

Celebrating Partnerships: 2015 NACME Continuum Meeting

Falls Church Marriott, Fairview Park
Falls Church, VA

October 13-14, 2015

Corporate Sponsor

NORTHROP GRUMMAN

The logo for Northrop Grumman, featuring the company name in a bold, italicized, blue sans-serif font. Below the text is a thick, blue, curved line that starts under the 'N' and ends under the 'M', arching upwards in the middle.

Connectivity 2015 Strategic Plan:

Scholarship Program (2010-2015)

- Purpose

- Increase awareness about the accomplishments of NACME's 2010-2015 Scholarship and University Relations plan
- Increase awareness about the National Science Foundation (NSF) opportunities
- Share the NACME Scholar program's framework for the next five years
- Present key findings from NACME's NSF-funded research project, *The Big Study*

Connectivity 2015 Strategic Plan:

Scholarship Program (2010-2015)

- Meeting Takeaways
 - Provide the audience with information about joint accomplishments
 - Brainstorm areas of mutual interest for joint grant proposal
 - Provide input to NACME Scholar program's framework
 - Disseminate lessons learned from *The Big Study*

Accomplishments for 2010-2015 Plan

Aileen Walter

Vice President, Scholarships and University Relations &
Corporate Internships
NACME, Inc.

Connectivity 2015 Strategic Plan:

Scholarship Program (2010-2015)

Goals:

- NACME's program goals are accomplished through partnerships focused on four strategies:
 - Establish and deepen engagement through partnerships;
 - Build institutional capability;
 - Learn from our programs; and
 - Transfer and adapt knowledge

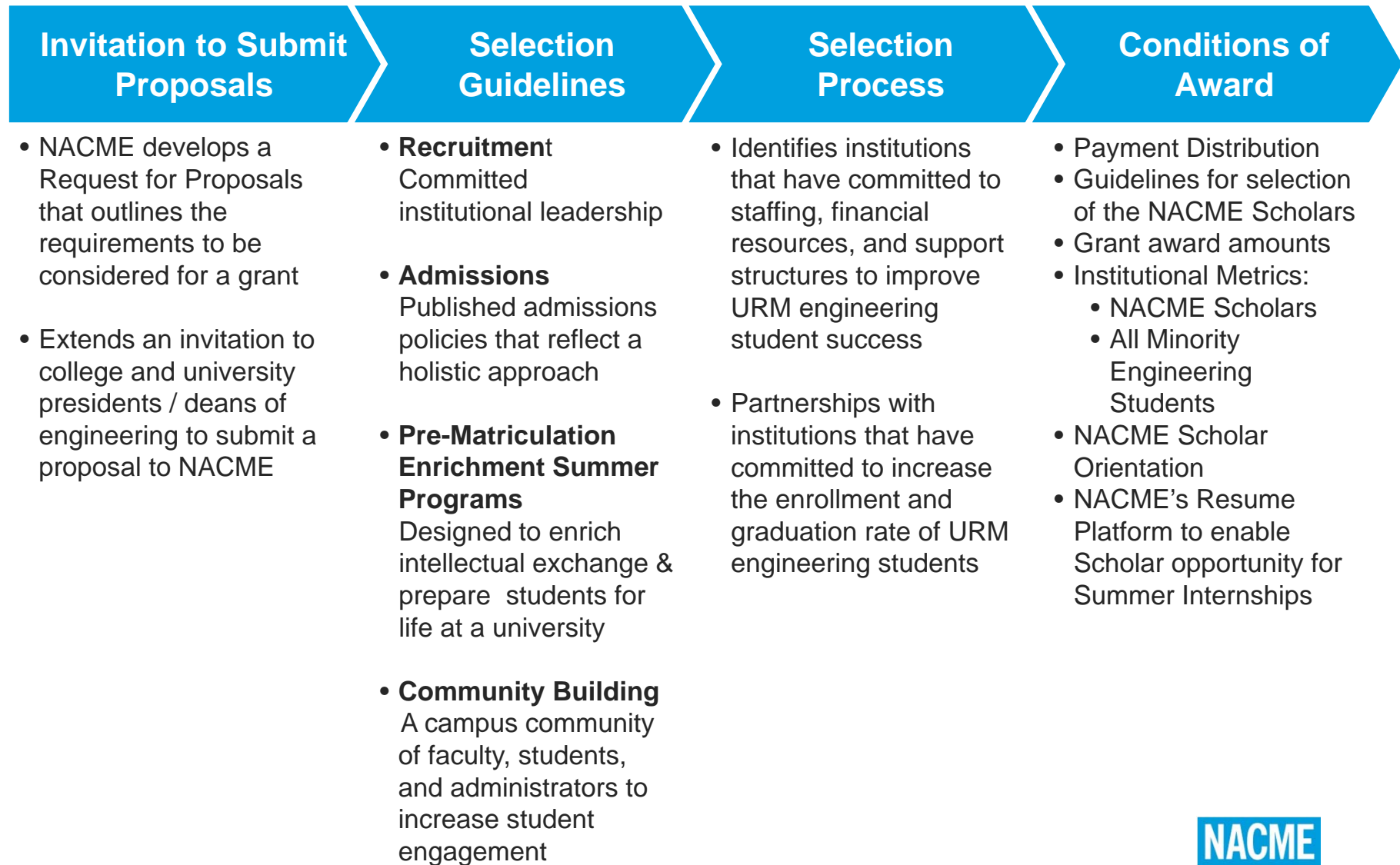
Connectivity 2015 Strategic Plan:

