTDOOR ADVENTURE		8,250 SF
4.00	OFFICE SUITE		1,724 SF
5.00	USER SUPPORT		2,781 SF
6.00	BUILDING SUPPORT		7,381 SF
	NET BUILDING AREA	75%	80,119 SF
	CIRCULATION AND WALLS	25%	26,706 SF
	GROSS BUILDING AREA		106,825 SF

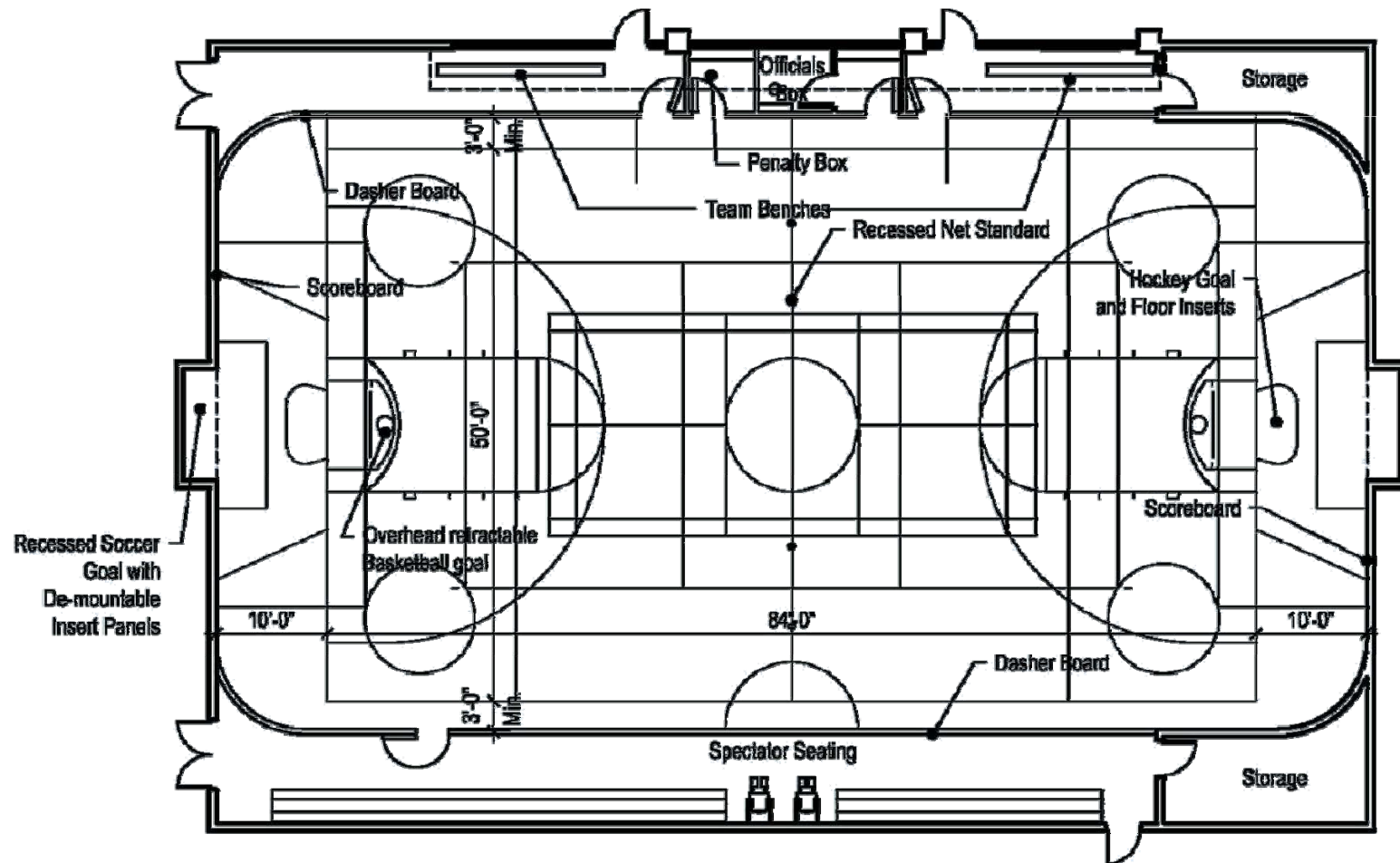
PROGRAM/DESIGN CONCEPTS

TECHNICAL DATA SHEET

Function:	Multi-purpose court for indoor soccer, hockey, basketball, volleyball, etc.
Adjacency:	Spectator / Athlete Seating / Boxes MAC Gymnasium Storage
Environment:	
Floor:	Synthetic floor
Walls:	CMU or gypsum board above 18'
Ceiling:	Exposed structure, acoustical deck; 25' height minimum
Windows:	Exterior windows
Doors:	3' x 7' wood doors
Equipment:	2 power operated retractable basketball backboards, Floor sleeves for volleyball net standards, wall mounted Scoreboards, protected clocks, dasherboard system
Furnishings:	Volleyball / badminton nets and standards
Mechanical:	Dedicated HVAC zone
Electrical:	Duplex electrical outlets per code, power/data for backboards, scoreboards HID or LED lighting

