

Maryland State Department of Education Analysis of 2007 High School Assessment Results

August 28, 2007

Introduction

In 2006, the Maryland State Department of Education (MSDE) examined the improvements in the High School Assessments (HSAs) passing rates over previous years. As 2009 approaches, MSDE has come to the point at which the focus on the HSAs must primarily be on looking forward and determining the distance from the goal—i.e., getting all students passing all four High School Assessment exams before completing their senior year.

Who are the students MSDE is focused on?

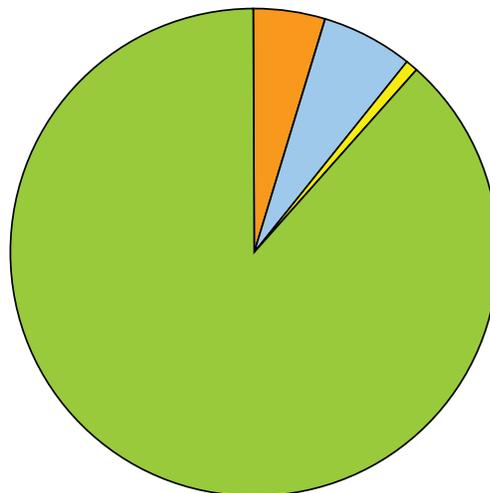
MSDE began the HSA analysis process by identifying a sample cohort student population. State regulations identify students who entered ninth grade for the first time in the fall of 2005 as the first cohort (2005-06 9th Grade Cohort) of students who must pass the four high school assessments in order to graduate. Most members of this group of students will graduate in the spring of 2009. However, it is not actually accurate to simply look at the “Class of 2009” because the class includes a number of students who actually started high school in the fall of 2004 or earlier and therefore do **not** have to pass the High School Assessments to receive a diploma. (See Fig. 1)

How many students is MSDE talking about?

Looking at a student population in any one grade at any particular time is always a challenge. Over the high school years, thousands of students are not promoted from one grade to another for various reasons, potentially resulting in as many as 5,000 students who were held back from the previous grade. (11,000 are not promoted from Grade 9 to Grade 10 each year.) For the 2007 tenth graders, MSDE estimates that 4,000 students do **not** have to pass the assessments to graduate because they are actually part of the cohort who began high school in the fall of 2004 or earlier.

Figure 1
Sample Student Population
2005-06 9th Grade Cohort
(i.e. Class of 2009)

-  Will meet graduation requirements
-  Non-Promotions
-  No Longer Enrolled
-  Special Education Certificates



How many students will be in the class of 2009?

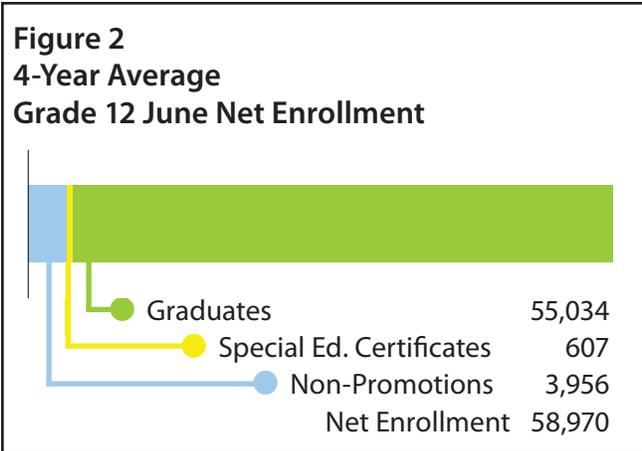
MSDE expects that approximately 55,000 students will be graduating and receiving Maryland High School Diplomas in the spring of 2009. This is based on the average number of students receiving a diploma in Maryland over the past four years. (See Fig. 2)

How many students are passing the four High School Assessments the first time?

