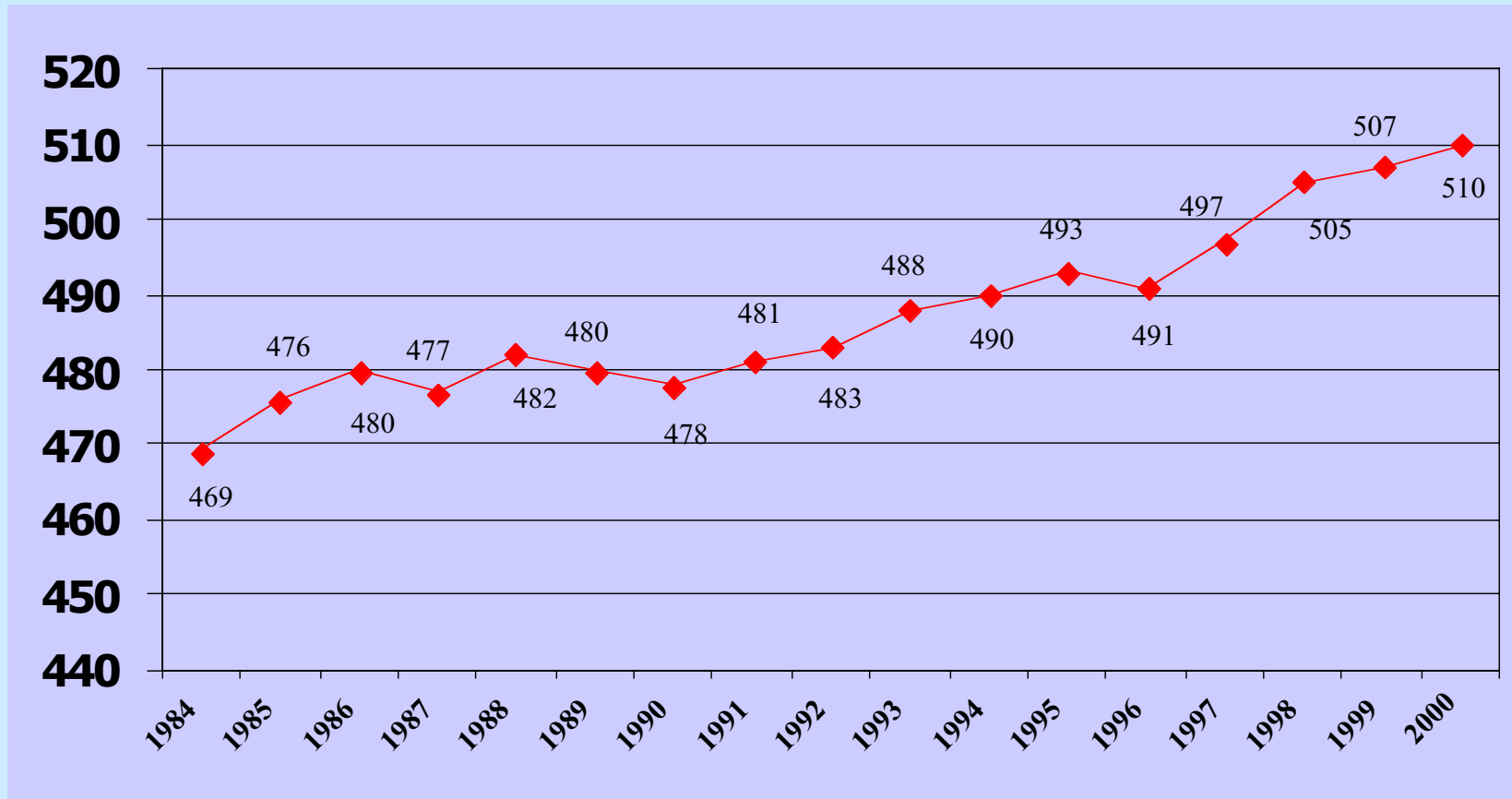


**University System of
Georgia:
Math Preparation &
Core Math Courses**

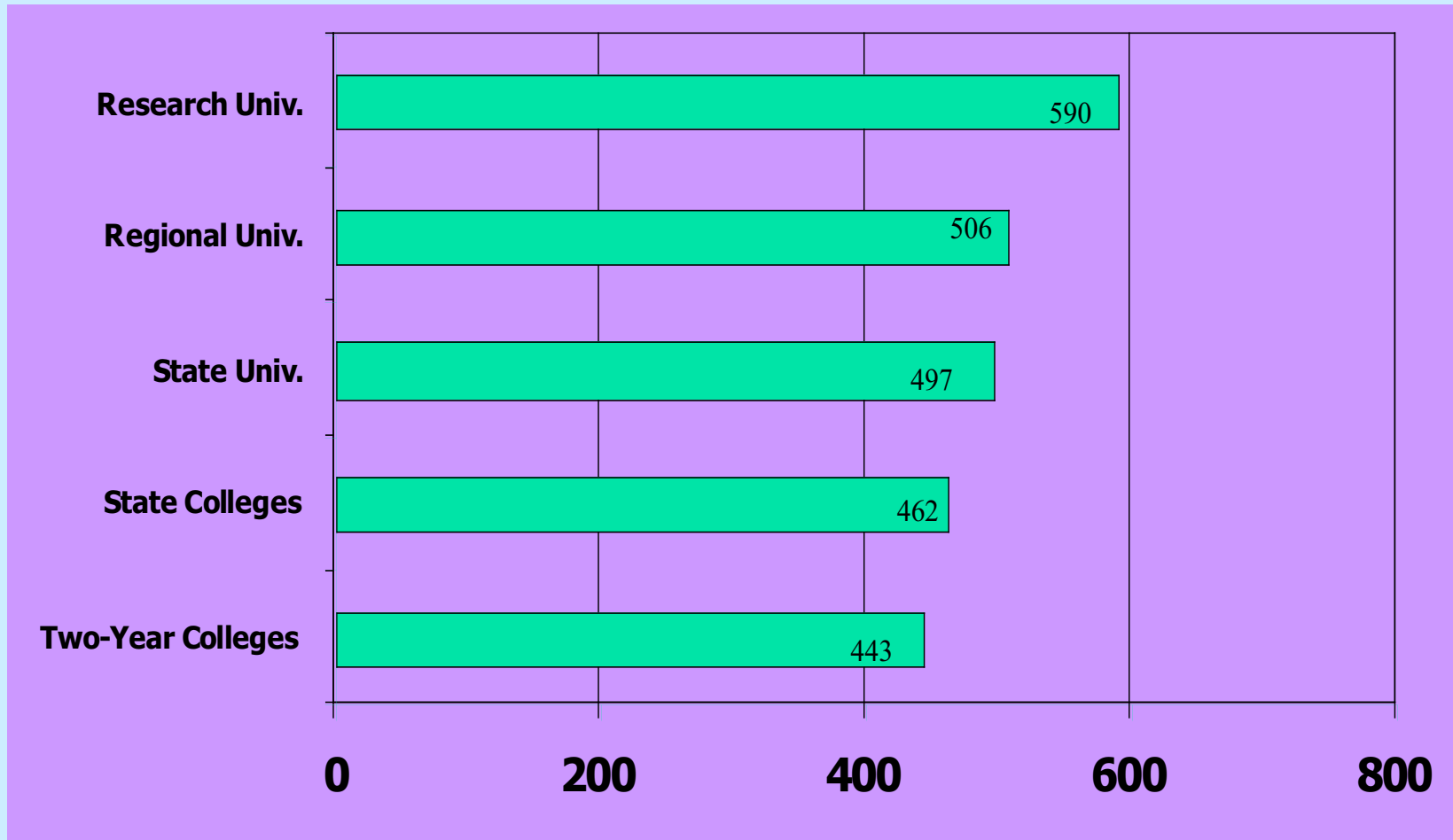
**Presentation to CAO Meeting
October 2001**

Average SAT Math Score of USG First-Time Freshmen Fall 1984 – Fall 2000



Note: All scores are re-centered. Source: SIRS Data; USG Office of Strategic Research and Analysis, October 2001.

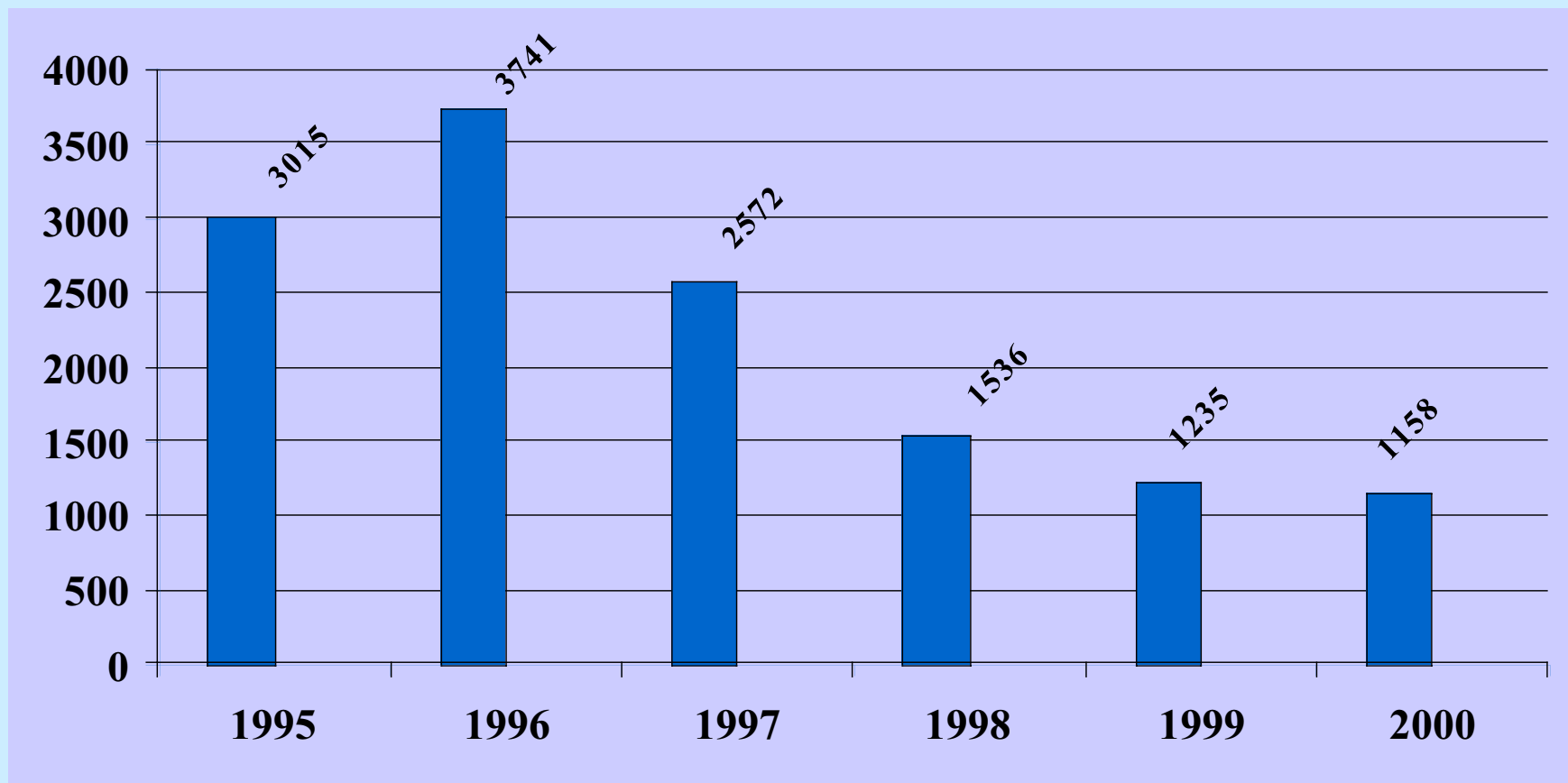
Average SAT Math Score of USG First-Time Freshmen by Sector, Fall 2000



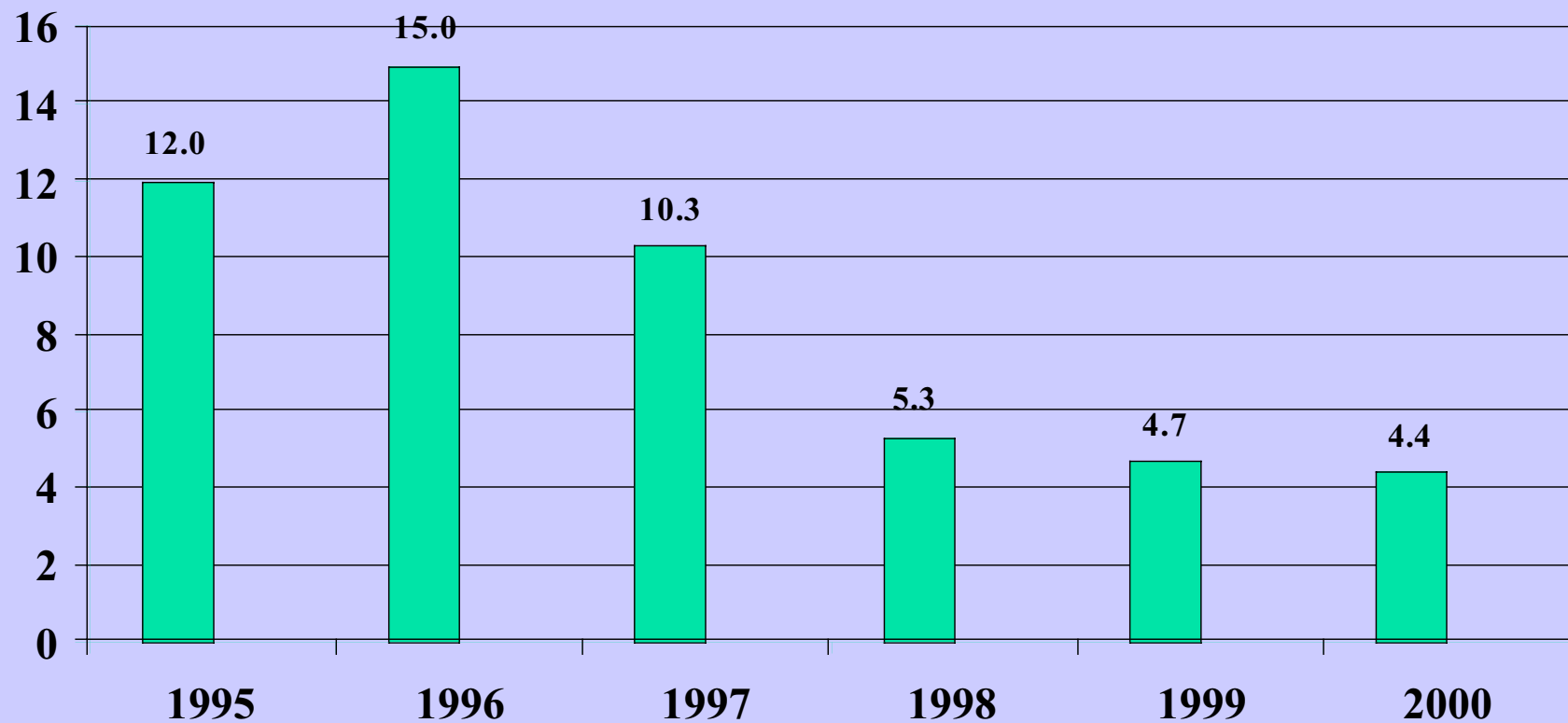
Note: All scores are re-centered. Source: SIRS Data; USG Office of Strategic Research and Analysis, October 2001.