Scholarship Program (2010-2015)

Rationale:

Support institutions that demonstrate their capacity to recruit, admit, retain, educate and graduate URM engineering students

NACME Scholars Program (Block Grant) Process



Connectivity 2015 Strategic Plan:

Performance Metrics

Institutional Metrics: NACME Scholars

- Retain to graduation 80% of NACME Scholars
- Retain to graduation 90% of NACME Scholars who transfer from the community college

Institutional Metrics: All Minority Engineering Students

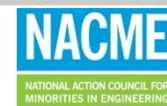
- Baseline enrollment and graduation rates are established for each institution's engineering students by race and ethnicity.
- Retention rates and six-year graduation unit record counts and rates are requested and measured at the end of each year.
- Partnership agreements are reviewed during the final year of funding.
- NACME expects evidence of continuous increase of the unit record graduation counts and rates of underrepresented minorities from year to year.

Connectivity 2015 Strategic Plan:

NACME Funded Partner Institutions

COHORT 1	COHORT 2	COHORT 3	COHORT 4	COHORT 5	COHORT 6
Arizona State U*	California State U, Los Angeles*	Kansas State U**	Drexel U*	U of Arkansas**	Texas A&M
The City College of New York	California State U, Sacramento	Kettering U**	Purdue U	Louisiana State U**	San Jose State U
Florida International U**	New Jersey Inst. of Technology**	Michigan Technological U*		U of Michigan, Ann Arbor**	Morgan State U
Georgia Inst. of Tech**	NYU Polytechnic Inst**.	Northern Arizona U		U of Alaska**	
Missouri U of Science and Tech**	U of Colorado – Boulder**	Prairie View A&M		Polytechnic U, Puerto Rico**	
North Carolina A&T	U of Texas, El Paso**	Rochester Inst of Tech**			
North Carolina State U*		Tuskegee U			
U of California, San Diego		U of Houston			
U of Central Florida					
U of Illinois, Chicago*					
U of Texas, San Antonio					
U of Washington					
Virginia Polytechnic Inst. and State U					

* Discontinued Program; **In-Kind Partner Institutions



Connectivity 2015 Strategic Plan:

NACME Partner Institutions Making In-Kind Contributions

Bucknell U	U of Akron
Cornell U	U of Alabama
Fairfield U	U of Bridgeport
Jackson State U*	U of Idaho
Milwaukee School of Engineering	U of Illinois Urbana-Champaign
Rose-Hulman Institute of Technology	U of Kentucky
Rutgers U	U of Maryland Baltimore County
Stevens Institute of Technology	U of Oklahoma*
SUNY Oswego	U of Southern California
Syracuse U	U of Texas at Dallas
Tennessee Technological U	West Virginia U