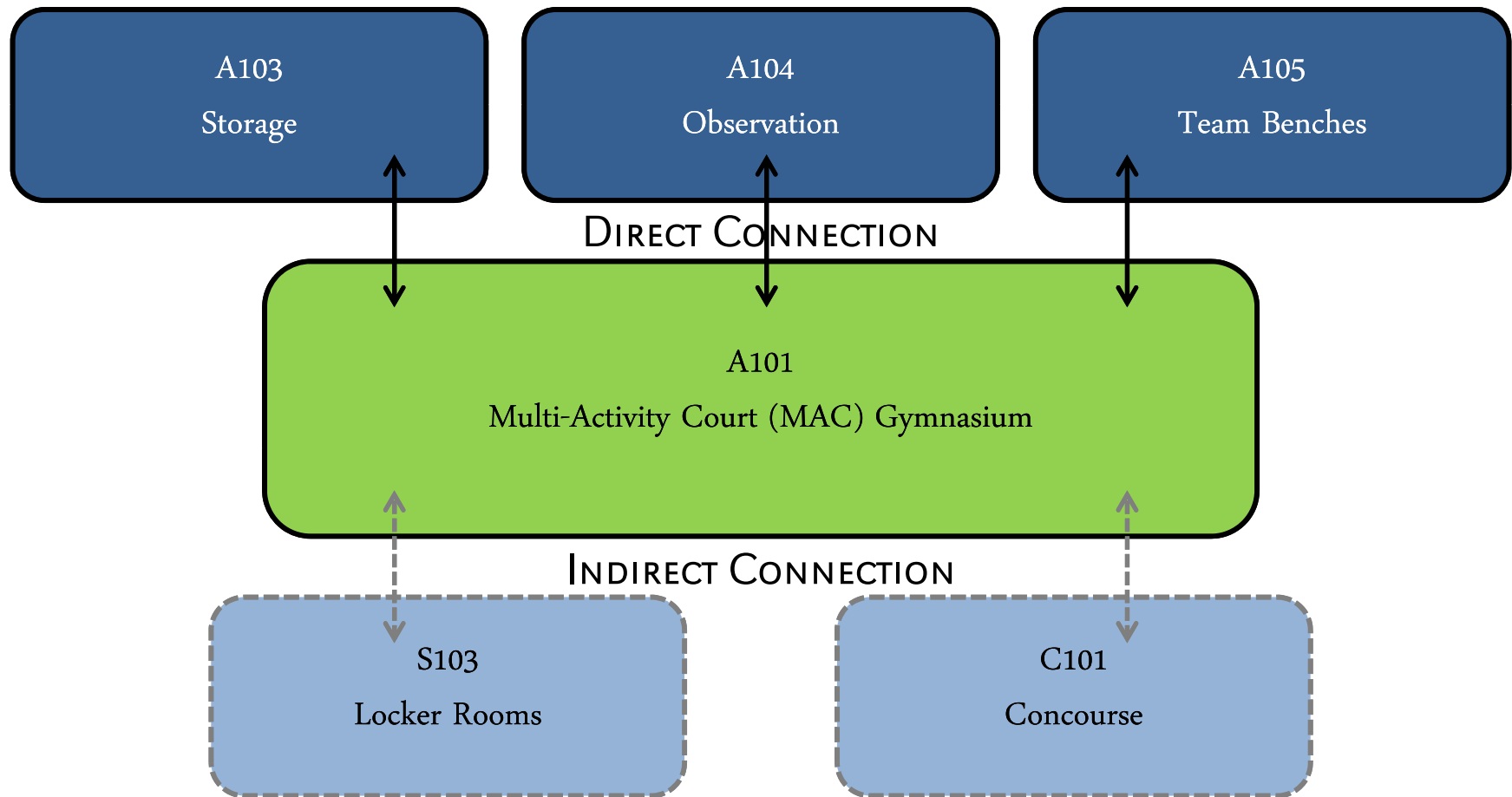
PROGRAM/DESIGN CONCEPTS

TECH DATA SHEET



PROJECT PROGRAM

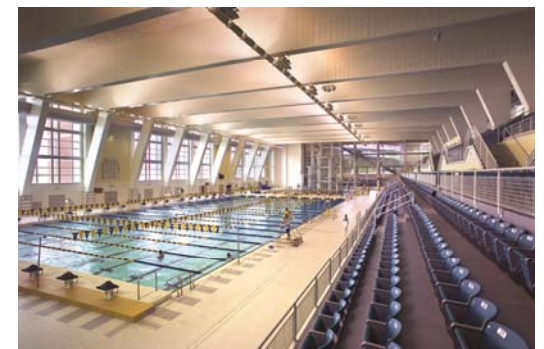
ADJACENCY DIAGRAM



PROGRAM/DESIGN CONCEPTS

DESIGN NARRATIVES

- ARCHITECTURAL
- CIVIL/LANDSCAPE
- MECHANICAL/ELECTRICAL
- PLUMBING/FIRE PROTECTION
- TECHNOLOGY
- A/V SYSTEMS
- AQUATICS
- SUSTAINABILITY



INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

PROGRAM/DESIGN CONCEPTS

SUSTAINABILITY PLAN

IMMEDIATE PAYBACK

- ORIENTATION
- BUILDING MASSING
- WINDOW POSITION
- EFFICIENT SITE USAGE

No Cost



INTRODUCTION

- GLAZING
- DAYLIGHT CONTROLS
- SOLAR SHADING
- NIGHTTIME VENTILATION
- MIXED MODE VENTILATION
- REFLECTIVE ROOFS

Low Cost



PROCESS

- HEAT RECOVERY
- DESICCANT COOLING
- EVAPORATIVE COOLING
- WIND TOWERS/SCOOPS
- GREEN ROOFS

MEDIUM COST



EXAMPLE

LONG TERM SAVINGS

- PHOTOVOLTAIC'S
- WIND TURBINES
- GEOTHERMAL
- DOUBLE-SKIN FACADES

HIGHER COST



SUMMARY

PROGRAM/DESIGN CONCEPTS

DESIGN CONCEPT

- GRAPHIC PROGRAM
- MULTIPLE OPTIONS
 - NEW CONSTRUCTION
 - RENOVATION/EXPANSION
- PLAN CONCEPTS
- 3D IMAGES
- COMMUNICATION TOOL
 - PROMOTIONAL / FUNDRAISING
- BASIS FOR COST MODEL



PROGRAM/DESIGN CONCEPTS

COST MODEL

- **BALANCE BUDGET**
 - QUALITY
 - QUANTITY
- **TOTAL PROJECT COST**
 - CONSTRUCTION COST
 - SOFT COST
 - CONTINGENCIES
 - ESCALATION



PROGRAM/DESIGN CONCEPTS

COST MODEL

- TOTAL PROJECT COST
 - CONSTRUCTION
 - RELATED COSTS
 - SOFT COSTS
- INCLUDE CONTINGENCIES
- ADDRESS INFLATION

A CONSTRUCTION COST		COST
A1	CONSTRUCTION COST	\$33,000,000
A2	CONSTRUCTION CONTINGENCY 5.0%	\$1,650,000
A3	TOTAL CONSTRUCTION COST	\$34,650,000
B CONSTRUCTION RELATED COST		
B1	HAZARDOUS MATERIALS ABATEMENT	\$235,360
B2	LEAD PAINT MANAGEMENT	\$50,000
B3	TEMPORARY FACILITIES	\$200,000
B4	TOTAL CONSTRUCTION RELATED COST	\$485,360
C FIXTURES, FURNISHINGS & EQUIPMENT (FFE)		
C1	FURNITURE	\$275,000
C2	FITNESS EQUIPMENT	\$725,000
C3	A/V EQUIPMENT	\$120,000
C4	TELEPHONE AND IT SYSTEMS	\$50,000
C5	POOL TIMING SYSTEM	\$200,000
C6	TOTAL FFE	\$1,370,000
D PROFESSIONAL FEES & EXPENSES		
D1	A/E FEE - BASIC SERVICES 8.00%	\$2,772,000
D2	SPECIALTY CONSULTANTS 1.00%	\$346,500
D3	FURNITURE DESIGN FEE 10%	\$27,500
D4	LEED CONSULTING AND DOCUMENTATION	\$128,248
D5	SURVEY	\$13,234
D6	GEOTECHNICAL REPORT	\$9,900
D7	REIMBURSABLE EXPENSES	\$150,000
D8	MOVING EXPENSES	\$60,000
D9	LEGAL FEES	\$50,000
D10	FINANCING FEES	\$40,000
D11	TOTAL PROFESSIONAL FEES & EXPENSES	\$3,597,382
E1 SUB TOTAL		\$40,102,742
E2	PROJECT CONTINGENCY 5.00%	\$2,005,137.10
E3	INFLATION 3.00%	\$1,263,236
E4	TOTAL PROJECT COST	\$43,371,115

