

Graduate Education in the 21st Century

Annual Graduate Faculty Meeting
February 2, 2012

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Overview

- COGS –Annual Report
- Directions 2011 – Progress Report
- Council of Graduate Schools
 - *The Path Forward -2010*
 - *Pathways through Graduate School and into Careers-2012*
- 21st Century Challenges and Opportunities

UT-BOT Resolution

January 25, 2010

- o ...be it resolved that...

“The University of Toledo Board of Trustees charges the President of the University to work, as appropriate, with administrators, faculty and staff to accelerate fundamental, transformative and sustainable changes to elevate the stature of the undergraduate and non-professional graduate programs during fiscal years 2010-12 to create a vibrant institution thriving into the 21st century.”

COGS: Vision Statement

The **vision** of the College of Graduate Studies is

- to enable its graduate and professional academic programs to become nationally distinguished and highly ranked and
- to improve the human condition by preparing graduates for **careers in the 21st century** and fostering a culture of life-long learning.

COGS: Mission Statement

The **mission** of the College of Graduate Studies is

- to provide leadership for graduate education through exceptional support services for graduate students and faculty;
- to foster quality in graduate education, research and scholarship;
- to nurture the diversity and collegiality of graduate programs; and
- to work with Graduate Council to establish university graduate policies, standards and procedures that define best practices for the graduate programs it serves.

COGS Annual Report AY2010-11



more ways to build on your degree at the UT College of **GRADUATE STUDIES**

more earning potential:
New credentials and knowledge can pay off

more programs:
200 graduate/professional programs in nine colleges

more graduate options:
Part-time and online programs and classes available

To become one of UT's 5,000 graduate students and learn more, visit utoledo.edu/graduate or call 419.530.GRAD.



COGS Snapshot AY 2010-11

- 10 colleges with graduate programs
- 4,766 graduate students
- 768 graduate faculty
- 164 graduate degree programs:
 - 38 Ph.D. (including DNP, ODT, DPT and DE)
 - 126 Master's (including 10 professional master's programs)
 - and 24 graduate certificate programs
- 1,649 degrees awarded in 2010-11:
 - First Professional- 273
 - Doctoral- 372
 - Master's- 977
 - Education Specialist –27
 - and 22 Graduate Certificates