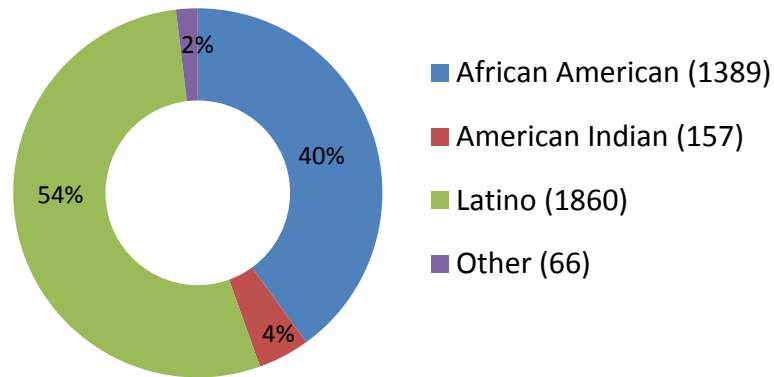
* Discontinued Programs

NACME Scholars Supported

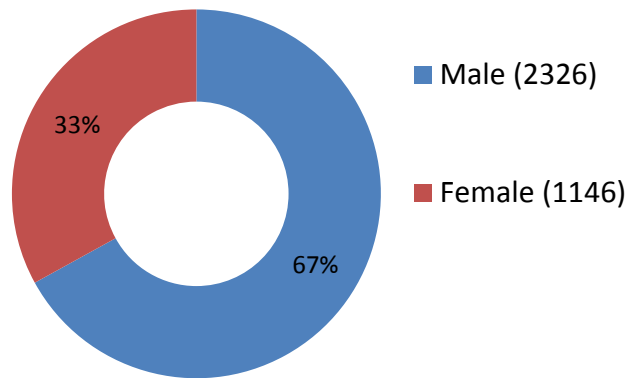
2010-11 to 2014-15 (n=3,472)

Average GPA = 3.3 on a 4.0 scale

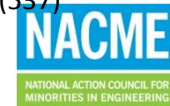
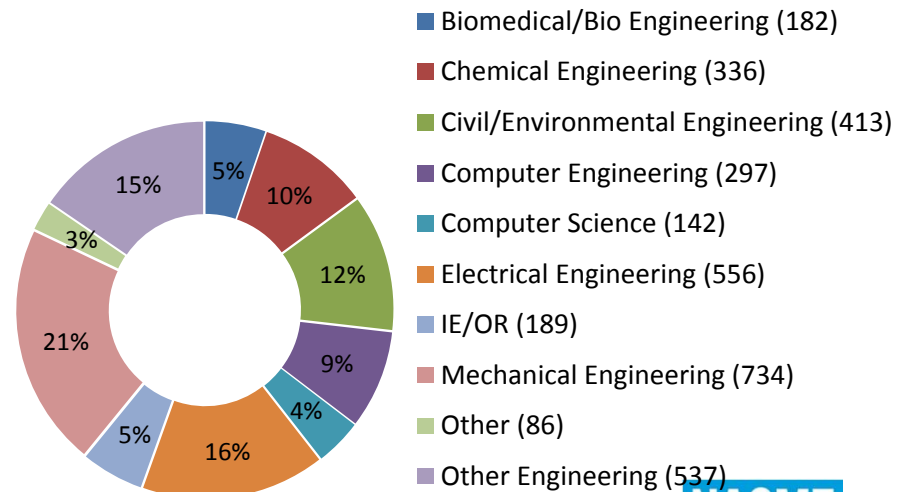
NACME SCHOLARS BY ETHNICITY