The best way to answer this question is to look at HSA results after the majority of students in the 2005-06 9th Grade Cohort have taken the exam. Since most students take algebra by the end of grade 9, MSDE used the 2006 Algebra/Data Analysis HSA results. Approximately 45,000 students passed the first time they took the exam. A few thousand more students passed the exam in 2007 on the second try. The three remaining assessments in government, biology, and English are primarily tenth grade courses so MSDE used the 2007 results from those three exams. On average, approximately 45,000 students passed the first time they took the exam. (See Fig. 3)

Do Algebra/Data Analysis HSA test results say much about how students will do in the other three tests?

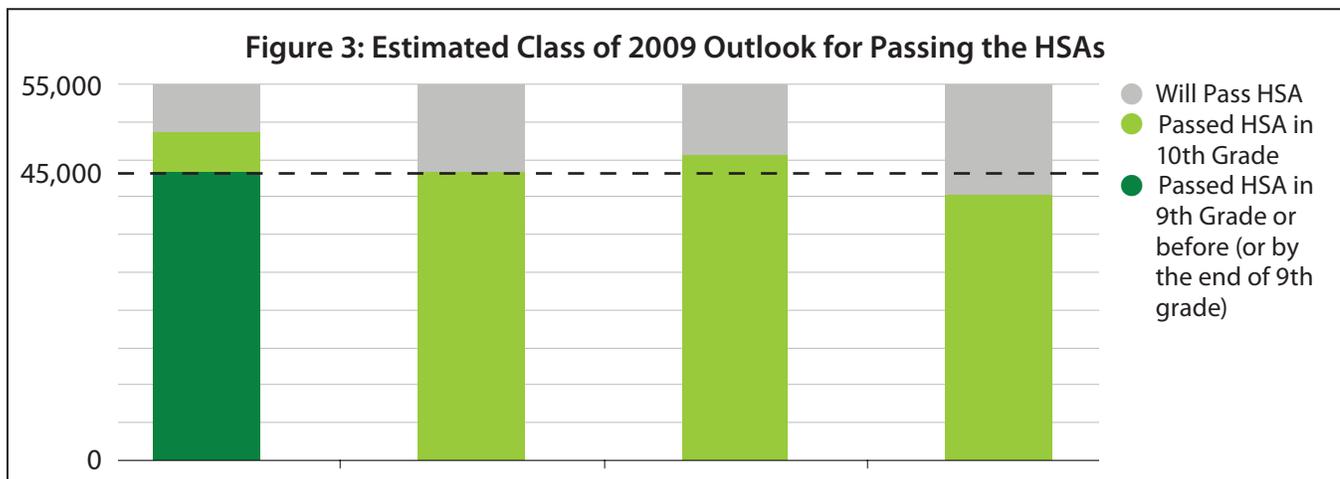
Yes, by the end of grade 9 in 2006, 44,908 students in this cohort passed the Algebra/Data Analysis HSA exam. While a small number of these students were taking the exam a second time, the algebra numbers are very consistent with the results of the



other three tests taken by the end of grade 10: 41,294 students passed Biology, 44,919 students passed English, and 47,522 passed Government. These results are promising given that many students have not yet taken the biology and government course and HSA exam. The results show that a very large number of students are achieving standards successfully the first time. The results are even more encouraging in light of the estimate of 55,000 students graduating in the spring of 2009.

What happens to students who take the courses later in high school?

MSDE has found that students who take HSA-related courses earlier in their high school career are generally more likely to pass the corresponding HSA exam on the first try. In spring of 2007, however, 3,771 tenth graders took and passed the Algebra/Data Analysis HSA exam for the first time.



What happens to students who take the courses later in high school? (cont'd.)

This increased the cumulative number of students passing in the 2005-06 9th Grade Cohort to 48,679 before adding re-takers.

How many students retook the Algebra/Data Analysis HSA exam and passed it?

Students in the 2005-06 9th Grade Cohort who failed the 2006 Algebra/Data Analysis HSA exam, retook the exam in 2007 with 2,385 passing. This brings the cumulative total of 2005-06 9th Grade Cohort students who passed the Algebra/Data Analysis HSA exam to 51,064. With the success of re-takers, the total number of passers is quickly approaching the number of graduating students from this class. This is very encouraging because students who have not yet passed the exams have numerous chances over the next two years to meet the requirement before graduation in spring 2009.