Completion of College Preparatory Curriculum in Math

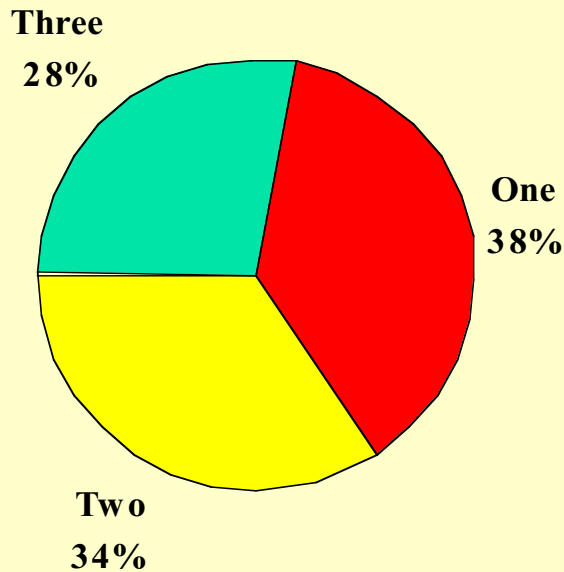
Number of First-Time Freshmen (Same Year HS Grads) Who Did Not Complete CPC Math Courses in High School, Fall 1995--Fall 2000



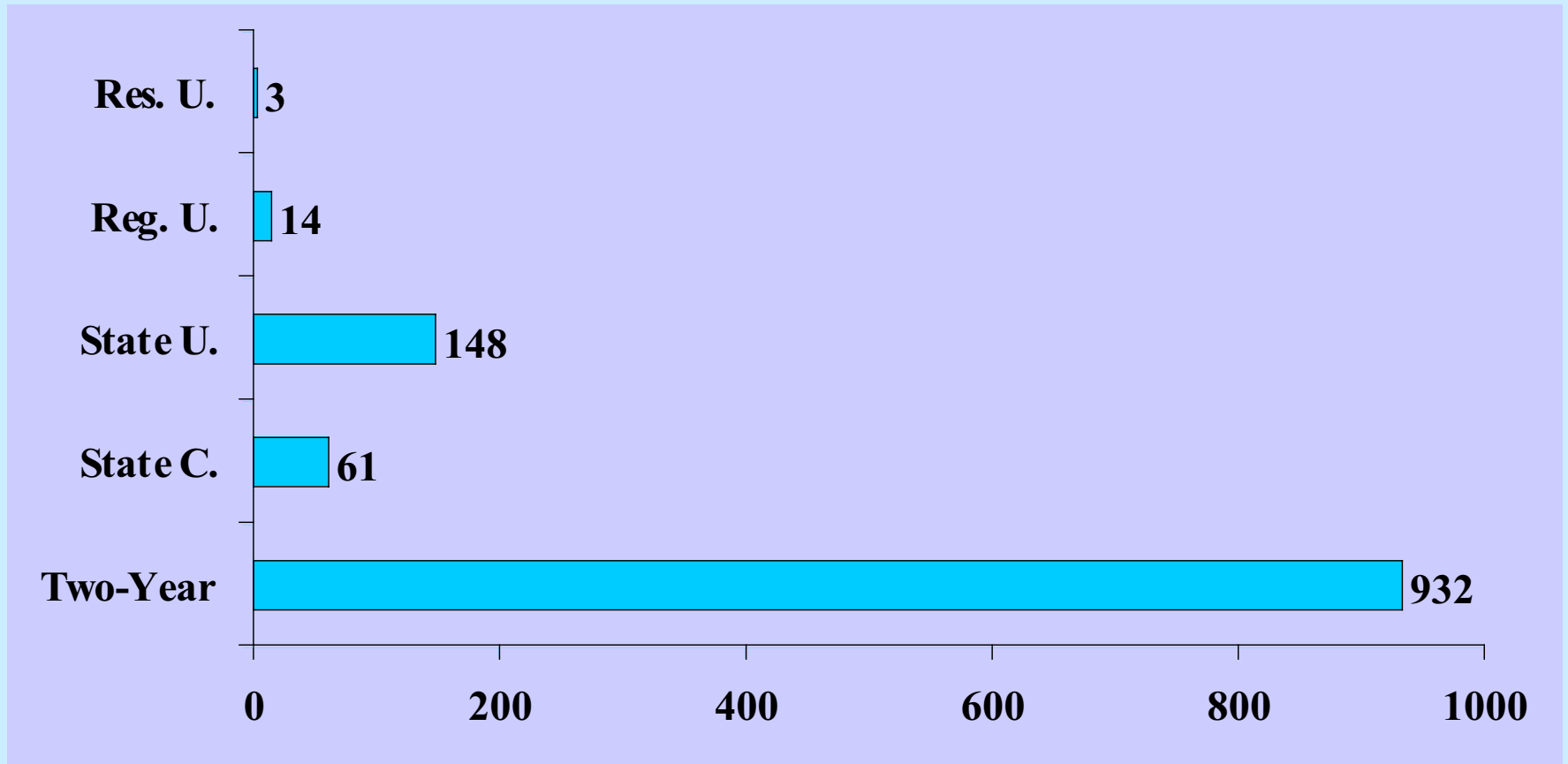
Percentage of First-Time Freshmen (Same Year HS Grads) Who Did Not Complete CPC Math Courses in High School, Fall 1995--Fall 2000



Number of First-Time Freshmen (Same Year HS Grads) by Number of of CPC Math Course Deficiencies Fall 2000



Number of First-Time Freshmen (Same Year HS Grads) with CPC Math Course Deficiencies Fall 2000 by Sector

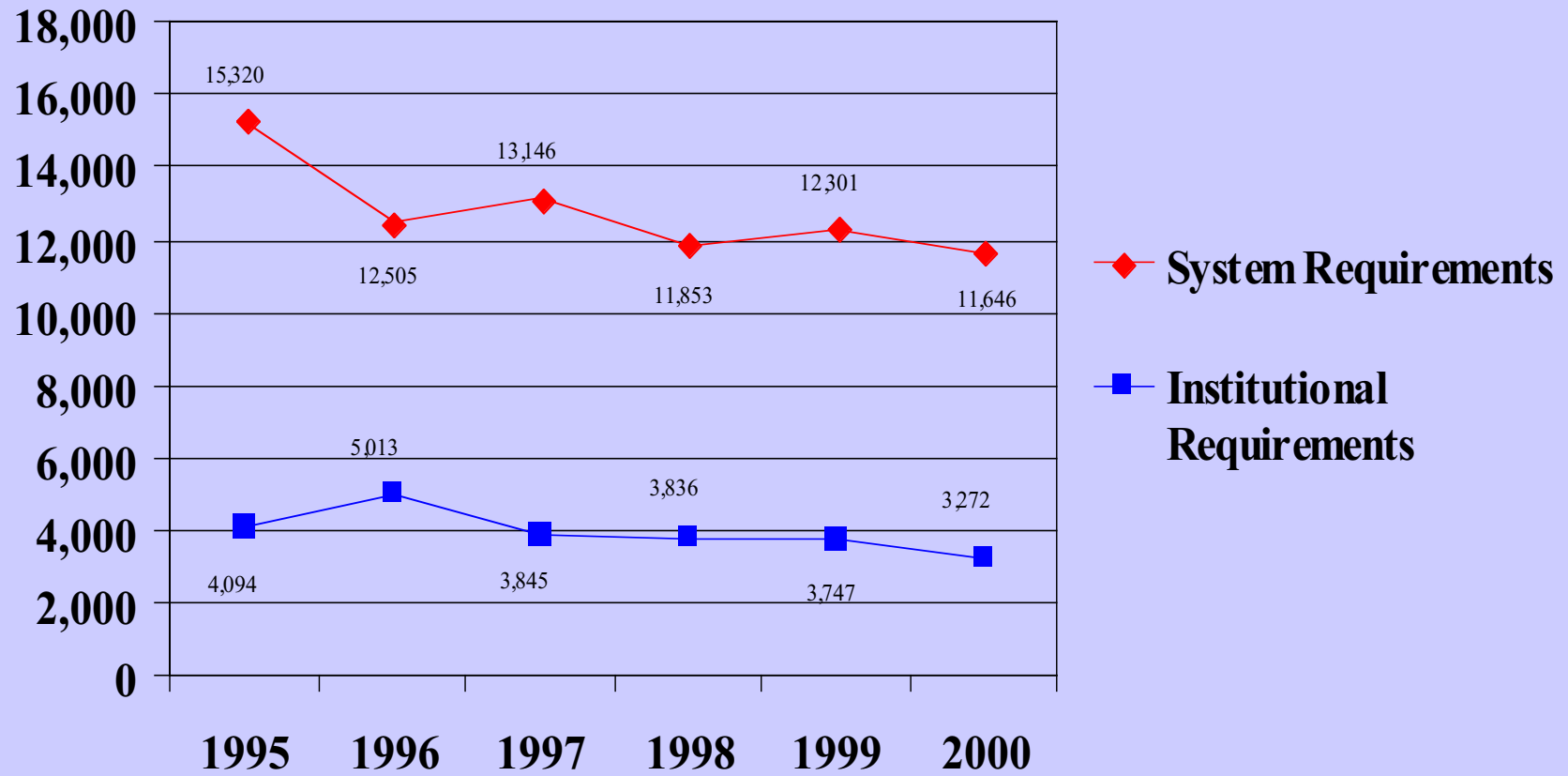


Placement in Learning Support in Math

Learning Support in Math

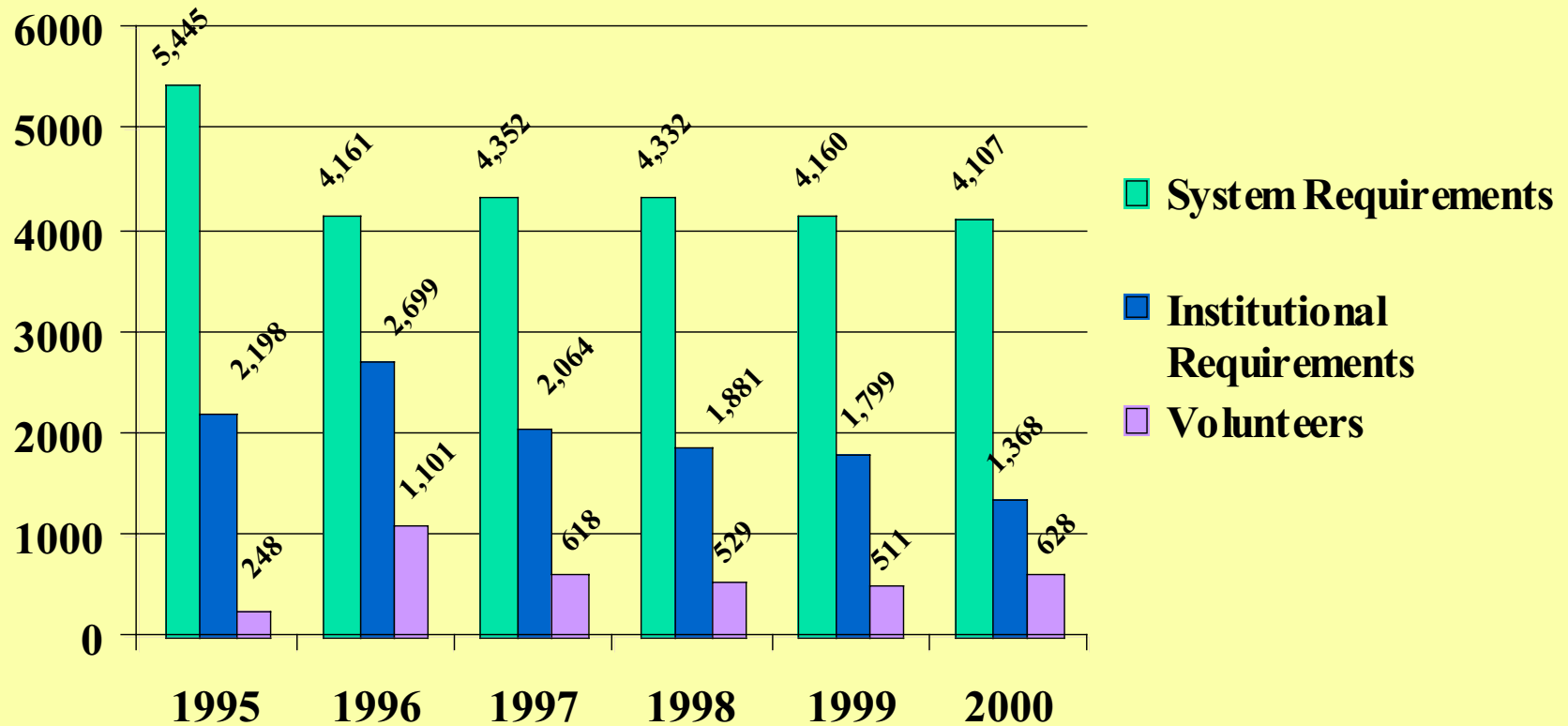
- More USG students require LS in math than in reading or English.
 - True at both level of System requirements and institutional requirements.
- More USG students volunteer to take LS math courses than in other two areas.

