

Joint Boards of Advisors Meeting

October 17, 2008

Purdue School of Engineering and Technology,
IUPUI

School Report

2008-09 Priorities for IU System

- Budget submission to legislature for 2009-11
- University campaign
- IU Master Plan
- Control of expenses (healthcare costs)
- Administrative searches
- International strategies
- Research administration portfolio
- Diversity plans
- IU's relationship to Clarion
- Relationships among IU, Purdue, and Ivy Tech
- Statewide economic development and IU RTC
- New academic initiatives (School of Public Health)

2008-09 IUPUI Priorities

- **Research, Scholarship, and Creative Activities**
 - 2007-08 External Grants (IUB: \$191M, PWL: \$292M, IUPUI: \$303M)
 - 29 Signature Centers (\$300K per center for three years)
- **Teaching and Learning**
 - One year retention rate for fall 2007 is expected to be 69.5%.
 - 2007 fall to 2008 spring retention rate is 87.4%.
 - Six year graduation rate for 2002 cohort is 32%.
 - Enrollment shaping
- **Civic Engagement**
 - National awards in civic engagement
 - Translating Research into Practice (Jafari, El-Mounayri)
- **Enhancement of the Resource Base**
 - Fundraising campaign
 - SRUF (Support for Recruitment of Underrepresented Faculty)

IUPUI Master Plan

- **Academic / Research:**
 - 9,439,260 GSF today
 - Up to 5 million GSF new, replacement
 - 75 acres (medical precinct)
- **Residential:**
 - 419,919 GSF Residential, 1,066 Beds
 - Additional 2,500 Beds (10%)
 - 1,000,000 GSF at 400 GSF/Bed
 - 30 acres
 - Or, additional 10,666 Beds (33%)
 - Up to 3,200,000 at 400 GSF / Bed
 - 99 acres
- **Parking:**
 - 16,660 spaces (8,448 surface) today
 - Re-distribute 6,800 surface spaces (75%)
 - 54 acres surface or 12 acres structured
- **Recreation/Athletics:**
 - 30 acres of Recreation/Athletics today
 - Provide up to 30 acres

IUPUI Master Plan-2

- **Surveyed 9 of 12 Peer Institutions:**
 - University at Buffalo
 - University of Alabama at Birmingham
 - University of Cincinnati
 - University of Illinois Chicago
 - University of Louisville
 - University of New Mexico
 - University of South Florida
 - University of Utah
 - Virginia Commonwealth University
- **IUPUI has 25% less space / student than the average peer institution (191 ASF / Student vs. 256 ASF)**
- **IUPUI has 26% less space / faculty than the average peer institution (2,347 ASF / Faculty vs. 3,154 ASF)**