What can MSDE infer from the Algebra/Data Analysis HSA results about the remaining three High School Assessments?

Assuming that the same pattern holds, MSDE can infer that there will be approximately 51,000 students passing each of the other three assessments this time next year. Since the initial number of students passing biology, English, and government in 2007 is similar to the 2006 Algebra/Data Analysis results, this is a reasonable assumption. In addition, when Massachusetts instituted an exit exam, the initial number of students passing on the first try and on subsequent retests has been similar between their subject area tests. Initial numbers of students passing over time has also grown as achievement has improved. (See Fig. 4)

What are the prospects of getting all 55,000 students passing all four HSAs by the spring of 2009?

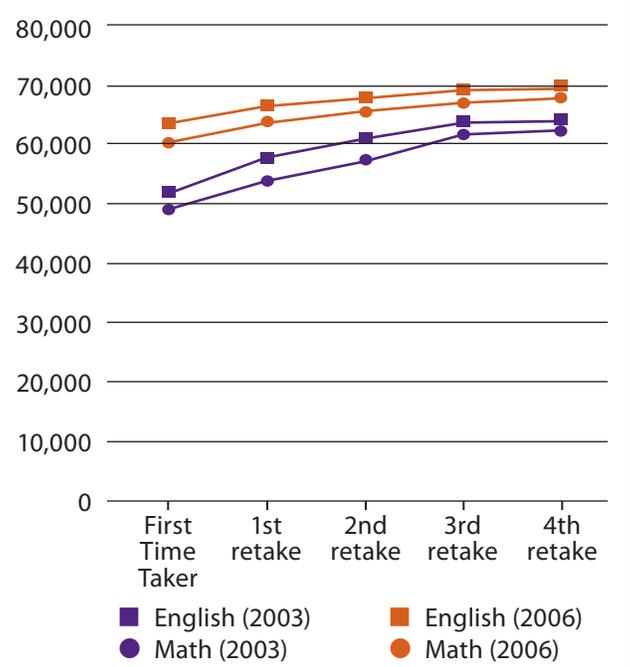
To answer this question, MSDE looked at the distribution of scores for the 2007 Algebra/Data Analysis HSA exams. Therefore we believe that there are 1,600 to 3,000 students who are quite likely to pass the assessments between now and the spring of 2009. The

data showed that 1,685 students are close to passing the Algebra/Data Analysis HSA, missing the passing score by 10 scale points or less. These students are very likely to pass the next time they take the exam with study and assistance. Additional students who missed the standard by more points but are still well within striking distance of the passing score.

Do these numbers still come up a little short of the goal of having 100% of students graduate on time in 2009?

MSDE is not certain, but there may be some students who will still fall short of the 1602 scale points needed across the four exams to meet the testing requirement for graduation. There are a number of options being examined using Algebra/Data Analysis HSA results as the base for the model. Between the 2006 and 2007 Algebra/Data Analysis HSA, there are 51,064 students who have passed, with as many as 1,600 or 3,000 additional students well within reach of the passing score. If these students do not reach the passing score, MSDE could establish an alternative route to meeting the testing requirement for graduation.

Figure 4
Performance on Massachusetts Exit Exams



Summary

The 2007 HSA results are the most meaningful results MSDE has to date, and the statewide data tells only part of the story. Further analysis of local schools system results will be critical in helping school systems translate the statewide picture into a more valuable template for their own purposes.

MSDE has received a great deal of feedback from stakeholders and the public, including a 2006 survey conducted by University of Baltimore's Schaefer Center for Public Policy, strongly supporting the High School Assessments' level of standards and series of exams as a graduation requirement. While many stakeholders feel there is a current need for a supplemental plan for meeting the HSA graduation requirement, MSDE's data shows it would only be for a small population of students.

Overall, the cumulative 2006 and 2007 HSA data has clearly shown that students are passing at levels consistent with former exams, such as the Functional Tests. Based on this information, MSDE is confident that passing rates will only improve by the class of 2009 and beyond, and Maryland's students will graduate better prepared for the opportunities the lie ahead of them.

