

Hockey Feasibility Study

University of Illinois March 8, 2018





TABLE OF CONTENTS

TABLE OF CONTENTS	
EXECUTIVE SUMMARY	4
UNIVERSITY OF ILLINOIS - BACKGROUND	
UNIVERSITY OF ILLINOIS - ATHLETICS BACKGROUND	S - BACKGROUND S - ATHLETICS BACKGROUND OCKEY LANDSCAPE CKEY TIMELINE L BACKGROUND 1 1 1 2 SE PRO FORMA 2 MENT COSTS 3
BIG TEN - INSTITUTIONAL BACKGROUND	15
Competitiveness	15
Operating Budget	10
Coaching Salaries	
Scholarship Budget	
Facility Background	
ILLINOIS HOCKEY EXPENSE PRO FORMA	
Scholarships	22
Administrative Operations	23
HOCKEY START-UP EQUIPMENT COSTS	
-	
Season Ticket Sales	
AUXILIARY- REVENUE PRO FORMA	
PROJECTED AUXILIARY EXPENSES	32



CASE STUDY: ARIZONA STATE UNIVERSITY	33
CASE STUDY: PENN STATE UNIVERSITY	34
Penn State University HOCKEY FACILITY LOCATION ANALYSIS	34
Background	
Recommendation	41
Justification for Downtown Site	
NEVT CTEDC	15





EXECUTIVE SUMMARY

Collegiate Consulting was commissioned by the National Hockey League (NHL), National Hockey League Players Association (NHLPA) and College Hockey, Inc. to complete a comprehensive feasibility study to ascertain the feasibility of starting a Division I men's hockey program at the University of Illinois. Collegiate Consulting met with University stakeholders, collected extensive hockey benchmarking data and reviewed Illinois's intercollegiate athletic department to determine whether it was practical to consider undertaking such an endeavor at this time.

The Division I hockey landscape currently features 60 men's programs and 35 women's programs. While the state of Illinois has the 6th highest youth participation in the country with 22,373 registered USAH youth players 18 years of age and under, there are no Division I intercollegiate hockey programs.

Collegiate Consulting examined men's hockey benchmarking within its current conference, the Big Ten. Big Ten hockey currently features seven institutions. The average Big Ten operating budget for the 2016-17 season was \$1.15 million with all institutions offering the NCAA maximum of 18 scholarships. The average base salary for Big Ten head coaches is \$293,333 with bonus/merit compensation ranging from \$35,000 to a high of \$370,000. The first assistant coach average salary is \$121,667 with the second assistant coach average salary at \$99,167. The average size for Big Ten hockey arenas is 9,419 seats with an average attendance of 6,485, and annual ticket revenue is at approximately \$2.3 million.

The University of Illinois can anticipate a two-to-three year time frame from initial approval to the first varsity game. One-time equipment and start-up costs are estimated at \$350,000, but with the potential apparel and equipment deals with Nike and Bauer is reduced to \$140,150. Construction costs for new facilities vary greatly with Penn State's Pegula Arena costing \$88 million. Other recently built facilities include the 5,000-seat Scheels Arena, in Fargo, ND, which opened in 2008 at a cost of \$25 million and Bemidji State's 4,700-seat Sanford Center, which opened in 2010 at a cost of \$35 million. Two competing developers have proposed different sites for the new arena with one being on-campus and one off-campus. Both facilities are attempting to provide additional space in order to accommodate a number of other Illinois teams in need of upgraded facilities.



Ideally, if Illinois were to start a Division I hockey program, it would control its own facility, whether that is on- or off-campus. Collegiate Consulting endorses the downtown location and recommends a two-to-three-sheet ice complex with an aggressive plan to rent the facility during non-varsity practice and competition. Projected initial net revenue for renting such an auxiliary facility is estimated to start at \$355,440 per year.

Once the Division I hockey program is fully operational, Collegiate Consulting is estimating first year annual revenue of \$3.1 million rising to \$4.7 million by year five with annual expenses at \$3.5 million rising to \$3.7 million by year five. The men's program would have a base operating budget of \$1.3 million, in addition to \$877,000 allocated for 18 scholarships; a coaching salary allocation of \$982,000 and administrative support expenses at \$350,000. The program would hire a head coach, two assistant coaches, a director of hockey operations, administrative assistant, athletic trainer, equipment manager and strength & conditioning coach. On the administrative side, Illinois would add an Assistant Director of Ticket Operations, Marketing & Promotions position, Academic Advisor, and Assistant Sports Information Director.

The 2017 Frozen Four held in Chicago was an outstanding success. The University of Illinois Club Hockey Team had another successful season in 2017, finishing the season ranked #13 in the ACHA Division I and hockey participation continues to expand with more Division I college hockey players coming from the State of Illinois every year. Thanks in large part to the influence of the Chicago Blackhawks, youth hockey numbers are exploding. Many believe that Division I hockey would be transformative for the athletic department, university and for Champaign-Urbana. Hopefully this Feasibility Study will resonate with the powers to be and donors that will be essential if this new facility and move to division I hockey are to become a reality.

Based on interviews with and feedback from campus and community stakeholders and tremendous support from the Chicago Blackhawks and the NHL, there is growing excitement and anticipation about the University of Illinois starting Division I intercollegiate ice hockey. With a growing passion for ice hockey at all levels in the state of Illinois, the foundation appears to be in place for the University of Illinois to develop an intercollegiate men's hockey program that will be financially successful and competitive on a conference and national level.



UNIVERSITY OF ILLINOIS - BACKGROUND

The University of Illinois at Urbana-Champaign (UIUC) is one of the original 37 public land-grant institutions created after President Abraham Lincoln signed the Morrill Act in 1862. The University was founded in 1867 in the twin cities of Champaign and Urbana, and is the flagship of the University of Illinois system as well as a founding member of the Big Ten Conference.

UIUC is classified as a R1 Doctoral Research University, which denotes the highest research activity. The University comprises 15 colleges that offer more than 150 programs of study. The University has an annual operating budget in excess of \$2 billion and an endowment of \$3.5 billion. University rankings compiled by *U.S. News & World Report* rank Illinois among the Top-15 Public Institutions in the United States, Top-50 Public Institutions in the world, as well as the Top-Five engineering schools in the world. The University has also been rated as the #1 disability friendly institution in the United States.

The University opened in 1867 with two faculty members and 77 students. Today, UIUC has 44,880 students from all 50 states and more than 110 countries. With more than 12,000 international students, Illinois ranks #2 for all public institutions. The fall 2016 retention rate for all students at Illinois was 92% with a 76% graduation rate for the fall 2011 co-hort.

UIUC's undergraduate population is 33,467; there are also 11,413 graduate and doctoral students. The University gender breakdown is 55% men and 45% women. The undergraduate base tuition for in-state residents ranges from \$31,000-to-\$36,000; out-of-state costs of \$48,000-to-\$53,000 and international costs of \$49,000-to-\$58,000.

By 1967, the University of Illinois system consisted of a main campus in Champaign-Urbana and two Chicago campuses, which later became University of Illinois at Chicago. Today, the University of Illinois system now includes campuses in Springfield (UIS) and Chicago (UIC).

Admission to UIUC is rated as "more selective" by *U.S. News & World Report*. The recent incoming freshman class has average ACT scores between 27-32 for composite, 26-33 for math, and 26-33 for English; with 59% ranking in the top-tenth of their high school graduating class and 90% in the top-quarter.



The Beckman Institute for Advanced Science and Technology is the largest interdisciplinary facility on campus with 313,000 square feet. The University is regarded as a world-leading magnet for engineering and sciences, and is listed as one of the Top 25 American Research Universities by The Center for Measuring University Performance. The University has also been a leader in computer-based education and was the first institution to license the UNIX operating system.

Illinois boasts more than 425,000 living alumni, and has one of the largest alumni organizations in the country. UIUC alumni have founded numerous companies including Advanced Micro Devices, Netscape, Oracle, PayPal, Tesla, Yelp and YouTube.

The University has more than 1,000 active Registered Student Organizations (RSOs). There are 59 fraternities and 38 sororities on-campus with approximately 7,100 members or 21% of the undergraduate community. University housing for undergraduates is provided through 24 residence halls, which house 8,550 students. Incoming freshmen are required to live in student housing their first year on campus.

The campus has two main recreation facilities, the Activities and Recreation Center (ARC) and the Campus Recreation Center East (CRCE). The ARC was renovated and reopened in 2008. The renovations expanded the facility, adding 103,433 square feet to the existing structure and costing \$54.9M. This facility is touted by the University as "one of the country's largest on-campus recreation centers." The CRCE opened in 1989 and was renovated in 2005 to expand the space and update equipment.

Illinois has an academic staff of more than 2,500 and total staff of 7,500. Alumni and faculty of Illinois have won 26 Pulitzer Prizes as well as 24 Nobel Prizes. In particular, John Bardeen is the only person to have won two Nobel Prizes in physics, having done so in 1956 and 1972.

Over the last 20 years state funding for the University has fallen from 44.5% to 16.4%. As a result, the University's budget has shifted from relying on state support to the point where nearly 84% of the budget comes from other sources. Private philanthropy increasingly supplements revenue from tuition and state funding, currently providing about 19% of the annual budget. Notable among significant donors, alumnus entrepreneur Thomas M. Siebel has committed nearly \$150 million to the University and alumnus W. W. Grainger has contributed nearly \$200 million. Larry Gies recently contributed a gift of \$150 million to the College of Business, which was renamed the Gies College of Business.

On March 12, 2015, the Board of Trustees approved the creation of a medical school, the first college created at Urbana–Champaign in more than 60 years. The Carle-Illinois College of Medicine is expected to begin classes in 2018.