PROGRAM/DESIGN CONCEPTS

BUSINESS PLAN

■ ACTIVITIES AND PROGRAMS

- CURRENT/FUTURE

■ STAFFING PLAN

- FULL/PART TIME
- CURRENT/FUTURE

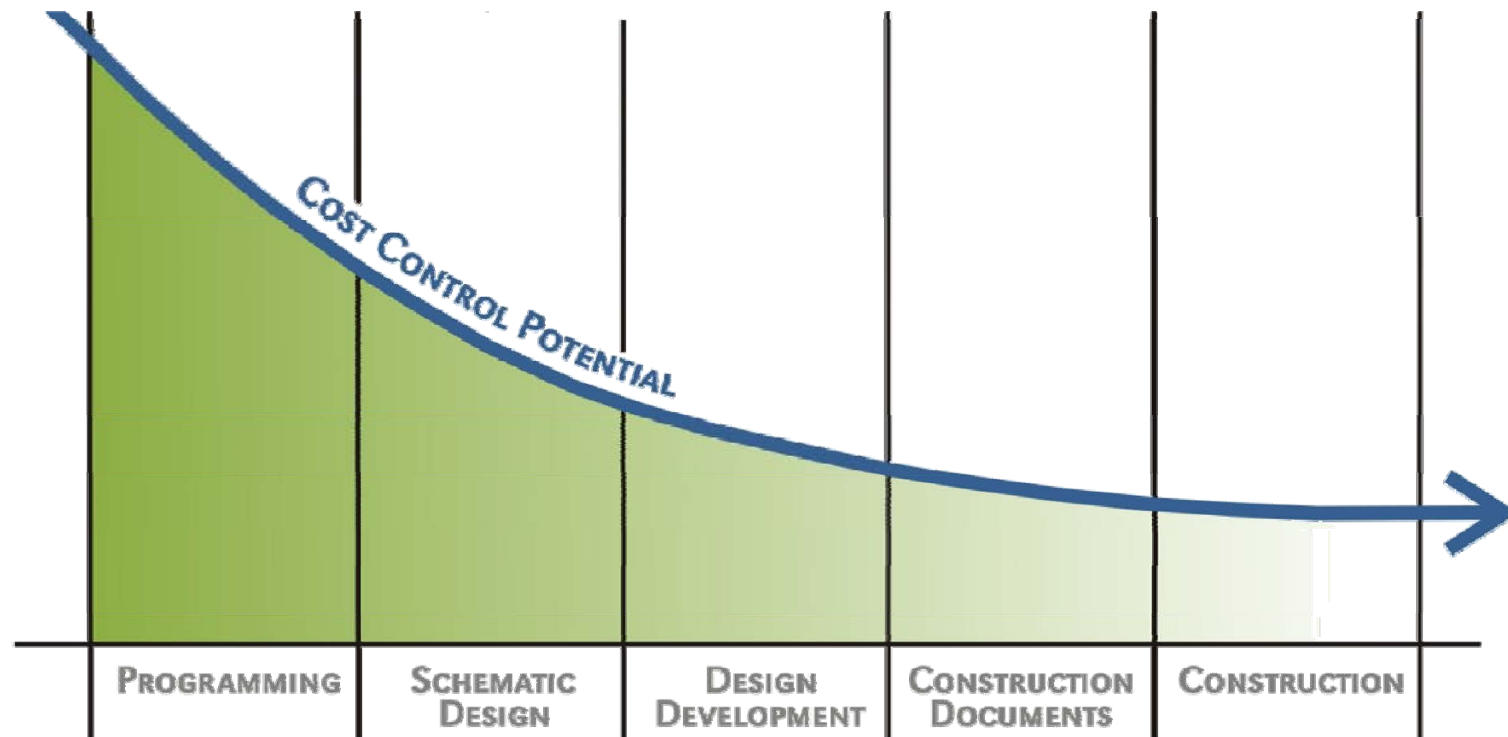
■ OPERATING PRO-FORMA

- REVENUE
- EXPENSES

REVENUE	EXPENSES
MEMBERSHIP FEES	PAYROLL & BENEFITS
PROGRAM FEES	UTILITIES
FACILITY RENTAL	MAINTENANCE
FUNDRAISING	SUPPLIES
CONCESSIONS	INSURANCE
INTEREST INCOME	INTEREST PAYMENTS

PROGRAM/DESIGN CONCEPTS

COST CONTROL POTENTIAL



ASSESSMENT OF RESOURCES

PROJECT PROMOTION

- ORGANIZED EFFORT
- PROJECT CHAMPION
- PERSONAL MESSAGE
 - GENERAL COMMUNITY
 - POTENTIAL DONORS
- MULTI-MEDIA COMMUNICATION
 - PROJECT WEB SITE
 - SOCIAL MEDIA



PRE-DESIGN PHASE



FINAL REPORT

- I. EXECUTIVE SUMMARY
- II. PROJECT GOALS
- III. EXISTING FACILITY ASSESSMENT
- IV. MARKET ANALYSIS
- V. SURVEY RESULTS
- VI. BUILDING PROGRAM
- VII. DESIGN CONCEPT
- VIII. BUSINESS PLAN
- IX. COST MODEL





III EXAMPLE

COLORADO STATE UNIVERSITY

PROJECT SATISTICS

■ PLANNING TIMELINE

- PLANNING 2006
- DESIGN 2007
- 3 PHASE CONSTRUCTION 2008-2010

■ PROJECT MILESTONES

- 1989 75,000 SF/1999 25,000 SF
- NEW SF 65,000
- \$24M CONSTRUCTION COST
- \$29M TOTAL PROJECT COST
- LEED GOLD



COLORADO STATE UNIVERSITY



Student Recreation Center Addition & Renovation

Table of Contents

- I Executive Summary**
 - Executive Summary
 - Acknowledgements
 - Design Team
 - Programmatic Justification
 - Project Description
 - Phasing
- II Campus Recreation/Program Information**
 - History, Vision and Mission
 - Program Descriptions
 - Program Needs & Trends
 - Project Benefits
 - Relation to Academic or Institutional Strategic Plans
 - Relation to Other Programs or Agencies
 - Existing Programmatic/Operational Deficiencies
 - Program Alternatives
- III Facility Needs**
 - Total Space Requirements
 - Space Program Summary
 - Unique or Special Features
 - Health, Life Safety and Code Issues
 - Building Code Analysis
 - Site Requirements
 - New Equipment Requirements
 - Acquisition of Real Property
 - Description of Existing Facilities
 - Previous Improvements
- IV Project Description**
 - Exterior Design
 - Interior Design
 - Site and Landscape Design
 - Narratives
 - Civil
 - Structural
 - HVAC
 - Plumbing and Fire Protection
 - Electrical
 - Conceptual Plans
 - Project Schedule
 - Total Project Cost Summary
 - Life Cycle Cost Analysis
 - Financial Analysis



Student Recreation Center Addition & Renovation

Table of Contents (Continued)

- V Student Survey**
 - Questionnaire
 - Results
- VI Relation to Campus Masterplan**
 - Physical Master Plan
 - Physical Development Plan
 - Sustainable Design
 - Parking, Biking, Pedestrian Access
 - Utilities
 - Historic Buildings
 - Landscaping
 - Information Technology
- VII Tennis**
 - Executive Summary
 - Program Information
 - Facilities Needs
 - Project Description
 - Relation to Master Plan
- VIII Appendices**
 - Appendix A: Existing Facility Program and Plans
 - Appendix B: Proposed Facility Program and Conceptual Plans
 - Appendix C: Cost Summaries
 - Appendix D: Life Cycle Cost Analysis
 - Appendix E: Tennis Program, Cost Summaries, & Conceptual Plan