NACME SCHOLARS BY GENDER



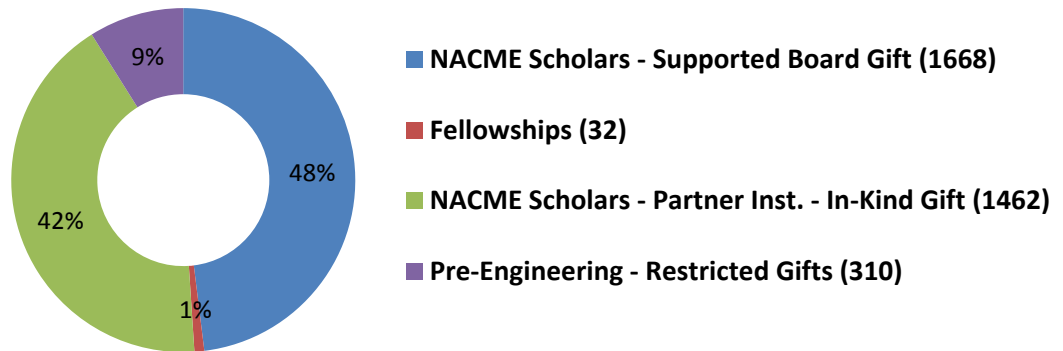
NACME SCHOLARS BY ACADEMIC DISCIPLINE



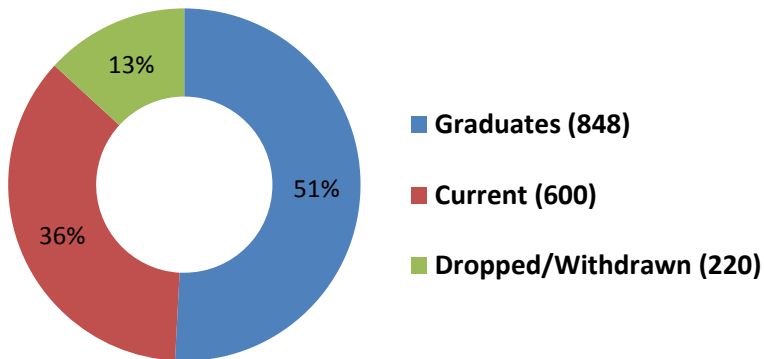
NACME Scholars Supported

2010-11 to 2014-15

NACME SCHOLARS BY PROGRAM
(n=3,472)

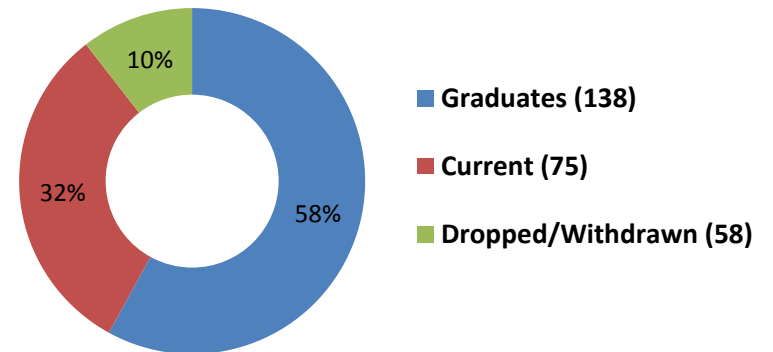


NACME PAID SCHOLARSHIPS
(n=1,668)



\$7,132,400 Total Block Grant Paid

NACME SCHOLARS – TRANSFERS FROM COMMUNITY COLLEGE (n=238)



