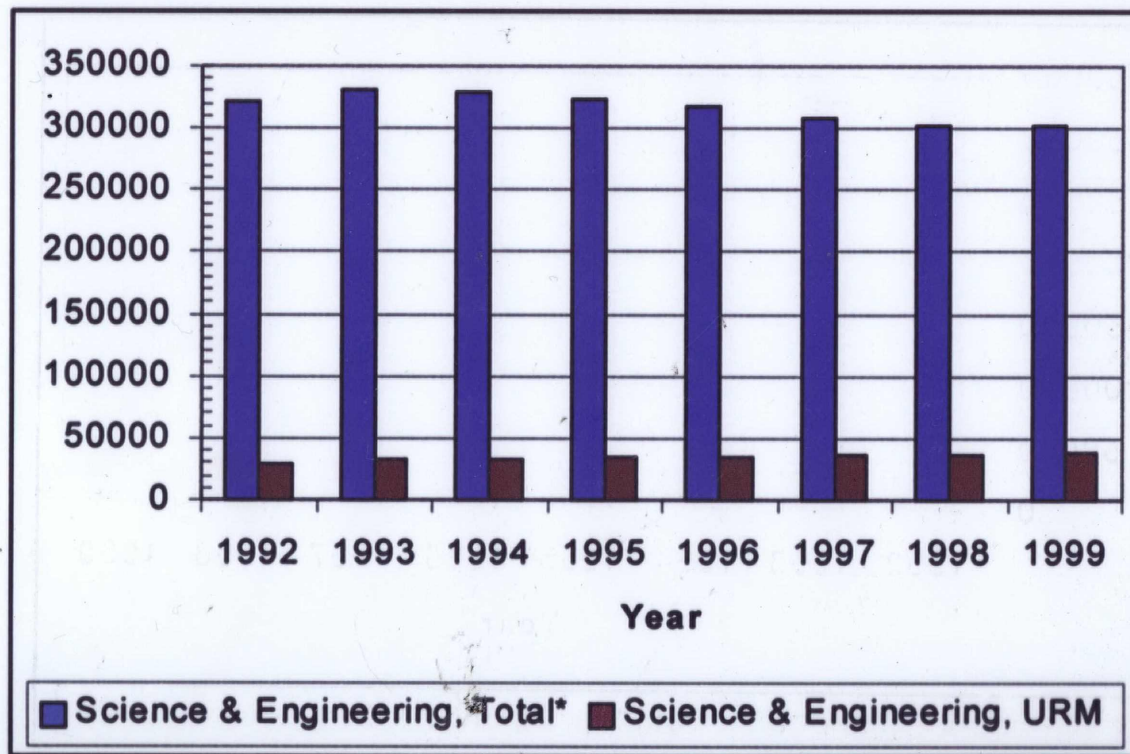


Science and Engineering Graduate Student Enrollment

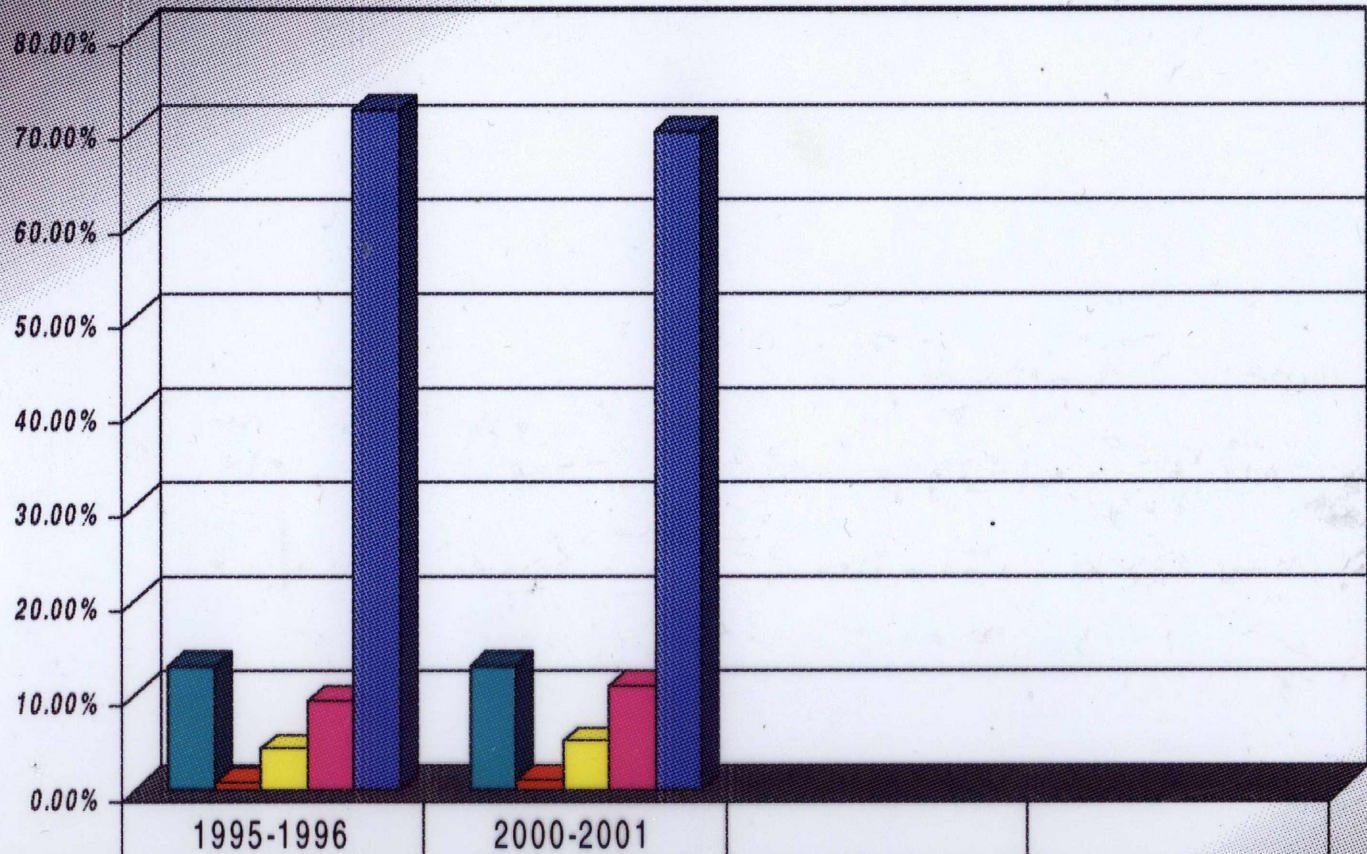


National Science Foundation, Division of Science Resources Studies, *Graduate Students and Postdoctorates in Science and Engineering: Fall 1999*, NSF 01-315, Project Officer, Joan Burelli (Arlington, VA, 2001)

Number of Ph.Ds Recipients in Eng.&Science by Citizenship, Race/Ethnicity in 1996