COLORADO STATE UNIVERSITY



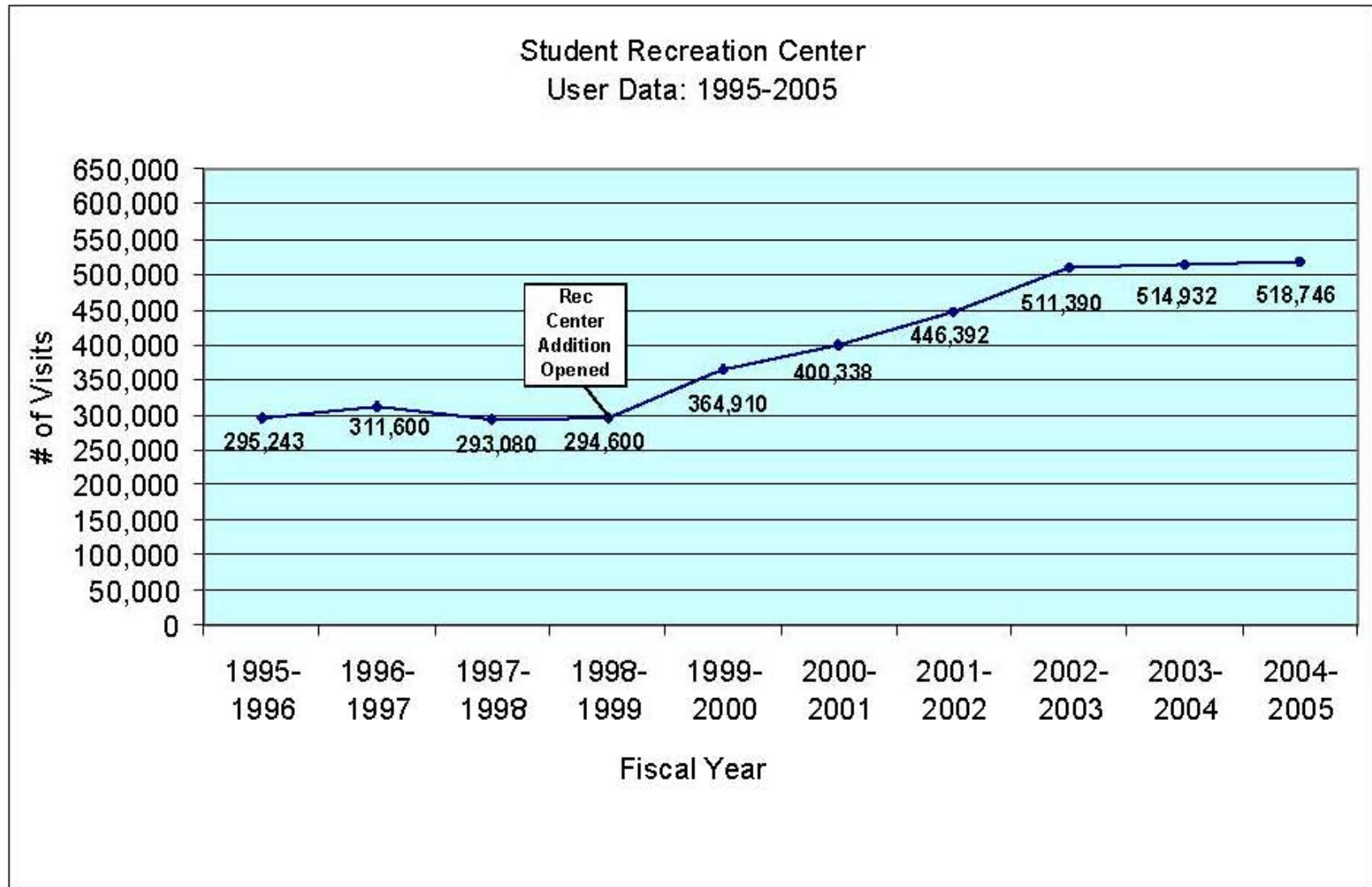
Student Recreation Center Addition & Renovation

Executive Summary

Campus Recreation, an auxiliary unit in the Division of Student Affairs, is comprised of seven program areas and three operation areas. The programmatic areas consist of Informal Recreation (Student Recreation Center), Strength & Fitness, Sport Clubs, Intramural Sports, Outdoor Adventure, Challenge Ropes Course and Non-Credit Instruction. Membership services, custodial and maintenance are the three operation areas. Twenty three full-time and approximately 300 part-time students and 30 contracted instructors manage or deliver department programs, services and classes.

Colorado State University Campus Recreation selected Hastings & Chivetta Architects to develop an initial space program and conceptual design for the Student Recreation Center addition and renovation. The scope of the project involved reviewing the existing facilities and determining an acceptable solution for the campus needs. The existing student recreation functions are spread out in three buildings, the Student Recreation Center, Moby C-Wing, and South College Gymnasium. The purpose of this study was to develop a comprehensive approach to understanding campus recreation needs and develop a conceptual plan to accommodate these needs. The program plan was developed through collaborative programming and review as well as a student survey conducted by the Student Voice.

COLORADO STATE UNIVERSITY



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Student Recreation Center Addition & Renovation

Programmatic Justification (Continued)

2003 CAMPUS RECREATION STUDENT SATISFACTION SURVEY

"Why don't you use the Rec Center?"	Spring 2003	Fall 2003
<i>Total number of respondents</i>	1,286	1,181
Not interested in programs or services	2%	.5%
Do not know what's offered	4%	2%
Too crowded	20%	13%
Attend another gym	1%	1%
No time	8%	6%

"Do you support building an addition?"	Spring 2003	Fall 2003
<i>Total number of respondents</i>	1,286	1,181
Yes	93%	86%
No	7%	7%

COLORADO STATE UNIVERSITY



Student Recreation Center Addition & Renovation

Programmatic Justification (Continued)

“Would you support an estimated \$15 fee increase to renovate and construct an addition to the existing Student Recreation Center?”

Very Likely	55%
Somewhat Likely	28%
Somewhat Unlikely	7%
Not at all Likely	8%
No opinion	3%

Intramural Sports and Sport Clubs programs serve over 10,000 CSU students annually. The Moby C-wing and South College Gym are at capacity for the number of Intramural activities and Sport Club team practices that can be scheduled due to limited time availability as these spaces are shared by Campus Recreation, Athletics, Health & Exercise Science and groups scheduled by University Scheduling Office. There is no over-flow indoor space available at the Student Recreation Center for Intramural activities or Sport Club teams due to the high volume of students recreating in the facility. Pressure for indoor practice space is also being exerted by the Athletic Department for an additional hour of practice time in Moby C-wing, which would further restrict time allotted for Intramural Sports. With an addition to the Student Recreation Center, the additional hour for Athletic team practice could

COLORADO STATE UNIVERSITY

Fitness and recreational facilities have become an integral part of campus life in developing healthy life-styles, providing a tool for student recruitment and retention, and improving campus climate for student life and learning. The Colorado State University Student Recreation Center existing facilities no longer adequately serve the campus community which is indicated by lack of facilities and programming to serve the quantity of users interested in campus recreation.

The proposed addition and renovation to the Campus Recreation Center will consist of the following:

- A two-story addition to the east side of the existing building: 19,500 GSF
The first floor of this addition would house the new entrance lobby which opens towards the main campus circulation route, meeting rooms, a climbing wall and bouldering area, student-related offices, Outdoor Adventure reception and resource room, and a juice bar. The second floor will provide new administrative offices.
- A two-story addition in the southwest corner of the existing building: 21,000 GSF
The first floor of this addition would house the expanded fitness center and maintenance offices and shop. The second floor would house additional fitness space. This addition fills a corner of the existing building and provides natural light and views from the facility without impeding upon the view corridor as defined by the Campus Master Plan.
- A two-story volume addition to the north side of the existing building: 20,500 GSF
This addition will house one Multi-Athletic Courts (MAC) including a separate entrance and toilet rooms. This space is accessible both from the exterior and interior of the building and will have the ability to be closed off from the Recreation Center for special events.
- Renovations to the existing facility:
Renovations will be made to expand the locker rooms within the existing building as well as the addition of family changing locker rooms. The existing running track ramped corners will be reconstructed to provide a flat surface. New Multi-purpose rooms, student services, toilets and a game room will be constructed in the large area that previously housed the fitness center and volleyball courts.