Total Number of Students Enrolled in LS—Math, Fall 1995--Fall 2000

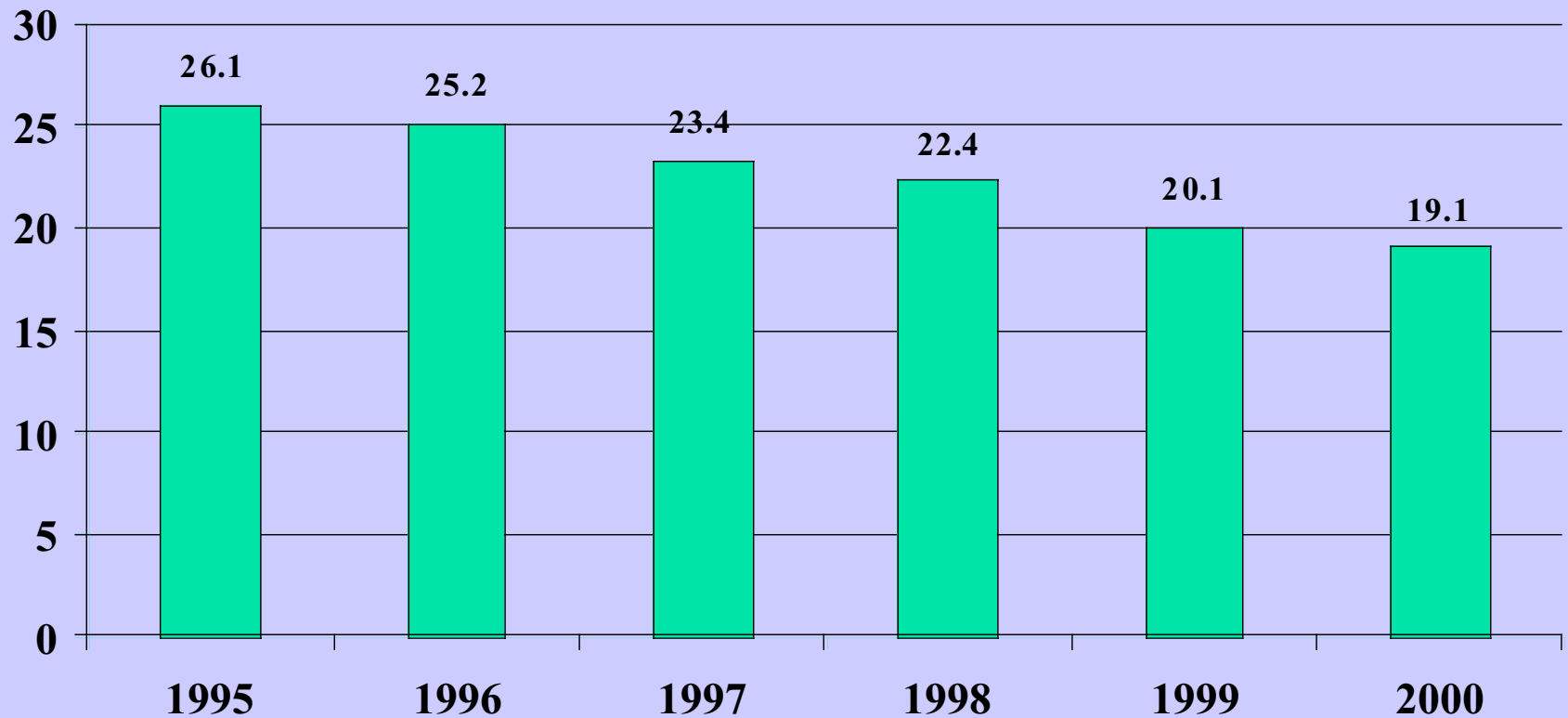


Note: USG students enrolled in fall term are counted according to their LS requirements. Some students have requirements but are not enrolled. SIRS Data.

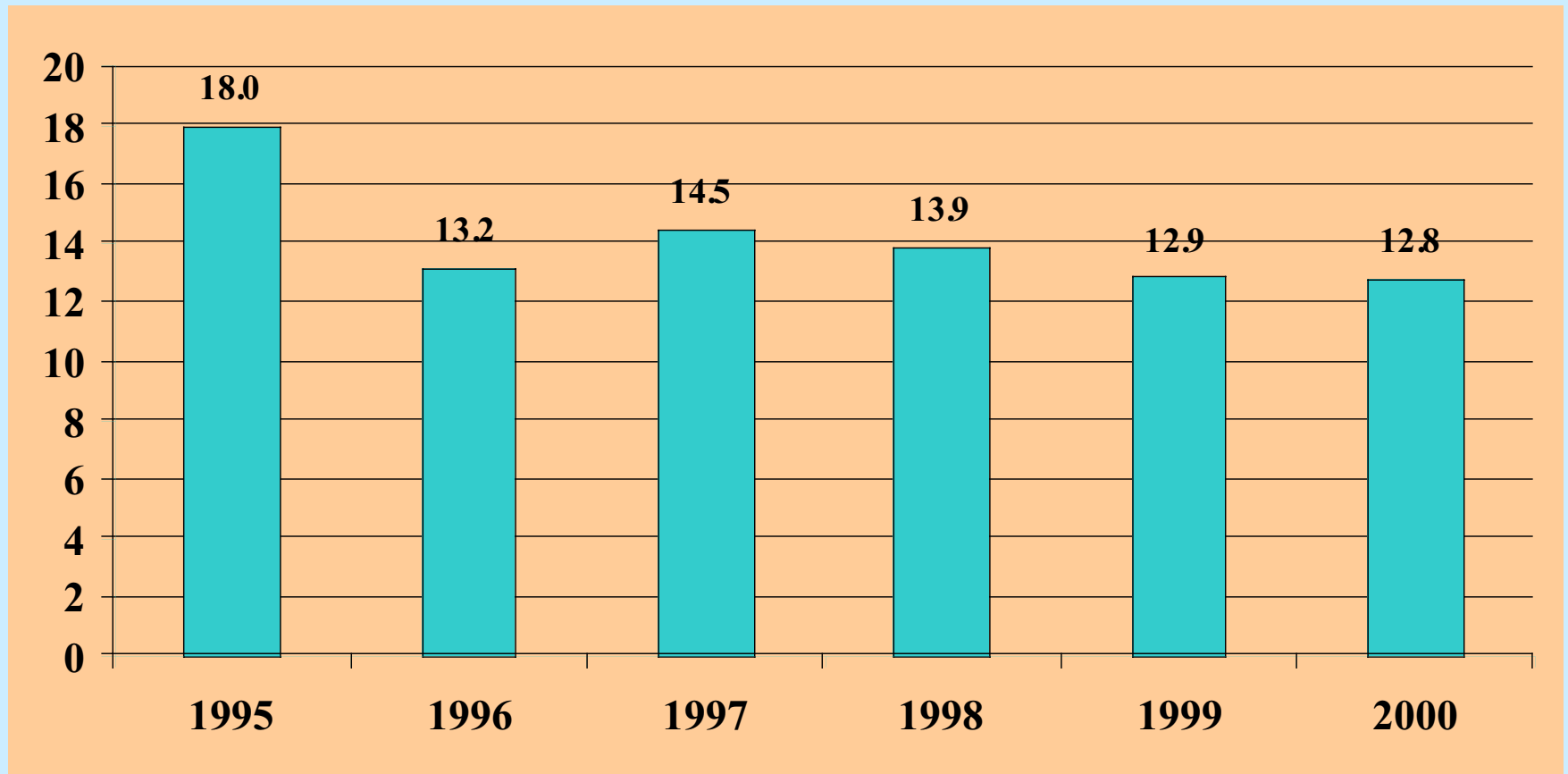
Total Number of First-Time Freshmen Enrolled in LS—Math, Fall 1995--Fall 2000



Percentage of First-Time Freshmen Enrolled in LS—Math, Fall 1995--Fall 2000

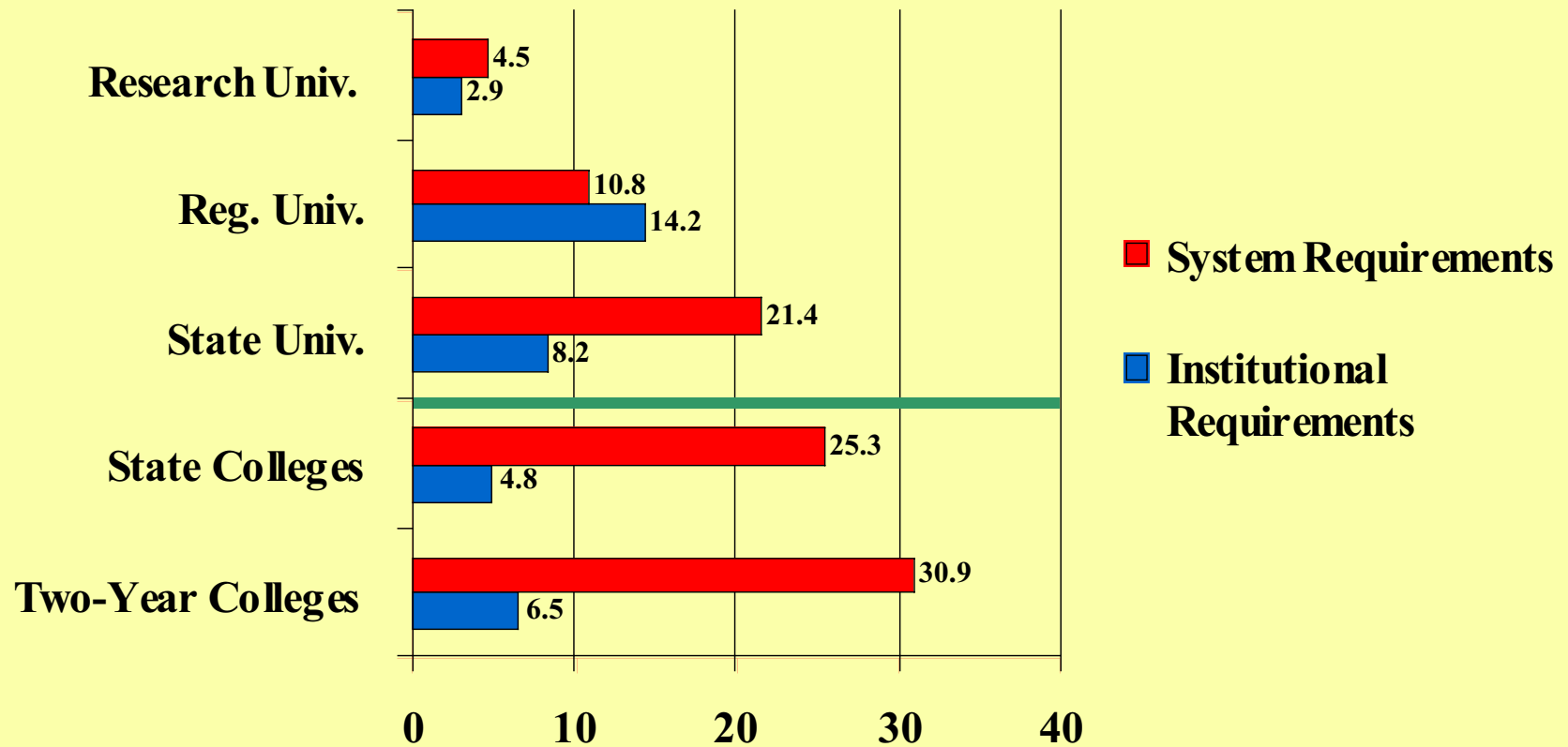


Percentage of First-Time Freshmen Enrolled in LS Math Because of System Requirements Fall 1995--Fall 2000