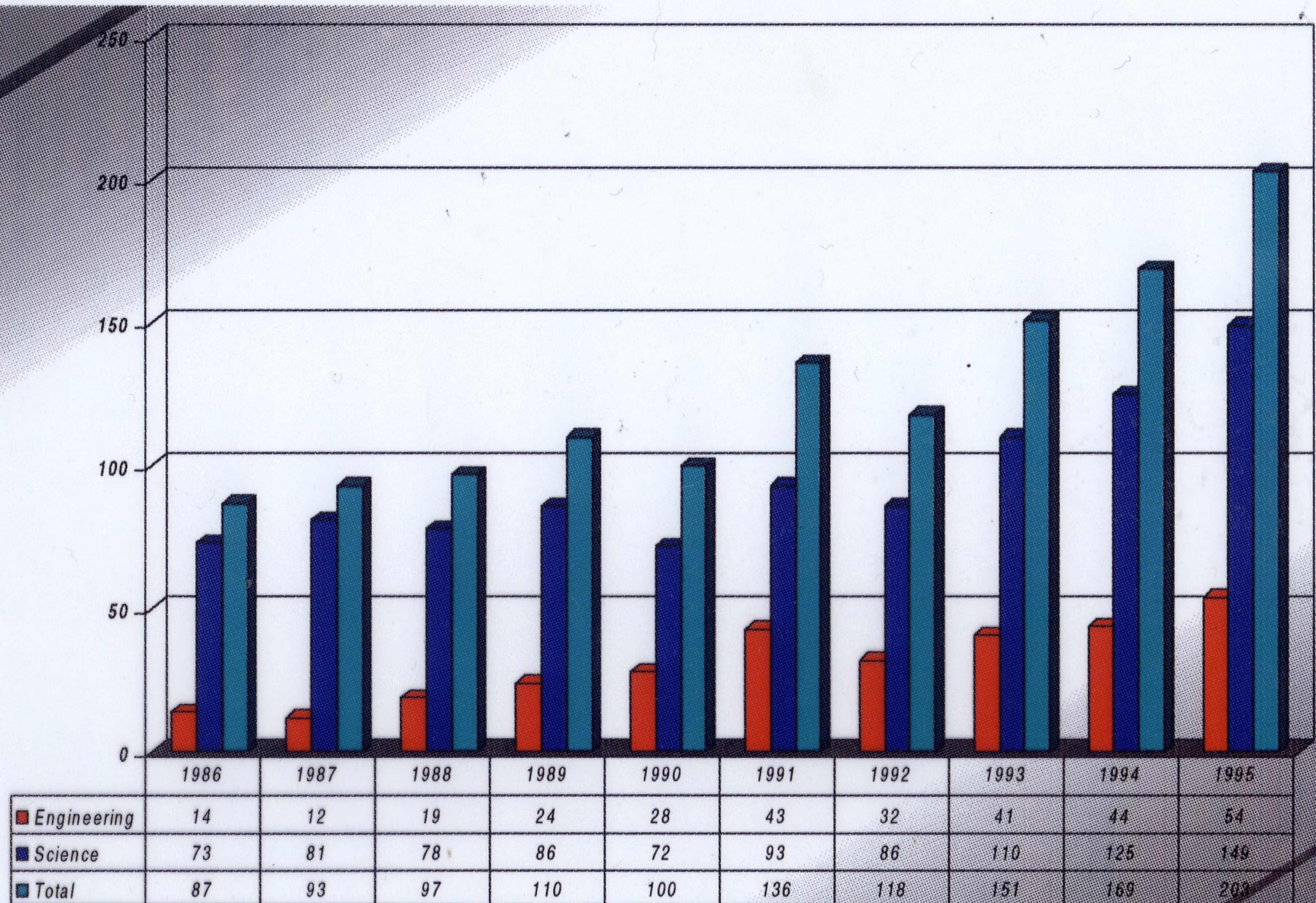


Percent of Public School Graduates by Race/Ethnicity

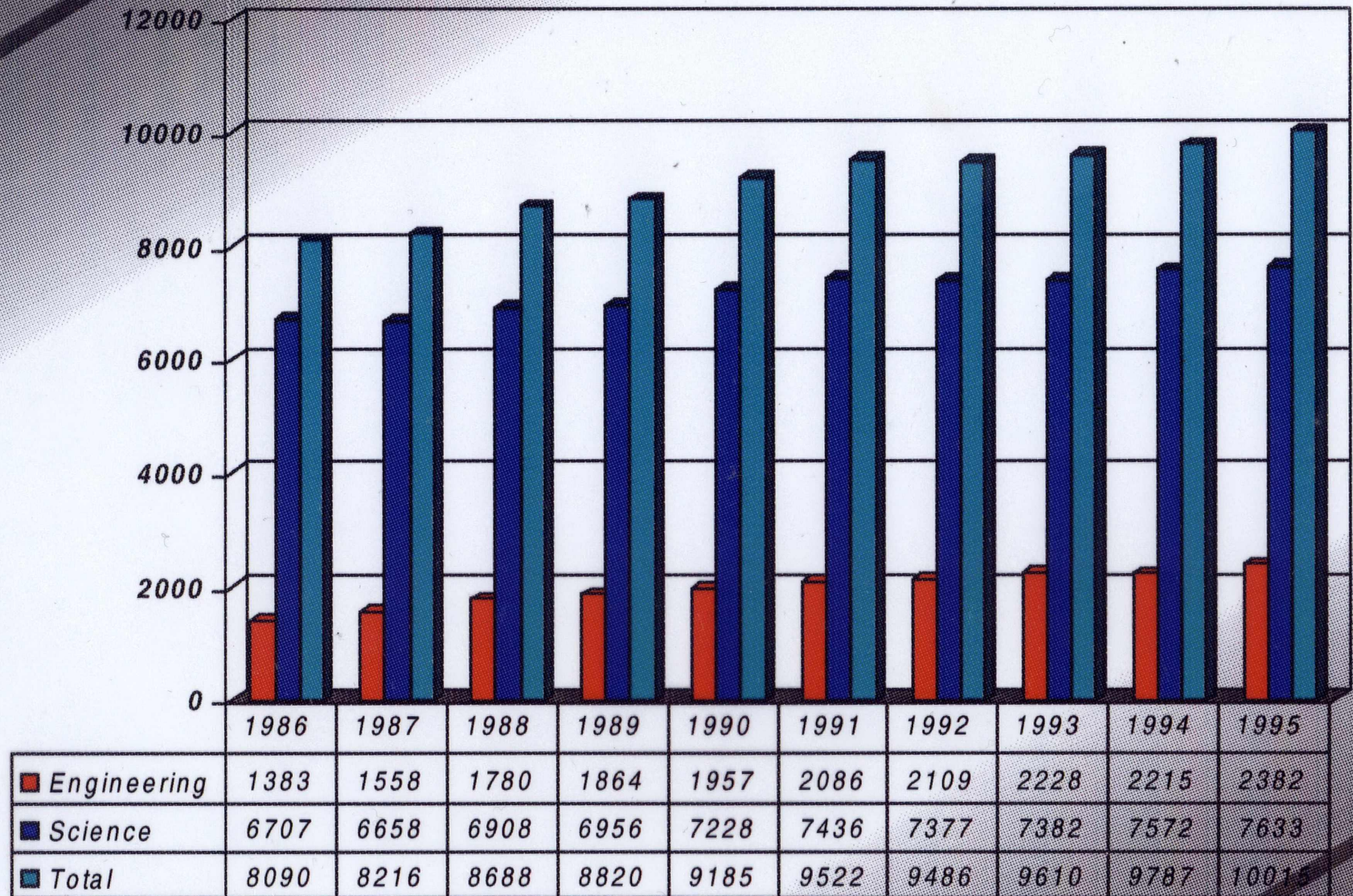


	1995-1996	2000-2001
■ African-American	13.10%	13.10%
■ American-Indian	0.90%	1.10%