If you have further questions, please check the following websites:

- www.MarylandPublicSchools.org
- www.HSAexam.org
- www.MdReportCard.org

2007 High School Assessments (HSA) Results

Presented to
Maryland Board of Education

August 28, 2007

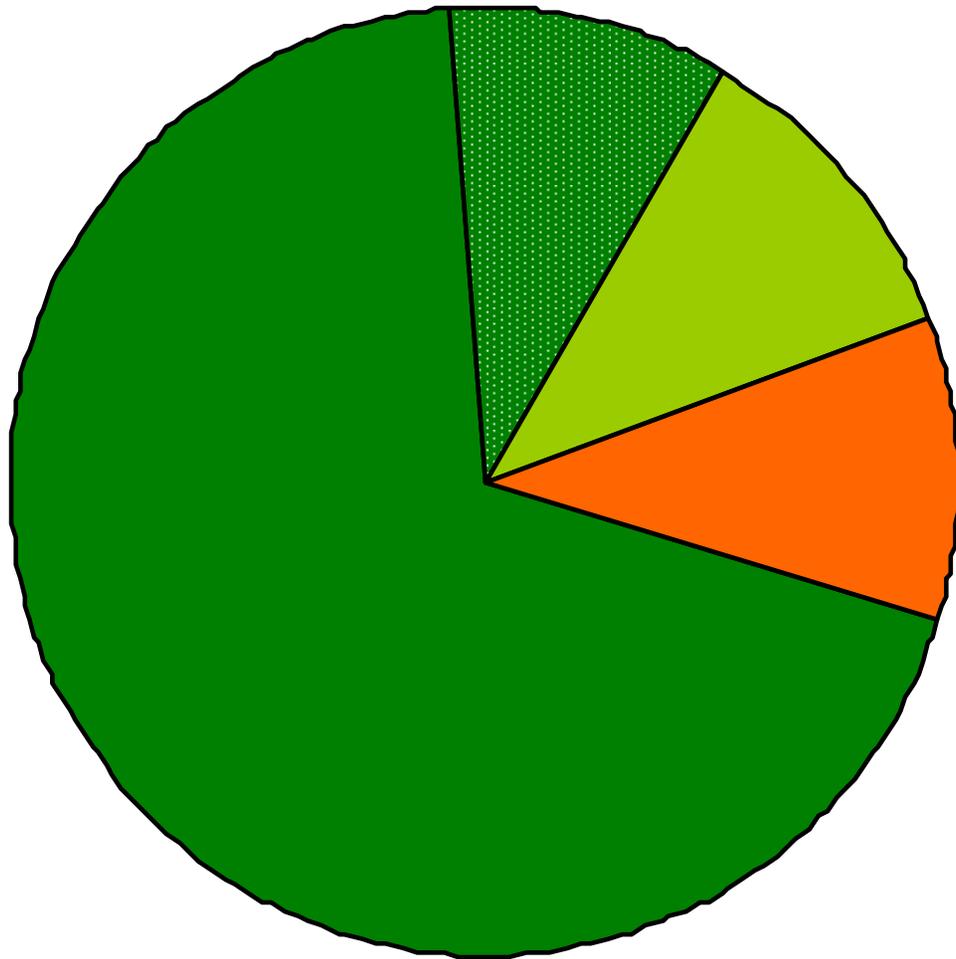
2007 Highlights

- All systems showing progress, including subgroups.
- More than 80% of students in 14 school systems passed the Algebra/DA HSA the first time they took the test.
- Other HSA subject areas are reflecting the same passing patterns as the Algebra/DA HSA.
- By 2009, we expect nearly all remaining eligible graduates to pass the HSAs.