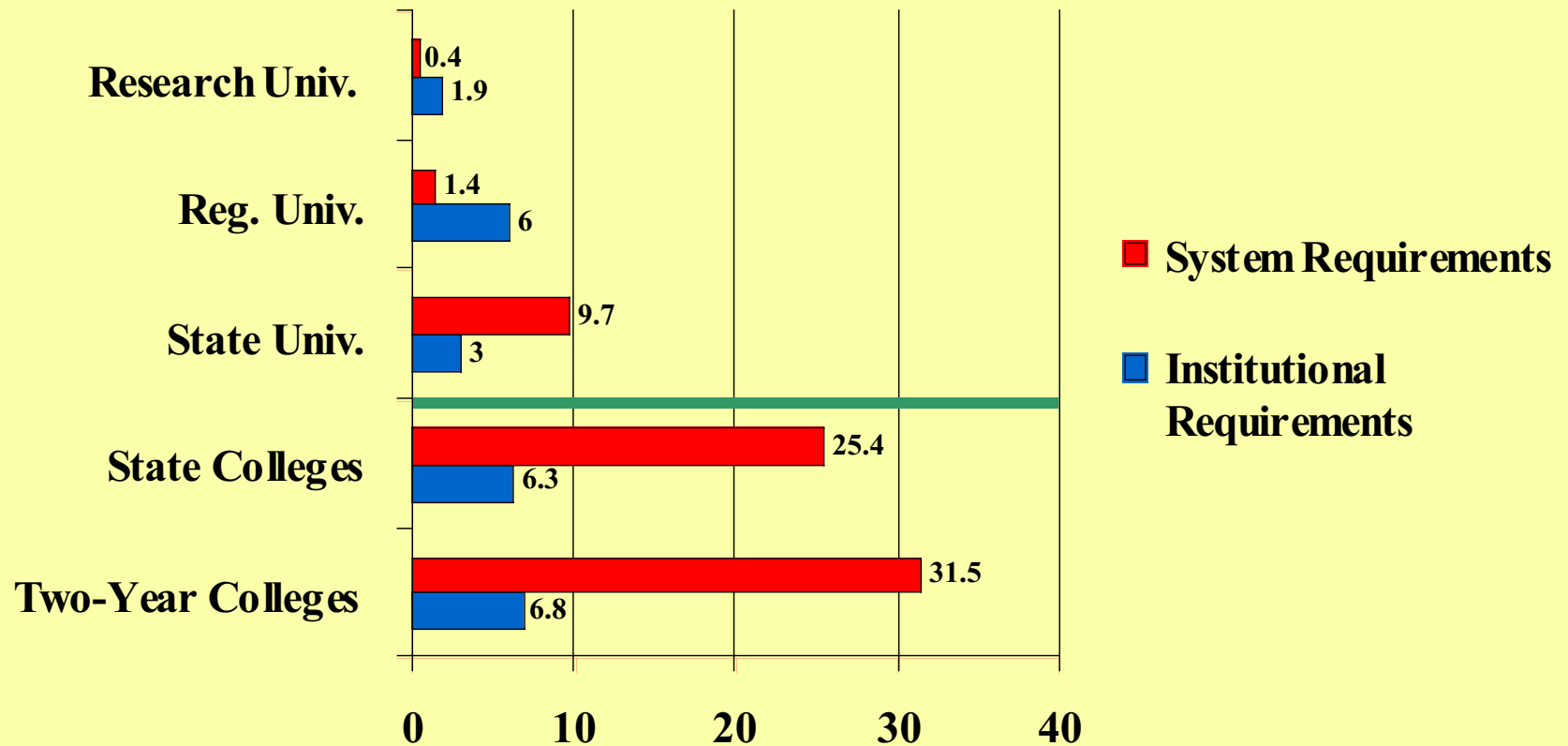
First-Time Freshmen

Proportion Enrolled in LS-Math by Sector: Fall 1995



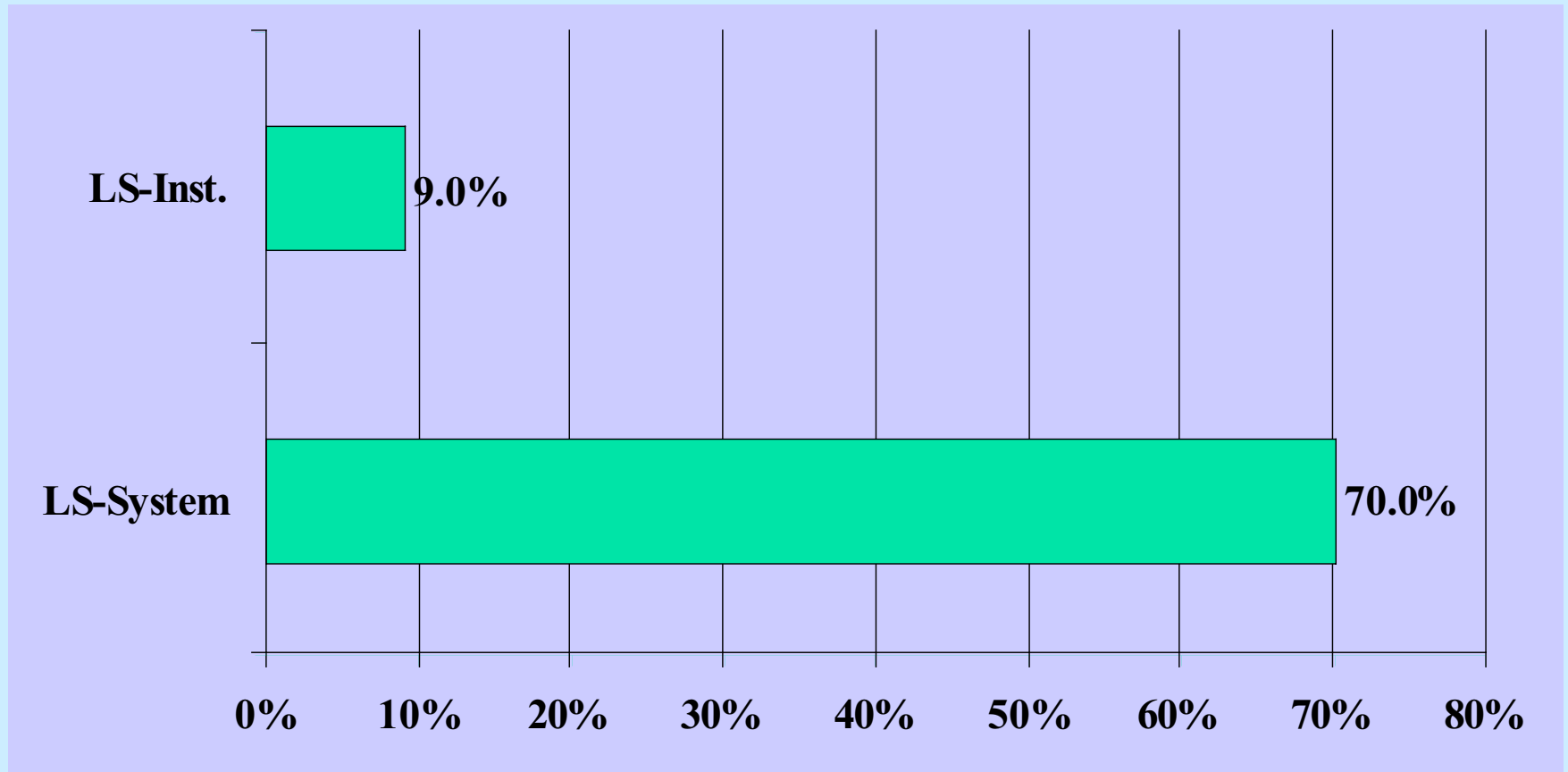
First-Time Freshmen

Proportion Enrolled in LS-Math by Sector: Fall 2000



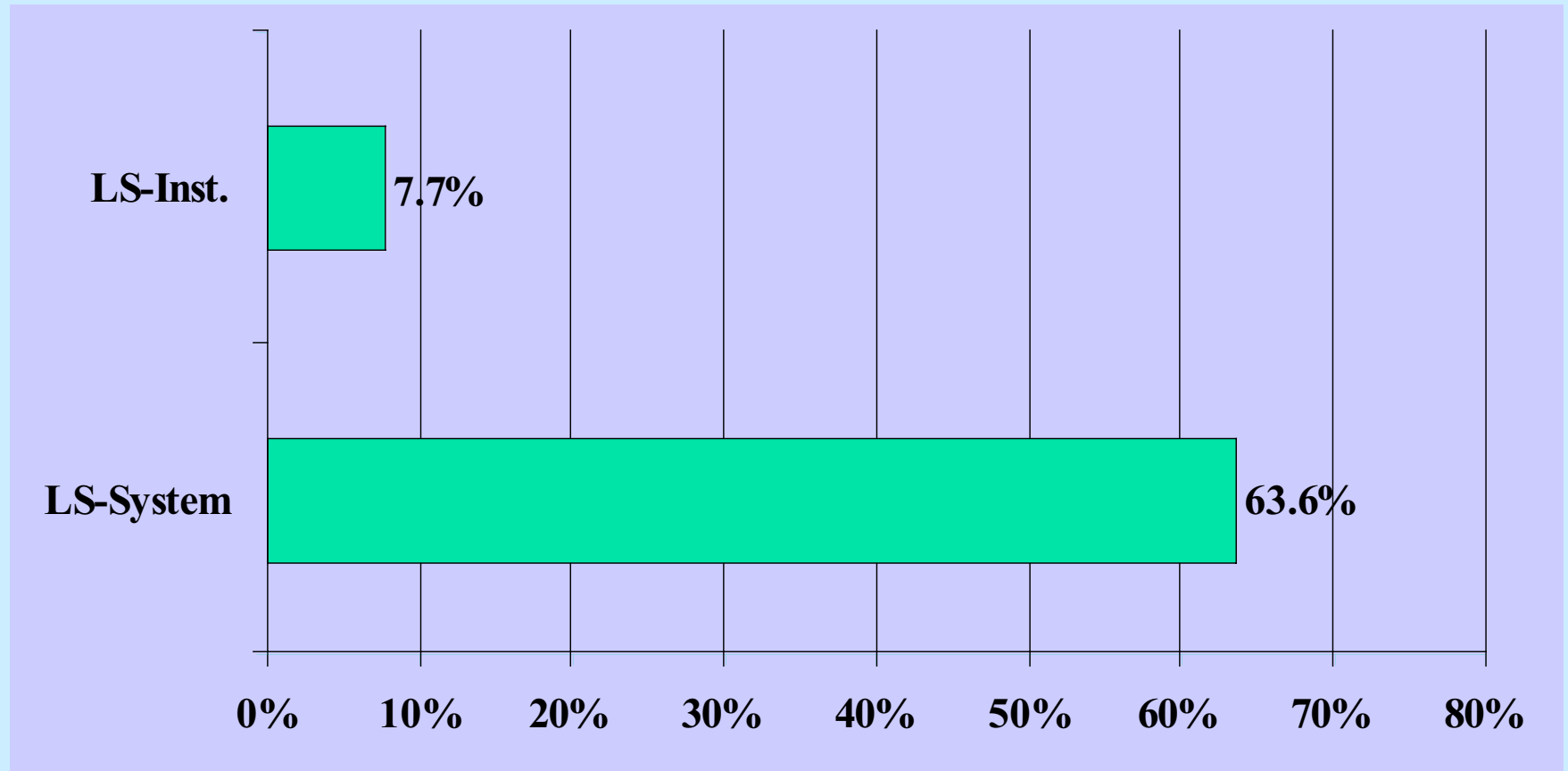
**Relationship Between
Placement in Learning
Support in Math
& CPC Completion in Math**

Percentage of First-Time Freshmen* with CPC Deficiencies Who Have LS—Math Requirements, Fall 1995



Note: * denotes that first-time freshmen were restricted to same-year HS graduates. Source: SIRS; USG SRA, October 2001.

Percentage of First-Time Freshmen* with CPC Deficiencies Who Have LS—Math Requirements, Fall 2000



Note: * denotes that first-time freshmen were restricted to same-year HS graduates. Source: SIRS; USG SRA, October 2001.

**University System of Georgia
Grades in Courses in
Math**

Issues in Studying Math Grades

■ Pass rates

- Are students prepared to continue?
- What is an adequate pass rate for a System?

■ Withdrawal rates

- Why do students withdraw? How often?
- Do these students eventually succeed?

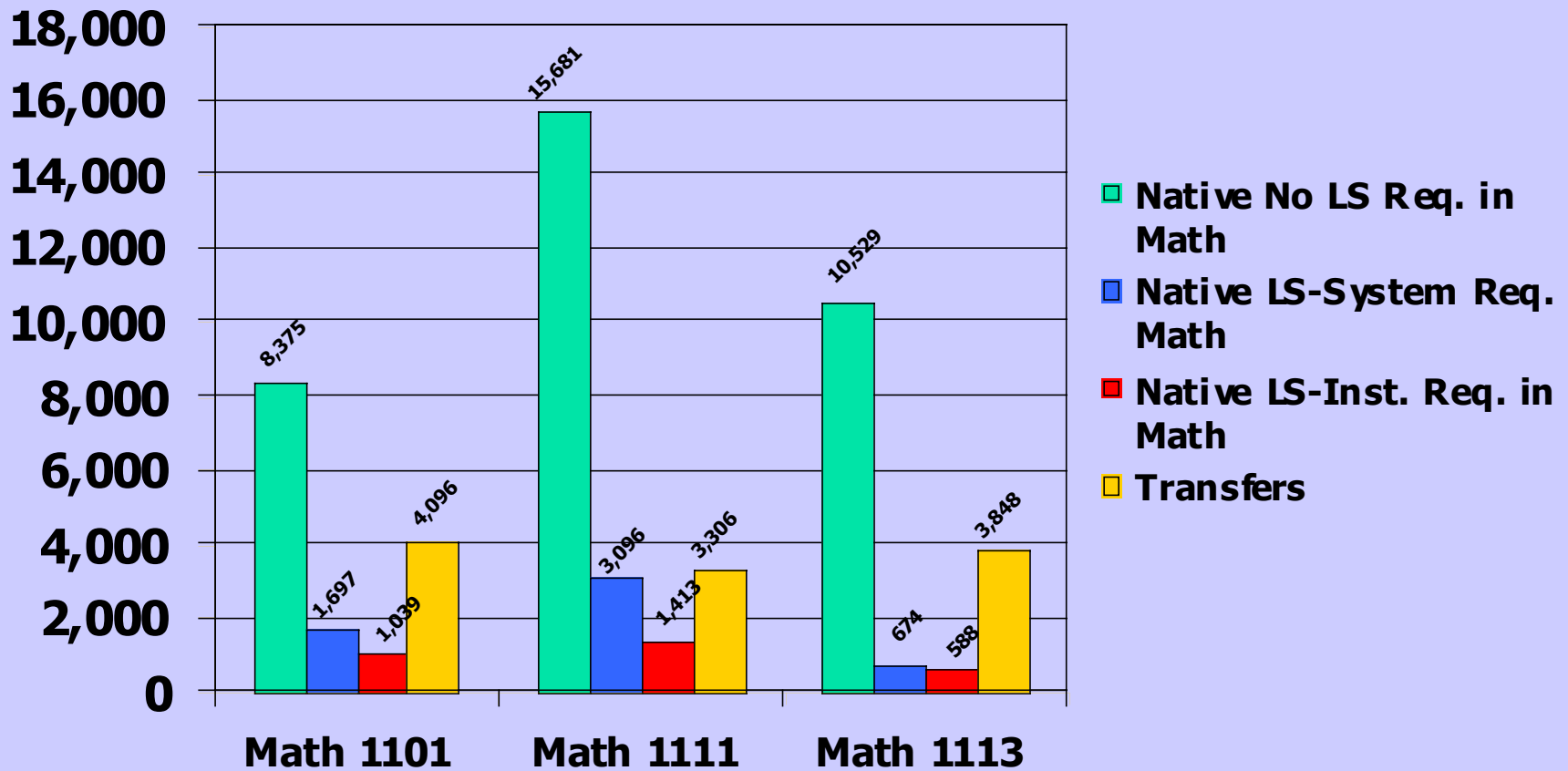
■ Do students who complete LS-Math succeed in LS math?

■ Major choice

- Are LS students effectively prohibited from pursuing majors that require Math 1113?

■ Do transfer students do as well in math as native students?