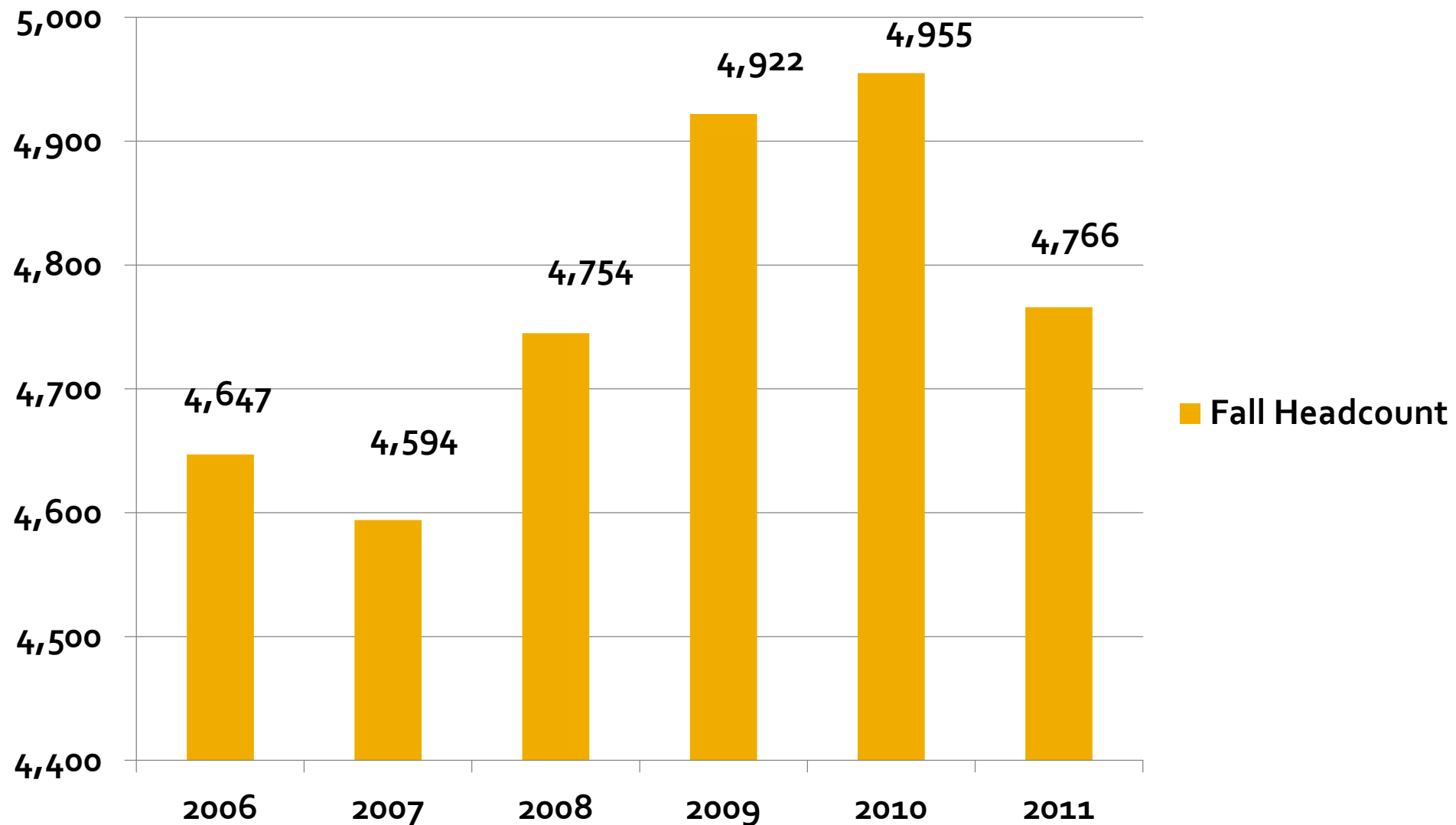
COGS- Fall 2011 Enrollment Statistics

(Source: Institutional Research)

- **Enrollment:** 4,766 Headcount, 3,291 FTE
- **Gender:** 55.4% female, 44.6% male
- **Diversity:** 64% White, 16.4% ethnic minority, 14.1% international
- **Residency:** 70% in-state, 15.9% out-of-state, 14.1% international
- **Load:** 66.7% full-time, 33.3% part-time

COGS Enrollment Trends

2006-11

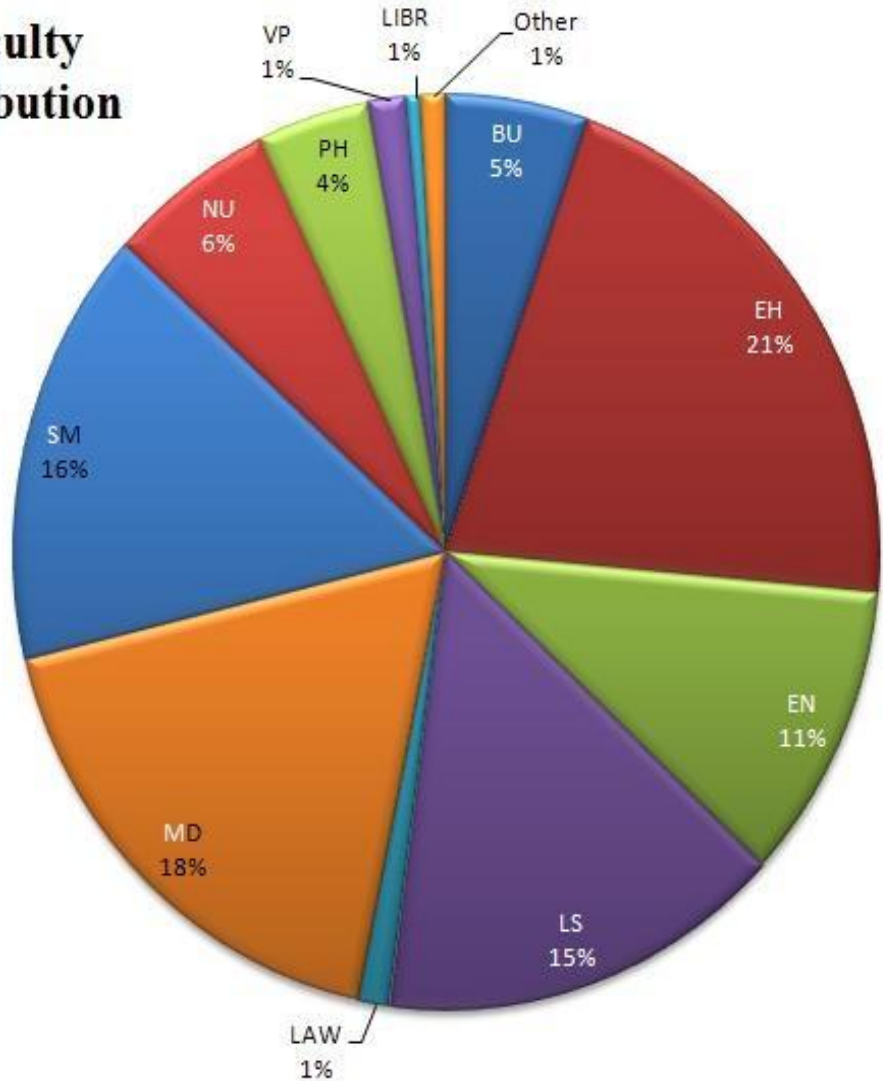


COGS- Quick Facts AY2010-11

- **Admissions:** 3,631 applications (1,322 admitted)
- **Professional Development Programs:** 16
- **Graduation Clearance:** 1,671 students
- **GAPA's/ePAF's Processed:** ~1,000
- **Graduate Faculty Applications:** 138
- **Graduate Curriculum Processing:** 148 actions for Graduate Council
- **National Surveys:** NSF , CGS, ACT