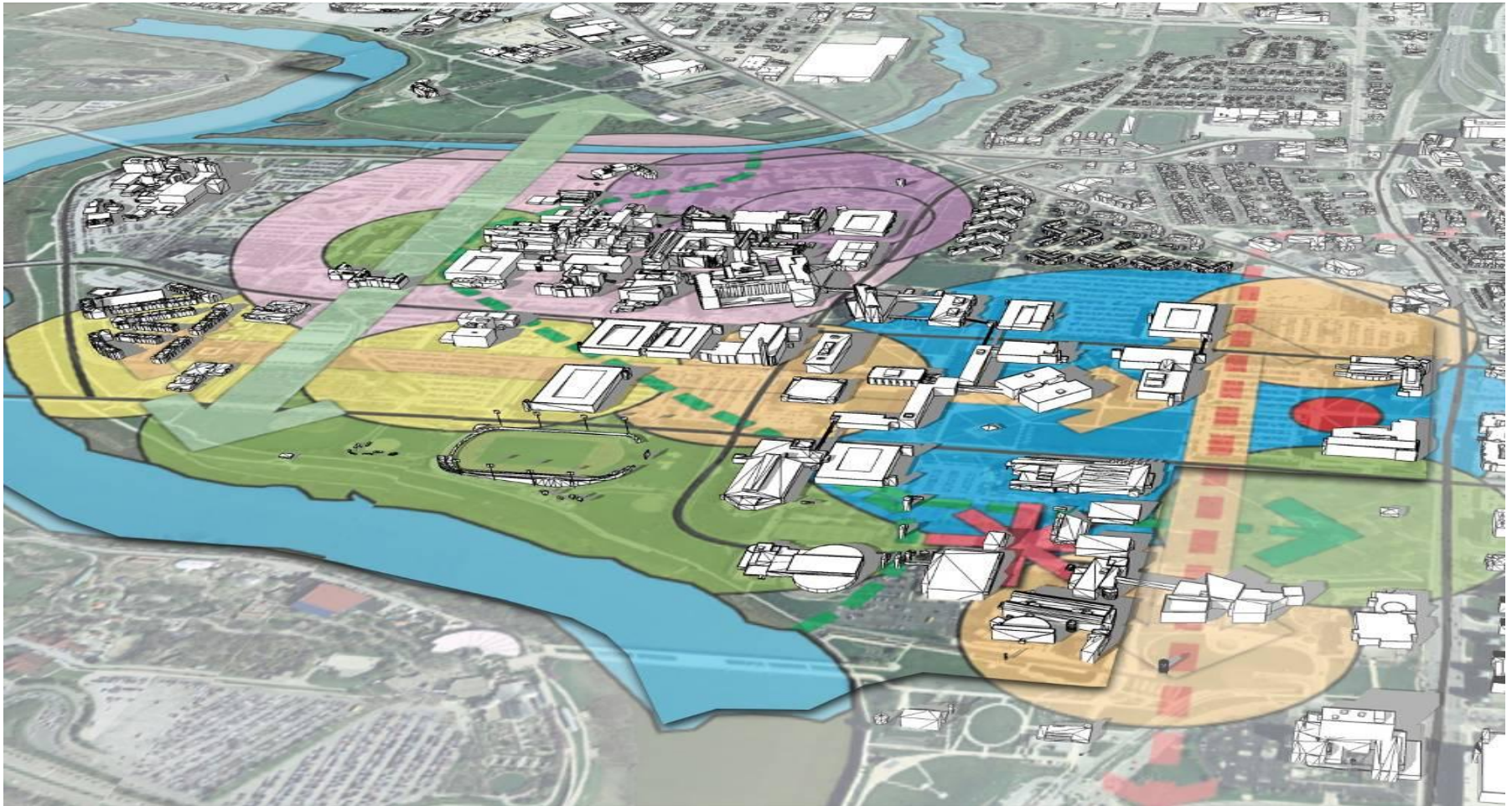
IUPUI Master Plan-3

- **Targeted enrollment: 35,000**
- **Projected Space Demand (preliminary): 3.5 Million GSF (2.1 million ASF)**
 - Research: 1 million ASF
 - Academic Offices: 300,000 ASF
 - Classrooms: 90,000 ASF
 - Teaching labs: 40,000 ASF
 - Academic non-office 60,000 ASF
 - Assembly/Exhibit: 130,000 ASF
 - Phys Education/Recreation: 90,000 ASF
 - Administrative Offices: 45,000 ASF
 - Physical Plant: 45,000 ASF
 - Administration non-office: 70,00 ASF
 - Campus Center: 80,000 ASF
 - Athletics: TBD