UNIVERSITY OF ILLINOIS – ATHLETICS BACKGROUND

The Illinois Division of Intercollegiate Athletics sponsors 10 men's and 11 women's varsity sports. UIUC participates at the NCAA Division I level and is a founding member of the Big Ten Conference, one of the pre-eminent and oldest intercollegiate athletic conferences in the country. The University's athletic teams are known as the Fighting Illini.

The Fighting Illini have won 26 National Championships dating back to 1900, with 22 men's championships and one women's national championship as follows: men's gymnastics (10), football (5), men's track & field (5), men's basketball (2), and women's track & field (1). Illinois has 98 individual NCAA champions: 53 in men's gymnastics; 24 in wrestling; and 1 in cross country. Overall, the Fighting Illini's 21 teams have more than 140 NCAA appearances, with men's gymnastics at 44 and men's basketball at 30 respectively. Illinois has captured nearly 200 Big Ten titles since its inception.

Overall 68 Illinois student-athletes have participated in the Olympics since 1908, winning 10 gold medals, seven silver medals and 13 bronze medals. Nine Illinois alumni have served in an olympic coaching capacity, winning one gold medal, while two others have served in Olympic administrative roles.

Illinois sponsors the following intercollegiate athletics programs:

Men'sWomen'sBaseballBasketballBasketballCross CountryCross CountryGolf

Football Gymnastics
Golf Soccer
Gymnastics Softball

Tennis Swimming & Diving

Indoor Track & Field Swimming & Diving

Outdoor Track & Field Indoor Track & Field Wrestling Outdoor Track & Field

Volleyball

The program generates approximately \$91.5 million in revenue annually with football earning \$31 million and men's basketball \$18 million. The athletic department has an annual operating budget of approximately \$91.5 million, based on the latest Equity in Athletics Data Analysis (EADA).



In 2016, Illinois student-athletes hailed from 32 states and 12 countries. They pursued 77 majors in 11 different colleges and earned a cumulative GPA of 3.16. In the most recent cohort, Illinois student-athletes graduated at a rate of 87%, a rate that is slightly above that of the general student population.

A 2011 study performed by the College of Business estimated the annual local economic impact of DIA to be between \$40M and \$50M.

DIA fully funds 258.5 scholarships, the maximum allowable under NCAA rules. DIA is responsible for paying the University all tuition, fees, room and board its students incur. The University provides no waivers or special arrangements to the athletic program for these expenses.

Since Collegiate Consulting's focus is a hockey feasibility study, it is important to recognize the current men's club ice hockey program. The program plays on-campus at the historic 2,000-seat University of Illinois Ice Arena. They are a member of the American Collegiate Hockey Association (ACHA) at the Division I level and a member of the Central States Collegiate Hockey League (CSCHL) within the ACHA.

Organized ice hockey came to UIUC in the 1930s and played its first official season in 1937 as an independent NCAA team. The program was ended after the 1942–43 season during World War II. The current Fighting Illini men's ice hockey team was reformed in the mid-1950s. The team joined the CSCHL in 1975, and is the longest ongoing CSCHL member. The program has captured two national titles (2005, 2008), with nine Final Four appearances and 17 ACHA tournament appearances. The program has also captured six CSCHL tournament titles and two regular-season championships.



COLLEGIATE MEN'S ICE HOCKEY LANDSCAPE

NCAA Division I (NCAA DI) is comprised of 60 men's and 35 women's hockey teams. The most recent addition was Arizona State, which began its inaugural season as a full Division I men's program in 2016-17.

Conference Alignment

In men's NCAA DI hockey there are six conferences: Atlantic Hockey Association (AHA), Big Ten, Eastern Collegiate Athletic Conference (ECAC), Hockey East, National Collegiate Hockey Conference (NCHC) and Western Collegiate Hockey Association (WCHA). For purposes of our report, this assessment focuses solely on Big Ten hockey.

Atlantic Hockey Association

The Atlantic Hockey Association is comprised of 11 members all in the northeast United States, with the exception of the U.S. Air Force Academy in Colorado.

NCAA Division I Hockey Conference Landscape								
Conference	Members							
	American International College							
	Bentley University							
	Canisius College							
	College of the Holy Cross							
	Mercyhurst University							
AHA	Niagara University							
	Robert Morris University							
	Rochester Institute of Technology							
	Sacred Heart University							
	U.S. Air Force Academy							
	United States Military Academy							



Hockey East Conference

The Hockey East Conference consists of 11 programs, after the departure of Notre Dame following the 2016-17 season. The conference has arguably had the most success in NCAA DI men's hockey competition.

NCAA Division I Hockey Conference Landscape								
Conference	Members							
	Boston University							
	Boston College							
	University of Connecticut							
	University of Maine							
	University of Massachusetts Amherst							
Hockey East	University of Massachusetts Lowell							
	Merrimack College							
	University of New Hampshire							
	Northeastern University							
	Providence College							
	University of Vermont							

Big Ten Conference

The Big Ten started as a Division I hockey conference in the 2013-14 season. Notre Dame joined the conference in 2017 bringing membership to seven; if Illinois were to a launch a hockey program it would become the eighth hockey member.

NCAA Division I Hockey Conference Landscape								
Conference	Members							
	Michigan State University							
	Ohio State University							
	Penn State University							
Big 10	University of Michigan							
_	University of Minnesota							
	University of Notre Dame							
	University of Wisconsin							



Eastern Collegiate Athletic Association

ECAC Hockey is a 12-team conference consisting of several Ivy League institutions and other private institutions in the northeastern United States.

NCAA Division I Hockey Conference Landscape								
Conference	Members							
	Brown University							
	Clarkson University							
	Colgate University							
	Cornell University							
	Dartmouth College							
FCAC	Harvard University							
ECAC	Princeton University							
	Quinnipiac University							
	Rensselaer Polytechnic Institute							
	St. Lawrence University							
	Union College							
	Yale University							

National Collegiate Hockey Conference

The NCHC began play in 2013-14, and is comprised of eight member institutions. Arizona State, which recently started its men's program, applied to the NCHC, but was denied membership at this time.

NCAA Division I Hockey Conference Landscape							
Conference	Members						
	University of North Dakota						
	Miami University						
	University of Nebraska Omaha						
NCHC	University of Denver						
NCHC	University of Minnesota Duluth						
	St. Cloud State University						
	Western Michigan University						
	Colorado College						



Western Collegiate Hockey Associations

The WCHA currently has 10 member institutions including many institutions of the former CCHA.

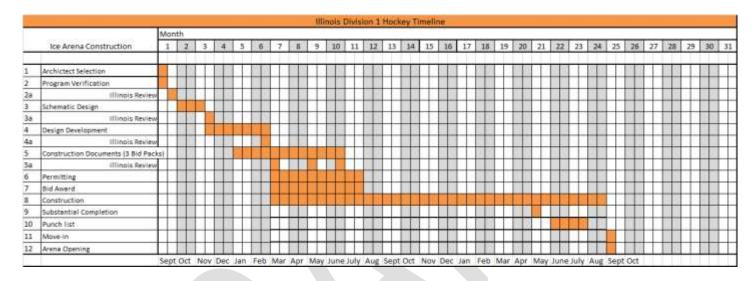
NCAA Division I Hockey Conference Landscape							
Conference	Members						
	Bemidji State University						
	Bowling Green State University						
	Ferris State University						
	Lake Superior State University						
WCHA	Michigan Technical College						
WCHA	Minnesota State University						
	Northern Michigan University						
	University of Alabama in Huntsville						
	University of Alaska Anchorage						
	University of Alaska Fairbanks						

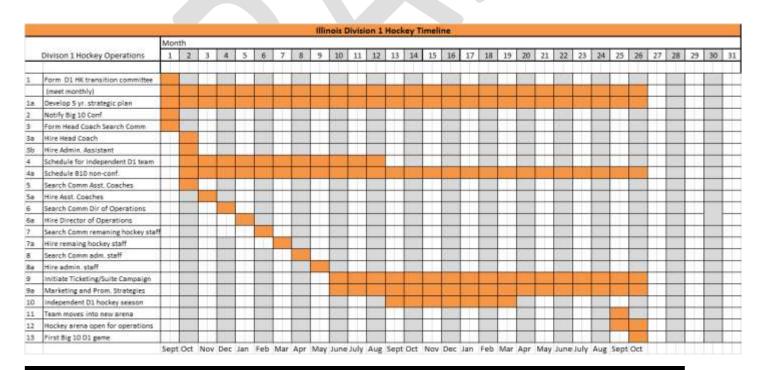


ILLINOIS DIVISION I HOCKEY TIMELINE

Timeline for transition to intercollegiate Division I Hockey

- Division I independent season 2020-21
- First Big Ten Conference season 2021-22







BIG TEN - INSTITUTIONAL BACKGROUND

Big Ten Hockey Conference

There are seven member teams in the Big Ten hockey conference: The Ohio State University, University of Michigan, Michigan State University, University of Minnesota, University of Notre Dame, Penn State University and the University of Wisconsin.

The Big Ten has been sponsoring hockey since the 2013-14 season, and has had teams qualify for the NCAA Championship each year. All conference members have a history of success, earning the title of NCAA National Champion 23 times and making 143 total appearances in the NCAA Tournament.