COLORADO STATE UNIVERSITY

Colorado State University

Campus Recreation Center Programming Plan
Hastings & Chivetta

Space Summary Program

Component	Renovated			New Construction		
	No. of Units	Area	Total Area SF	No. of Units	Area	Total Area SF
1.00 Public Spaces						
1.01 Vestibule				1 vest	190 SF	190 SF
1.02 Lobby / Lounge				1 area	5,135 SF	5,135 SF
1.03 Service Desk	1 desk	596 SF	596 SF			
1.04 Control Desk (included in 1.03)						
1.05 Women's Toilet	3 rooms	325+50+50	425 SF			
1.06 Men's Toilet	3 rooms	245+50+50	345 SF			
1.07 Women's Toilet (existing)	1 room	141 SF	141 SF			
1.08 Men's Toilet (existing)	1 room	204 SF	204 SF			
1.00 Public Spaces			1,711 SF			5,325 SF
2.00 Educational/Meeting						
2.01 Meeting Room (Dividable)				1 room	1,820 SF	1,820 SF
2.02 Storage				2 room	100 SF	200 SF
2.00 Educational/Meeting			0 SF			2,020 SF
3.00 Student Services						
3.01 Massage	2 rooms	160 SF	320 SF			
3.02 Toilet Room	1 room	45 SF	45 SF			
3.03 Massage Entry / Waiting	1 room	320 SF	320 SF			
3.04 Student Breakroom	1 room	460 SF	460 SF			
3.05 Personal Trainer	1 room	180 SF	180 SF			
3.06 Personal Trainer Assessment	1 room	215 SF	215 SF			
3.00 Student Services			932 SF			0 SF
4.00 Natatorium						
4.01 Sauna	1 room	240 SF	240 SF			
4.02 Steam	1 room	160 SF	160 SF			
4.03 Spa	1 room	490 SF	490 SF			
4.04 Natatorium (existing - no work)	1 room	11,000 SF	11,000 SF			
4.05 Pool Equipment (existing - no work)	1 room	614 SF	614 SF			
4.06 Pool Chemical Storage (existing - no work)	1 room	29 SF	29 SF			
Mechanical Space						
4.00 Natatorium			12,533 SF			0 SF

Colorado State University

Campus Recreation Center Programming Plan
Hastings & Chivetta

Space Summary Program

Component	Renovated			New Construction		
	No. of Units	Area	Total Area SF	No. of Units	Area	Total Area SF
5.00 Fitness Areas						
5.01 Cardio/Weights				1 room	16,385 SF	16,385 SF
5.02 Cardio/Weights (existing office & meeting area)	1 room	7,040 SF	7,040 SF			
5.03 Cardio/Weights (existing multipurpose area)	1 room	3,465 SF	3,465 SF			
5.04 Boxing Area (included in 5.01)						
5.05 Storage	1 room	90 SF	90 SF			
5.06 Small Multipurpose	1 rooms	690 SF	690 SF			
5.07 Small Multipurpose Storage	1 rooms	235 SF	235 SF			
5.08 Medium Multipurpose	1 rooms	1,255 SF	1,255 SF			
5.09 Medium Multipurpose Storage	1 rooms	320 SF	320 SF			
5.10 Large Multipurpose	1 room	3,235 SF	3,235 SF			
5.11 Large Multipurpose Storage	1 room	225 SF	225 SF			
5.12 Large Multipurpose (existing - no work)	1 room	2,363 SF	2,363 SF			
5.13 Large Multipurpose Storage (existing - no work)	1 room	260 SF	260 SF			
5.14 Shared Storage	1 room	800 SF	800 SF			
5.15 Spinning Studio (existing - no work)	1 room	800 SF	800 SF			
5.16 Zen Den (existing - no work)	1 room	800 SF	800 SF			
5.17 Climbing Wall/ Bouldering Area				1 area	1,805 SF	1,805 SF
5.18 Climbing wall Storage				1 area	30 SF	30 SF
5.00 Fitness Areas			21,578 SF			18,220 SF
6.00 Recreational Gymnasium						
6.01 MAC Gymnasium				1 room	13,125 SF	13,125 SF
6.02 MAC Men's Toilet				1 room	310 SF	310 SF
6.03 MAC Women's Toilet				1 room	310 SF	310 SF
6.04 MAC Storage				1 room	725 SF	725 SF
6.05 MAC Team Benches				1 room	730 SF	730 SF
6.06 MAC Observation				1 room	730 SF	730 SF
6.07 4-Court Gymnasium (minimal work)	1 room	24,890 SF	24,890 SF			
6.08 Jogging Track (remove ramped corners)	1 track	7,331 SF	7,331 SF			
6.09 Mechanical Space				1 room	1,045 SF	1,045 SF
6.00 Recreational Gymnasium			32,221 SF			16,975 SF

COLORADO STATE UNIVERSITY

Colorado State University Campus Recreation Center Programming Plan Hastings & Chivetta

Space Summary Program

Component	Renovated			New Construction		
	No. of Units	Area	Total Area SF	No. of Units	Area	Total Area SF
7.00 Administration Area						
7.01 Reception / Waiting				1 area	505 SF	505 SF
7.02 Conference Room				1 room	405 SF	405 SF
7.03 Breakroom				1 room	150 SF	150 SF
7.04 Director's Office				1 room	360 SF	360 SF
7.05 Associate Office				4 room	145 SF	580 SF
7.06 Workroom				1 room	120 SF	120 SF
7.07 Storage				1 room	170 SF	170 SF
7.08 IT Office				1 room	550 SF	550 SF
7.09 Fiscal Office	3 room	120 SF	360 SF			
7.10 Building Manager	1 room	140 SF	140 SF			
7.11 Cash Counting Room	1 room	55 SF	55 SF			
7.12 Workroom / Mailroom	1 room	80 SF	80 SF			
7.13 AV Storage	1 room	55 SF	55 SF			
7.14 Sports Club Office				3 room	120 SF	360 SF
7.15 Rec Sports				3 room	120 SF	360 SF
7.16 Sports Club / Rec Sports Workstation				1 area	600 SF	600 SF
7.17 IM Sports Office				2 room	120 SF	240 SF
7.18 Strenght & Fitness Office				2 room	120 SF	240 SF
7.19 IM Sports / Strenght & Fitness Workstation				1 area	820 SF	820 SF
7.20 Future Office				1 room	120 SF	120 SF
7.21 Conference Room				1 area	425 SF	425 SF
7.22 Breakroom / Workroom				1 room	315 SF	315 SF
7.23 Mechanical Space				1 room	285 SF	285 SF
7.00 Administration Area			690 SF			6,605 SF
8.00 Outdoor Adventure Program						
8.01 Reception/ Service Center				0 area	875 SF	0 SF
8.02 Resource Room	1 area	560 SF	560 SF	1 area	450 SF	450 SF
8.03 Office	2 rooms	130 SF	260 SF			
8.04 Shared Storage	1 room	1,325 SF	1,325 SF			
8.00 Outdoor Adventure Program			2,145 SF			450 SF

Colorado State University Campus Recreation Center Programming Plan Hastings & Chivetta