Algebra: Results Reveal Success Patterns

**Algebra results aid in understanding
how our students are doing**

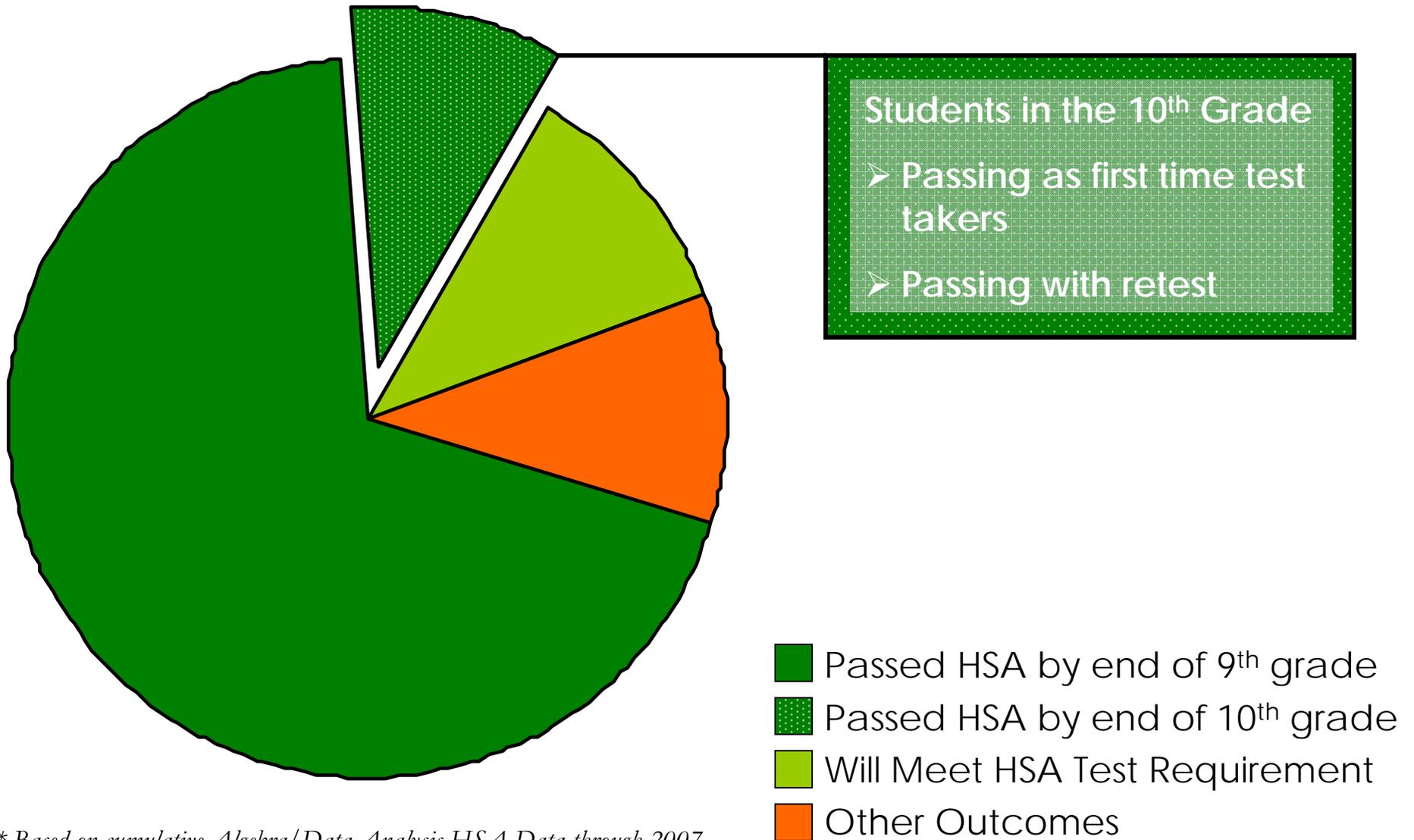
ALGEBRA: Passing Students Continue to Add Up



- Passed HSA by end of 9th grade
- Passed HSA by end of 10th grade
- Will Meet HSA Test Requirement
- Other Outcomes