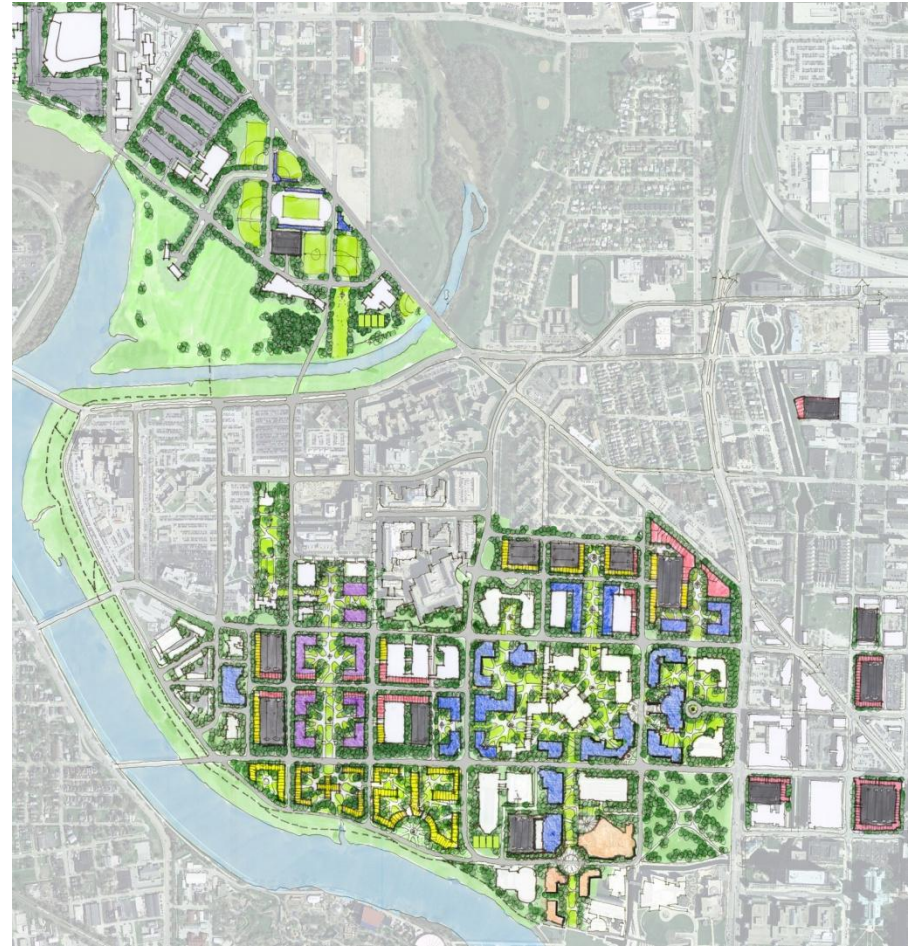
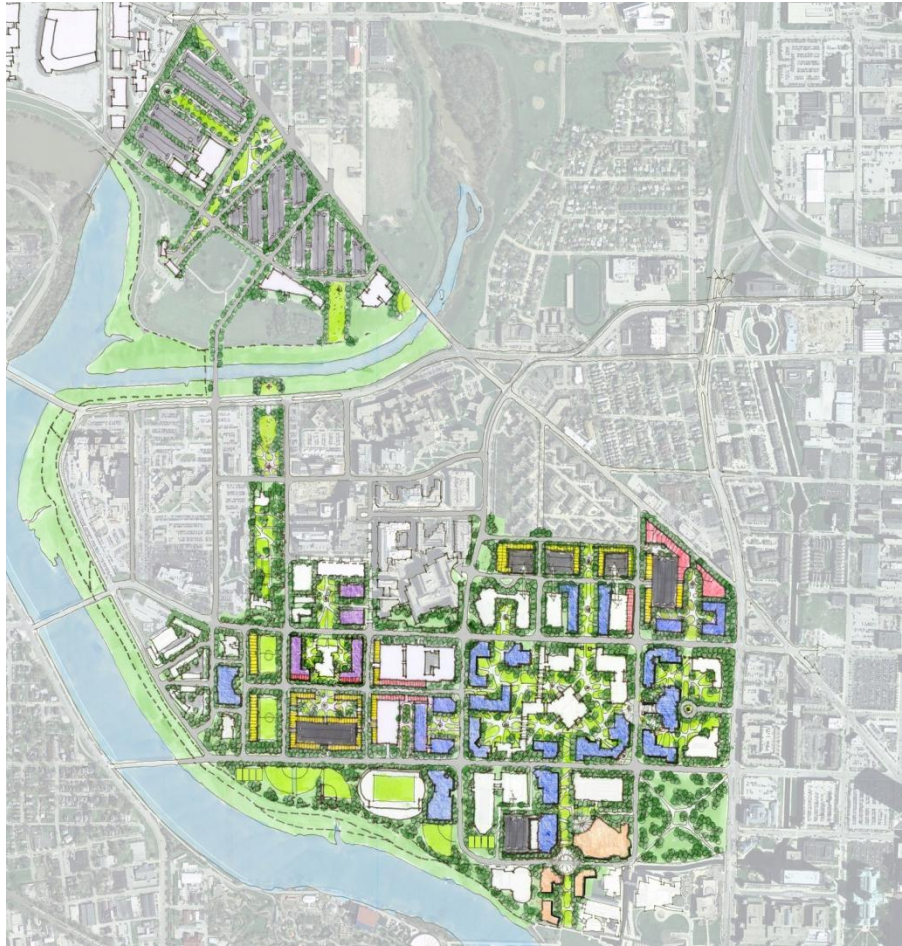
IUPUI Master Plan-4