Space Summary Program

Component	Renovated			New Construction		
	No. of Units	Area	Total Area SF	No. of Units	Area	Total Area SF
9.00 User Support						
9.01 Family Change	1 room	790 SF	790 SF			
9.02 Men's Lockers	2 rooms	3,320 SF	3,320 SF			
9.05 Women's Lockers	1 room	3,640 SF	3,640 SF			
9.08 Equipment Issue				1 desk	220 SF	220 SF
9.08 Equipment Storage/ Laundry (existing - no work)	1 room	1,235 SF	1,235 SF			
9.00 User Support			8,985 SF			220 SF
10.00 Building Support						
10.01 Mechanical (existing - no work)	2 rooms	545 SF	1,090 SF	1 room	515 SF	515 SF
10.02 Mechanical				1 room	475 SF	475 SF
10.03 Custodial Closet (existing - no work)	2 rooms	50 SF	100 SF	2 rooms	105 SF	210 SF
10.04 Loading				1 room	215 SF	215 SF
10.05 Custodial / Maintenance				1 room	2,400 SF	2,400 SF
10.06 Custodial / Maintenance Office				2 rooms	120 SF	240 SF
10.07 Custodial / Maintenance Open Office				1 room	520 SF	520 SF
10.08 Custodial / Maintenance Breakroom				1 room	300 SF	300 SF
10.09 Elevator Equipment				1 room	80 SF	80 SF
10.10 Elevator				1 room	80 SF	80 SF
10.11 Communications Closet (existing - no work)	1 room	47 SF	47 SF			
10.12 Electrical Room (existing - no work)	2 rooms	52 SF	104 SF	2 rooms	90 SF	180 SF
10.00 Building Support			1,341 SF			5,215 SF
Net Building Area	81%		82,136 SF	90%		55,030 SF
Circulation (new construction)				10%		6,405 SF
Circulation (renovated construction)	6%		6,300 SF			
Circulation and Walls (existing - no work)	13%		13,587 SF			
Gross Building Area	100%		102,023 SF	100%		61,435 SF

COLORADO STATE UNIVERSITY

Division 2 - Site Work		\$1,443,969	\$9.94
Division 3 - Concrete		\$645,617	\$4.44
Division 4 - Masonry		\$1,626,352	\$11.19
Division 5 - Metals		\$1,464,679	\$10.08
Division 6 - Wood and Plastics		\$285,120	\$1.96
Division 7 - Moisture Protection		\$959,782	\$6.61
Division 8 - Doors and Windows		\$1,136,040	\$7.82
Division 9 - Finishes		\$1,218,037	\$8.38
Division 10 - Specialties		\$338,745	\$2.33
Division 11 - Equipment		\$3,600	\$0.02
Division 12 - Furnishings		\$8,342	\$0.06
Division 13 - Special Construction		\$459,000	\$3.16
Division 15 - Mechanical			
Fire Protection		\$230,452	\$1.59
Plumbing		\$253,296	\$1.74
HVAC		\$1,922,649	\$13.23
Division 16 - Electrical		\$1,904,490	\$13.11
Subtotal		\$13,900,170	\$95.68
General Conditions	7.5%	\$1,042,513	\$7.18
Permits, Fees, Insurance	1.25%	\$186,784	\$1.29
Overhead & Profit	5.0%	\$756,473	\$5.21
Bond	1.0%	\$158,859	\$1.09
Subtotal		\$16,044,799	\$110.44
Escalate to 1 Q2008	8.0%	\$1,283,584	\$8.83
Subtotal Including Escalation		\$17,328,383	\$119.27
Design Contingency	10.0%	\$1,604,480	\$11.04
Total		\$18,932,863	\$130.32

COLORADO STATE UNIVERSITY

TABLE 1.7 Continued -- LIFE CYCLE COST ANALYSIS									
MAJOR REPAIR AND REPLACEMENT COSTS - NEW CONSTRUCTION									
Project:	Additions and Renovations to the existing Student Recreation Center								
Date:	July 2006								
Inflation Factor:	5%								
Project Cost:	\$32,000,000								
Study Period:	30 years								
									Total
						Provision			Annual
			Useful		Current	for	FV factor	Total Replace.	Provision
	Likely		Life	% of Pjct.	Replace.	Renewal	5%,	Cost with	for FV
Facility Subsystem	Life	Range	Chosen	Costs	Cost	w/o Inflation	useful life	Inflation:	Renewal
Foundations/structure	n/a	n/a	n/a	25.0%	8,000,000				
Roofing	25	15-40	25	7.0%	2,240,000	89,600	3.386	7,584,640	\$303,386
Exterior Cladding	n/a	50 up	50	11.0%	3,520,000	70,400	11.467	40,363,840	\$807,277
Interior Partitions	50	25 up	40	10.0%	3,200,000	80,000	7.040	22,528,000	\$563,200
Interior Finishings	10	5-15	20	8.0%	2,560,000	128,000	2.653	6,791,680	\$339,584
Elevators	40	25 up	n/a	1.0%	320,000				
Plumbing	30	20-80	35	6.0%	1,920,000	54,857	5.516	10,590,720	\$302,592
HVAC - moving	15	15-25	20	8.0%	2,560,000	128,000	2.653	6,791,680	\$339,584
HVAC - static	50	30-75	40	8.0%	2,560,000	64,000	7.040	18,022,400	\$450,560
Electrical - moving	35	20-50	35	2.0%	640,000	18,286	5.516	3,530,240	\$100,864
Electrical - static	50	30-75	50	9.0%	2,880,000	57,600	7.040	20,275,200	\$405,504
Fire Protection	50	20-100	80	1.0%	320,000				
Special Equip/Misc	30	10-50	20	4.0%	1,280,000	64,000	2.653	3,395,840	\$169,792
TOTALS				100%	\$32,000,000	\$754,743		\$139,874,240	\$3,782,342
Note:	Foundation and Structural Costs usually dictate when a building has met its useful life and should be razed. These figures can be ignored when considering major repair and replacement costs for a facility, unless special circumstances dictate otherwise.								

COLORADO STATE UNIVERSITY



Student Recreation Center
Addition & Renovation



Hastings+Chivetta
0 60' 120' 240' 360'

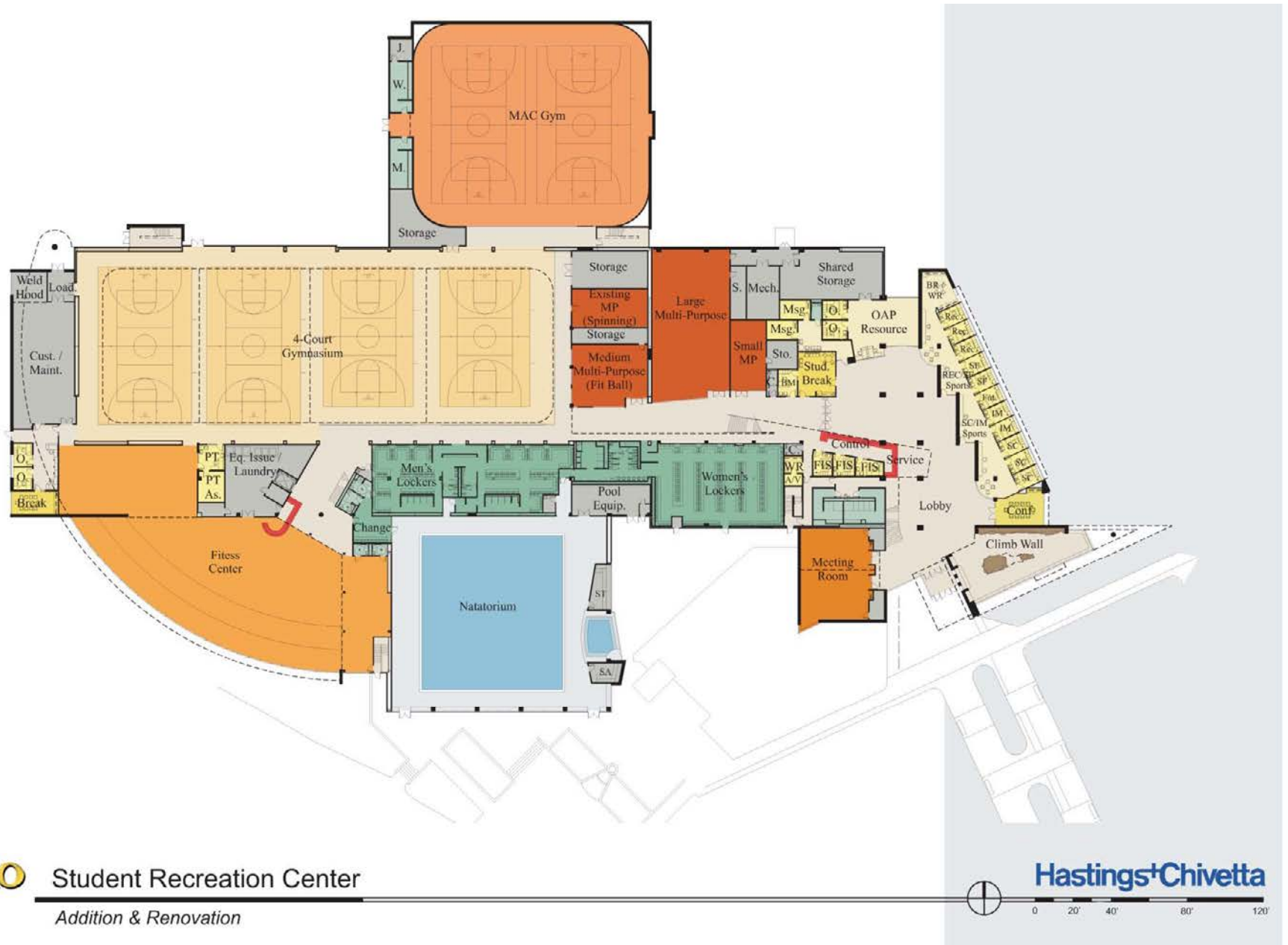
INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