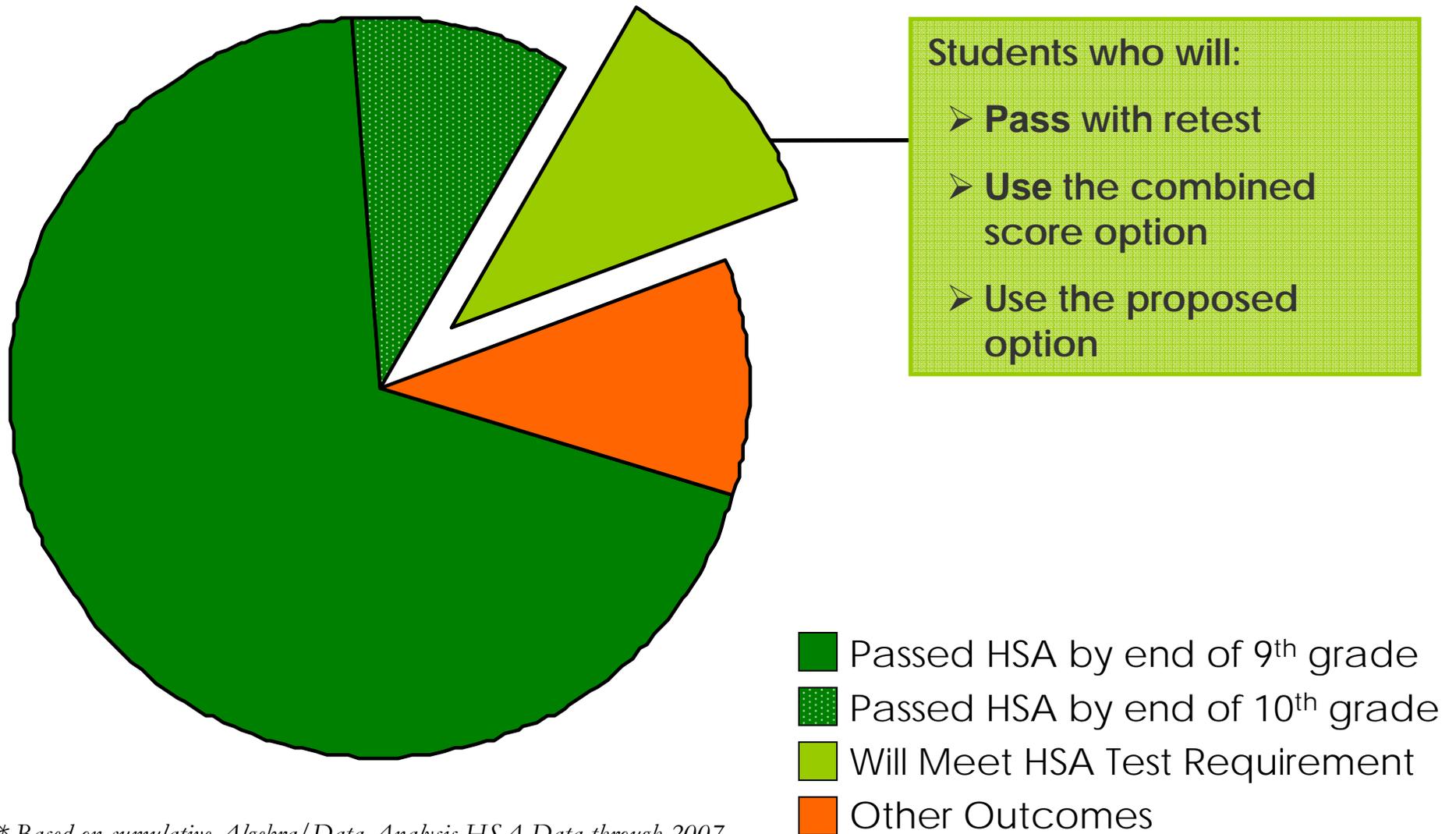
* Based on cumulative Algebra/Data Analysis HSA Data through 2007.