- **Concept Direction**
 - Recreational Waterfront or Riverfront Housing
 - Michigan and New York Streets become 2-way
 - Vermont Street pedestrian-oriented
- **Residential/Mixed Use District**
 - Strengthen edges and spaces within East
- **Campus Academic District**
 - Mixed Use at Indiana Avenue and Cultural Trail
 - University Hall Performance Venue adjacent to Military Park
 - West Research Campus bridging renovated
 - Michigan Street for immediate building sites
 - North – South greenway linking historic resources from Fall Creek to White River through Ball Gardens
 - Residential District adjacent to Lockefield Gardens
 - Long Term Planning for Wishard Hospital Move

IUPUI Master Plan-5



IUPUI Master Plan-6



IUPUI Master Plan-7

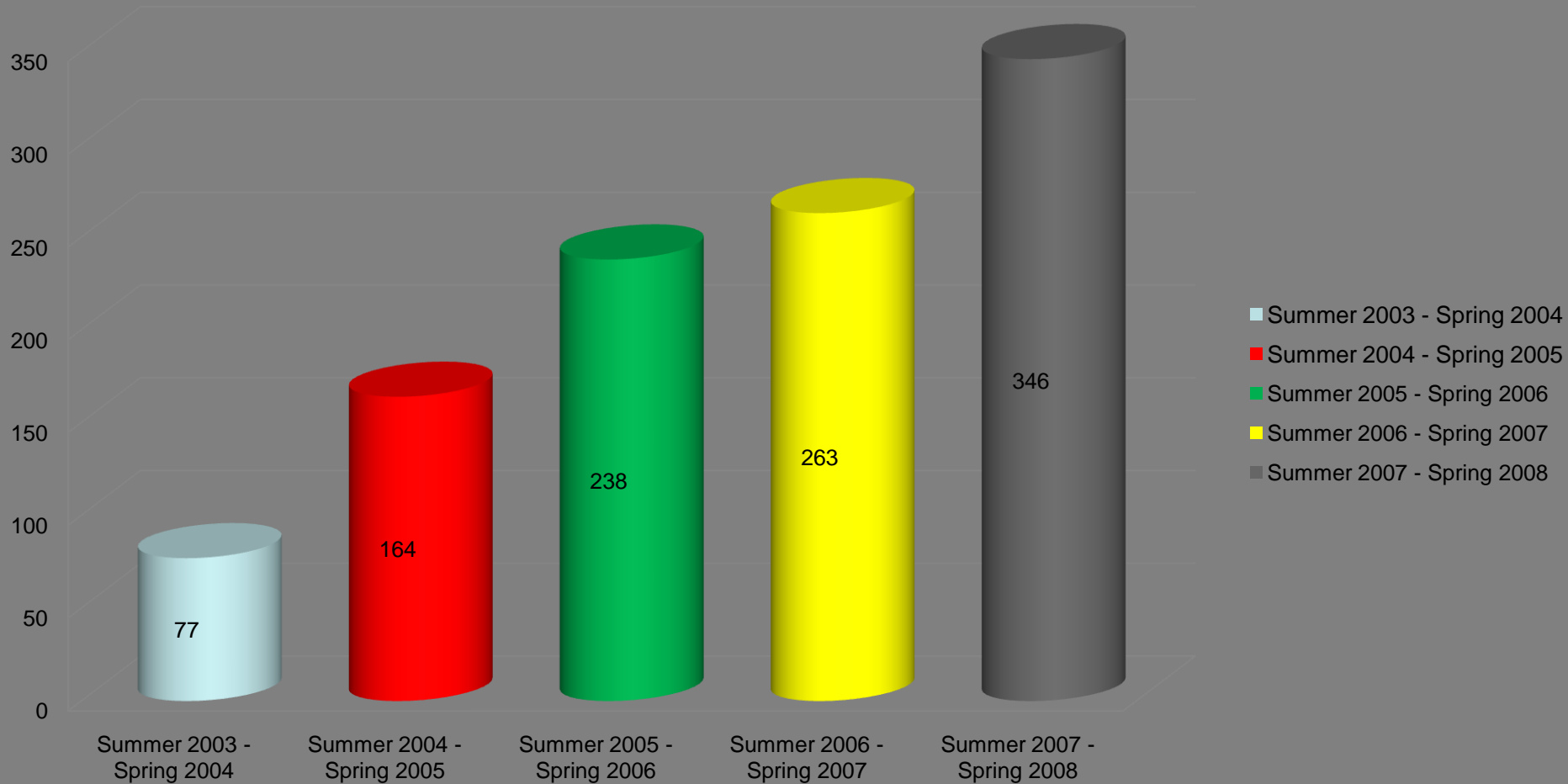


Enrollment Data

- IUPUI student headcount exceeded 30,000 for the first time.
- 72% of undergraduate students are full time.
- Highest number of minority students enrolled (4,551)
- School student headcount was up 3.4% and student credit hours were up 4.0% as compared to last year.
- School has the highest number of non-resident international students (295, 11%)