Numbers of Students Taking Math 1101, Math 1111, and Math 1113 All USG Institutions



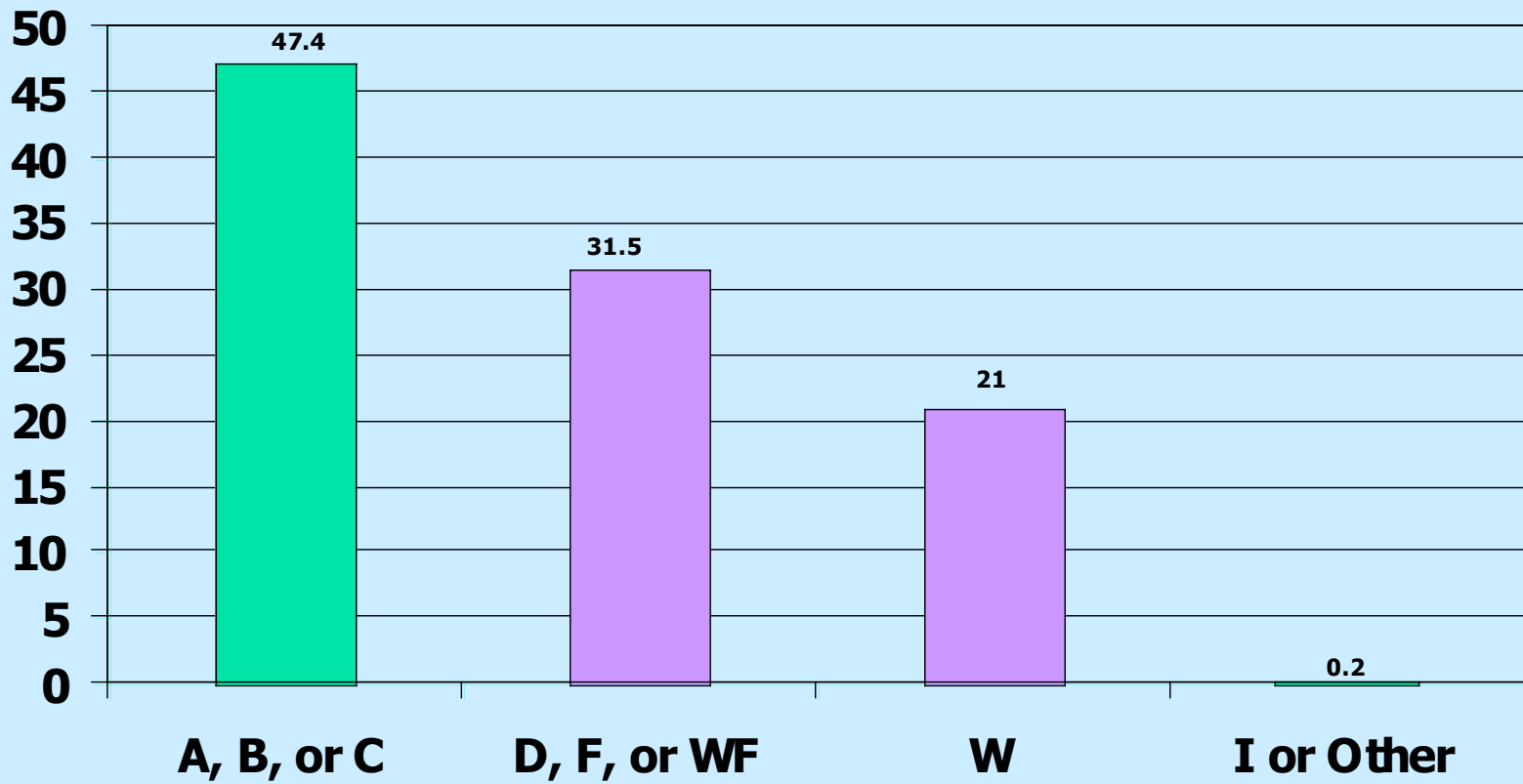
Math 1111 and Math 1101

- Almost twice as many students take Math 1111 as Math 1101.
- Few students who have taken learning support courses in math later take Math 1113.
 - LS students are limited from pursuing many majors.

Grades in Math 1111
College Algebra

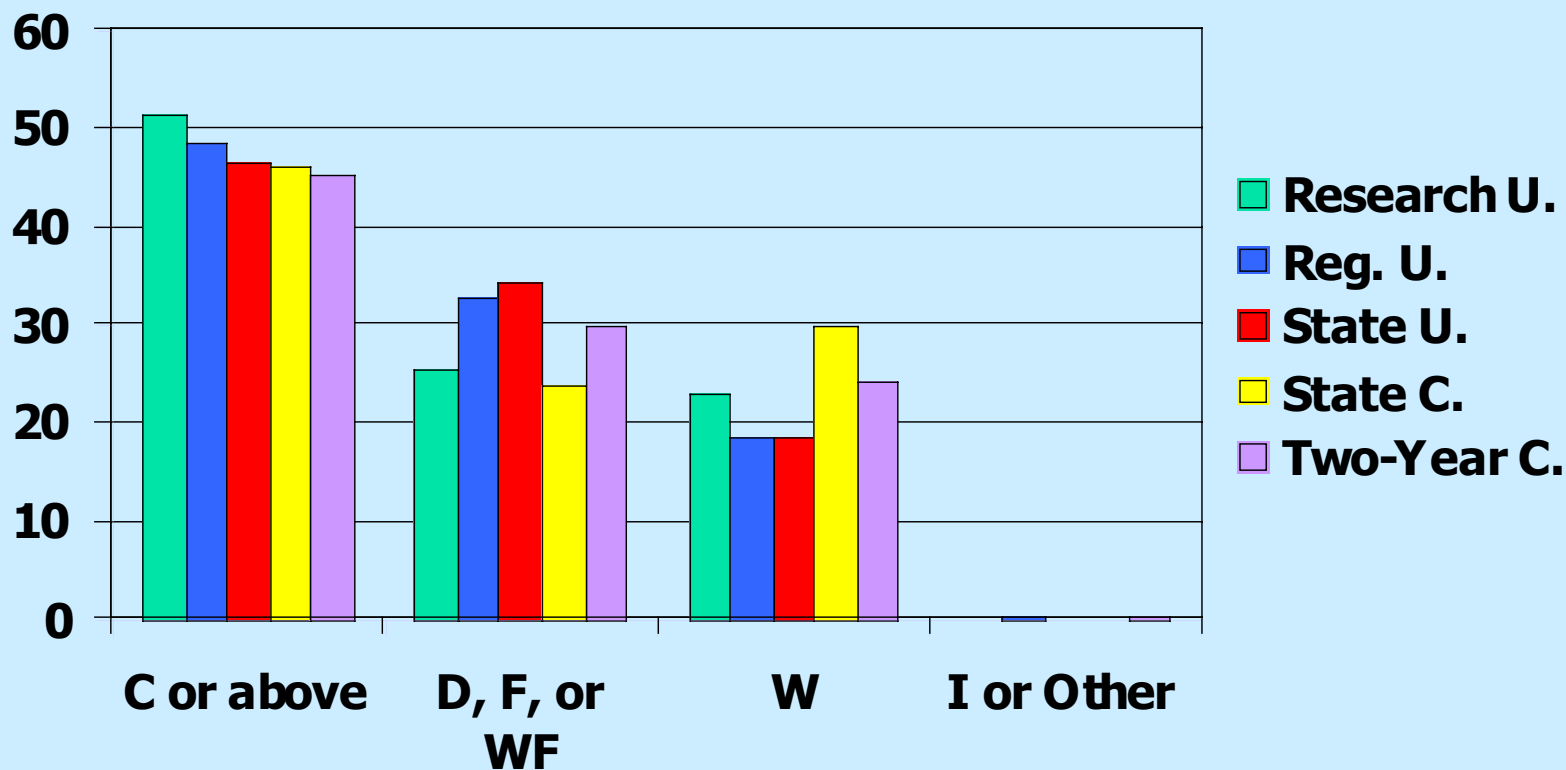
All USG Institutions

Course Grades for Math 1111—College Algebra

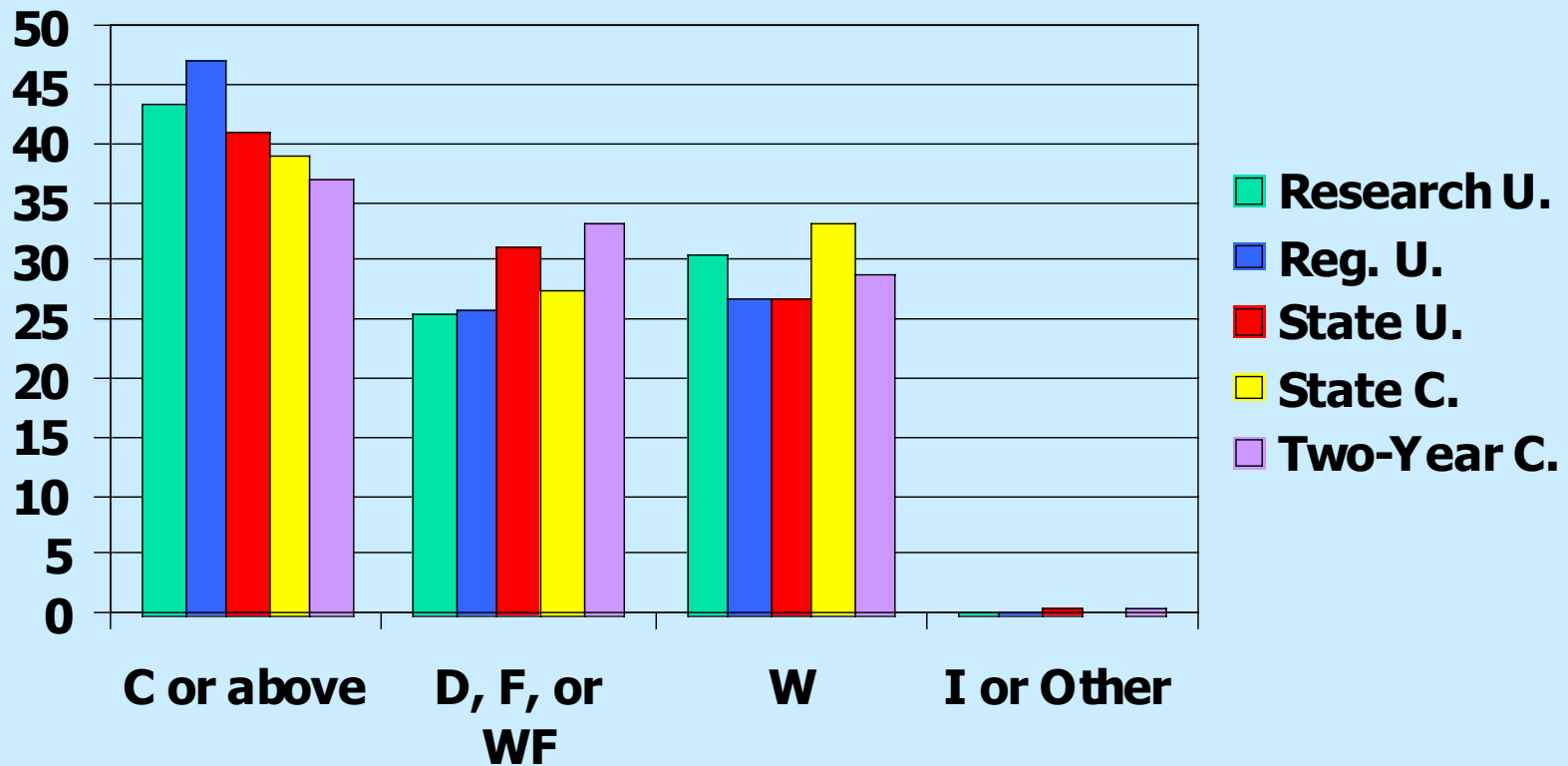


Notes: N=20,190 for all students with no transfer history who are took the course. Core/LS SIRS Feedback Data, 1999-2000. USG Office of Strategic Research & Analysis, October 2001.

Percentage of Students with Course Grades in Math 1111--All USG Institutions by Sector: Native Students

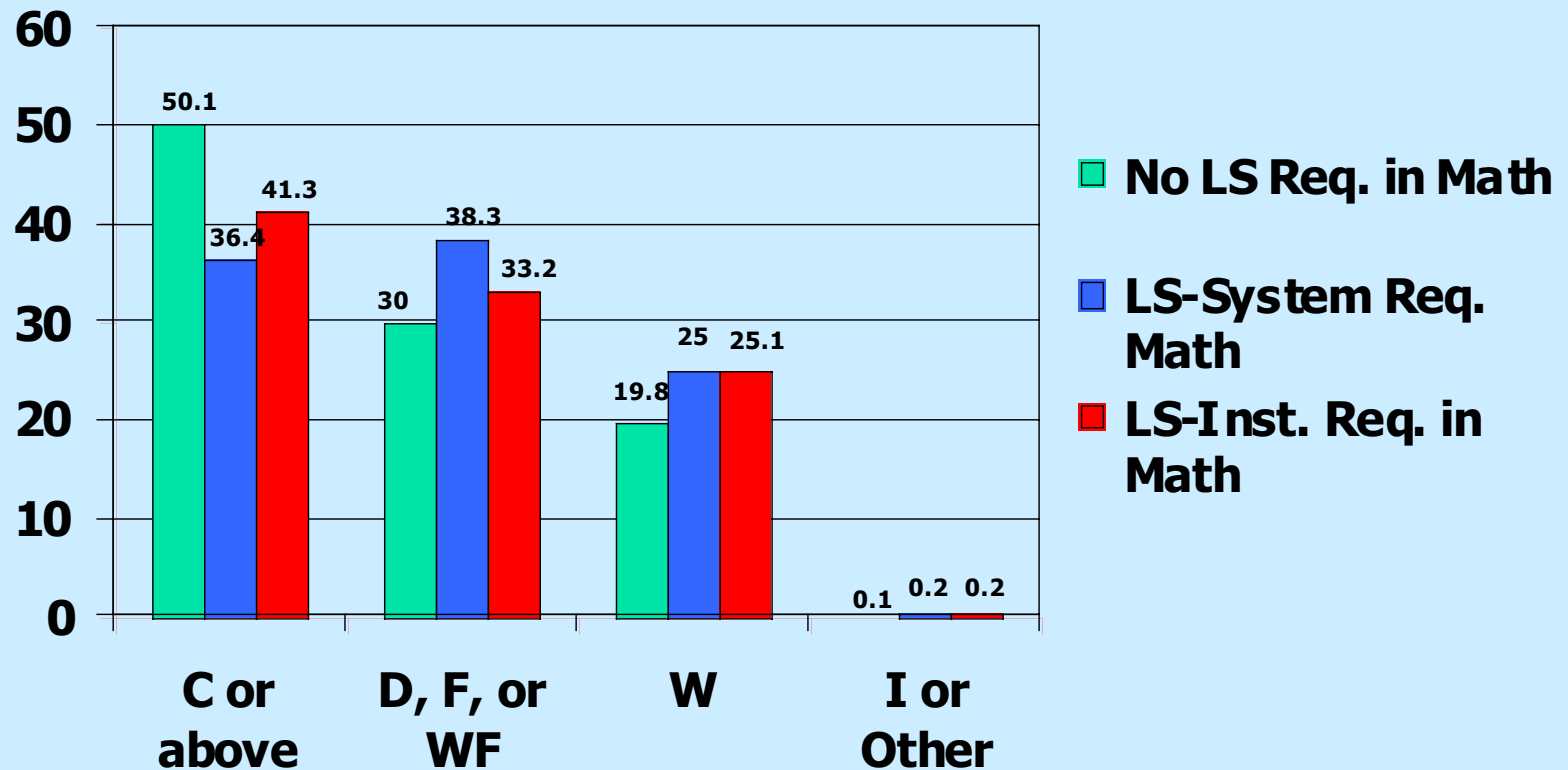


Percentage of Students by Course Grades in Math 1111--All USG Institutions by Sector: Transfer Students