Graduate Faculty by College

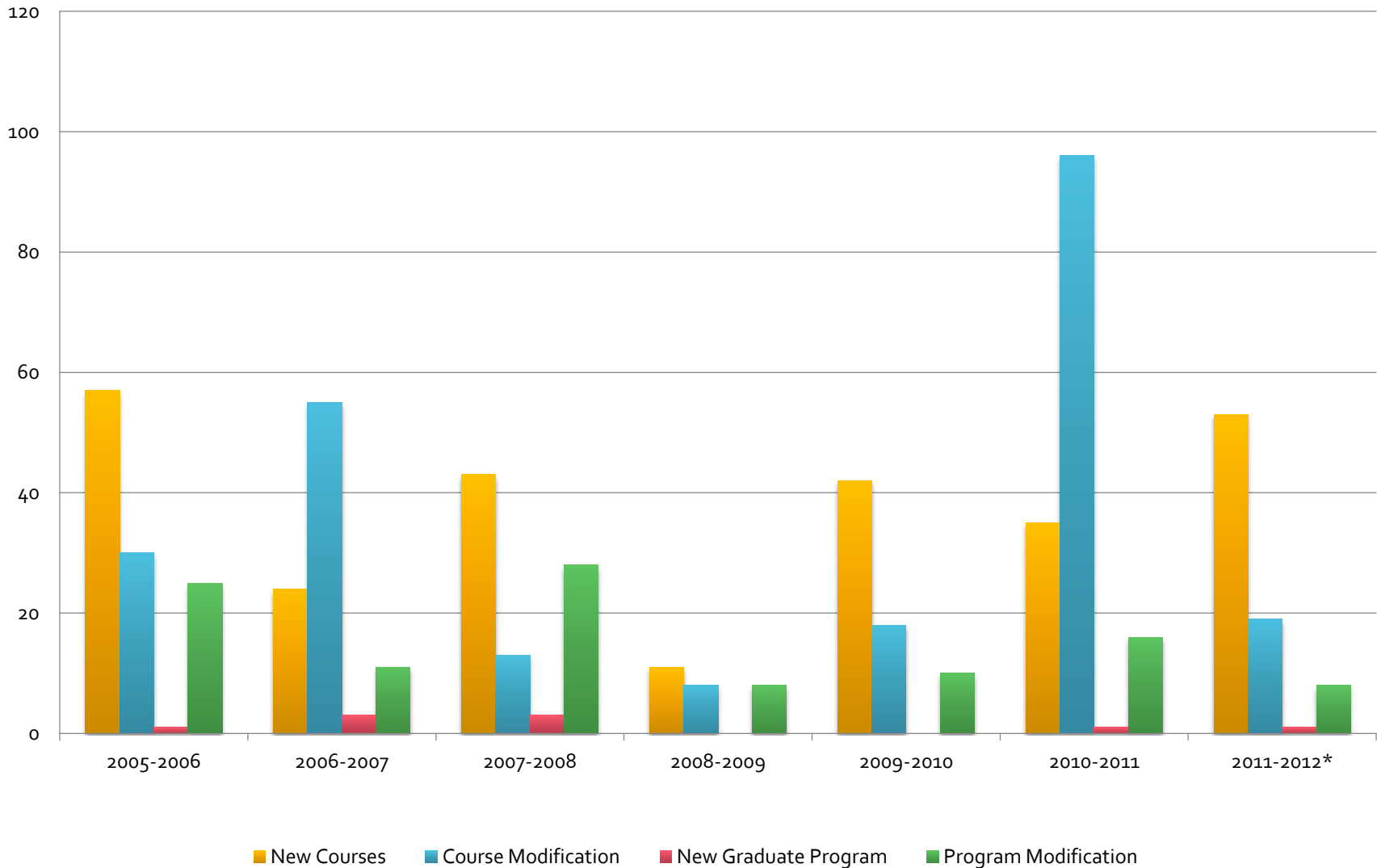
Total Graduate Faculty Membership Distribution Chart



- BU - College of Business and Innovation
- EH - Judith Herb College of Education and Health Science and Human Service
- EN - College of Engineering
- LS - College of Language, Literature, and Social Sciences
- LAW - College of Law
- MD - College of Medicine
- SM - College of Natural Sciences and Mathematics
- NU - College of Nursing
- PH - College of Pharmacy and Pharmaceutical Sciences
- VP - College of Visual and Performing Arts
- LIBR - University Libraries
- Other

Total Number of Memberships: 768

Overview of Curricular Changes 2005-2011



COGS Initiatives AY 2011-12

- **Graduate Program Review:**
 - Doctoral: March 2011-2012
 - Master's: August 2011-2012
- **First COGS Assessment Plan & Report** (fall 2011)
- **First COGS Diversity Plan & Report** (fall 2011)
- **Established COGS Diversity Committee** (fall 2011)
- **Establishing COGS Alumni Advisory Board** (spring 2012)

21st Century changes in COGS: Student Centered Initiatives

- “LIVE Chat” function for applicants
- Social Media: Facebook and Twitter
- New Orientation Program-includes new required online modules on *Academic Integrity, Welcoming Diversity and Preventing Harassment*
- Travel Funding ~\$10K last year
- Graduate “tab” on the UT web portal-fast access to COGS info/forms (pdf-fillable and URL-linked)
- Exit Survey of graduating students

Graduate Student Exit Survey- Fall 2011 Comments

- “UT is a great place for graduate studies”
- “UT is a excellent University I would like to return back to it for my PhD”
- “Fantastic school and very helpful!”
- “Great school, I made the right choice. Thanks for everything!”
- “Great place to learn!”