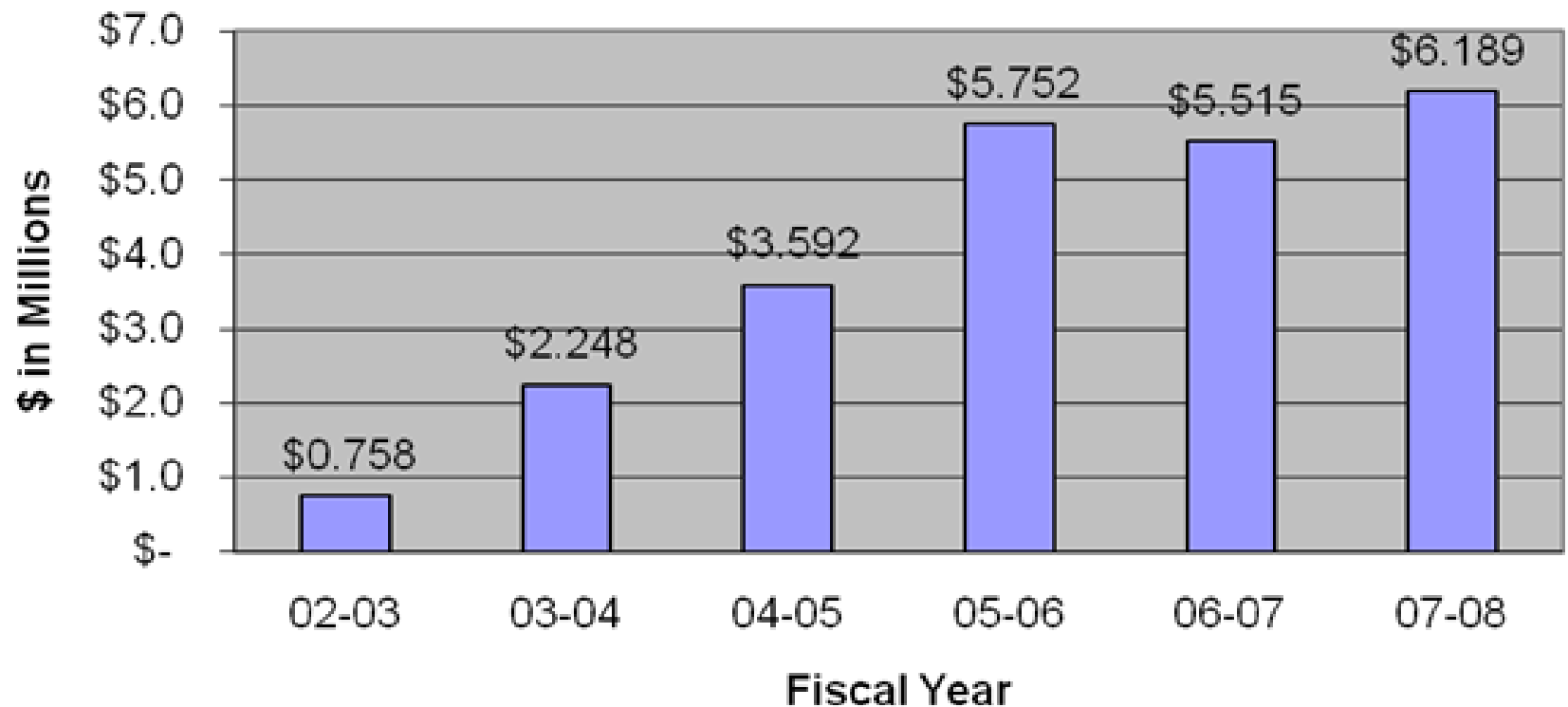
Internships and Co-ops

Internship and Cooperative Education



Grants and Contracts Data

Total Awards



Major Accomplishments (2007-08)

- **New degree programs**
 - Motorsports Engineering-BS
 - Music Technology-BS
 - 5-year BS/MS program and a dual BSEE/BS in Physics program
 - Online MS degree in Facilities Management
- **ASEE National rankings (2007)**
 - Third place for technology BS degrees awarded
 - First place for technology BS degrees awarded to women
 - Third place for technology student enrollment
- **Transfer agreements**
 - Ivy Tech, Franklin College, and IU East
 - HCIT (Malaysia) and CNA (Canada and Qatar)

Major Accomplishments-2

- **School received record research funding of \$6.2M**
 - Ghassan Kassab, NIH-NHLBI, “The Role of Shear Stress in Heart Failure”, \$359,952. This is a five-year R01 grant from NIH totaling to \$1.8M.
 - Ghassan Kassab, FlowCo, Inc., “Impedance Planimetry Device Pre-Clinical Validation”, \$233,500.
 - Razi Nalim, Rolls Royce Corporation, “Wave Rotor Combustion Rig Design and Analysis”, \$200,000.
 - Sohail Anwar, Indiana Office of Energy, “Plug-in Hybrid Electric Vehicle (PHEV) Development”, \$132,392.
- **Two new Signature Centers (in addition to Lugar Center for Renewable Energy) were created.**
 - Transportation Active Safety Institute (TASI)
 - Biomechanics and Biomaterials Research Center

Major Accomplishments-3

- **Accreditation**

- Interior Design Technology-BS program received full 6-year accreditation from CIDA.
- ABET reaccredited Electrical Engineering and Computer Engineering programs.

- **Our students**

- Fourteen of the 2007 IUPUI Top 100 students were from our school.
- Four of our students made it to Top 10 Men and Top Ten Women list.