Big 10 Conference Hockey Institutions										
Institution	Public-	Enrol	lment	%	of	Tuition & Fees				
mstitution	Private	Total	Undergrad	Male	Female	In-State	Out-of-State			
University of Illinois	Public	45,842	33,368	56%	44%	\$ 15,054	\$ 30,214			
University of Minnesota	Public	50,678	34,071	48%	52%	\$ 13,790	\$ 22,210			
University of Michigan	Public	43,651	28,312	51%	49%	\$ 13,856	\$ 43,476			
Michigan State University	Public	50,538	39,143	50%	50%	\$ 13,560	\$ 36,360			
University of Notre Dame	Private	12,292	8,413	53%	47%	N/A	N/A			
Ohio State University	Public	58,663	45,289	52%	48%	\$ 10,037	\$ 28,229			
Penn State University	Public	47,307	40,742	54%	46%	\$ 17,514	\$ 31,346			
University of Wisconsin	Public	42,716	30,991	49%	51%	\$ 10,415	\$ 29,665			
Average		43,961	32,541	52%	48%	\$ 13,461	\$ 31,643			
Variance		4%	3%	8%	-9%	12%	-5%			
Rank		5	5	1	8	2	4			
Public	6									
Private	1									

Source: National Center for Education Statistics; Due to UND's status as a private insitution and not full Big 10 member, their tuition & fees were excluded

Competitiveness

Results were compiled since the formation of the Big Ten Hockey Conference to illustrate member institutions' competitiveness both in the regular season and in the NCAA Tournament. Since this is the first season of Notre Dame's inclusion as a Big Ten hockey member their win-loss record is excluded, but it is important to note that UND was a Frozen Four participant in 2017.



Since the hockey conference's inception, Minnesota has been the strongest program, with 16 more wins than its nearest Big Ten rival. Michigan, Penn State and Ohio State have overall records above .500. Michigan State has only recorded one winning season in the past four, and this past year was Wisconsin's first year over .500 since the 2013-14 season.

Big Ten Conference Record											
INSTITUTION	INSTITUTION 2016-17 2015-16 2014-15 2013-14 C										
University of Wisconsin	20-15-1	8-19-8	4-26-5	24-11- 2	56-71-16						
Ohio State University	21-12-6	14-18-4	14-19- 3	18-14-5	67-63-18						
University of Michigan	13-19-3	25-8-5	22-15- 0	18-13-4	78-55-12						
University of Minnesota	23-12-3	20-17-0	23-13- 3	28- 7- 6	94-49-12						
Penn State University	25-12-2	21-13-4	18-15-4	8-26- 2	72-66-12						
Michigan State University	7-24-4	10-23-4	17-16- 2	11-18- 7	45-81-17						

Collegiate Consulting researched NCAA Tournament appearances since the Big Ten hockey conference formation. The men's tournament features a 16-team field. In the past four years, every program with the exception of Michigan State has made at least one tournament appearance. In 2014 and 2017 multiple teams made the field, with three programs earning bids in 2017. Minnesota was the runner-up in 2014 with Michigan and Penn State reaching the quarterfinals. Since the conference's inception no program has won a NCAA Men's Ice Hockey National Championship.

Operating Budget

Information was collected with regard to Big Ten hockey operating expenses for the past two seasons. Operating expenses include all costs excluding scholarships and salaries. The average operating budget is \$1.15 million with a high of \$1.3 million and low of \$900,000. Notre Dame's information was not available for 2016-17. In 2015-16, the average operating budget was nearly \$1.1 million, with Michigan having the highest at \$1.21 million and Ohio State the lowest at \$775,000. Overall, five of the programs have annual operating budgets of \$1 million or higher.



Big 10 Men's Ice Hockey Operating Budget										
Institution		2015-16		2016-17						
Michigan	\$	1,215,000	\$	1,200,000						
Michigan State	\$	1,120,000	\$	1,100,000						
Ohio State	\$	775,000	\$	900,000						
Penn State	\$	1,100,000	\$	1,300,000						
Notre Dame	\$	1,200,000								
Wisconsin	\$	900,000	\$	1,200,000						
Minnesota	\$	1,100,000	\$	1,200,000						
AVERAGE	\$	1,060,000	\$	1,150,000						

Coaching Salaries

Collegiate Consulting gathered Big Ten coaching salary data for the 2015-16 and 2016-17 athletic years. Notre Dame's data was not available.

Overall, the average 2015-16 head coach base salary within the conference is \$262,764. The highest-paid head coach earns a base salary of \$330,000 whereas the lowest-paid, at Michigan, earns \$238,000. The average base salary is nearly \$42,000 higher than the WCHA average, but \$20,000 lower than the NCHC average. Total compensation includes bonus monies and other benefits in addition to the base salary (country club, car allowance, etc.). Minnesota has the highest total compensation package at \$695,000 while the average total head coach compensation package in the conference is \$425,251.

Collegiate Consulting also collected data for both the first and second assistant coaches. The Big Ten average for first assistant coach base salary is \$119,000, making it nearly \$8,000 greater than the NCHC and \$28,000 greater than the WCHA. All of the first assistant coaches have a base salary greater than \$100,000 with the highest-paid at \$145,000. There were no additional compensation packages reported for the first assistant.

The average second assistant coach base salary within the conference is just under \$100,000, making it nearly identical to the NCHC and \$20,000 greater than the WCHA. The highest-paid second assistant coaches are at Wisconsin and Minnesota (\$110,000); Ohio State has the lowest salary at \$85,000.



Big 10 Men's Ice Hockey - 2015 - 16														
BIG 10 - Salary	N	1ichigan	N	Michigan State Minnesota		Ohio State		Penn State		Wisconsin		Average		
Head Coach - Base Salary	\$	238,702	\$	253,310	\$	330,000	\$	250,000	\$	244,968	\$	259,605	\$	262,764
Head Coach - Total Compensation	\$	529,916	\$	365,310	\$	695,000	\$	292,200	\$	308,538	\$	360,544	\$	425,251
1st Asst. Coach Salary	\$	119,025	\$	103,168	\$	145,000	\$	117,312	\$	103,248	\$	127,338	\$	119,182
2nd Asst. Coach Salary	\$	105,000	\$	95,000	\$	110,000	\$	85,000	\$	90,000	\$	110,000	\$	99,167
Total HC/Ass't Coach Compensation	\$	753,941	\$	563,478	\$	950,000	\$	494,512	\$	501,786	\$	597,882	\$	643,600

Salary data from 2016-17 demonstrates an increase in coaching salaries, with the head coach base salary having the highest increase from \$262,833 to \$293,133, an annual increase of more than \$30,000. The top assistant coach average salary increased from \$119,000 to \$121,667 with the second assistant coach average remaining the same as 2015-16. The totals at the bottom of each school is head coach total compensation plus the salaries of the first and second assistant coach. It does not include fringe benefits.

As a note, research indicated that Michigan's head coach received a significant increase in base salary, but saw an overall slight drop as the bonus/merit compensation was modified.

Big 10 Men's Ice Hockey - 2016 - 17														
BIG 10 - Salaries	N	1ichigan	N	Aichigan State	N	linnesota	o	hio State	Pe	enn State	W	/isconsin		Average
Head Coach - Base Salary	\$	410,000	\$	250,000	\$	330,000	\$	265,000	\$	245,000	\$	260,000	\$	293,333
Head Coach - Total Compensation	\$	530,000	\$	370,000	\$	700,000	\$	300,000	\$	310,000	\$	370,000	\$	430,000
1st Asst. Coach Salary	\$	120,000	\$	120,000	\$	145,000	\$	105,000	\$	110,000	\$	130,000	\$	121,667
2nd Asst. Coach Salary	\$	105,000	\$	95,000	\$	110,000	\$	85,000	\$	90,000	\$	110,000	\$	99,167
Total HC/Ass't Coach Compensation	\$	755,000	\$	585,000	\$	955,000	\$	490,000	\$	510,000	\$	610,000	\$	650,833

Scholarship Budget

All of the Big Ten schools allocate the maximum of 18 hockey scholarships. The average scholarship budget is \$841,667 with the lowest budget at \$600,000. Since the schools listed below are public institutions, the disparity in spending is a result of the differences in a combination of costs of tuition for each school as well as ratio of in-state/out-of-state student-athletes.



Big 10 Scholarship Budget											
Institution	2016-17										
Michigan	\$	1,000,000									
Michigan State	\$	900,000									
Ohio State	\$	800,000									
Penn State	\$	950,000									
Notre Dame											
Wisconsin	\$	800,000									
Minnesota	\$	600,000									
AVERAGE	\$	841,667									

Facility Background

Collegiate Consulting examined facilities for the Big Ten member institutions. Of the seven facilities, the average capacity is 9,606. Ohio State's Value City Arena is the largest with seating capacity of 18,809. Notre Dame's Compton Family Ice Arena is the smallest with a capacity of 5,022. Three of the venues have capacity of 10,000 or higher, and all of them are on-campus and managed by the University.

		Bi	g 10 Arena A	Assessment	
INSTITUTION	FACILITY NAME	YEAR BUILT	CAPACITY	UNIVERSITY	AMENITIES/RENOVATIONS
University of Michigan	Yost Ice Arena	1923	5,800	Yes	Improved sound & lighting system, desiccant dehumidification system, insulated ceiling, electronic scoreboard and megatron, locker rooms for both teams, updated lobby with trophy cases, balcony seating (across from press box), and chair-backed premium seating.
Michigan State University	Munn Ice Arena	1974	6,470	Yes	Press box, electronic video scoreboards, and club seats and luxury boxes.
University of Minnesota	3M Arena at Mariucci	1993	10,000	Yes	Plentiful chair-backed seating and electronic megatron score board.
University of Notre Dame	Compton Family Ice Arena	2011	5,022	Yes	Chair-backed seating and standing space for spectators, visiting teams' suite, locker rooms for both teams, club seating for 250, electronic megatron scoreboard, and media center.
Ohio State University	Value City Arena at the Jerome Schottenstein Center	1998	17,500	Yes	Electronic megatron scoreboard and plentiful chair-backed seating
Penn State University	Pegula Ice Arena	2013	5,782	Yes	Chair-backed seating and concessions for fans, locker rooms for both teams, and electronic megatron scoreboard.
University of Wisconsin	Kohl Center	1998	15,359	Yes	Megatron scorebaord & LED ribbon and balcony seating.
		Average	9,419		



Attendance

Attendance figures for the Big Ten are strong, with an average capacity percentage for the 2016-17 season at 78%. Wisconsin has the highest average attendance with 10,158 per game and Penn State has the highest capacity percentage with average attendance of 6,026 for the 5,782-seat Pegula Ice Arena or 104% capacity. Three-of-seven institutions have a percentage capacity of 96% or greater and all but Ohio State are above 66%. Ohio State, which has the largest facility, ranks fifth in per-game attendance and only has 30.5% capacity per game.