Note: Core/LS SIRS Feedback Data, 1999-2000.
USG Office of Strategic Research & Analysis
October 2001

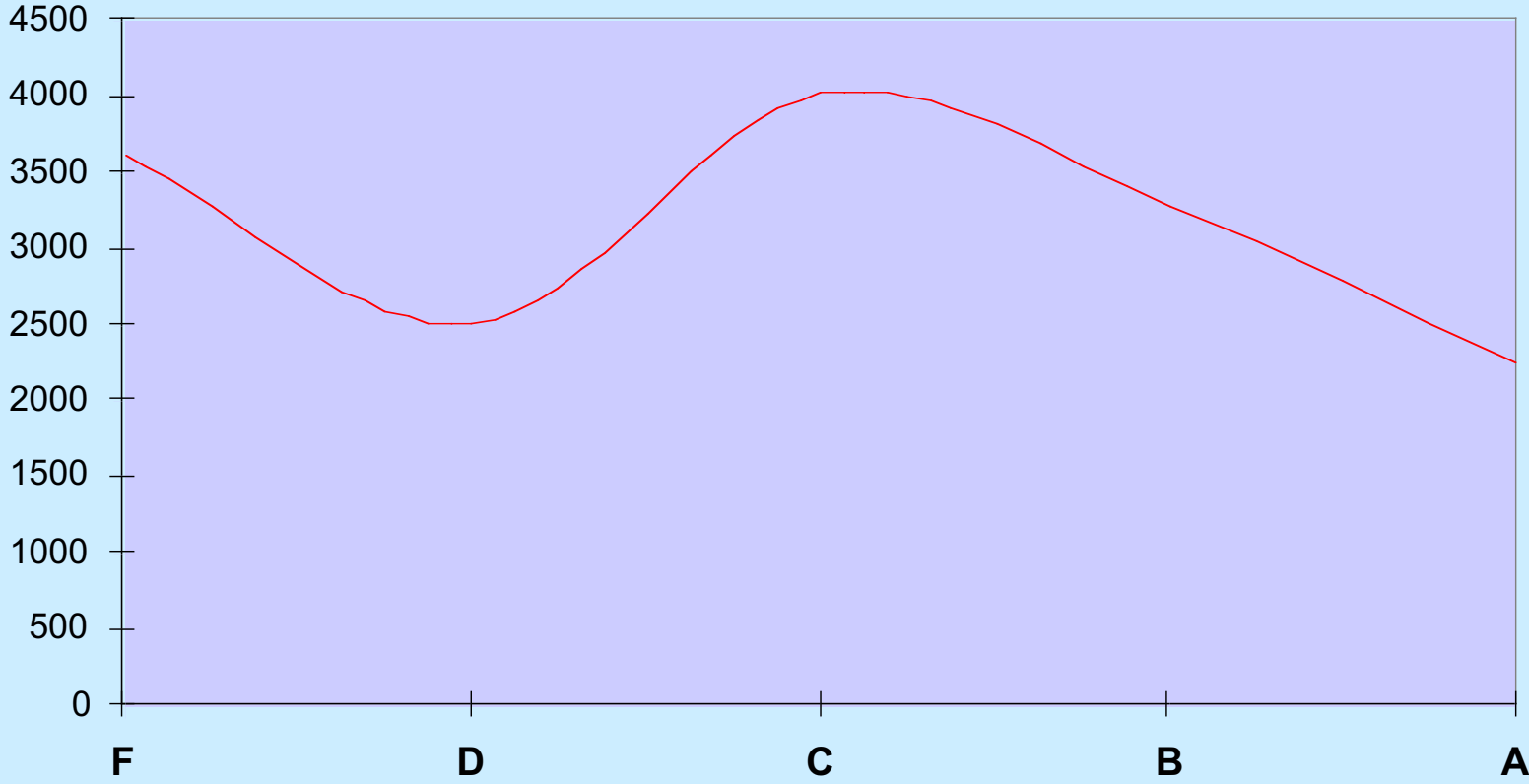
Percentage of Course Grades Math 1111--All USG Institutions by LS Status



Notes: N=20,190 for all students with no transfer history who are took the course; n=3,096 for those with LS-System requirement in math and no transfer history; n=15,681 for those with no LS requirement in math and no transfer history; n= 1,413 for those with an LS-institutional requirement in math and no transfer history. Note: Core/LS SIRS Feedback Data, 1999-2000, USG Office of Strategic Research & Analysis, October 2001.

All USG Institutions

Course Grades for Math 1111—College Algebra



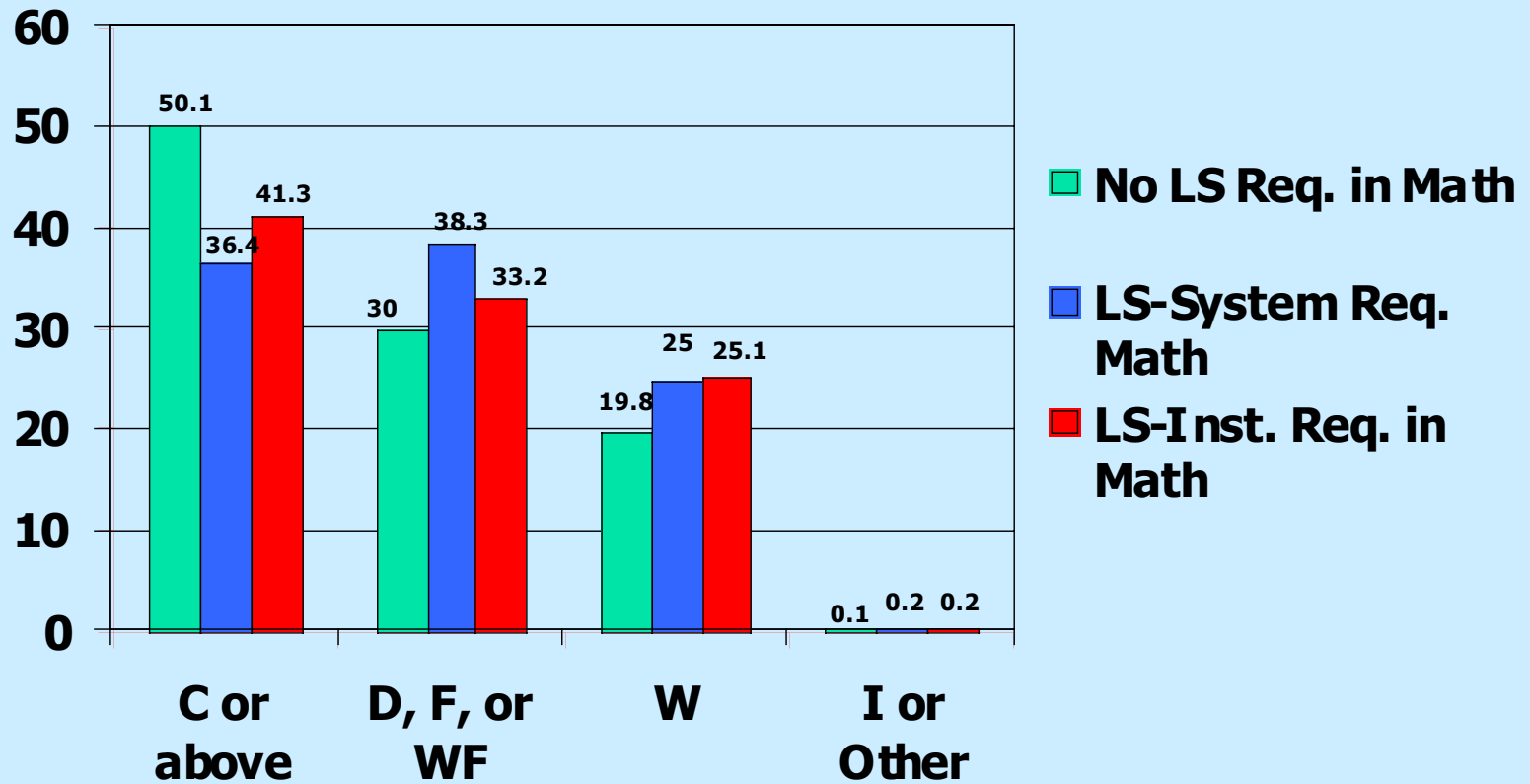
Notes: N=20,190 for all students with no transfer history who are took the course.

Math 1111

Success Rates of Native Students

- Almost half of those who did not require LS do not successfully complete Math 1111 (A, B, or C).
- Among those who required LS at the System level, 64 percent did not successfully complete Math 1111 in 1999-2000.

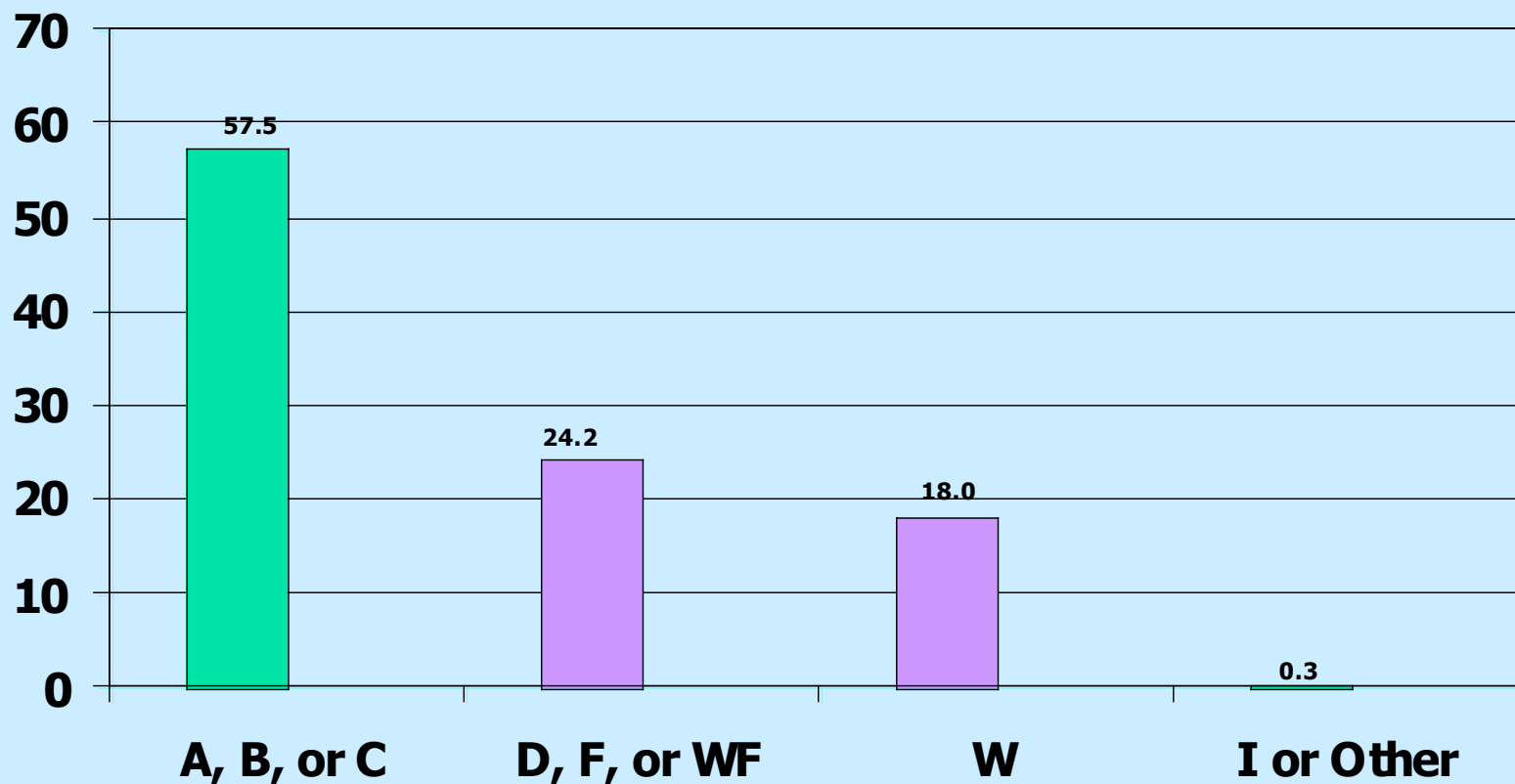
Percentage of Students by Course Grades for Math 1111—College Algebra All USG Institutions—Native Students



Notes: N=20,190 for all students with no transfer history who are took the course; n=3,096 for those with LS-System requirement in math and no transfer history; n=15,681 for those with no LS requirement in math and no transfer history; n= 1,413 for those with an LS-institutional requirement in math and no transfer history. Core/LS SIRS Feedback Data, 1999-2000, USG Office of Strategic Research & Analysis, October 2001.