■ Asian/Pacific	4.40%	5.20%
■ Latino	9.50%	11.10%
■ White (non-Latino)	72.10%	69.60%

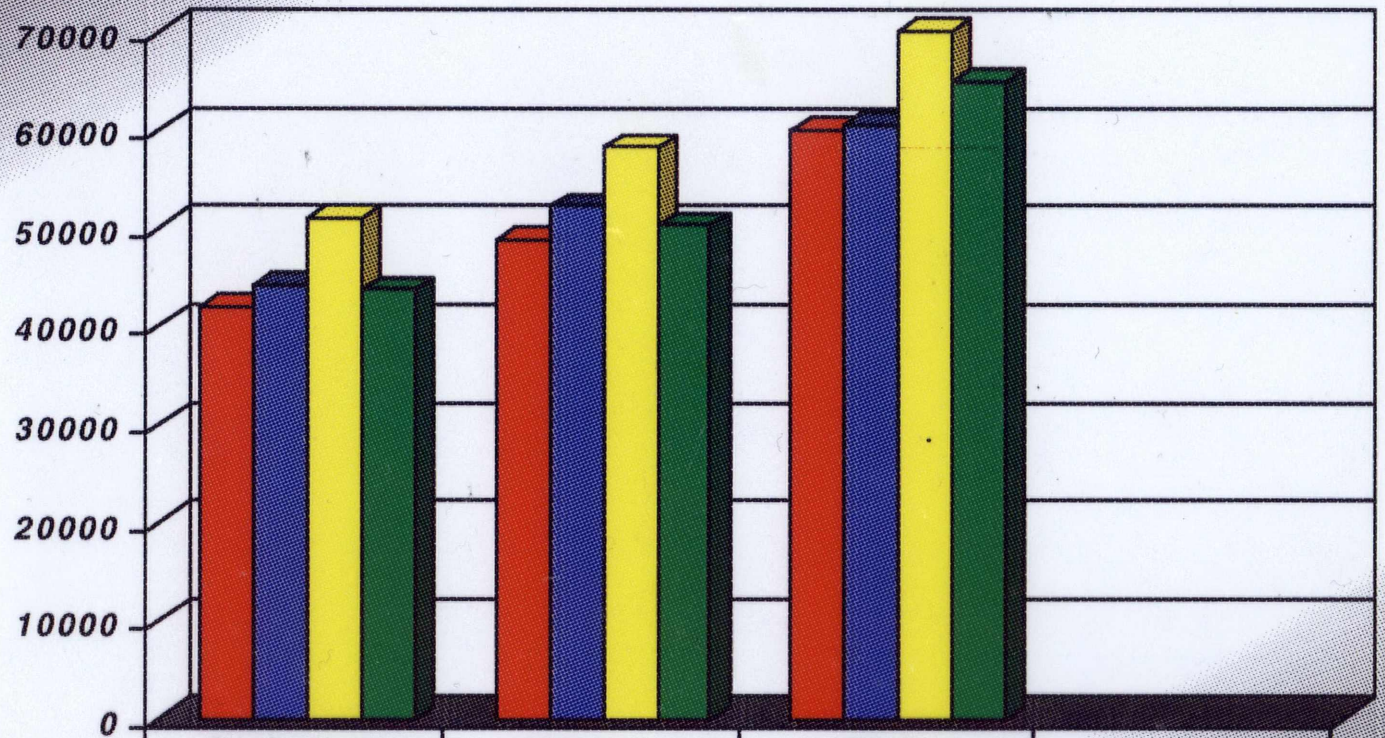
Doctorates Awarded to Black U.S. Citizens in Science & Engineering