INSTITUTION	Big 10	Attendance 201	.6-17
INSTITUTION	ATTENDANCE	CAPACITY	CAPACITY %
University of Michigan	5,596	5,800	96.5%
Michigan State University	4,536	6,470	70.1%
University of Minnesota	9,595	10,000	96.0%
University of Notre Dame	4,151	5,022	82.7%
Ohio State University	5,335	17,500	30.5%
Penn State University	6,026	5,782	104.2%
University of Wisconsin	10,158	15,359	66.1%
AVERAGE	6,485	9,419	78.0%

Ticket Prices

Collegiate Consulting collected both season and single-game ticket pricing for the Big Ten institutions. All of the programs have at least two levels of pricing, with the exception of Minnesota. The average top-tier ticket pricing is \$501 with Penn State having the highest season ticket pricing at \$1,000 and Michigan State having the lowest at \$289. Four of the seven programs have three tiers of pricing with Penn State having six and Notre Dame five. It is important to note that the season ticket pricing does not include the amount of any minimum donation required per seat (if applicable).

Big 10 Season Ticket Prices													
Institution	Price A		Price B		P	Price C		Price D		rice E	Pr	ice F	# of Price Points
University of Wisconsin (Madison)	\$	215	\$	210									2
Ohio State University	\$	160	\$	120									2
Notre Dame	\$	667	\$	483	\$	437	\$	391	\$	299			5
University of Michigan	\$	475	\$	395	\$	340							3
University of Minnesota	\$	700											1
Penn State University	\$	1,000	\$	778	\$	756	\$	445	\$	338	\$	267	6
Michigan State University	\$	289	\$	255	\$	86							3
AVERAGE	\$	501	\$	374	\$	405	\$	418	\$	319	\$	267	3.1



Single-game ticket prices range from \$9 to \$70 amongst the seven schools. Two institutions have single-game ticket prices of \$60 or higher: Penn State (\$60) and Minnesota (\$70). All the programs have a minimum of two single-game pricing ticketing tiers, with 5-of-7 having three or more tiers. Notre Dame with six single-game ticket tiers leads the conference. The average prices for the top-two tiers of single-game ticket prices are \$37 and \$268, which is nearly identical to the NCHC. Additionally 6-of-7 schools offer single-game tickets priced less than \$20, with Minnesota as the exception.

Big 10 Single-Game Ticket Prices												
INSTITUTION	PRICE A		PRICE B		PRI	CE C	PRICE D		PRICE E		PRICE F	# OF PRICE POINTS
University of Wisconsin (Madison)	\$	24	\$	20								2
Ohio State University	\$	15	\$	14	\$	12	\$	11	\$	9		5
Notre Dame	\$	35	\$	30	\$	25	\$	22	\$	20	\$ 16	6
University of Michigan	\$	30	\$	20								2
University of Minnesota	\$	70	\$	60	\$	55						3
Penn State University	\$	60	\$	30	\$	18	\$	15				4
Michigan State University	\$	22	\$	20	\$	10						3
AVERAGE	\$	37	\$	28	\$	24	\$	16	\$	15	\$ 16	3.6

Ticket Revenue

Data was collected with regard to ticket revenue. Notre Dame and one of the public institutions chose not to report revenue. The average ticket revenue from the five schools that reported their ticket sales was \$2.3 million, with a high of \$5.2 million and a low of \$803,069.

Big 10 Ticket Sales											
School	Sales										
School #1`	\$	5,290,000									
School #2	\$	1,630,000									
School #3	\$	1,384,862									
School #4											
School #5	\$	2,490,000									
School #6	\$	803,069									
Average	\$	2,319,586									



ILLINOIS HOCKEY EXPENSE PRO FORMA

The five-year pro forma incorporates recommendations made for scholarships, sports operations, administrative operations, administrative salaries and coaching salaries.

Overall, Collegiate Consulting estimates that men's ice hockey, competing in the Big Ten, would require a budget of \$3.7 million by year five.

	ILLINOIS HOCKEY EXPENSE PRO-FORMA											
	Υ	ear One		Year Two		Year Three	,	Year Four	Year Five			
Scholarships	\$	-	\$	406,059	\$	836,483	\$	861,577	\$	887,424		
Sports Operations	\$	325,000	\$	650,000	\$	1,300,000	\$	1,339,000	\$	1,379,170		
Administrative Operations	\$	140,150	\$	127,500	\$	200,575	\$	205,092	\$	209,745		
Administrative Salaries	\$	-	\$	97,500	\$	260,000	\$	267,800	\$	275,834		
Coaching Salaries	\$	357,500	\$	950,000	\$	987,300	\$	1,016,919	\$	1,047,427		
TOTAL	\$	822,650	\$	2,231,059	\$	3,584,358	\$	3,690,388	\$	3,799,600		

Scholarships

Collegiate Consulting recommends funding men's ice hockey at the Division I limit of 18 scholarships with nine used in the first year of the transition and then the full complement by Year Three. Collegiate Consulting's budget is for nine in-state scholarships, four international scholarships and five out-of-state scholarships. The projected costs for Year One are \$33,500 in-state, which is the average in-state scholarship valuation (\$31,600 - \$36,000). The out-of-state scholarship valuation is \$50,000, same formula (\$47,000-\$53,000). The international scholarship valuation is \$53,500, same formula (\$49,000-\$58,000). Collegiate Consulting increased cost of financial aid annually by three percent.

	HOCKEY SCHOLARSHIPS											
Scholarships	NCAA	Ye	ar One	Ye	ear Two	Yea	r Three	Y	ear Four	Year Five		
Scholarships	Maximum	EQUIV	BUDGET	EQUIV	BUDGET	EQUIV	BUDGET	EQUIV	BUDGET	EQUIV	BUDGET	
Men's Sports												
In-State		0.00	\$ -	4.50	\$ 159,931	9.00	\$ 329,457	9.00	\$ 339,341	9.00	\$ 349,521	
Out-of-State		0.00	\$ -	2.50	\$ 132,613	5.00	\$ 273,182	5.00	\$ 281,377	5.00	\$ 289,819	
International	18.00	0.00	\$ -	2.00	\$ 113,516	4.00	\$ 233,844	4.00	\$ 240,859	4.00	\$ 248,085	
Grand Total	0.00	0.00	\$ -	9.00	\$ 406,059	18.00	\$ 836,483	18.00	\$ 861,577	18.00	\$ 887,424	



Sports Operations

Collegiate Consulting projected an operating budget of \$1.3 million for the first full year of varsity competition followed by annual increases of three percent. This is consistent with the current Big Ten average. To account for the timeline of program development, the first year is projected at half of the baseline budget. On-going equipment costs of \$175,000 are moved into sports operations, although the initial start-up costs are placed within the administrative operational budgets.

SPORTS OPERATING BUDGET											
Year One Year Two Year Three Year Four Year Five											
Men's Sports											
Ice Hockey	\$	325,000	\$	650,000	\$	1,300,000	\$	1,339,000	\$	1,379,170	
Total Amount	\$	325,000	\$	650,000	\$	1,300,000	\$	1,339,000	\$	1,379,170	

Collegiate Consulting developed a line-item breakdown of the operating budget, based upon first full-year operating budget of \$1.3 million.

Operating Budget - Line Item											
Team Travel	\$	700,000	53.8%								
Equip & Supplies	\$	180,000	13.8%								
Purchased Services \$ 150,000 11.5%											
Group Meals *	\$	110,000	8.5%								
Recruiting	\$	100,000	7.7%								
Game Guarantees	\$	60,000	4.7%								
TOTAL \$ 1,300,000 100%											
* Training Table and Holiday/School Break Meals											

Administrative Operations

In addition to the start-up costs required for the launch of men's ice hockey, Collegiate Consulting estimated a budget increase of three percent for administrative operations for each department as well as start-up equipment costs. After the year one costs, which include initiation and start-up, annual costs will reach approximately \$210,000 in year five.



	ADMINISTRATIVE OPERATING BUDGET												
		Year One	Year Two		Year Three			Year Four	Year Five				
Admin Operations	\$		\$	15,000	\$	15,450	\$	15,914	\$	16,391			
Game Guarantee	\$	-	\$	-	\$	50,000	\$	50,000	\$	50,000			
Media Relations	\$	-	\$	5,000	\$	5,150	\$	5,305	\$	5,464			
Academic Service	\$	-	\$	5,000	\$	5,150	\$	5,305	\$	5,464			
Start-up Equip Costs	\$	140,150	\$	-	\$	-	\$	-	\$	-			
Radio/TV Production	\$	-	\$	25,000	\$	45,000	\$	46,350	\$	47,741			
Development	\$	-	\$	12,500	\$	12,875	\$	13,261	\$	13,659			
Marketing & Promotions	\$	-	\$	25,000	\$	25,750	\$	26,523	\$	27,318			
Athletic Training	\$	-	\$	20,000	\$	20,600	\$	21,218	\$	21,855			
Strength & Conditioning	\$	-	\$	20,000	\$	20,600	\$	21,218	\$	21,855			
Total Operations	\$	140,150	\$	127,500	\$	200,575	\$	205,092	\$	209,745			

Administrative Salaries

With the addition of men's ice hockey and one women's program, Collegiate Consulting projects that Illinois would add four full-time positions in the departments of marketing, ticket sales/ops, academic advising and sports information. As shown in the chart below, the administrative positions would not be hired until half-way through the practice/start-up season prior to the first full-season of Big Ten participation.