**Grades in Courses in
Math 1101—Introduction
to Mathematics
Modeling**

Proportion of Native Students by Course Grades for Math 1101—Math Modeling by All USG Institutions



Notes: N=11,111 for all students with no transfer history who are took the course. Note: Core/LS SIRS Feedback Data, 1999-2000. USG Office of Strategic Research & Analysis, October 2001.

Native vs. Transfer Students

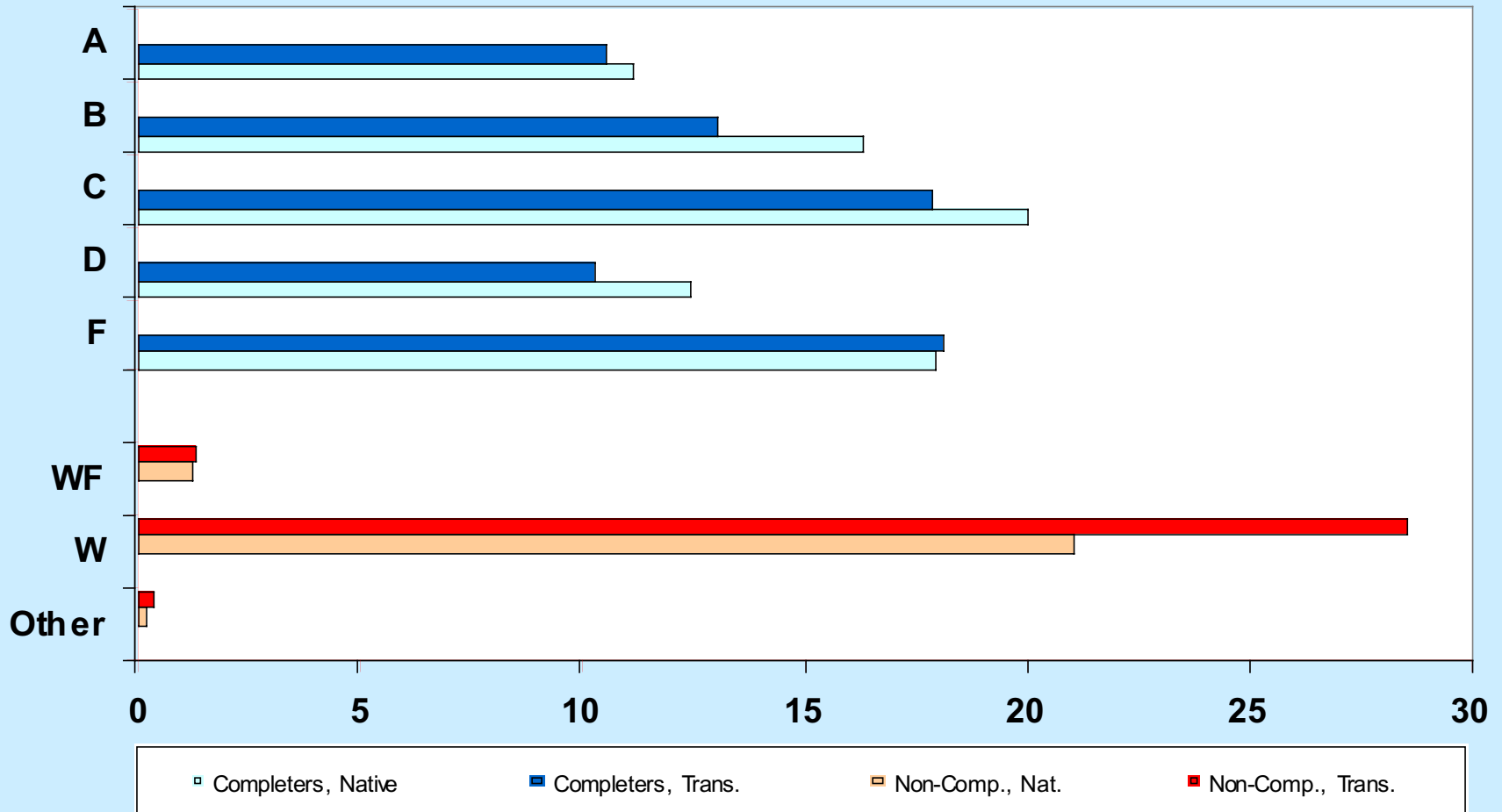
Math 1111

- Transfer students withdrew at a rate of 29 percent, compared to 21 percent for native students.

All USG Institutions

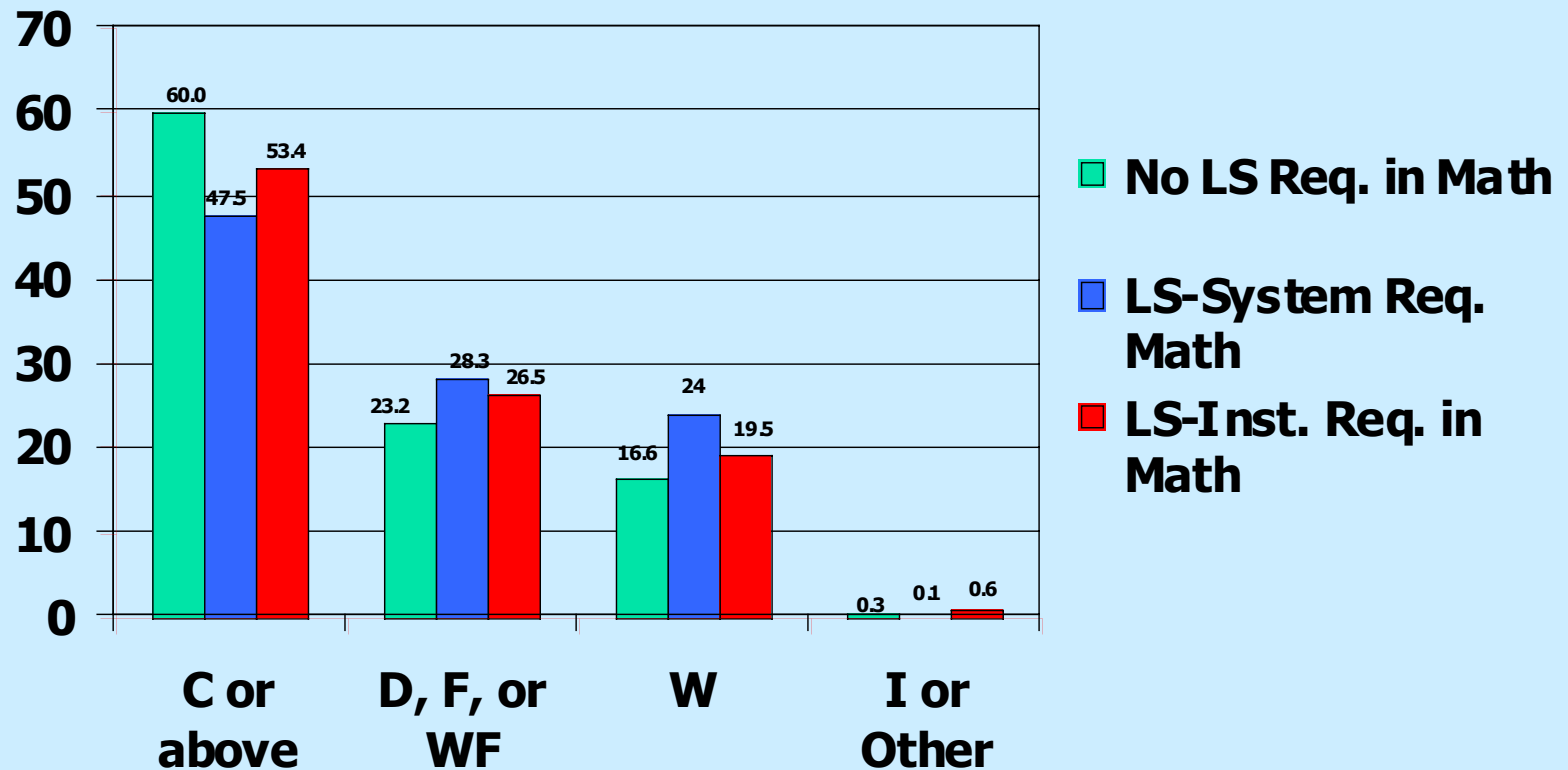
Completion Rates for Math 1111

Native vs. Transfer Students



Notes: N=20,190 for all students with no transfer history who are took the course, and N=4,085 for transfer students who took the course.

Proportion of Native Students by Course Grades in Math 1101 All USG Institutions by LS Status

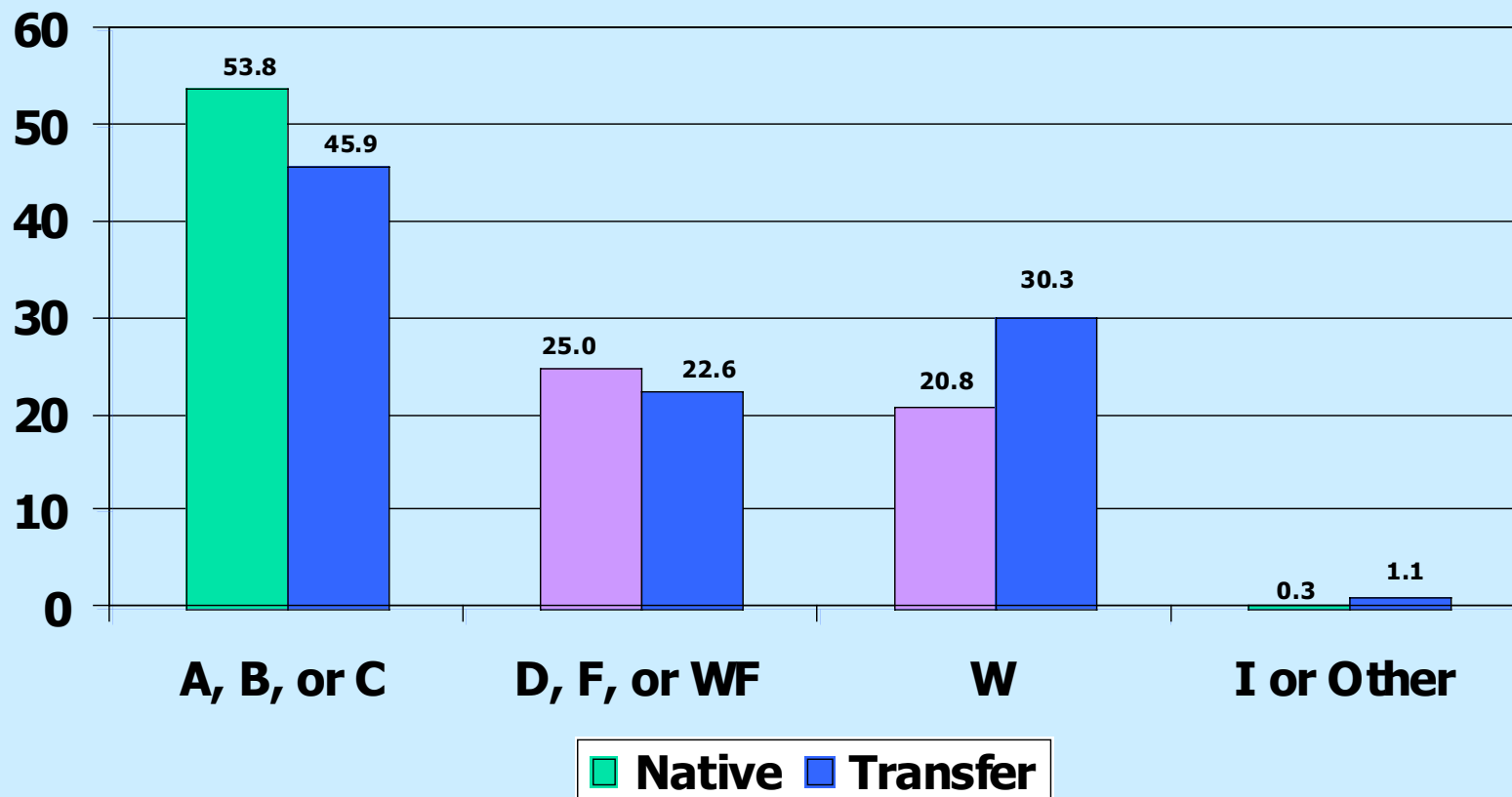


Notes: N=11,111 for all students with no transfer history who are took the course; n=1,697 for those with LS-System requirement in math and no transfer history; n=8,375 for those with no LS requirement in math and no transfer history; n=1,039 for those with an LS-institutional requirement in math and no transfer history. October 2001; USG SRA.