Graduate Student Exit Survey- Fall 2011 Comments-2

- “I thoroughly enjoyed my education at UT and gained experiences which are priceless.”
- “I enjoyed my experience at UT. I was very blessed to have some wonderful professors.”
- “I enjoyed my time at UT. I will use my educational tools that I have learned at UT in the work field.”

Directions 2011 Goal 2: Graduate and Professional Academic Programs

- Our graduate and professional academic programs will be regionally relevant, nationally distinguished and highly ranked.
- These programs at UT will be known for high **quality** while maintaining **accessibility**, **affordability** and **engagement**. STEMM (Science, Technology, Engineering, Mathematics, Medicine) and professional programs will have high visibility.

Directions 2011

Goal 2 Progress Report



Directions 2011

The Strategic Plan of the University of Toledo

Goal 2: Sub-goals

- 2.1 We will enhance the **quality** and stature of all of our programs.
- 2.2 We will work to assure **affordability** of our graduate and professional programs.
- 2.3 We will work to ensure **accessibility** to a diverse student population.
- 2.4 We will establish a recognized role in **economic leadership** and stimulation of the regional economy.

Sub-goal 2.1. We will enhance the quality and stature of all our programs.

- 2.1h. Use program review outcomes to inform strategic reallocation of program funding.
- Status:
 - Doctoral program review -underway and will be completed in spring 2012 (38 programs)
 - Master's program review -underway and will be completed in summer 2012 (126 programs)
 - Strategic reallocation of program funding -occurred every year since FY10

Sub-goal 2.1. Quality-cont.

- 2.1j Establish undergraduate-to-graduate pipeline for existing and new graduate/professional programs.

Status:

- Fall 2011-New B.S. in biology/ M.S. in bioinformatics
 - 5 year (not 6 year) program
 - Interdisciplinary between the Colleges of Medicine & Life Sciences and Natural Sciences & Mathematics
- Fall 2012 -New BSN to DNP pathway in the College of Nursing (direct entry post-baccalaureate to professional degree program)

Sub-goal 2.1. Quality-cont.

- **2.1k** Develop interdisciplinary graduate/ professional programs in emerging areas and incorporate interdisciplinary education in current programs where appropriate.

Status

- Fall 2010-Initiated new **Professional Master's degree in Photovoltaics**
 - Brings together Physics, Business and the NW Ohio solar industry (internships)
 - Seeking national "Professional Science Masters (PSM)" designation
- Fall 2012/13- Additional PSM's in development in the Colleges of Medicine & Life Sciences (BRIM) and Natural Sciences & Mathematics (Green Chemistry, Biotechnology, Environmental Sustainability, and Industrial Mathematics)

Sub-goal 2.2. We will work to assure affordability of our graduate and professional programs.

- **2.2b** Annual evaluation of strategic allocations of funding to maintain affordability.
Status:
 - Reallocations to increase competitive stipends in the STEMM areas
 - Reallocations of tuition scholarships to address the needs of the adult learners (part-time working professionals like teachers and nurses)
- **2.2c** Identify employers to find financial support for graduate/professional students.
Status:
 - Identified a core of 20 NW Ohio employers
 - Hire 20-25 graduate students each year (contracts total ~\$400-\$500,000 annually)