		ı	\DIV	IINISTRATIVE SAI	LAR	IES		
Administration	١	ear One		Year Two		Year Three	Year Four	Year Five
Marketing & Promotions	\$	-	\$	25,000	\$	50,000	\$ 51,500	\$ 53,045
Ass't - Tickets & Ops	\$	-	\$	25,000	\$	50,000	\$ 51,500	\$ 53,045
Academic Advising	\$	-	\$	25,000	\$	50,000	\$ 51,500	\$ 53,045
SID	\$	-	\$	-	\$	50,000	\$ 51,500	\$ 53,045
TOTAL SALARY	\$	-	\$	75,000	\$	200,000	\$ 206,000	\$ 212,180
BENEFITS (30%)	\$	-	\$	22,500	\$	60,000	\$ 61,800	\$ 63,654
TOTAL SALARY & BENEFITS	\$	-	\$	97,500	\$	260,000	\$ 267,800	\$ 275,834

Coaching Salaries

Collegiate Consulting projects a hockey specific staff including a head coach, two assistant coaches, director of operations, administrative assistant, equipment manager, athletic trainer and strength & conditioning coordinator. Overall, salaries and benefits are projected at \$950,000 with three percent annual increases. It is important to note that the head coaches' salary is base only. Supplementary compensation averages an additional \$110,000 in the Conference.



	нс	CKI	Y STAFF SALAR	IES			
Position	Year One		Year Two		Year Three	Year Four	Year Five
Men's Ice Hockey							
Head Coach	\$ 162,500	\$	325,000	\$	334,750	\$ 344,793	\$ 355,136
Assistant Coach	\$ 62,500	\$	125,000	\$	128,750	\$ 132,613	\$ 136,591
Assistant Coach	\$ 50,000	\$	100,000	\$	103,000	\$ 106,090	\$ 109,273
Director of Hockey Operations	\$ -	\$	50,000	\$	51,500	\$ 53,045	\$ 54,636
Administrative Ass't	\$ -	\$	40,000	\$	41,200	\$ 42,436	\$ 43,709
Athletic Trainer	\$ -	\$	40,000	\$	50,000	\$ 51,500	\$ 53,045
Equipment Manager	\$ -	\$	40,000	\$	41,200	\$ 42,436	\$ 43,709
Strength & Conditioning	\$ -	\$	50,000	\$	51,500	\$ 53,045	\$ 54,636
TOTAL SALARY	\$ 275,000	\$	770,000	\$	801,900	\$ 825,957	\$ 850,736
BENEFITS (30%)	\$ 82,500	\$	180,000	\$	185,400	\$ 190,962	\$ 196,691
TOTAL SALARY + BENEFITS	\$ 357,500	\$	950,000	\$	987,300	\$ 1,016,919	\$ 1,047,427





HOCKEY START-UP EQUIPMENT COSTS

As part of the Nike – Illinois agreement, the University could receive more than \$100,000 in hockey uniforms and apparel. It is standard of Big Ten institutions to enter into equipment agreements that will cover costs including sticks, gloves, pads and shells. Thus, as part of proposed agreement with Bauer, Illinois could receive \$105,100 in start-up player equipment. Thus reducing start-up costs from \$345,250 to \$140,150.





Н	ocke	y Start-Up	Equipment Costs		
Item		Total	Item		Total
Sticks	\$	90,000	Mouth Guards	\$	1,200
Skates	\$	18,000		\$	2,500
Tape	\$	5,000	Tag-ups	\$	300
Gloves	\$		Practice Pucks	\$	1,000
Helmets/Cages	\$	3,000	Helmet Decals	\$	2,500
Face Shields	\$	600	Helmet Parts	\$	500
Shin Pads	\$	2,500	Undergear (top/bottom/socks)	\$	5,000
Elbow Pads	\$	2,500	Canvas Bags	\$	4,000
Cup/Supporters	\$	1,500	Hockey Equipment Costs	\$	153,350
Garter Belts	\$	500	Harley Deagness Addition	-1.0	t-
Shoulder Pads	\$	2,000	Hockey Program Addition	ai C	osts
Blades	\$	2,500	Item		Total
Laces	\$	1,500	Skate Sharpener - Arena	\$	20,000
Stick Extensions	\$	250	Skate Sharpener -Portable	\$	5,000
Hadran Halfarm Casta			Skate Sharpener - Supplies/Maint	\$	3,000
Hockey Uniform Costs			Riveters	\$	5,000
Item		Total	Sewing Machine	\$	6,000
Game Uniforms (Away) - pants	\$	4,000	Travel Trunks	\$	4,000
Game Uniforms (Home)- pants	\$	4,000	Reconditioning	\$	2,000
Game Uniforms (Away) - Jersey	\$	4,500	Hardware Store	\$	1,000
Game Uniforms (Home)- Jersey	\$	4,500	Screening	\$	1,000
Game Socks	\$	2,500	Name plates/luggage tags	\$	4,000
Practice Socks	\$	2,000	Misc.	\$	10,000
Uniform Customizing	\$	4,000	Hockey Program Additional Costs	\$	61,000
Practice Jerseys	\$	8,400			
Exercise Shirts (3 per player)	\$	8,000	Grand Total Hockey Program Costs	\$	345,250
Exercise Shorts	\$	5,000			
Sneakers (2 per player)	\$	12,000			
Sweatshirts	\$	2,500			
Sweatpants	\$	1,500			
Apparel - team branded	\$	40,000			
Goalie Pads- (1 each)	\$	12,000			
Goalie Blocker - (2 each)	\$	3,000			
Goalie Chest/Arms - (1 each)	\$	3,000			
Goalie Gloves - (2 each)	\$	3,000			
Goalie Mask -(1 each)	\$	6,000			
Goalie Throat Protector - (1 each)	\$	500			
Goalie Pants (1 each)	\$	500			
Total Hockey Uniform Costs	\$	130,900			



ILLINOIS HOCKEY REVENUE PRO FORMA

Collegiate Consulting developed revenue projections for Illinois men's ice hockey based on external and auxiliary revenue. Overall, Collegiate Consulting estimates that men's ice hockey, competing in the Big Ten, would bring in approximately \$4.7 annually in revenue by the fifth year of operation.

		но	CKE	Y REVENUE PR	0-F(ORMA					
	Year One	Year Two	Υ	ear Three	•	Year Four	•	Year Five	Year Six	Υ	ear Seven
Season Ticket Sales			\$	1,967,469	\$	2,016,656	\$	2,067,072	\$ 2,118,749	\$	2,171,718
Progam Revenue	Program F	Damp Hp	\$	162,500	\$	1,026,000	\$	1,217,040	\$ 1,342,122	\$	1,469,646
Game Day Ancillary	Programii	valiih-oh	\$	403,750	\$	413,844	\$	424,190	\$ 434,795	\$	445,664
Single-Game Ticket Sales			\$	252,450	\$	258,761	\$	265,230	\$ 271,861	\$	278,658
Auxiliary Revenue			\$	355,440	\$	366,106	\$	377,087	\$ 388,401	\$	400,052
TOTAL			\$	3,141,609	\$	4,081,367	\$	4,350,619	\$ 4,555,927	\$	4,765,738

Season Ticket Sales

Collegiate Consulting projected season tickets at 3,480 seats sold. Collegiate Consulting developed a staggered model based on 100% season ticket sales for the club and center ice seats; 80% for suites and blue line seats; and 65% for the corners and student season tickets. Total season ticket revenue would start at \$1.9 million with a projected 2.5% annual increase.

Season Ticket Sales	# of Seats	Tic	ket Price	Tot	al p/seat	100%	80%	65%	50%
Suites (10)		\$	25,000	\$	25,000	\$ 250,000	\$ 200,000	\$ 162,500	\$ 125,000
Club Seats	700	\$	800	\$	800	\$ 560,000	\$ 448,000	\$ 364,000	\$ 280,000
Center Ice	800	\$	700	\$	700	\$ 560,000	\$ 448,000	\$ 364,000	\$ 280,000
Blue Line	1,400	\$	400	\$	400	\$ 560,000	\$ 448,000	\$ 364,000	\$ 280,000
Corners	775	\$	325	\$	325	\$ 251,875	\$ 201,500	\$ 163,719	\$ 125,938
Student Season	550	\$	100	\$	100	\$ 55,000	\$ 44,000	\$ 35,750	\$ 27,500
Comp Seasons	200	\$	-	\$	-	\$ -	\$ -	\$ -	\$ -
Total	4,425								
TOTAL SEATS SOLD	3,480								
TOTAL REVENUE	\$ 1,967,469								



Program Revenue

Program revenue for men's ice hockey included radio revenue, corporate sales, the annual fund and licensing. The highest-yielding revenue streams are from corporate sales and the annual fund. As the Illinois team continues to develop, revenue from these streams will grow incrementally with it approaching nearly \$1.5 million in year seven (or year five of program being launched).