Grades in Courses in Math 1113—Pre-Calculus

Percentage of Students by Course Grades for Math 1113—Pre-Calculus:

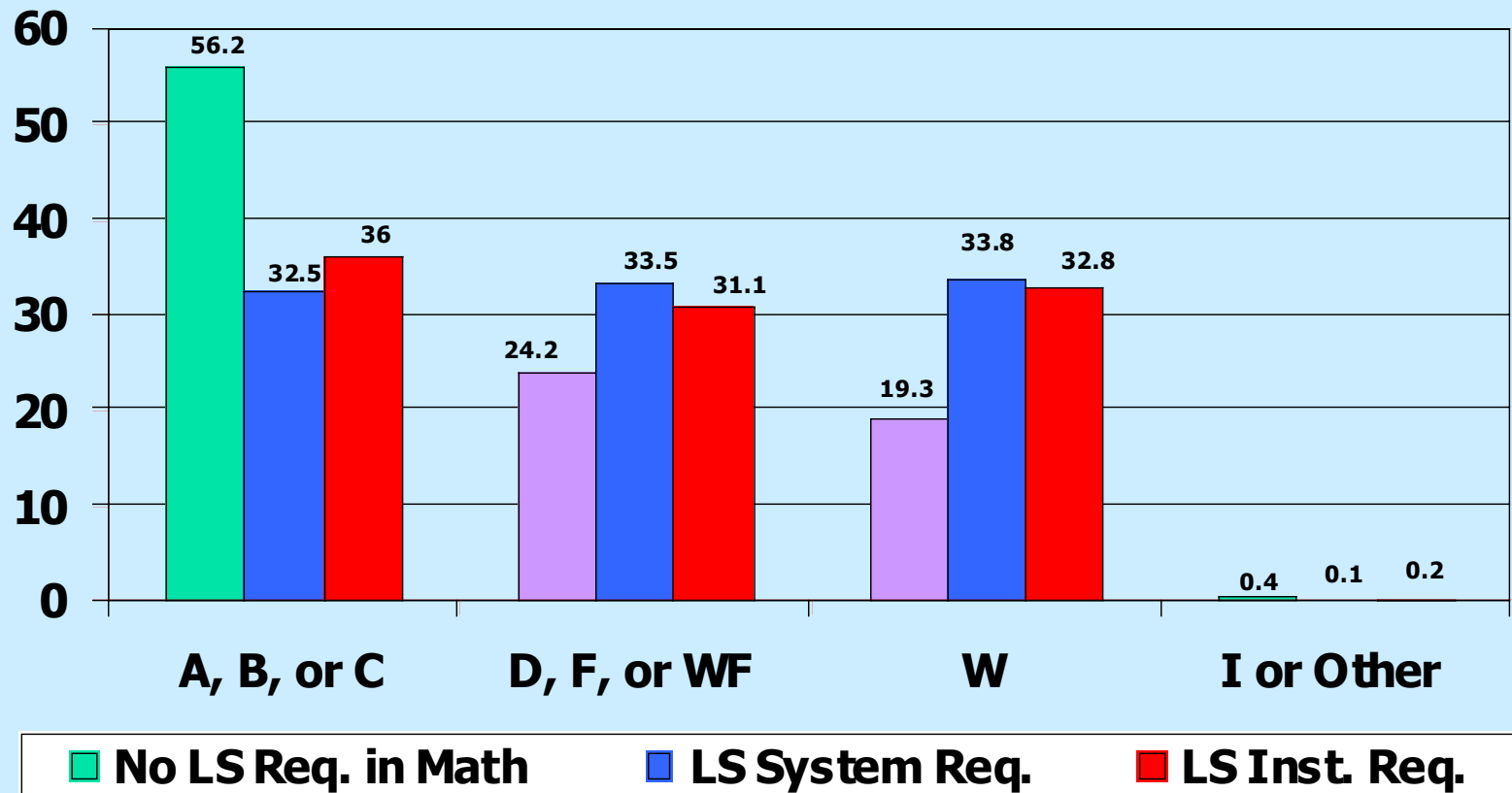
Native vs. Transfer Students at All USG Institutions



Notes: N=11,791 for all students with no transfer history who are took the course, and N=4,193 for transfer students who took the course.
Source: Core/LS SIRS Feedback Data, 1999-2000, USG Office of Strategic Research & Analysis, October 2001.

Percentage of Students by Course Grades for Math 1113—Pre-Calculus:

By LS Requirements for Native Students/All USG Institutions



Notes: N=11,791 for all students with no transfer history who are took the course.

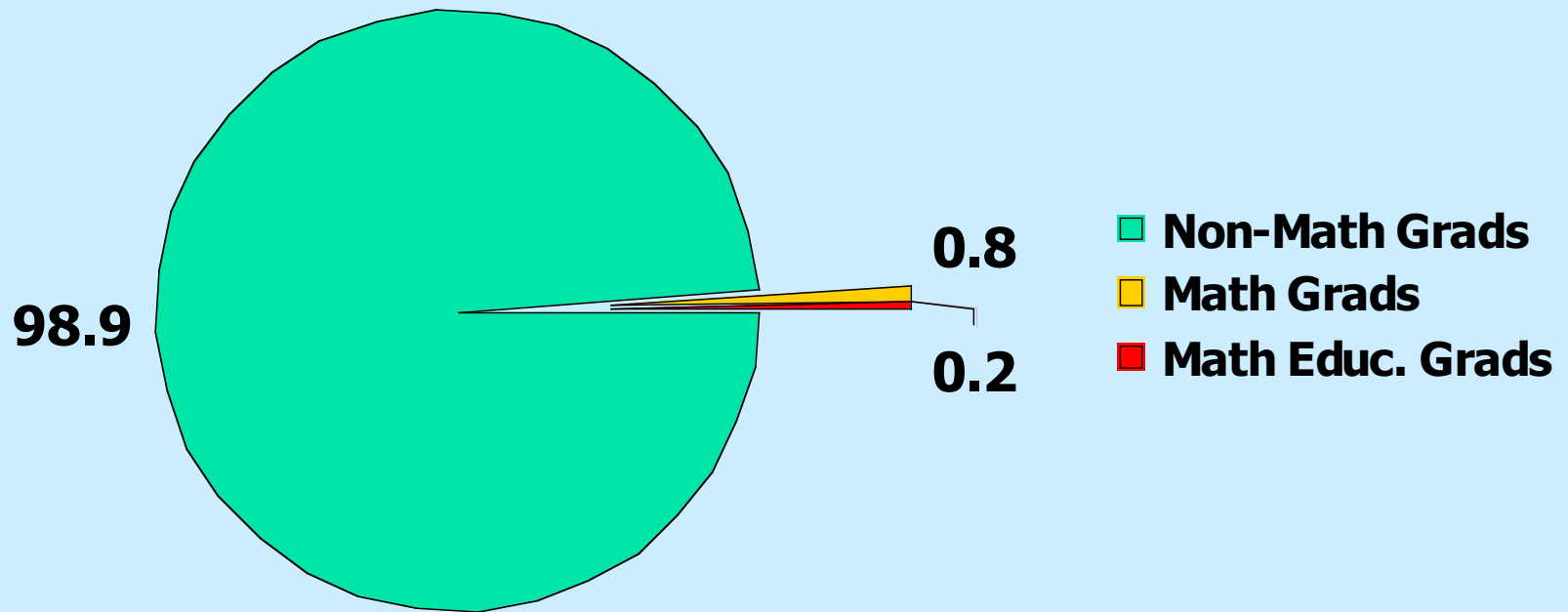
Source: Core/LS SIRS Feedback Data, 1999-2000, USG Office of Strategic Research & Analysis, October 2001.

USG Math Majors

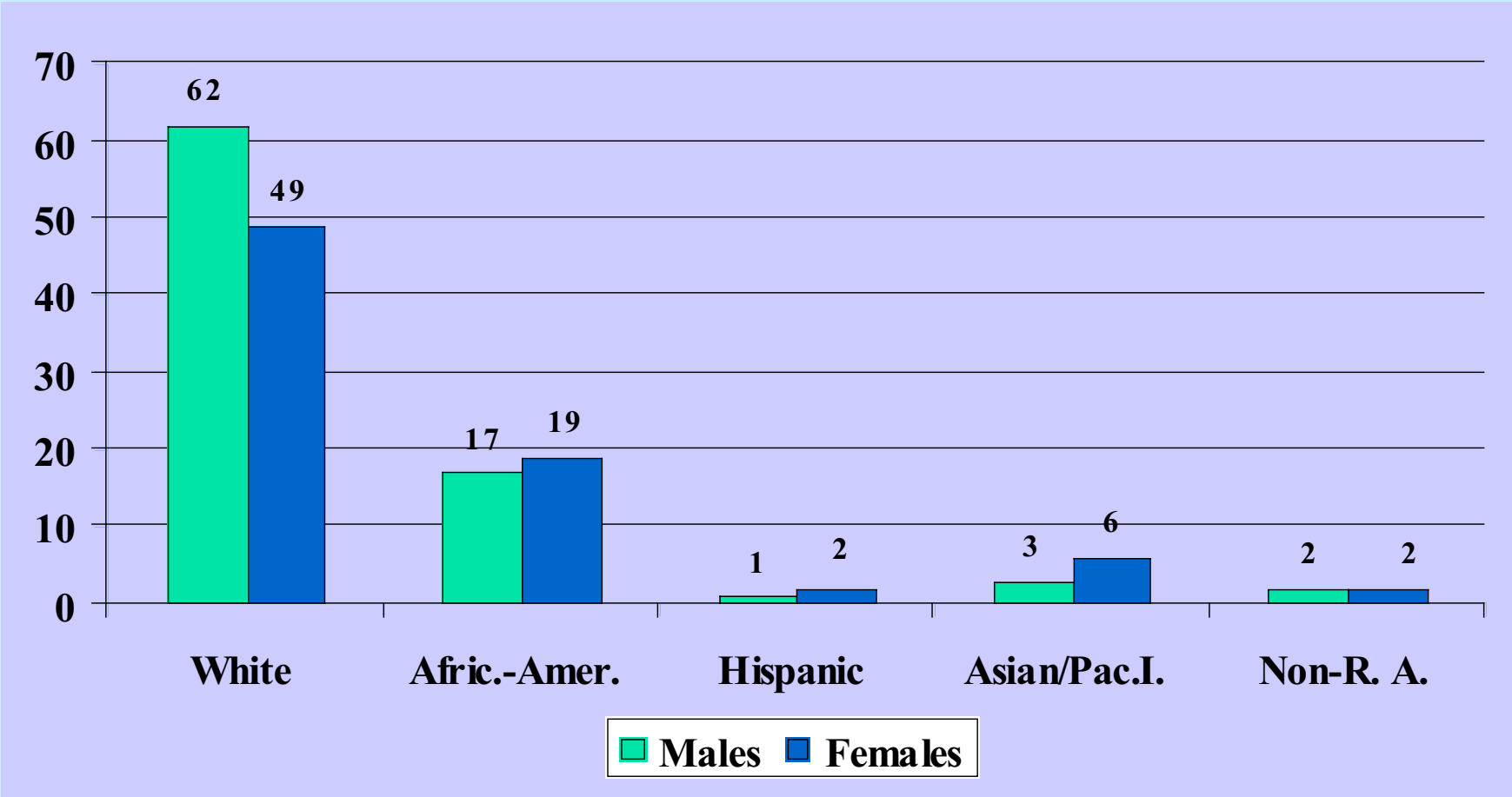
Number of Math & Math Education Baccalaureate Degrees, USG FY1999—FY2001



Percentage of Baccalaureate Degrees in Math: USG FY2001

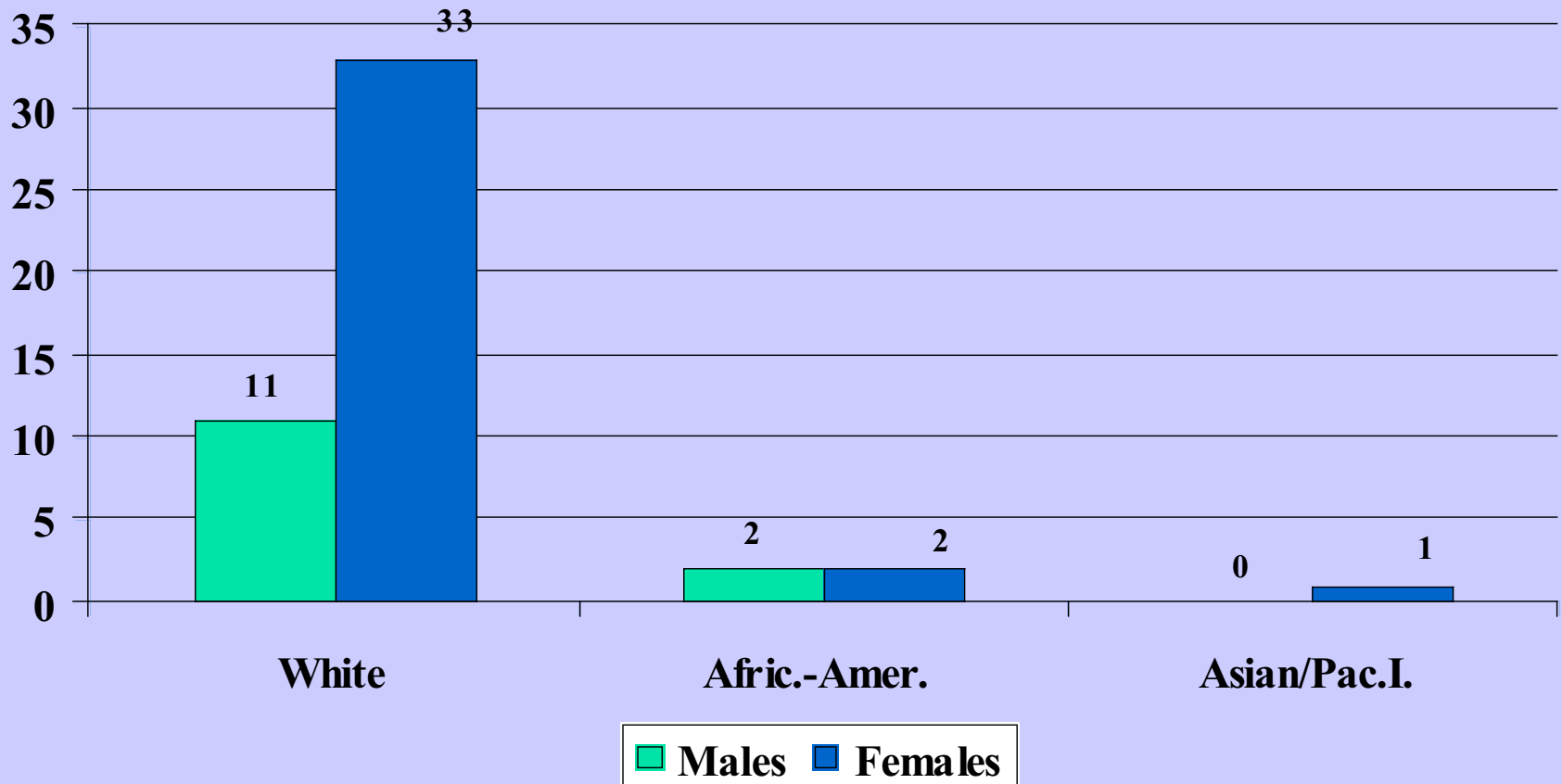


Number of Math Baccalaureate Degrees, FY2001 By Race/Ethnicity & Gender



Source: SIRS. If a race/ethnic category is not shown, no degrees were produced in that category in FY2001. USG SRA 2001. N=163 for CIP code 27.

Number of Math Education Baccalaureate Degrees in USG, FY2001 By Race/Ethnicity & Gender



Doctorates in Math in USG

■ Of 723 doctorates conferred by USG institutions in FY2001:

→ 22 were in math

- White: 2 males; 5 females
- Hispanic: 1 male
- Non-Resident Aliens: 12 males; 2 females

→ 9 were in math education

- White: 2 males; 6 females
- Non-Resident Alien: 1 male