Student Recreation Center
Addition & Renovation

Hastings+Chivetta

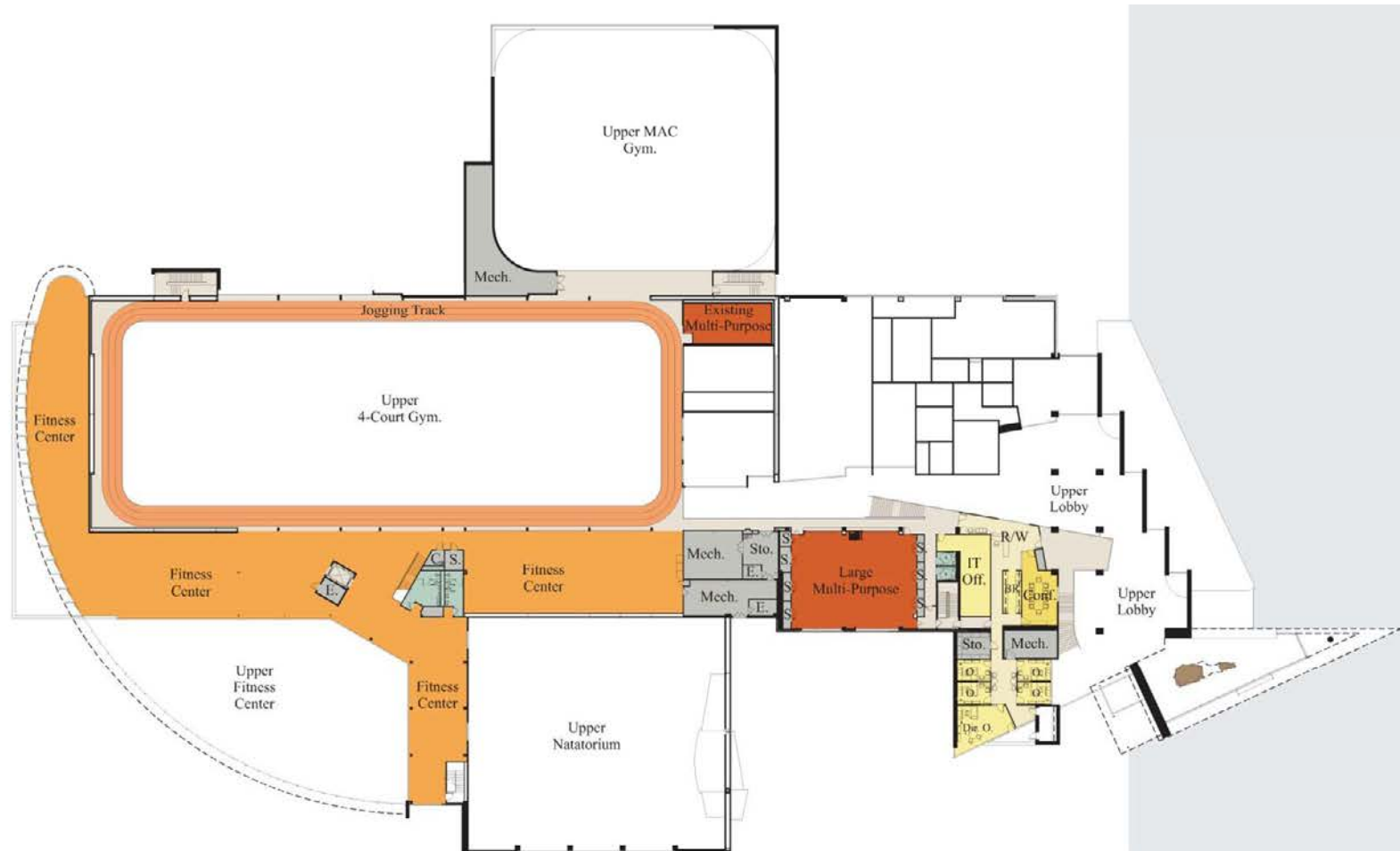
INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



Student Recreation Center
Addition & Renovation

Hastings+Chivetta



0 20' 40' 80' 120'

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



December 21st - 12:00PM



March 21st - 12:00PM



June 21st - 12:00PM



Student Recreation Center
Addition & Renovation

Hastings+Chivetta

0 20' 40' 60' 120'

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



December 21st - 12:00PM



March 21st - 12:00PM



June 21st - 12:00PM



Student Recreation Center
Addition & Renovation

Hastings+Chivetta

0 20' 40' 60' 120'

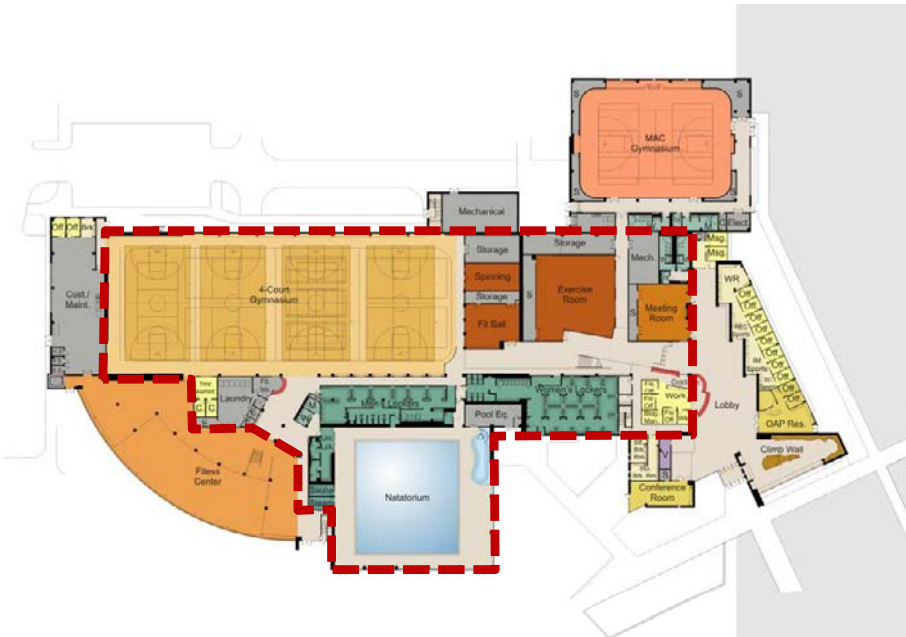
INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