Doctorates Awarded to All U.S. Citizens in Science & Engineering



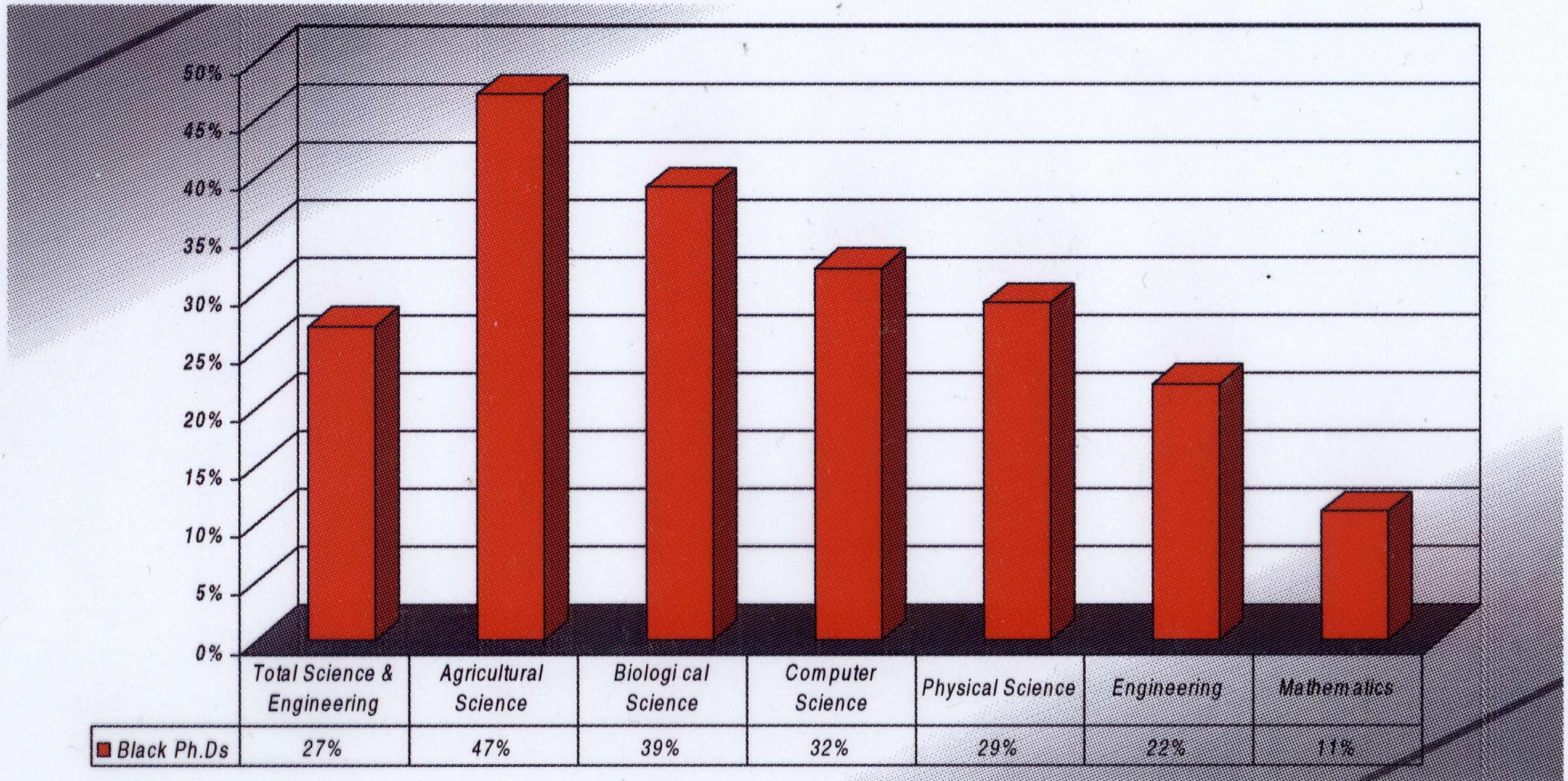
Median of Salaries by Field & Level of Highest Degree



	Bachelor's	Master's	Ph.D	
■ All Science & Engineering	42000	48800	60000	
■ Computer/Mathematical science	44100	52200	60600	
■ Engineering	51000	58200	70000	
■ Physical Sciences	43700	50300	64800	