Budget Considerations- Affordability Issues

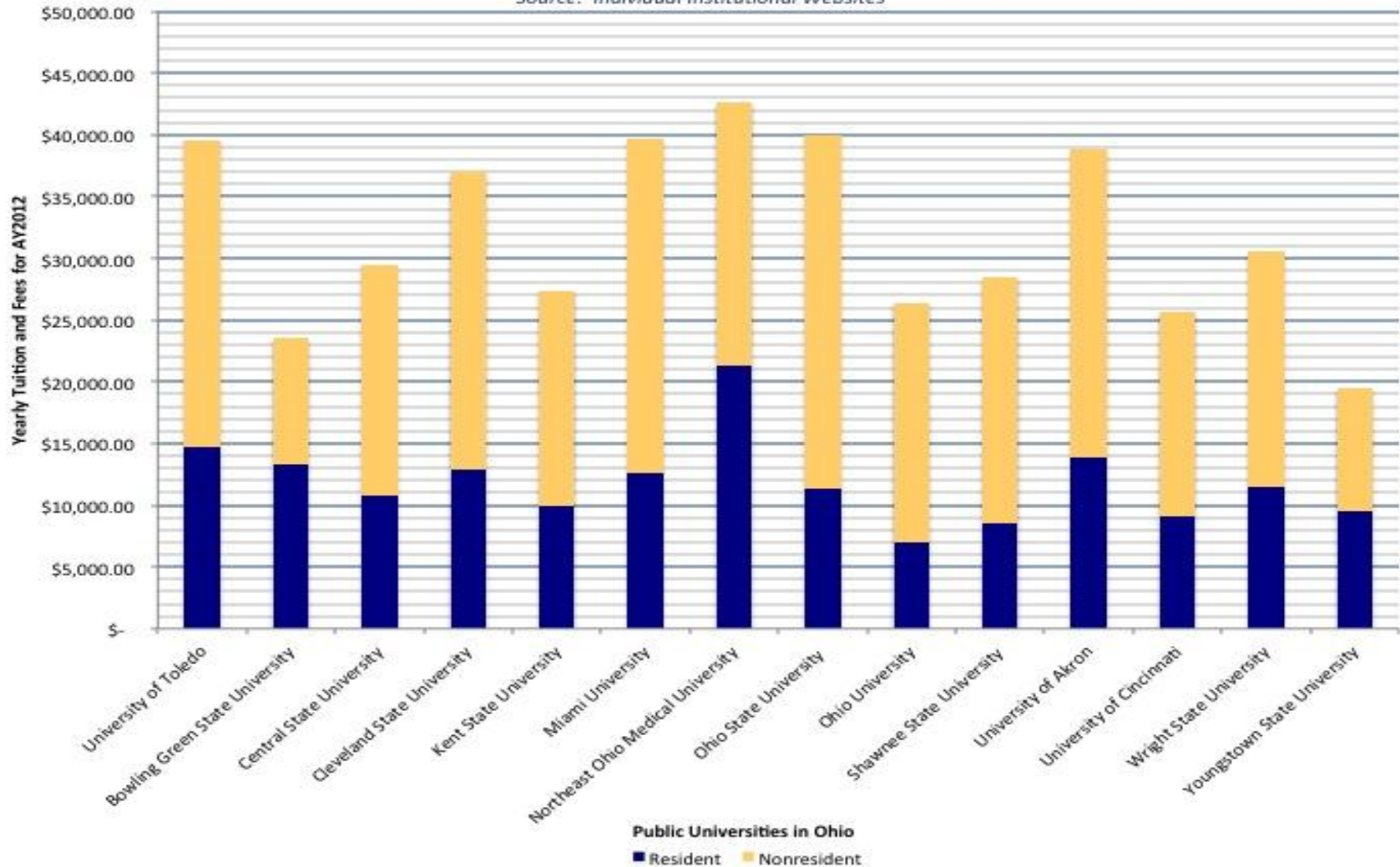
- **Tuition** –increased 3.5-6.5% every year since 2001
- **Stipends** – flat stipend budget for 10 years
- **Health Insurance** –high UT premiums (reduces stipend package competitiveness)
- **Federal Proposal- loss of subsidized Stafford loans** for graduate/professional students (\$18B could be shifted to cover UG Pell grants)
- **Economic factors impacting enrollment** –adult learners impacted by mortgage crisis-cannot get home equity loans to assist with tuition
- **Competition**-BGSU and Lourdes are successful in recruiting education and business students in NW Ohio

Graduate Tuition and Fees-2012

(from BOT presentation 1/23/12; slide from Marcie Ferguson)