- Rachel Meyer (BME) was selected as the Top IUPUI Female student.

Major Accomplishments-4

- **Successful summer programs**
 - MEAP
 - Indiana Summer Transportation Institute
 - Pathways to Engineering Camp
 - TECH Camp and Power Camp
 - Motorsports summer program
 - International research internship program at IUPUI
 - CGT program in Poland (UITM and UCM)
 - OLS programs in Germany and Mexico

Priorities for 2008-09

- **Targeted enrollment increase**
 - Recruit more minority and women students
- **Targeted research expansion**
 - Signature Centers and new strategic areas
- **Marketing of the school**
 - New School Website
 - Work with marketing firm
 - Special marketing of motorsports engineering

Priorities-2

- **Quality**
 - Initial ABET accreditation visit (CIT and CGT programs)
 - Accreditation of Music Technology Program
- **Diversity**
 - Closer collaboration with campus
- **Space**
 - Planning for IUPUI Innovation Center
 - Renovation of spaces in ET and SL Buildings
 - New engineering, science, and technology building
- **Engagement**
 - Building up department and school plans for fundraising
 - I-STEM
 - Closer connection to business and industry

Deans Industry Advisory Council

Chair – Clayton Nicholas, Delphi

- **Mission**

- The mission of the DIAC is to guide and support the School of Engineering and Technology in providing relevant educational experiences for students, comprehensive outreach and accessibility to the community through civic engagement, excellence in research and creative activity, and meaningful activities that support the intellectual and economic development of community stakeholders. In addition, DIAC members are an effective and committed two-way information conduit between the School, industry, and the community.