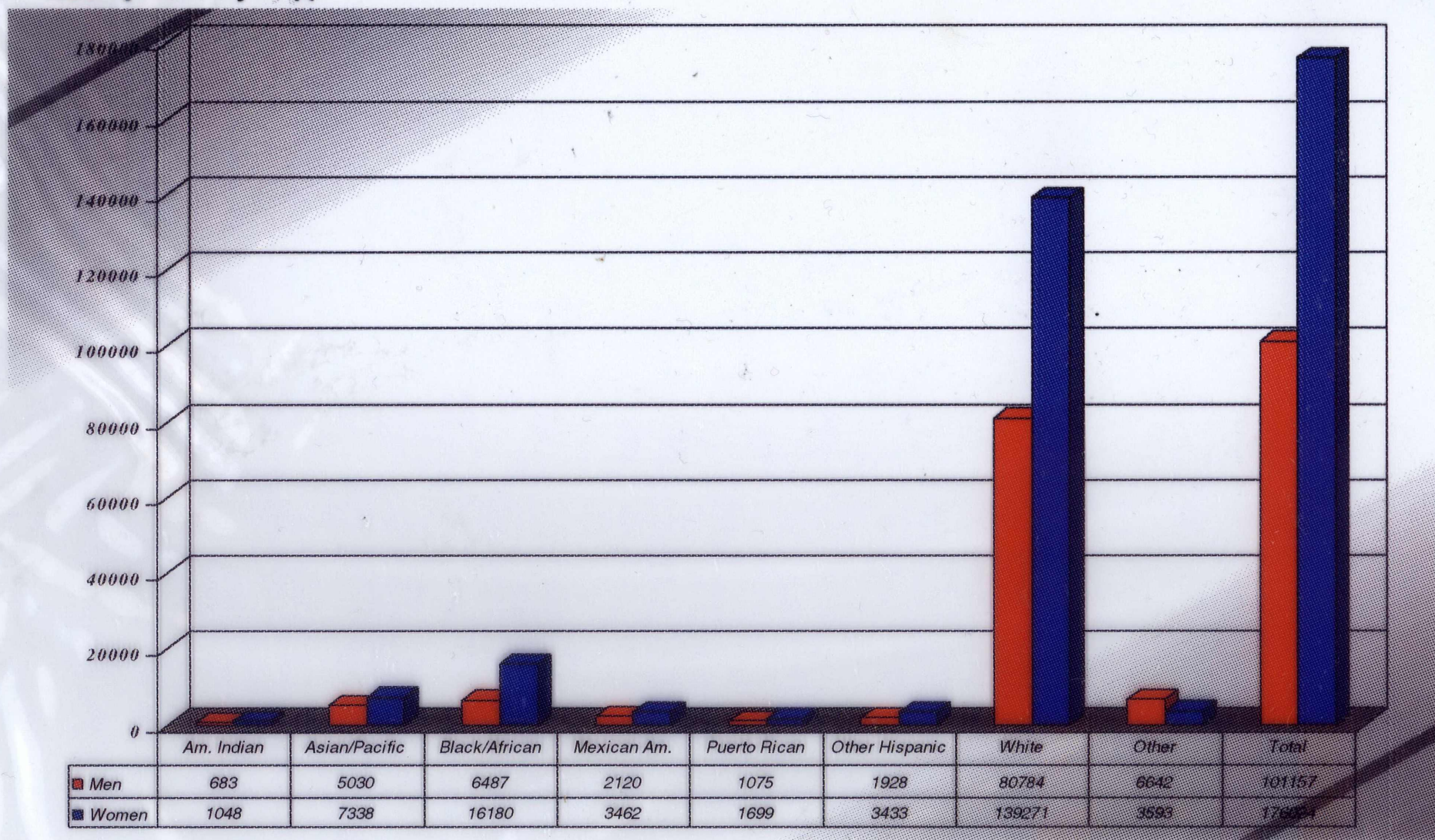


Black Ph.Ds Recipients with B.S. Origins in Historically Black Universities

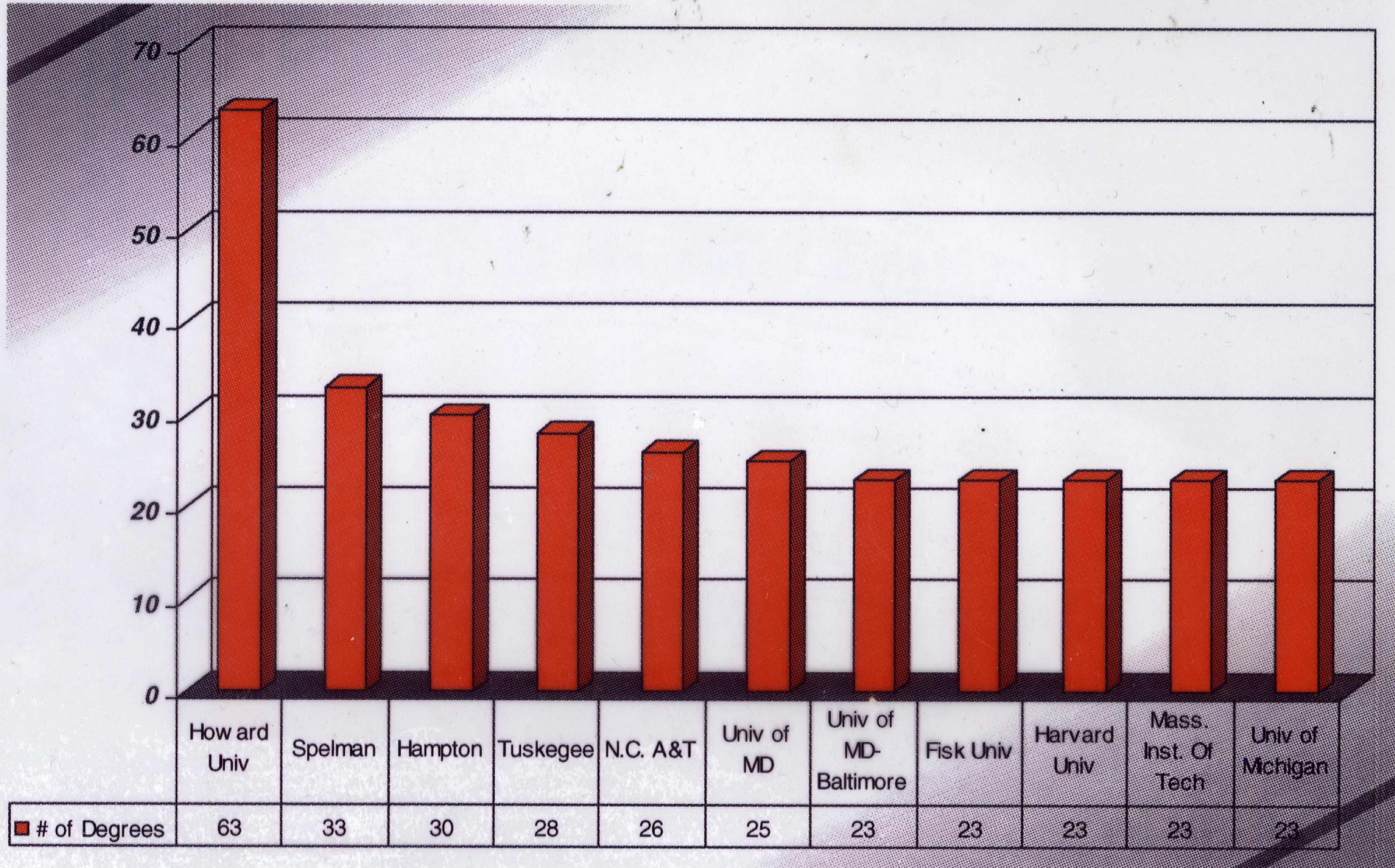