	Year One	Year Two	Υe	ar Three	,	Year Four	Year Five		Year Six	Υ	ear Seven
Men's Sports											
Corporate/Radio	Drogram Dr	ama Ha	\$	55,000	\$	800,000	\$ 950,000	\$	1,050,000	\$	1,150,000
Annual Fund	Program Ra	amp-op	\$	85,000	\$	200,000	\$ 240,000	\$	264,000	\$	290,400
Licensing (16%)			\$	22,500	Ş	26,000	\$ 27,040	Ş	28,122	Ş	29,246
Total Operations			\$	162,500	\$	1,026,000	\$ 1,217,040	\$	1,342,122	\$	1,469,646

Game Day Ancillary Revenue

Collegiate Consulting determined game day ancillary revenue based on merchandise, concessions, program sales, and parking. Projections were based on average attendance of 4,500 and Illinois having a facility where it retained parking revenue. Merchandise and concession revenue was calculated based on per-fan expenditure of \$15 per game and athletics receiving 25% of the gross revenue.

	Reve	nue per	# of		Attendance	p/	Game	
Game Day Ancillary Revenue	1	ame	Games	5,000	4,500		4,000	3,500
Merch/Concess/Prog (25%)	\$	15.00	18	\$ 337,500	\$ 303,750	\$	270,000	\$ 236,250
Gen. Park (250 spaces) (100%)	\$	20	18	\$ 100,000	\$ 100,000	\$	100,000	\$ 100,000
Total				\$ 437,500	\$ 403,750	\$	370,000	\$ 336,250

Single-Game Ticket Sales

Collegiate Consulting projects year-one single-game sales of approximately 625, but this number includes 75 complimentary tickets per game. Identical to the season ticket projections, there is a staggered percentage of tickets sold for each seat category. Overall single-game ticket revenue is projected initially at \$252,450.

Single-Game Seats	# of Seats	 ket ice	# of Games	100%	80%	65%	50%	2	25%
Center Ice	75	\$ 40	18	\$ 54,000	\$ 43,200	\$ 35,100	\$ 27,000	\$ 1	13,500
Blue Line	250	\$ 32	18	\$ 144,000	\$ 115,200	\$ 93,600	\$ 72,000	\$ 3	36,000
Corners	200	\$ 25	18	\$ 90,000	\$ 72,000	\$ 58,500	\$ 45,000	\$ 2	22,500
Student Single	125	\$ 10	18	\$ 22,500	\$ 18,000	\$ 14,625	\$ 11,250	\$	5,625
Comps	125	\$ -	18	\$ -	\$ -	\$ -	\$ -	\$	-



Endowment Revenue

Collegiate Consulting has illustrated an annual distribution of 4% for five different fundraising goals to assist with financial support of the Illinois' men's ice hockey program. The different endowment scenarios would increase overall support by \$400,000 to \$800,000 annually.

-	Amt Raised	,	Year One	Υ	ear Two	Υe	ar Three		Year Four
\$	10,000,000	\$	400,000	\$	400,000	\$	400,000	\$	400,000
\$	12,500,000	\$	500,000	\$	500,000	\$	500,000	\$	500,000
\$	15,000,000	\$	600,000	\$	600,000	\$	600,000	\$	600,000
\$	17,500,000	\$	700,000	\$	700,000	\$	700,000		700,000
\$	20,000,000	Ş	800,000	Ş	800,000	\$	800,000	Ş	800,000

AUXILIARY- REVENUE PRO FORMA

One of the most significant sources of revenue will be Auxiliary from the rental and use of two sheets of ice at a proposed new arena. It is important to note that Illinois is considering three sheets of ice, but the pro-forma was developed based upon two sheets. Once the total number of ice sheets is finalized, these numbers will be adjusted. The five-year revenue pro-forma details the multiple revenue categories for the facility. Gross revenue by year five is projected at \$1.1 million with year five net revenue at \$400,000. The revenue breakdown for year five is as follows: figure skating lessons and general/free



skate are anticipated to reach \$518,000 and 45% of total revenue projections; leagues, which would consist of youth, adult and intramural leagues, are approximately \$140,000 annually and nearly 12% of total revenue; rental revenue, which comes from various teams including youth-to-high school intramurals and other college/club programs, will reach nearly \$336,000 and 30% of total revenue; special events and other sources account for nearly \$64,000 in revenue and 6% of total revenue; and "other sources" is \$96,000 and 8% of gross revenue.





		Project	ed .	Auxiliary	Re	venue			
Arena Programs	١	ear One	١	ear Two	,	Year Three	Year Four	γ	ear Five
Learn to Skate	\$	61,800	\$	63,654	\$	65,564	\$ 67,531	\$	69,556
Learn to Play Hockey	\$	56,650	\$	58,350	\$	60,100	\$ 61,903	\$	63,760
Hockey Clinics	\$	20,600	\$	21,218	\$	21,855	\$ 22,510	\$	23,185
Figure Skating Clinics	\$	20,600	\$	21,218	\$	21,855	\$ 22,510	\$	23,185
Private Instructional	\$	92,700	\$	95,481	\$	98,345	\$ 101,296	\$	104,335
Public Sessions	\$	154,500	\$	159,135	\$	163,909	\$ 168,826	\$	173,891
Figure Skating Sessions	\$	51,500	\$	53,045	\$	54,636	\$ 56,275	\$	57,964
Hockey Sessions	\$	15,450	\$	15,914	\$	16,391	\$ 16,883	\$	17,389
TOTALS	\$	460,000	\$	473,800	\$	488,015	\$ 502,655	\$	517,734
Leagues	١	ear One	١	ear Two	,	Year Three	Year Four	Υ	ear Five
Adult Hockey	\$	92,700	\$	95,481	\$	98,345	\$ 101,296	\$	104,335
In-House Youth Hockey	\$	30,900	\$	31,827	\$	32,782	\$ 33,765	\$	34,778
TOTALS	\$	123,600	\$	127,308	\$	131,127	\$ 135,061	\$	139,113
Rentals (Ice Time \$200- \$215/hr.)	١	ear One	١	ear Two	,	Year Three	Year Four	١	ear Five
Local Figure Skating Club	\$	41,200	\$	42,436	•	43,709	\$ 45,020	\$	46,371
Amateur Hockey	\$	72,100	\$	74,263	\$	76,491	\$ 78,786	\$	81,149
High School	\$	30,900	\$	31,827	\$	32,782	\$ 33,765	\$	34,778
DIA Sports Camps	\$	77,250	\$	79,568	\$	81,955	\$ 84,413	\$	86,946
Private Rentals	\$	77,250	\$	79,568	\$	81,955	\$ 84,413	\$	86,946
TOTALS	\$	298,700	\$	307,662	\$	316,892	\$ 326,397	\$	336,190
Special Events		ear One		ear Two		Year Three	Year Four		ear Five
Hockey Tournaments	\$	30,900	\$	31,827	\$	32,782	\$ 33,765	\$	34,778
Figure Skating	\$	10,300		10,609		10,927	\$ 11,255	\$	11,593
Others	\$	15,450	\$	15,914		16,391	\$ 16,883	\$	17,389
TOTALS	\$	56,650	\$	58,350		60,100	\$ 61,903	\$	63,760
Other Sources		ear One		ear Two		Year Three	Year Four		ear Five
Pro Shop	\$	41,200	\$	42,436	\$	43,709	\$ 45,020	\$	46,371
Concessions (non-game	\$	36,050	\$	37,132	\$	38,245	\$ 39,393	\$	40,575
day)	,					•	 		
Arcade	\$	5,150	\$	5,305	\$	5,464	\$ 5,628	\$	5,796
Local Rentals	\$	3,090	\$	3,183	\$	3,278	\$ 3,377	\$	3,478
TOTALS	\$	85,490	\$	88,056	\$	90,696	\$ 93,418	\$	96,220
GROSS AUXILIARY REVENUE	\$	1,024,440	\$	1,055,176	\$	1,086,830	\$ 1,119,434	\$	1,153,017

PROJECTED AUXILIARY EXPENSES



One of the most significant sources of revenue will be auxiliary from the rental and use of two sheets of ice at a proposed new arena. Full-time staff would include seven positions as well hourly student operational support. Collegiate Consulting calculated 30 percent for fringe benefits. Over a five-year time frame, Collegiate Consulting anticipates personnel costs will increase from \$669,000 in year one to \$752,965 by the fifth season. There is an assumption of an annual 3% salary increase.

		Proj	ected	d Auxiliary	Expe	nses				
Staff (Salary & Benefits)	Ye	ear One	Υ	ear Two	Ye	ar Three	Ye	ear Four	Υe	ear Five
Manager	\$	80,000	\$	82,400	\$	84,872	\$	87,418	\$	90,041
Assistant Manager	\$	45,000	\$	46,350	\$	47,741	\$	49,173	\$	50,648
Technical Service (2)	\$	90,000	\$	92,700	\$	95,481	\$	98,345	\$	101,296
Administrative Assistant	\$	35,000	\$	36,050	\$	37,132	\$	38,245	\$	39,393
Hockey Director	\$	40,000	\$	41,200	\$	42,436	\$	43,709	\$	45,020
Skating Director	\$	40,000	\$	41,200	\$	42,436	\$	43,709	\$	45,020
Hourly Operations (Student Employees)	\$	240,000	\$	247,200	\$	254,616	\$	262,254	\$	270,122
Fringe - above positions (30%)	\$	99,000	\$	101,970	\$	105,029	\$	108,180	\$	111,425
GROSS SALARY/FRINGE	\$	669,000	\$	689,070	\$	709,743	\$	731,033	\$	752,965
GROSS AUXILIARY REVENUE	\$	1,024,440	\$	1,055,176	\$	1,086,830	\$	1,119,434	\$	1,153,017
GROSS AUXILIARY EXPENSES	\$	669,000	\$	689,070	\$	709,743	\$	731,033	\$	752,965
NET AUXILIARY REVENUE	\$	355,440	\$	366,106	\$	377,087	\$	388,401	\$	400,052

Custodial, maintenance and utility costs are not usually an expense charged back to athletics based on collected benchmarking; however, we felt it important to note these expenses. They were calculated for a 200,000-square-foot facility. Custodial services are \$0.91 per SF; maintenance is \$1.61 per SF; and utilities are \$2.53 per SF for annual total of \$1.01 million.