Accomplishments for 2010-2015 Plan

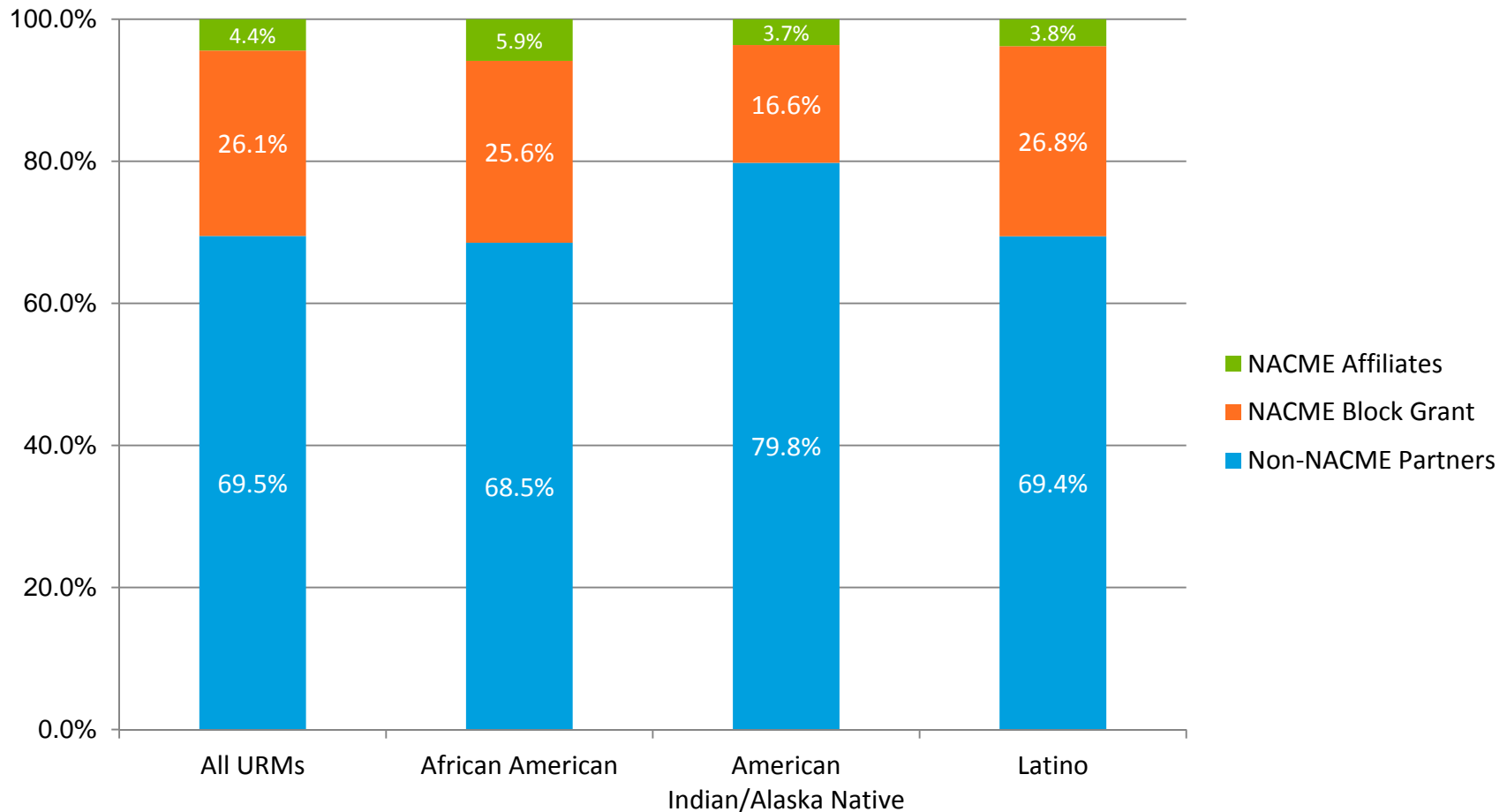
NACME Scholar Graduation Rates and Survey Results

Dr. Christopher Smith

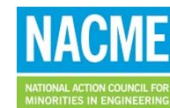
Director, Research and Program Evaluation
NACME, Inc.

Connectivity 2015 Strategic Plan:

Engineering Bachelor's Degrees Awarded to URM, 2013



Source: National Science Foundation, National Center for Science and Engineering Statistics, IPEDS Completions Survey by Race, 1977-2013, Integrated Science and Engineering Resources Data System (WebCASPAR) (<https://webcaspar.nsf.gov>) [10/06/15]



Connectivity 2015 Strategic Plan: Partner Institution Six Year Graduation Reports

- In a study of NACME Block Grant Institutions (for the first four years of the program):
 - The six-year graduation rate of NACME Scholars was 79.1 percent
 - The overall six-year graduation rate for minority students at these institutions was 39.3 percent
 - The overall six-year graduation rate for non-minority students at these institutions was 60.3 percent
- Follow up study in 2015-16 funded by the GE Foundation