GRE General Test Score Information by Ethnic Group and Sex: 1995-96

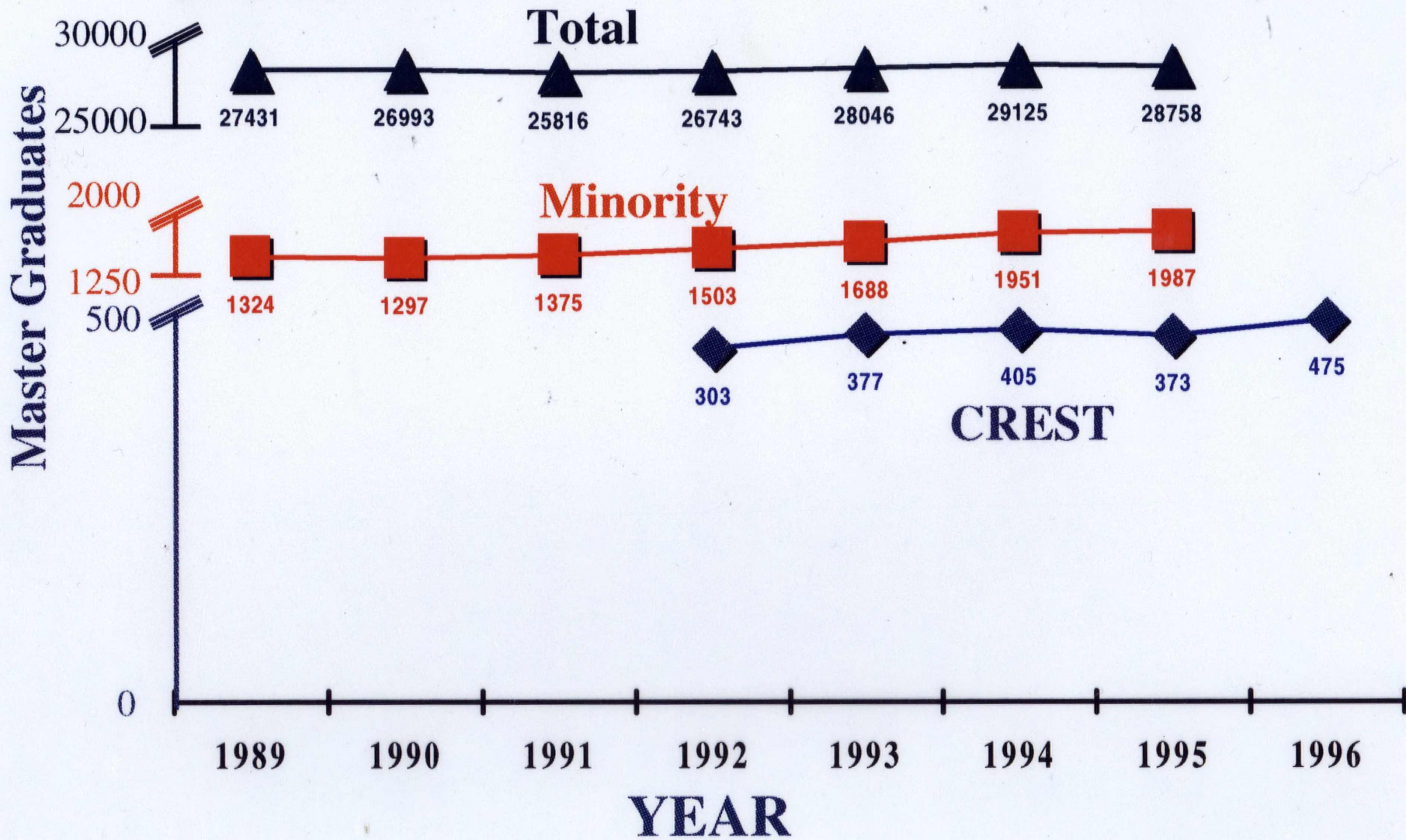


Leading Colleges of Baccalaureate Origin for Black Science and Engineering Doctoral Recipients, 1988-93