Custodial/ Maint/Utilities	Υe	ear One	Ye	ear Two	Ye	ar Three	Υe	ear Four	Υe	ar Five
200,000 sq. ft. @ \$.91/sq. ft Custodial	\$	182,000	\$	182,000	\$	182,000	\$	182,000	\$	182,000
200,000 sq. ft. @ \$1.61/sq. ft Maintenance	\$	322,000	\$	322,000	\$	322,000	\$	322,000	\$	322,000
200,000 sq. ft. @ \$2.53/sq. ft Utilities	\$	506,000	\$	506,000	\$	506,000	\$	506,000	\$	506,000
Gross Custodial/ Maint/Utilities	\$	1,010,000	\$	1,010,000	\$	1,010,000	\$	1,010,000	\$	1,010,000

CASE STUDY: ARIZONA STATE UNIVERSITY



On November 18, 2014, the Arizona State Sun Devil Ice Hockey program became the twenty-third NCAA-sponsored sport in the university's athletic program. Accordingly, Collegiate Consulting conducted a case study of Arizona State University, since they were the most recent to transition from a club team to a NCAA Division I men's ice hockey.

Prior to the move to Division I hockey, the Arizona State club hockey team was one of the elite in the country. The Sun Devils won the ACHA DI championship in the 2013-2014 season. University officials noted that the decision to elevate ice hockey was not a matter of "if" but "when" the program would be able to compete at the next level.

The addition of Sun Devil ice hockey to Arizona State athletics was made possible by the institution's ice hockey supporters, who came together to donate \$32 million for the program. In the program's first year of NCAA DI competition they played a hybrid schedule of NCAA Division I opponents and other top college teams. In 2016-17 the team played a full NCAA Division I schedule, and will do so going forward as they seek membership in a conference.

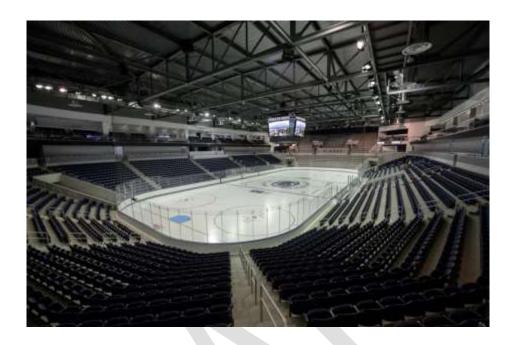
Currently the Sun Devils play at Oceanside Ice Arena. Since becoming a varsity program, Arizona State has played the majority of its games in the Oceanside Ice Arena, which was the club program's original home. The arena has received several upgrades for both practice and competition and now seats 750 for its home games. In addition, ASU played a number of games each year in the Gila River Arena. The Gila River Arena is home to the NHL's Phoenix Coyotes and opened in 2003 at a cost of \$225 million. It is important to note that on February 8th, 2018 the Arizona Board of Regents approved plans for a new 175,000 square-foot multi-purpose arena that will seat 5,000 spectators for hockey with 250-300 club seats and 48 loge seats. The new arena is expected to be completed in time for 2020-21 season.

CASE STUDY: PENN STATE UNIVERSITY

Penn State University

Information has been provided with regard to Penn State's construction of the 5,782-seat Pegula Ice Hockey Arena, which opened in October 2013 at a cost of \$88 million.







Penn State University Pegula Ice Hockey Arena											Mortens	on Const	nuction		
											Withtens	on consti	uction		
State College, PA															
Cost Model									Str	art Date	Oct. 4, 2011				
Feb. 5, 2011										mpletion Dat					
Control of Access		Dogul	a Ice Arena				Come	nunity Rin	_	mpscsion bill	Oct. 1, 2023	Overa	il Costs		
UnifFormat System Level 2	System Area	Cost p/System	Cost p/	Г	Cost	System Area	Cost p/System	Cost p/	Ī	Cost	System	Cost p/System	Cost p/ GSF		Cost
	100.00	bladmen				73 63	projection	صحد			741.00	byayaccon			
UniFormat System Level	2 - Total C		\$ 296.05	-	54,009,712			239.94	-	9,823,452			\$285.00	-	
Construction Escalation		3.00%	_	5	1,647,291		_		S	294,704				_	1,941,993
Sub	total			5	56,550,004				\$	10,118,155				\$ 6	6,675,159
Estimating/Const. Contingency		5.00%		Ś	2,827,850				\$	505,908				\$	3,333,758
	total			-	59,384,854	8			-	10,624,063				_	0,008,917
ray no down 2 no words no d		_		10	405,192		_		-	22.660			_	6	470.00
CM Perform & Payment Bond	_		_	\$		_		_	\$	72,669			_	5	478,863
Builders Risk Insurance	_			-	By Owner	-		-	+	By Owner				_	Owner
Liability Insurances				\$	515,461				\$	92,217				\$	607,677
Subtotal	_			\$	60,306,507				3	10,788,949				3 /	1,095,459
Contractor's Fee		2,25%		5	1,356,896				\$	242,751				\$	1,599,647
Pre-construction Fee				In (Owners Cost	5									
Total Const	ruction Co.	st		5	61,663,403				5	11,031,700				5 7	2,695,102
Project Contingency				5	4,800,000				ĺ	-				5	4,800,000
FF&E Budget				S	8,000,000					- 33				_	8,000,000
Fees & Other Soft Costs				S	7,050,000									-	7,050,000
Total Const	ruction Co	st		5	81,513,403				5	11,031,700				_	2,545,102
			A 222 45	210				d acc or	4.5				£225.02	61-	
	***		\$ 332.46	-		_		\$ 269.45	-				\$321.07	A Common	it.
Gross Bldg SF	226,417		185,475	65				40,942	G5				226,417	GSF	_
Seat Count	6,212		5,912	ses	ats			300	se	ats			6,212	seat	
		Potential	Projects Ri	sics	Unknown										
		Geotechnica													
	DEP Storm Water Regulations Authority Having Jurisdiction Review Penn State Review														
Technology Advancements Material Escalation/Market Conditions															
		Penn DOT A													



DIVISION I - HOCKEY TIMELINE

Collegiate Consulting utilized the timeline from Penn State's transition from a club program to a Division I hockey program. This timeline includes construction of the new facility. Overall, it took three years from the initial gift to the first game as a Division I hockey program and a member of the Big Ten.

<u>Timeline for transition to intercollegiate Division I Hockey</u>

- Club team 2010-11 and 2011-12
- Division I independent season 2012-13
- First Big Ten Conference season 2013-14

•	Announcement of the Pegula Gift at Board of Trustees meeting	09/2010
•	Select architect, and begin design/construction of new arena	09/2010
•	Initiate a supplemental \$10 million fundraising campaign	09/2010
•	Form Varsity Transition Committee (meet monthly)	09/2010
•	Begin scheduling as Independent D1 team for 2012-13	11/2010
•	Form Search Committee for Head Coach/Advertise position	01/2011
•	Review Head Coaching candidate resumes	03/2011 - 4/2011
•	Interview Head Coaching candidates (use AHCA Convention)	04/2011
•	Select Head Coach	05/2011
•	Hire both assistant coaches and staff assistant	06/2011
•	Hire Director of Operations and SID	07/2011
•	Budget for Club Team \$709,000	2011-12
•	Scheduling completed for 2012-2013 as Independent D1 team	11/2011
•	Begin efforts to establish relationships with constituent groups	12/2011
•	Develop ticketing, promotional and marketing campaign	12/2011
•	Pegula Arena Suites and Club Seat sales begin	01/2012
•	Advertising for summer hockey camps	03/2012
•	Head Coach/Assistant Coaches begin hockey promotional tour	06/2012



•	First season of play as an Independent D1 Varsity team	2012-13
•	Hire remainder of support staff	01/2013
•	Development of a Five-Year Comprehensive Strategic Plan	07/2013
•	Move into the Pegula Arena	09/2013
•	Ice Campaign Fundraising effort completed (\$10 Million goal)	09/2013
•	Hockey arena open for operation	09/2013
•	First season of play in the Big Ten Conference	2013-14
•	Budget for first Big Ten season \$2.8 million	2013-14
•	First Varsity game in new arena	10/2013

Transitional Budgets

TC	OTAL	\$ 709,000
•	Scholarships	\$ - 0
•	Equipment	\$ 30,000
•	Operating	\$ 121,000
•	Salaries (HC, AC, AC, SA, OPS, SID)	\$ 558,000

Budget for D1 Independent, 2012-13

TO	TAL	\$:	1.636.000
•	Scholarships (8)	\$	480,000
•	Equipment	\$	120,000
•	Operating	\$	323,000
•	Salaries (HC, AC, AC, SA, OPS, SID, Equip, STR, TR)	\$	713,000

Budget for first conference season, 2013-14

TO	TAL	\$2	2,887,000
•	Scholarships (16)	<u>\$</u>	960,000
•	Equipment (High due to start-up costs)	\$	223,000
•	Operating	\$	973,000
•	Salaries (HC, AC, AC, SA, OPS, SID, Equip, STR,	TR) \$	731,000

 $HC = Head\ Coach$ $AC = Assistant\ Coach$ $SA = Staff\ Assistant$ $OPS = Director\ of\ Hockey\ Operations$ $SID = Sports\ Information\ Director$ $Equipment\ = Equipment\ Manager$ $STR = Strength\ Coach$ $TR = Athletic\ Trainer$



HOCKEY FACILITY LOCATION ANALYSIS

Background

As the University initiated discussions on the feasibility of adding hockey as a Division I varsity sport at the University of Illinois, two local developers proposed competing plans for construction of new facilities to house the hockey program. The first plan features the new athletics facility as the centerpiece of a comprehensive, multifaceted development in downtown Champaign. The second plan places the facility on the southwest corner of the intersection of Fourth Street and St. Mary's Road, across from State Farm Center.