Connectivity 2015 Strategic Plan:

Partner Institution Six Year Graduation Reports – Institutional Supports

- Multicultural Engineering Program (MEP)
- Program for Mastery in Engineering Studies (PROMES)
- Summer bridge programs
- Supplemental Instruction (SI) for STEM courses
- Residential learning communities
- Mentoring opportunities
- NSF-Funded Big Study looking at Success Factors for URMs at NACME Partner Institutions

Connectivity 2015 Strategic Plan:

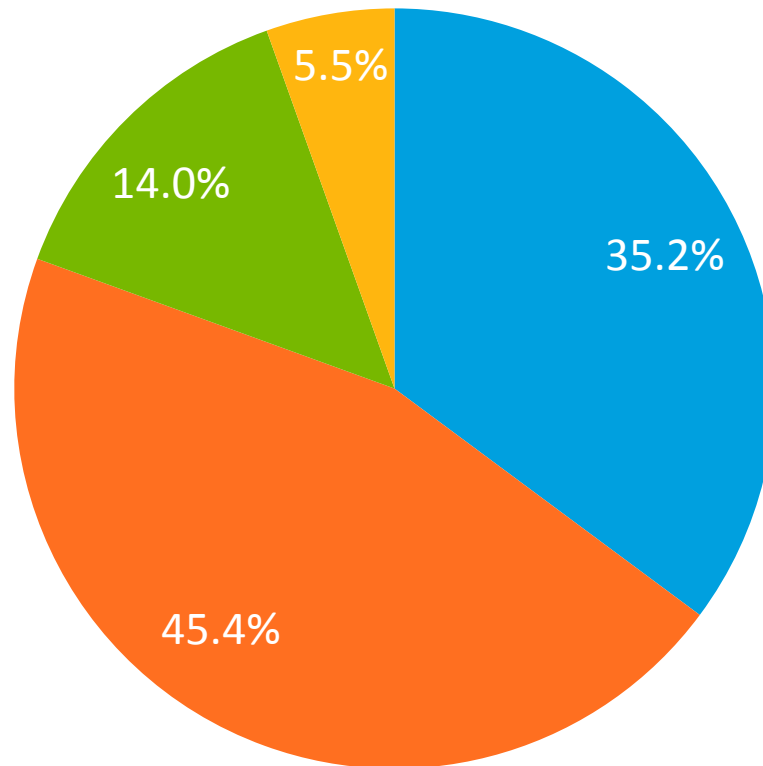
NACME Survey Results – Highlights

- Annually, NACME Surveys Scholars in all years of enrollment
 - Orientation Survey for first year scholars
 - Graduating Senior Survey for final year scholars
 - Annual Survey for all other scholars
- Printed scholar reports and interactive data tool available at www.nacme.org

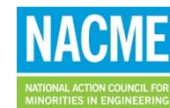
Connectivity 2015 Strategic Plan:

NACME Survey Results – Highlights

How prepared do students feel to get an engineering degree based on their work in high school? n = 293



■ Very Prepared ■ Somewhat Prepared ■ Somewhat Unprepared ■ Very Unprepared



Connectivity 2015 Strategic Plan:

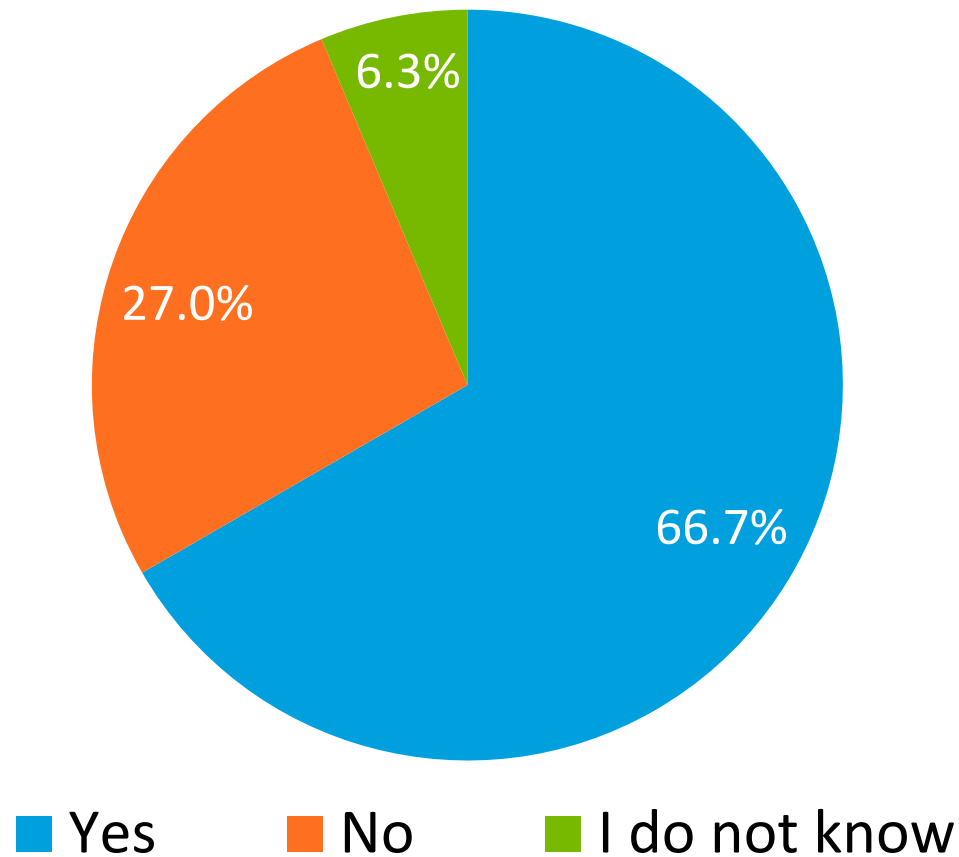
NACME Survey Results – Highlights

Student Services (n=290)

	Available	Usage	Satisfaction
Academic Advising	96.8%	70.5%	44.6%
Supplementary instruction	68.9%	47.3%	24.4%
Tutoring	80.8%	41.5%	35.6%
Mentoring	70.1%	48.6%	46.1%
Programs to assist with transfer from a 2-year college	17.7%	8.9%	5.2%
Peer mentoring programs	53.6%	32.3%	23.4%
Research opportunities	86.5%	49.7%	37.3%
Internship or co-op opportunities	89.4%	66.5%	56.5%
Professional association membership	78.6%	64.2%	41.1%
Travel funds to attend conferences	58.9%	34.2%	35.4%
International research experiences	39.3%	5.4%	18.3%
Study abroad	75.4%	14.1%	35.5%