Goal 2.2 | Competitive Graduate Tuition and Fees

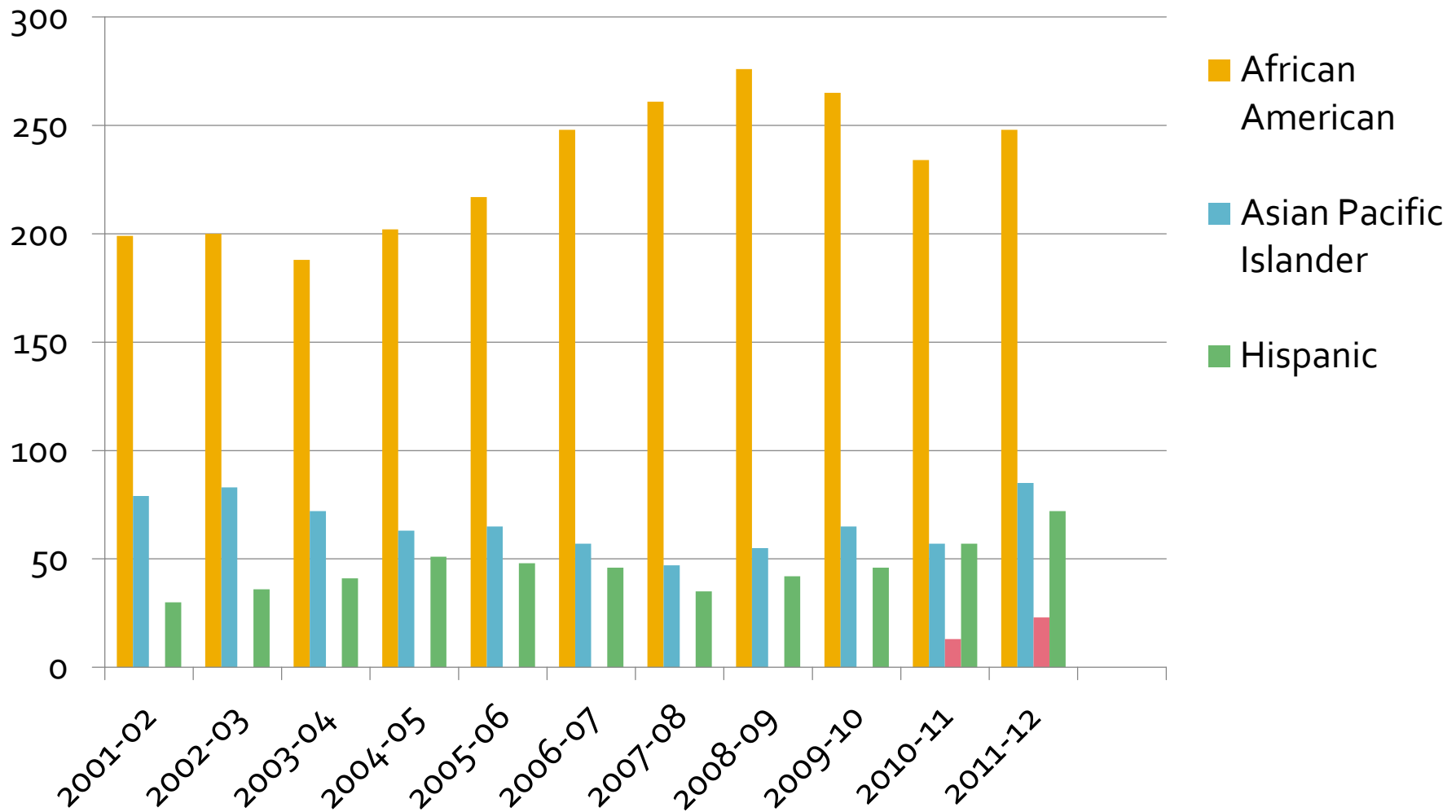
Source: Individual Institutional Websites



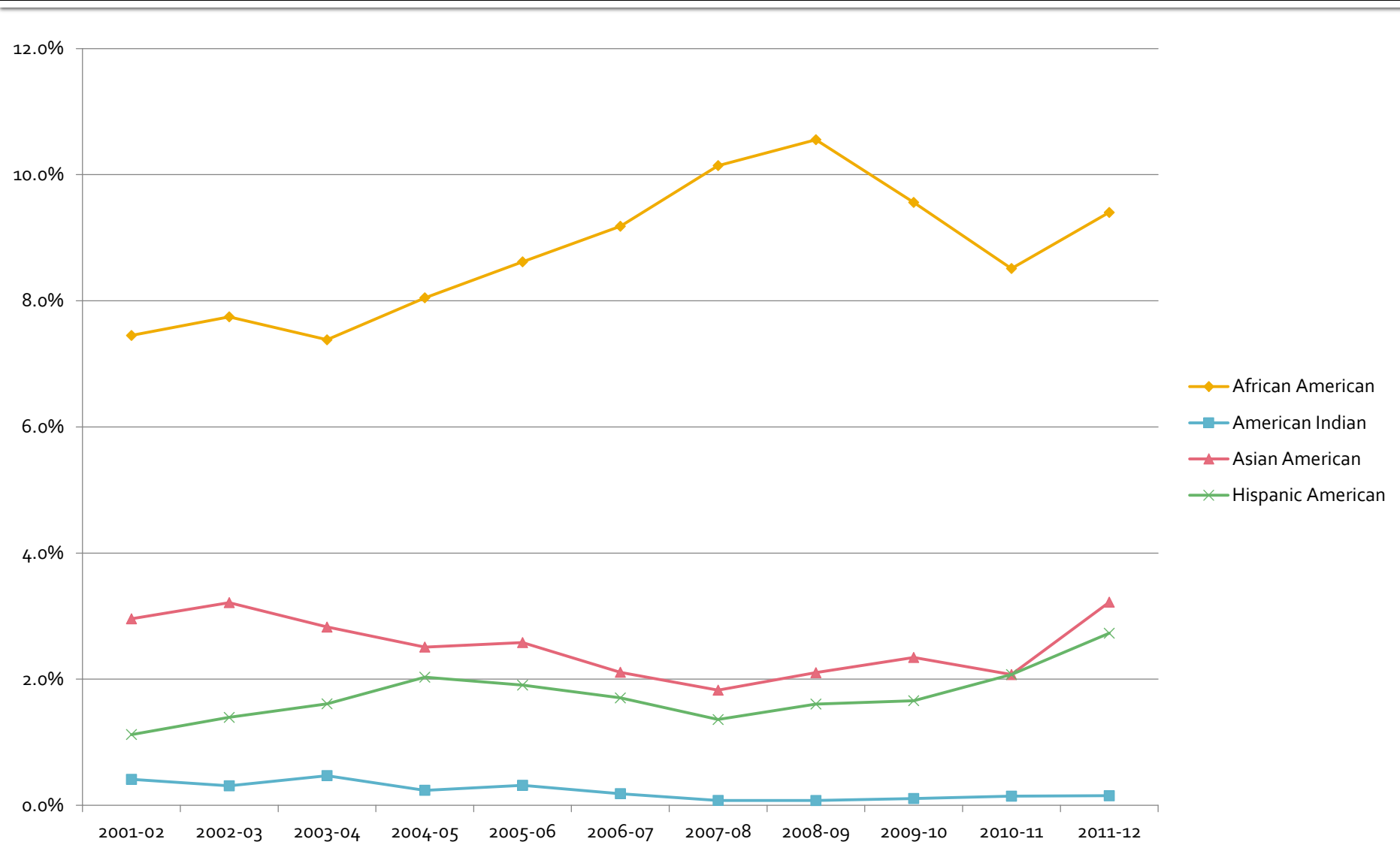
Sub-goal 2.3. We will work to ensure accessibility to a diverse student population.