Collegiate Consulting feels that the University of Illinois has the opportunity to add a paradigm-shifting sport like ice hockey that can evoke incredible pride, enhance exposure as well as create an opportunity to generate additional revenue. Plus the existence of two competing developers offers the University a watershed moment to continue their fierce commitment to excellence in both academics and athletics by adding a first class facility. Both developers are proposing facilities that, in addition to Division I hockey, also have the potential to meet the needs of a number of other sports that are currently operating in substandard facilities including women's volleyball, men's and women's gymnastics and wrestling.

Certainly there are pros and cons associated with both proposals. The on-campus site is east of the I Hotel and Conference Center and would be part of the University's Research Park. This site already has 6,500 existing parking spaces at the State Farm Center and other lots throughout the Research Park and no additional city infrastructure would be required. Others argue that the downtown site is preferable because it is easy walking distance for many University students, would encourage people to use public transportation by being convenient for MTD riders all the while being closer to a redeveloped downtown with its retail, entertainment and eating establishments. These amenities all located within easy walking distance, the downtown supporters argue, would make it ideal not just for hockey fans but also the families and participants in the numerous sports camps, clinics, tournaments and other events that will accompany such a development.

The downtown location and the Research Park location are approximately two miles apart, but the athletic facilities proposed for both sites would have similar amenities:

 A competition arena with permanent seating for 5,000-6,000 spectators that can be configured to host hockey, volleyball, wrestling, gymnastics, and youth basketball, along with graduations, trade shows, and other mid-sized events; premium seating spaces; a video board and audio system; ticket office; and concessions and merchandising outlets;



- A second sheet of ice with permanent seating for less than 500 spectators, to be used primarily by the University's varsity team for practice purposes;
- A third sheet of ice with permanent seating for less than 500 spectators, to be used primarily for community and campus purposes;
- Community facilities, including skate rental, changing rooms, restrooms, party spaces, and concessions;
- Temporary locker rooms and changing areas for use by visiting teams;
- Permanent practice facilities for use by the University's varsity volleyball and wrestling programs;
- Permanent locker rooms, team spaces, meeting rooms, offices, sports medicine facilities, and strength and conditioning areas for use by the University's varsity hockey, volleyball, and wrestling programs;
- All necessary back-of-house storage and staging spaces, including loading dock; ice creation and care; on-site food preparation; and staff offices.





Recommendation

Collegiate Consulting recommends that the university partner with the downtown developers. After a thorough analysis, we believe the downtown location presents a superior site. It has access to better amenities and is more convenient for students, thus providing greater revenue potential. The downtown location allows the University to partner in new and exciting ways with the City of Champaign and the Champaign-Urbana communities to enhance significantly one of the most exciting local assets, the downtown Champaign area, while serving as an economic catalyst to the local economy.

The downtown location is bordered on the west by Neil and Walnut Streets, on the south by Springfield Avenue, on the north by Logan Street, and on the east by railroad tracks. A separate parcel north of Logan Street borders the current depot for the Mass Transit District (MTD). Collectively, the accumulated land measures 10 acres.





The sports facility is one component of a \$200M development that would have broad implications for the downtown district. Other features of the development include a luxury hotel and large conference center; 135 residential units; 120,000 square feet of office space; 60,000 square feet of retail space; and expansion of the MTD terminal. MTD is a partner in the project and has applied for several federal grants to assist with ancillary costs.



The downtown developers have contractual rights to purchase all needed land. They are also prepared to build parking decks that would service the athletic facility and other elements of the accompanying development. They are undertaking both of these efforts at no expense to the University.

It is contemplated that the developers would retain ownership of the land and would build and own the athletic facility. This would allow for a much faster and cost-effective construction process.



Justification for Downtown Site

Numerous reasons for recommending the downtown site have been illuminated below:

- Convenient Surrounding Amenities -A standard hockey schedule features 8-10 two-game weekend series, with games played on Friday and Saturday nights. As a result, attending hockey games has become a very social experience. Having the arena in close proximity to the hotels, restaurants, and bars that downtown Champaign has to offer will improve the atmosphere at home hockey games and will make each game an event for students and community. Attendance at hockey games will be higher and the atmosphere better. The Research Park facility, in a more isolated location that prevents walking to comparable amenities, offers no such opportunities.
- Improved Outside Revenue Opportunities To operate a facility of this kind in a cost-effective manner, the university must work diligently to attract third-party users willing to pay for the space when it is not in use by DIA. The facility's flexibility will be an asset. It could host events ranging from large-scale, multifacility, multi-day tournaments to single-day competitions in hockey, volleyball, gymnastics, wrestling, and basketball. Indoor soccer would also be a possibility. Primary third-party users would be youth, high school, collegiate, and adult sports organizations. The facility could also service many non-sports events, including graduations and trade shows. Organizers have many different options when selecting sites for their events, making it very competitive for the facility operators to attract their business. By having the venue downtown in close proximity to the many amenities that district provides, you offer a more compelling total package to these organizers, providing a better opportunity to generate needed revenue. The Research Park does not offer the same appeal.
- **Better Student Access** For Division I hockey to be successful at the University of Illinois, the students must become a focal point of the weekend hockey experience. The arena will be designed to highlight a large, engaged student section. The downtown location is more convenient than the Research Park location to much of the student population, particularly as newly constructed student living accommodations continue to cluster around Green Street. The downtown location is a short walk from Green Street and is directly adjacent to the main bus terminal.
- **Stronger Economic Benefit** Over the last twenty years, perhaps no part of Champaign has changed more dramatically than downtown. Due to increased numbers of hotels, restaurants, bars, and retail outlets, downtown Champaign is thriving like never before. Adding a multipurpose arena and sports complex to such a central location would bring a significant influx of people and business. The economic benefit of the new facility would be far greater downtown than in the Research Park.



- **Pioneering Community Outreach** Partnering on the new downtown facility with the City of Champaign would represent a watershed moment for the University of Illinois. The university would be stepping away from its traditional mode of operation and extending, both literally and figuratively, into the community. In today's world of limited resources, these kinds of partnerships represent a new, innovative way of doing business that can expand the benefits of the university's investment beyond the campus. It is anticipated that the downtown project would be celebrated by those living and working in the Champaign-Urbana communities.
- More Attractive Financing The developers will be making a significant investment in the facility and surrounding amenities. In 2017, the City authorized an incremental financing (TIF) district to support the development. Finally, as discussed above, the downtown location has an attractiveness to community members, local businesses, and potential donors that the Research Park location lacks. The site's viability will allow for meaningful investment from the business community. Such significant third-party investments in the downtown project dramatically lower the costs of building on that site.
- Equivalent Facility Whether located in downtown or the Research Park, the functionality and spaces contemplated in the two facilities are largely comparable. Both facilities will feature the same number of sheets of ice; an arena with the same seating capacity and associated fan amenities; similar training and team spaces; abundant community areas; and comprehensive back-of-house capabilities. Proponents of the Research Park location cite use of University-owned land and available surface parking, but the developers have already acquired necessary land downtown and are prepared to build needed parking decks, all at no cost to the University.



NEXT STEPS

Collegiate Consulting believes that a transformational opportunity awaits Illinois as it contemplates whether or not to move ahead with the addition of men's ice hockey. Indeed, an argument could be made that this decision would alter the arch of the institution's already bold trajectory. Once a decision is made, Collegiate Consulting, College Hockey, Inc. and the NHL stand ready to work with Illinois in developing a strategic plan that would allow for an effective and efficient transition based on the following:

First, it is critical to develop a plan to successfully fund the program and make a facility decision.

Second, as the pro forma developed by Collegiate Consulting demonstrates, the launch of men's ice hockey will result in a substantial increase in budget expenses. Along this line, the strategic plan for increasing revenue during the transition period must focus on fundraising, corporate sponsorships, marketing, promotions, radio and television, and ticket sales while adding the additional support staff necessary to maximize these areas.

Finally, the facilities at a university underscore its commitment to academic and athletic excellence. Illinois and surrounding communities have in the past worked together in a creative, innovative and productive manner to build and/or operate mutually beneficial facilities. This cooperation and creativity will be critical in order to again provide synergistic solutions to building an ice arena in the downtown location that meets the playing and recruiting needs of the hockey team, and generates the revenue necessary to support the hockey program while also being a financial asset to the involved communities.

As a result of extensive long-range planning, Illinois has made it clear that it desires to do all things academic and athletic in a first-class manner. The widespread passion for the University, both on and off campus, positions it well for the demanding opportunities of tomorrow. Based on our experiences, and in order to guarantee the financial and competitive success of this move, Collegiate Consulting recommends that Illinois begin the process of initiating the building of its hockey programs, only after achieving the following:

• Establish an institutional consensus that this is consistent with Illinois' mission, vision and values. Illinois must gain support now from its faculty, staff, students, alumni and other stakeholders in order to guarantee the long-term benefits from such a move.



- Enter into a mutually beneficial Public Private Partnership with developers on the downtown site for the construction of a facility that will meet the short-term and long-term programmatic and financial needs of a Division I hockey program.
- Develop and implement a strategic plan for the launch of Division I hockey, including a detailed timeline and the creation of a financial pro forma that outlines the anticipated expenses and sources of revenue necessary to achieve and sustain this transition.