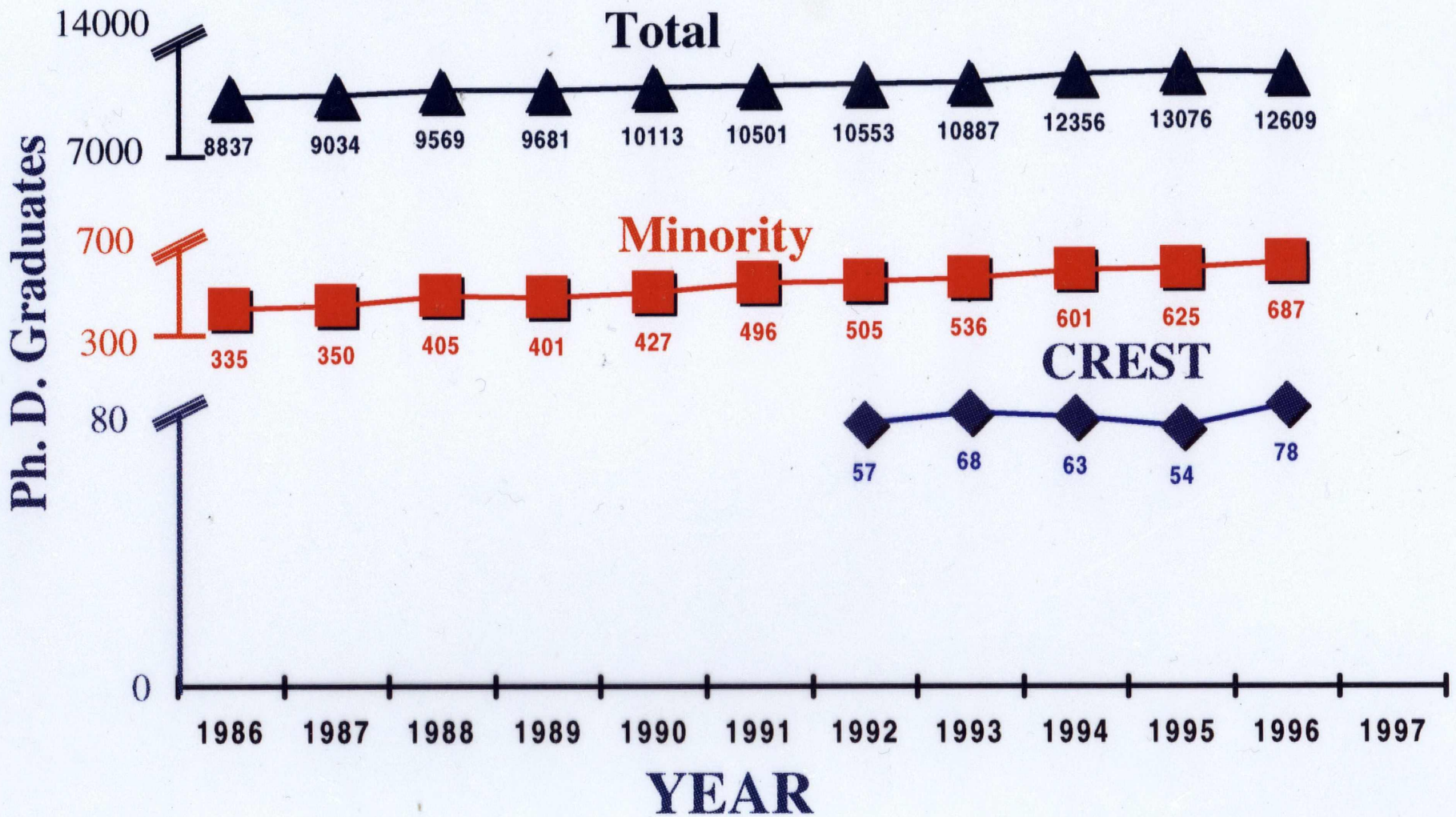


S & E Master Degrees

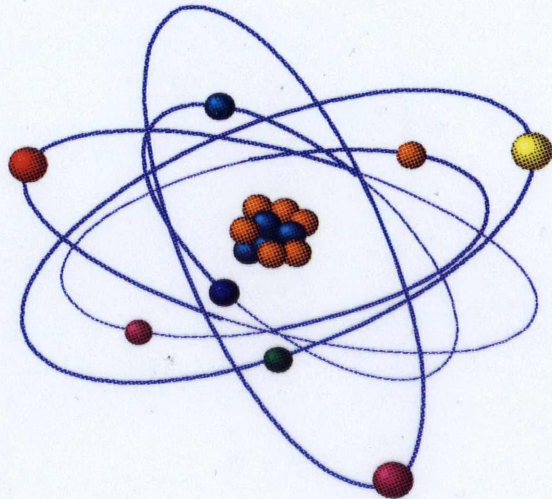




S & E Doctorates



**CENTERS OF RESEARCH
EXCELLENCE IN SCIENCE AND
TECHNOLOGY
(CREST)**



- ***WHAT IS THE CREST MISSION?***
- ***IS IT WORKING?***
- ***WHAT IS THE OUTCOME?***
- ***WHAT WILL BE THE FUTURE IMPACT?***