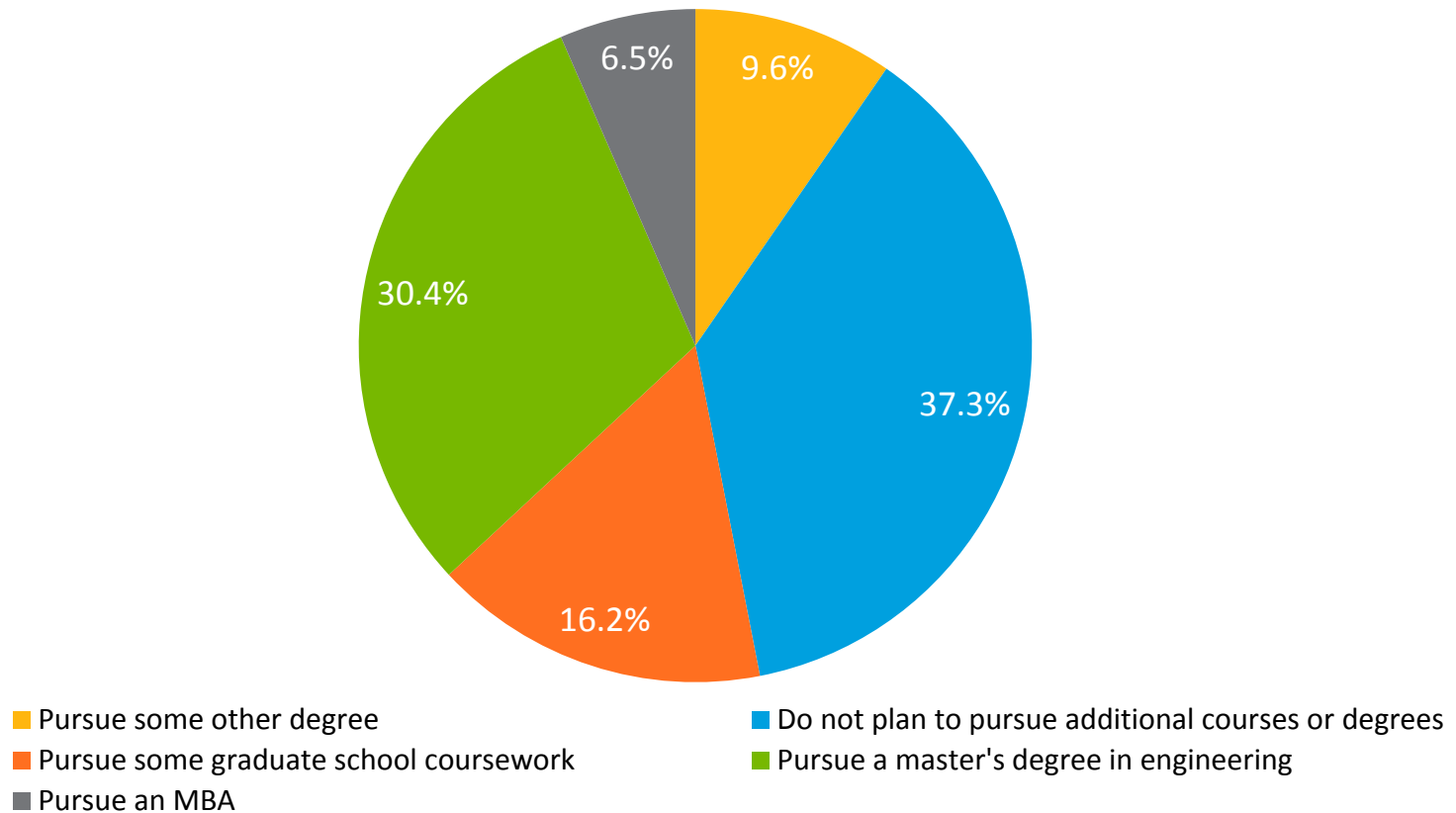
Connectivity 2015 Strategic Plan: NACME Survey Results – Highlights

Do the NACME Scholars receive Pell Grants to finance their education? n = 189



Connectivity 2015 Strategic Plan: NACME Survey Results – Highlights

What are the educational plans for the NACME Scholars in their first year out of college? n=260



Connectivity 2015 Strategic Plan:

NACME Survey Results – Highlights

Factors that "Greatly Influenced" Post-Graduate Plans	n=241
Professional interests	61.8%
Working conditions (e.g., hours, equipment, working environment)	48.5%
Compensation package (pay, bonuses, etc)	45.6%
Job location	41.1%
Promotion opportunities	40.7%
Family-related reasons (e.g., children, spouse's job, desire to be near relatives)	22.8%
Worked previously for the employer in an internship/co-op	21.6%
Job in field of study not available	10.8%
Worked at a similar company as an intern/co-op	8.7%

Connectivity 2015 Strategic Plan:

NACME Survey Results – Summary

- NACME Scholars have significantly higher six-year graduation rates than other engineering students, specifically URMs
 - Well prepared out of high school
 - Publish best practices from universities
 - NSF and GE Studies
- The majority of NACME Scholars are high-needs students
- NACME Scholars vary in their usage of on-campus supports
- NACME Scholars have varied career goals, including venturing outside of engineering

A stylized world map in a lighter shade of blue, centered on the Atlantic Ocean, serving as a background for the Q&A section.

Q&A