FIRST LEVEL PLAN



SECOND LEVEL PLAN

COLORADO STATE UNIVERSITY



ORIGINAL



NEW ENTRANCE

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



ORIGINAL ENTRANCE



NEW FITNESS CENTER

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



ORIGINAL FITNESS CENTER



NEW FITNESS CENTER

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



ORIGINAL FITNESS CENTER



NEW CONCOURSE

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

COLORADO STATE UNIVERSITY



ORIGINAL TRACK



NEW TRACK

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

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ORIGINAL LOCKERS



NEW LOCKERS

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

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RECREATION POOL



MAC GYMNASIUM

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

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LOBBY/LOUNGE



OUTDOOR ADVENTURE

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY

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MULTI-PURPOSE ROOM



CLIMBING WALL

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY



IV SUMMARY

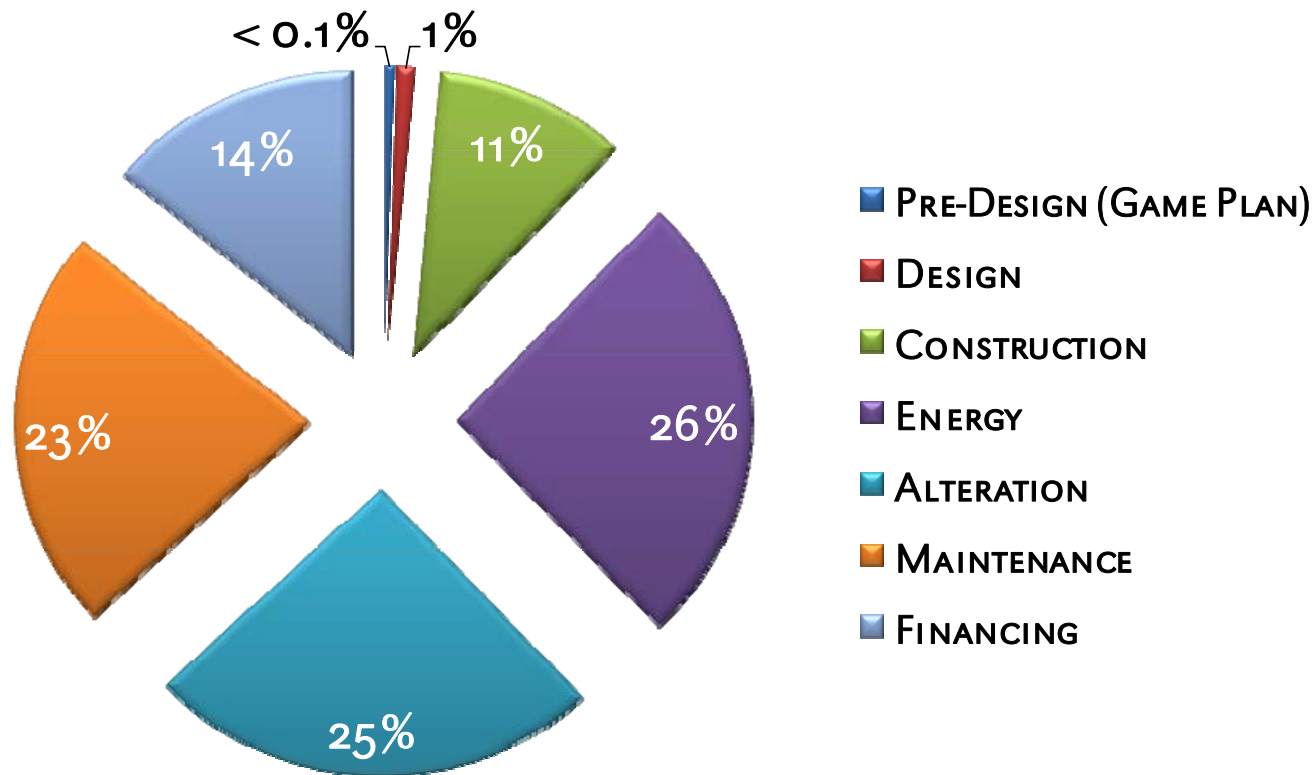
SUMMARY

- COST OF GAME PLAN
- HOW LONG DOES IT TAKE?
- STRATEGIES FOR SUCCESS
- POTENTIAL PITFALLS



COST OF GAME PLAN

LIFETIME BUILDING COST BREAK DOWN



- APPROXIMATELY 1/2 - 1% OF CONSTRUCTION COST
- \$75,000 - \$300,000 (\$15M - \$30M PROJECT)

How Long Does It Take?

6 – 8 MONTH PROCESS

Team Formation

• 1 Month

Assessment Of Resources

• 1 Month

Project Requirements

• 1 Month

Program/Design Concepts

• 2 - 4 Months

Final Report (Game Plan)

• 1 Month

STRATEGIES FOR SUCCESS

DO THIS

- INCLUDE OTHERS
- CONSENSUS DECISION
- HIRE QUALIFIED EXPERTS
- ACCOUNT FOR INFLATION
- INCLUDE CONTINGENCIES
- BALANCE QUALITY/QUANTITY
- PLAN AHEAD
- COMMIT TO SUCCESS

NOT THAT

- WORK IN A VACUUM
- CENTRAL AUTHORITY
- TAKE LOW BID
- FAIL TO UPDATE BUDGETS
- IGNORE THE UNEXPECTED
- BUDGET DRIVEN PROGRAM
- CHANGE RULES
- 'SETTLE' FOR LESS



V DISCUSSION

OTHER PRESENTATIONS TO CONSIDER

FRIDAY, NOVEMBER 30

8:30AM - 10:00AM

PLAYING WELL WITH OTHERS: THE CHALLENGE
OF COMBINATION RECREATION/ATHLETIC
FACILITIES ON SMALLER COLLEGE CAMPUSES

8:30AM - 10:00AM

MIND, BODY AND SOUL: THE FUTURE OF ACTIVE AGING
CENTERS

10:15AM - 11:45AM

ABRACADABRA! TRANSFORMATION BY RENOVATION AND
EXPANSION

10:15AM - 11:45AM

SUSTAINABLE DESIGN ... PROPERLY PLANNING OUR FUTURE

3:30PM - 5:00PM

PRACTICING OUTDOOR SPORTS INDOORS – FLEXIBILITY IN
TODAY'S FIELD HOUSE DESIGN

3:30PM - 5:00PM

QUICK CONSTRUCTION PROJECTS TO DO DURING OFF-PEAK
TIMES

SATURDAY, DECEMBER 1

8:30AM - 10:00AM

PANEL – MONEY. IT'S NOT A DIRTY WORD. STRATEGIES FOR
COST-EFFECTIVE DESIGN, MANAGEMENT AND SUSTAINABILITY

10:15AM - 11:45AM

"ASK AN EXPERT" PANEL DISCUSSION

INTRODUCTION

PROCESS

EXAMPLE

SUMMARY



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GAME PLAN

PROPER PROJECT PREPARATION

NOVEMBER 29, 2012

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