- 2.3a Seek opportunities to increase the proportion of graduate students from historically underrepresented groups.
- Status:
 - Increased stipend/scholarship awards in the Graduate Opportunity Assistance Program (GOAP) from 2 in 2009 to 20 in 2011
 - Recruited four McNair Scholars for AY2011-12: 2 doctoral (DPT and Exercise Science) and 2 Master's (CNL and MPH)
 - Established COGS Diversity Committee

Graduate Ethnic Minority Enrollments 2001-2012



Percentage of Graduate Ethnic Minorities 2001-12



Sub-goal 2.4. We will establish a recognized role in economic leadership and stimulation of the regional economy.

- 2.4a Enhance University relationships with regional, national and global institutions.
- Status:
 - Well-established MBA in India program with PSG Institute of Advanced Studies (sp'12- 91 grads)
 - Fall 2011-New MS in Mechanical Engineering in India (PSG)
 - Fall 2012-New MBA in Egypt
 - Fall 2013-proposed expansion of new PSM in Photovoltaics to the UAE (Abu Dhabi/Masdar City)

Sub-goal 2.4. Regional Leadership-cont.

- **2.4e** Organize and sponsor high-profile economic, social, and scientific conferences and events; co-sponsor with external entities.
- **Status:**
 - Spring 2012-3rd Annual Midwest Graduate Research Symposium
 - Spring 2011-the UT Graduate Student Association hosted the 2nd Annual Midwest Graduate Research Symposium-200 attendees from 10 universities ([P212121 sponsor](#))
 - Spring 2010-Medicinal Chemistry graduate students hosted the 42nd Annual Mid-Atlantic Graduate Student Symposium ([ACS](#), [Abbott](#), [Boehringer Ingelheim Pharmaceuticals](#), and [IUPAC](#) sponsors)



Council of Graduate Schools

Council of Graduate Schools

- National organization of >500 institutions of higher education in the USA and Canada engaged in graduate education, research and preparation of candidates for advanced degrees
- CGS member institutions awarded 92% of the doctoral degrees and 77% of the master's degrees in 2010
- CGS is partnered with ETS to examine Future of Graduate Education (FGE)
- April 2010-First FGE joint commission report-*The Path Forward*
- April 2012 (anticipated)-Second FGE joint commission report –*Pathways Through Graduate School and into Careers*

CGS-The Path Forward 2010

An aerial photograph of a university campus. In the foreground, a large white sign with a blue border is centered. The sign contains the logo 'FGE' in orange, followed by the text 'COMMISSION ON THE FUTURE OF GRADUATE EDUCATION IN THE UNITED STATES' in dark red. The background shows a paved walkway with several people walking, some trees, and a building with a staircase.

