



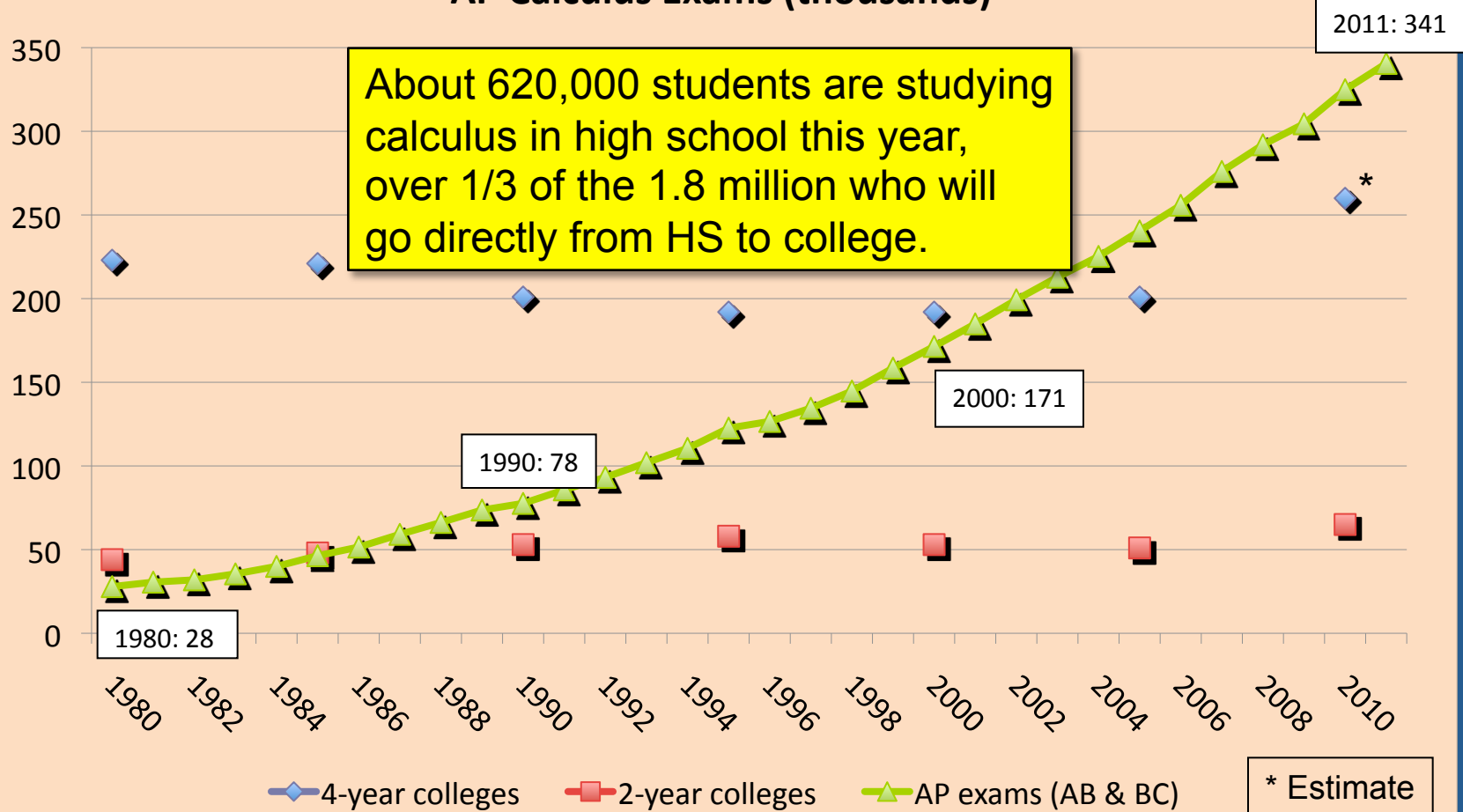
Why is the transition from High School to College important? Issues and next steps

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PowerPoint available at
www.macalester.edu/~bressoud/talks

Fall Enrollments in Calculus I versus AP Calculus Exams (thousands)



Of the high school students who graduated in 1992 and earned credit for “calculus” while in high school, 31% took *precalculus* in college, and a further 32% took *no calculus* in college.

Of the high school students who graduated in 2004 and earned credit for “calculus” while in high school, 17% took *remedial mathematics* in college.

NCES, NELS:88 and ELS:2002/06 data.

Students in college or university Calculus I:

61% studied calculus in high school

69% of them studied AP Calculus

60% of them took the AP Calculus exam
and earned 3 or higher

(20% of all students in college Calculus I)

MAA survey of 700 instructors, over 14,000 students, all
types of colleges and universities across US, Fall, 2010

Proposed MAA/NCTM recommendations:

Students who enroll in a calculus course in secondary school should have demonstrated mastery of algebra, geometry, trigonometry, and coordinate geometry.

The calculus course offered in secondary school should be treated as a college-level course.

The college curriculum should acknowledge the ubiquity of calculus in secondary school and offer entering students courses that are fresh and engaging.

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