CREST HIGHLIGHTS

- **HOWARD UNIVERSITY**
 - **FOCUS: ELECTRONIC AND ELECTRO-OPTIC DEVICE MATERIALS**
 - **MBE MATERIALS GROWTH**
 - **INVITED PARTICIPANT IN THE NATIONAL NANOFABRICATION USERS NETWORK (NNUN) CENTERED AT CORNELL UNIVERSITY**

CREST HIGHLIGHTS

- **ALABAMA A&M UNIVERSITY**
 - **FOCUS: NONLINEAR OPTICS AND NONLINEAR OPTICAL MATERIALS.**
 - **CRYSTAL GROWTH AND MATERIALS CHARACTERIZATION FACILITIES**
 - **COLLABORATION WITH LUCENT, UNIVERSITY OF MICHIGAN CENTER FOR ULTRAFAST OPTICAL SCIENCE, AND HUGHES ELECTRO-OPTIC DIVISION.**
 - **NEW PH.D. DEGREE IN PHYSICS & AWARDED 13 TO MINORITIES SINCE 1991.**

CREST HIGHLIGHTS

- **CLARK ATLANTA UNIVERSITY**
 - **FOCUS: THEORETICAL STUDIES OF PHYSICAL SYSTEMS. SELF-ORGANIZING SYSTEMS. WAVELET RESEARCH FOR REAL-TIME TRAFFIC CONTROL**
 - **EXTENSIVE COMPUTING FACILITIES, INCLUDING THE MOST POWERFUL CRAY PLATFORM IN GEORGIA.**
 - **HOSTED SEVERAL INTERNATIONAL MEETINGS . ALLIANCES WITH IBM & CRAY.**

CREST HIGHLIGHTS

- **HAMPTON UNIVERSITY**

- **FOCUS: NUCLEAR AND HIGH ENERGY PHYSICS; NEW PH.D. PROGRAM.**
- **PARTNER WITH THE THOMAS JEFFERSON NATIONAL ACCELERATOR FACILITY & U. of MICHIGAN STC.**
- **QUARK CLUSTERING PUBLICATIONS IN PHYSICAL REVIEW LETTERS .**
- **HAMPTON STUDENTS HELPED DEVELOP A WORLD CLASS BEAMLINe at TJNAF..**

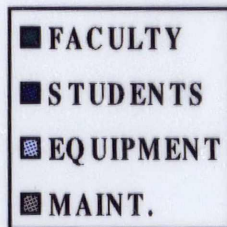
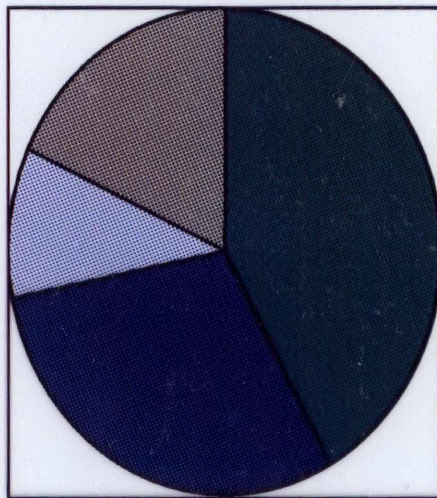
1997 CREST

IS IT WORKING? INPUT!

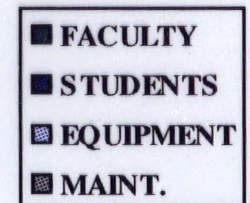
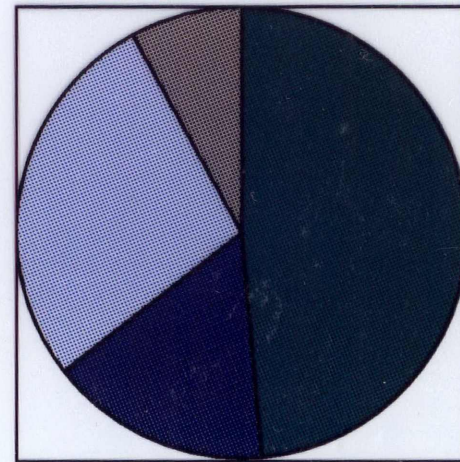
NSF SHARE: \$9.38 MILLION

PARTICIPANTS SHARE: \$2 MILLION

NSF



COSTSHARE



1997 CREST

IS IT WORKING ? IMPACT!

GENERATION AND DISSEMINATION OF NEW KNOWLEDGE

- CROSSING THE BOUNDARY BETWEEN QUANTUM PHYSICS AND REAL TIME TRAFFIC CONTROL WITH WAVELETS.
- FABRICATING THE MOST PRECISE ROBOTIC PHOTOMETRIC TELESCOPES BY MIXING CONTROL SYSTEM RESEARCH AND ASTRONOMY.
- SHARING KNOWLEDGE ON ACCELERATOR PHYSICS BETWEEN HIGH ENERGY PARTICLE RESEARCH AND ULTRA FAST PHOTONIC PROJECTS.

CREST OUTPUTS FOR 1997

PUBLICATIONS IN REFEREED JOURNALS :	292
UNDERREPRESENTED MINORITY Ph.D. DEGREES:	78
UNDERREPRESENTED MINORITY M.S. DEGREES:	475
UNDERGRADUATE RESEARCH EXPERIENCES:	48

CREST OUTCOMES!

FY1987-1997

- **NEW Ph. D. DEGREE PROGRAMS WITH CONNECTIONS TO OTHER MAJOR INSTITUTIONS AND NSF CENTERS.**
- **COLLABORATIONS WITH THE AMP PROGRAMS FOR RESEARCH EXPERIENCE FOR UNDERGRADUATES.**
- **MAJOR INCREASES IN SCIENCE & ENGINEERING INFRASTRUCTURE**