- **2008 Goals**

- Re-examine DIAC Mission, Vision and Activities
 - Based on School's Strategic Plan
 - Members to be fully acquainted with objectives
- Re-energize & restructure subcommittees
- Expand on Diversity and Innovation
- Promote the School's capabilities and successes
- Increase mutual awareness of School and member companies

- **2008 DIAC Accomplishments**

- Four Subcommittees reorganized and reinvigorated
- Three meetings at industry sites
- Programs have emphasized Signature Centers and successful School-Industry collaboration

DIAC Diversity, Recruitment & Retention Subcommittee

Chair - Vince Newsom, Delphi

- **Mission**

- Support the school in diversity, recruitment and retention matters and the drive to create an environment that respects and values diversity among students, faculty and staff.

- **2008 Goals**

- Review diversity and recruitment goals and metrics
- Recommend and supporting programs and activities
- Critique schools activities and initiatives
- Provide an industry perspective
- Establish a link to the school's Diversity Council

- **2008 Committee Accomplishments**

- Provided student and faculty peer institution metrics data for diversity and retention for E&T and summarized for DIAC members
- Represented DIAC on the E&T Diversity Council
- Provide recommendations to ISTEM (Indiana Science, Engineering, Math) Initiative
- Provided awareness to DIAC of student programs (MEAP, POWER, ISTI, Pathways to Engineering, Project Lead the Way) and provided recommendations for improvement.

DIAC Research Subcommittee

Chair – Wayne Eckerle, Cummins

- **Mission**

- Continue to advise and guide research activities of the School, especially collaboration with Industry

- **2008 Goals**

- Guide Industry Relations research marketing plans
- Help define School competitive advantage and research strategy
- Critique Engineering Professional Practice Plan
- Review concepts for the proposed Innovation Center
- Work with department Industry Advisory Boards to establish focal points from industry to help with departmental research plans
- Critique Departmental Research Plans

- **2008 Committee Accomplishments**

- Helping to define E&T competitive advantage and research strategy
- Reviewed Engineering Professional Practice Plan & Innovation Center plans
- Provided industry input on Technology Export Controls
- Critiqued Research Plan Template & one Department Plan to date

DIAC General Administration Subcommittee

Chair – Dale Jacobs, BSA LifeStructures

- **Mission**

- Vehicle to achieve continuity in DIAC leadership and establish DIAC policies such as membership terms & attendance and selection of new DIAC members

- **2008 Goals**

- Improve DIAC leadership transition and continuity
 - Examine length of term for Chairman
 - Name Chair for 2010
- Benchmark DIAC with peer schools & recommend improvements
- Examine diversity of industries represented on the DIAC
 - Review new member candidates & recommend to Executive Committee
- Development of Five Year Plan for DIAC

- **2008 Committee Accomplishments**

- Leadership transition in place thru 2010
- Chairman's term to remain at one year
- Five new members inducted this year
- Benchmarking completed with four peer schools
- Developed response to Indiana Commission for Higher Education supporting research role for Engineering and Technology at IUPUI

DIAC Industry Resources and Networking Subcommittee

Chair – Craig Edlin, Emerson

- **Mission**

- The mission of the industry resources and networking subcommittee is to facilitate comprehensive outreach, civic engagement and communication flow between industry, faculty, students and administration.

- **2008 Goals**

- Identify ways to help the DIAC better accomplish its mission
 - Increase meeting attendance
 - Improve communication between and among the members and the School
- Accumulate feedback from DIAC Stakeholders and recommend improvements

- **2008 Committee Accomplishments**

- Developed a series of observations from members
 - Input to Five Year Plan
- Survey submitted to DIAC members