FGE

**COMMISSION ON THE
FUTURE OF
GRADUATE
EDUCATION
IN THE UNITED STATES**

CGS-Pathways Through Graduate School into Careers-2012

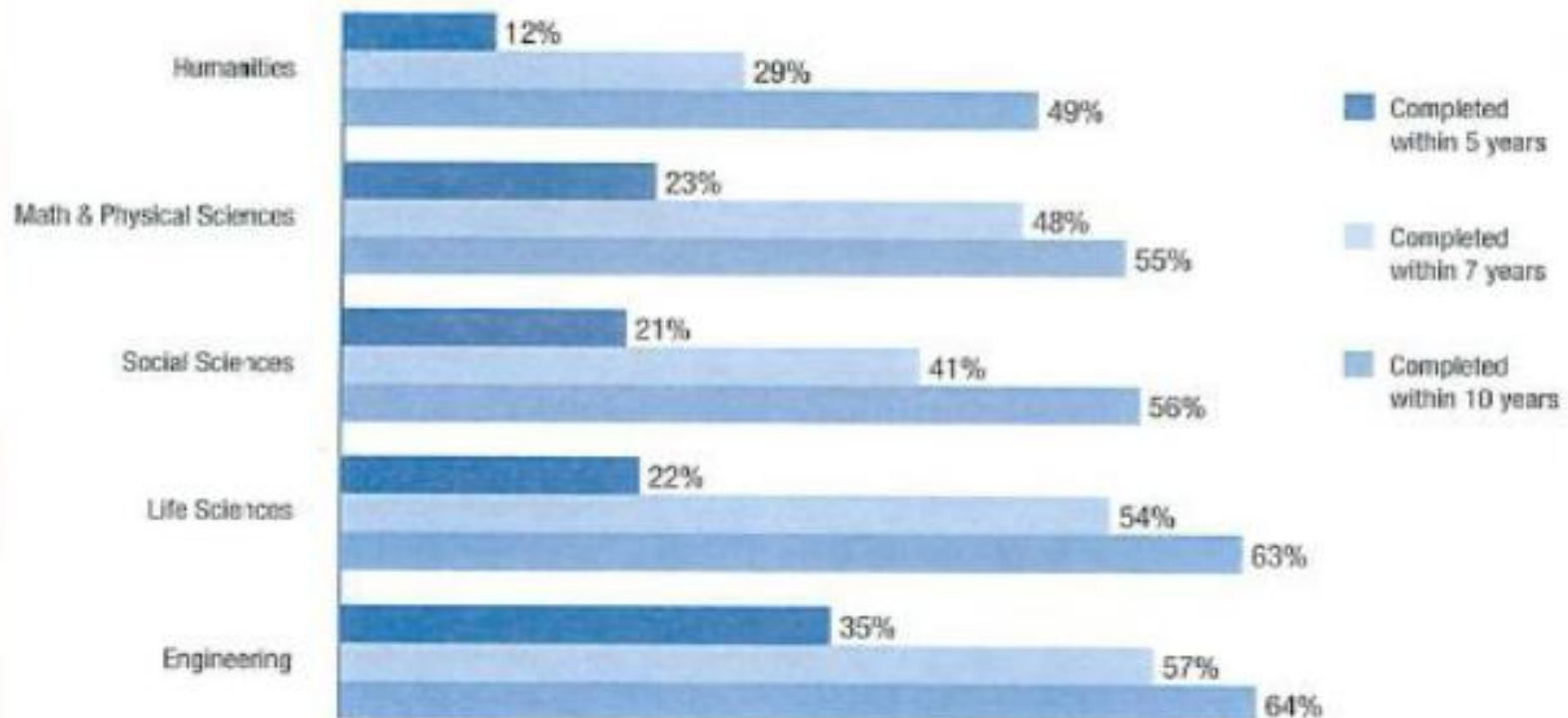
21st Century Challenges for Graduate Education:

- Changing demographics- graduate students will be older
- Attrition and time to degree considerations- 40-50% of doctoral students fail to complete, even after 10 years
- Debt accumulation-reaching epic proportions
- Lack of career transparency

Doctoral Completion Rate by Field and Number of Years (CGS 2008)

Figure 6

Doctoral completion rate, by field and number of years.



Source: Council of Graduate Schools, (2008), *Ph.D. completion and attrition: Analysis of baseline program data from the Ph.D. Completion Project*. Washington, DC: Author.

Transition Through Graduate Education into Careers-why important?

- **By 2020, BLS estimates that the number of jobs requiring advanced degrees will increase by 2.5 million**
 - 18% increase in jobs requiring masters
 - 17% increase in jobs requiring doctorates
- **Understanding career options may be a factor in deciding to go to graduate school**
 - The knowledge-based economy of the 21st century requires advanced knowledge and skills
 - Graduate education provides that and produces innovators

President Obama's 2012 State of the Union Address

- Encouraged the US to invest in education at all levels or we will lack the talented workforce that will drive innovation in the future
- Emphasized keeping higher education affordable –holding the line on tuition increases
- Stated that “growing industries in science and technology have twice as many openings as we have workers who can do the job.”

21st Century Opportunities at UT

- Develop 21st Century degrees
 - New professional science master's degrees
 - New professional doctorates
 - New pipeline degrees (like the BSN to DNP)
- Prepare students for 'alternative' (non-academic) careers –only 25% land academic positions
- Increase emphasis on online offerings
- Recruit adult learners-place bound in NW Ohio
- Propose evening/weekend graduate programs (perhaps market as "UT @ Night")

Summary

COGS looks forward to playing a lead role in preparing UT graduate students for 21st century jobs by:

- Recruiting the best and the brightest graduate students to high quality, affordable, and accessible programs
- Creating new certificates and degree offerings to meet the needs of the 21st century workforce (Cyber security? Digital humanities? Health informatics?)
- Seeking partnerships with employers to prepare our graduate students for careers
- Seeking new partnerships across the globe

Graduate Education in 2020: What does the Future Hold?

“...graduate and professional education is valuable both for the learning it imparts and because it is the gateway to future learning on the job”.

Anthony Carnevale, Director of the Georgetown University Center for Education and Workforce

(CGS 2009)

New University Fellows AY 2011-12



Thanks- Any questions?