ALGEBRA: Additional Grade 10 Students Passing



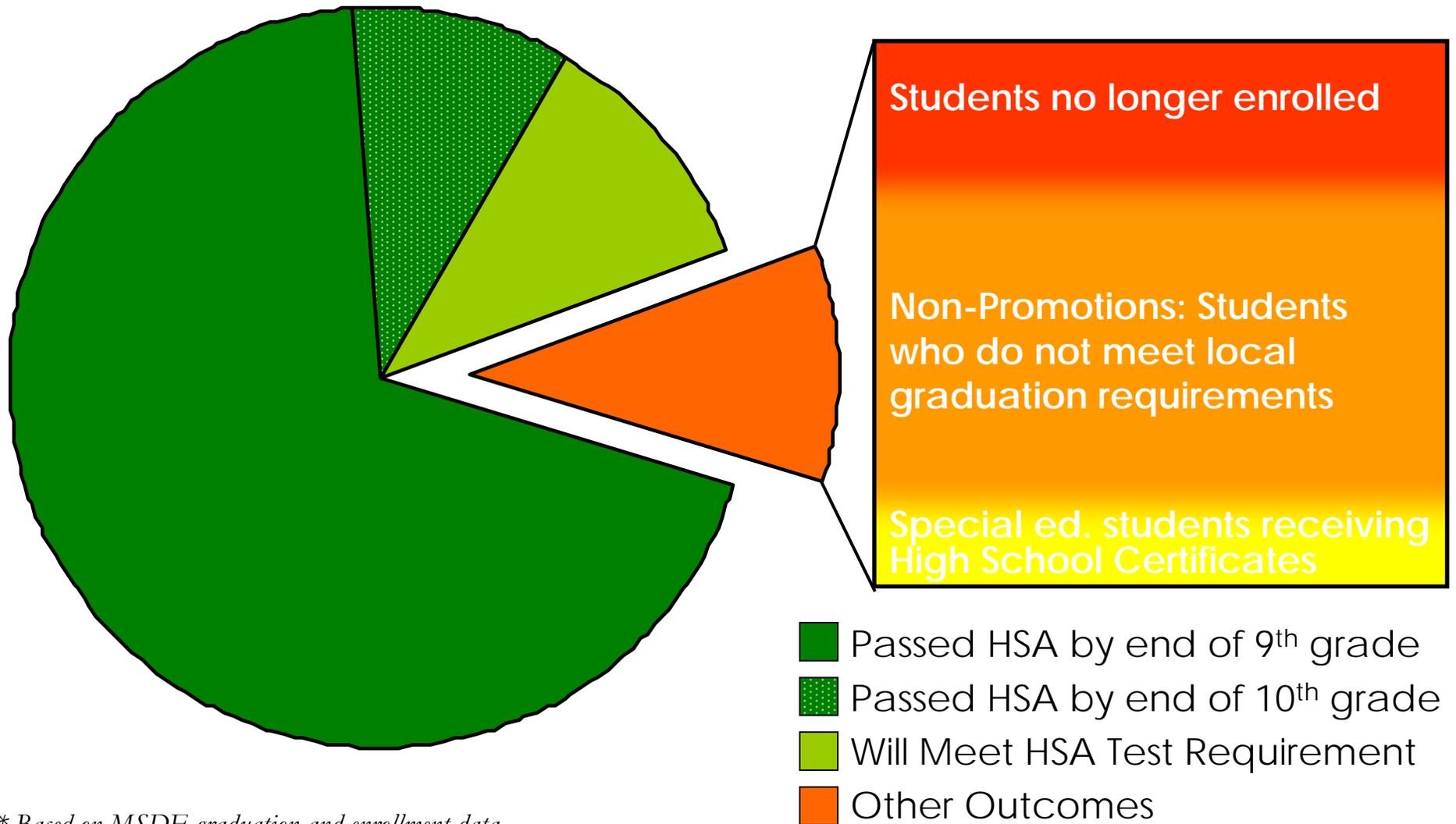
* Based on cumulative Algebra/Data Analysis HSA Data through 2007.

ALGEBRA: Additional Students Will Pass or Meet Requirements by 2009



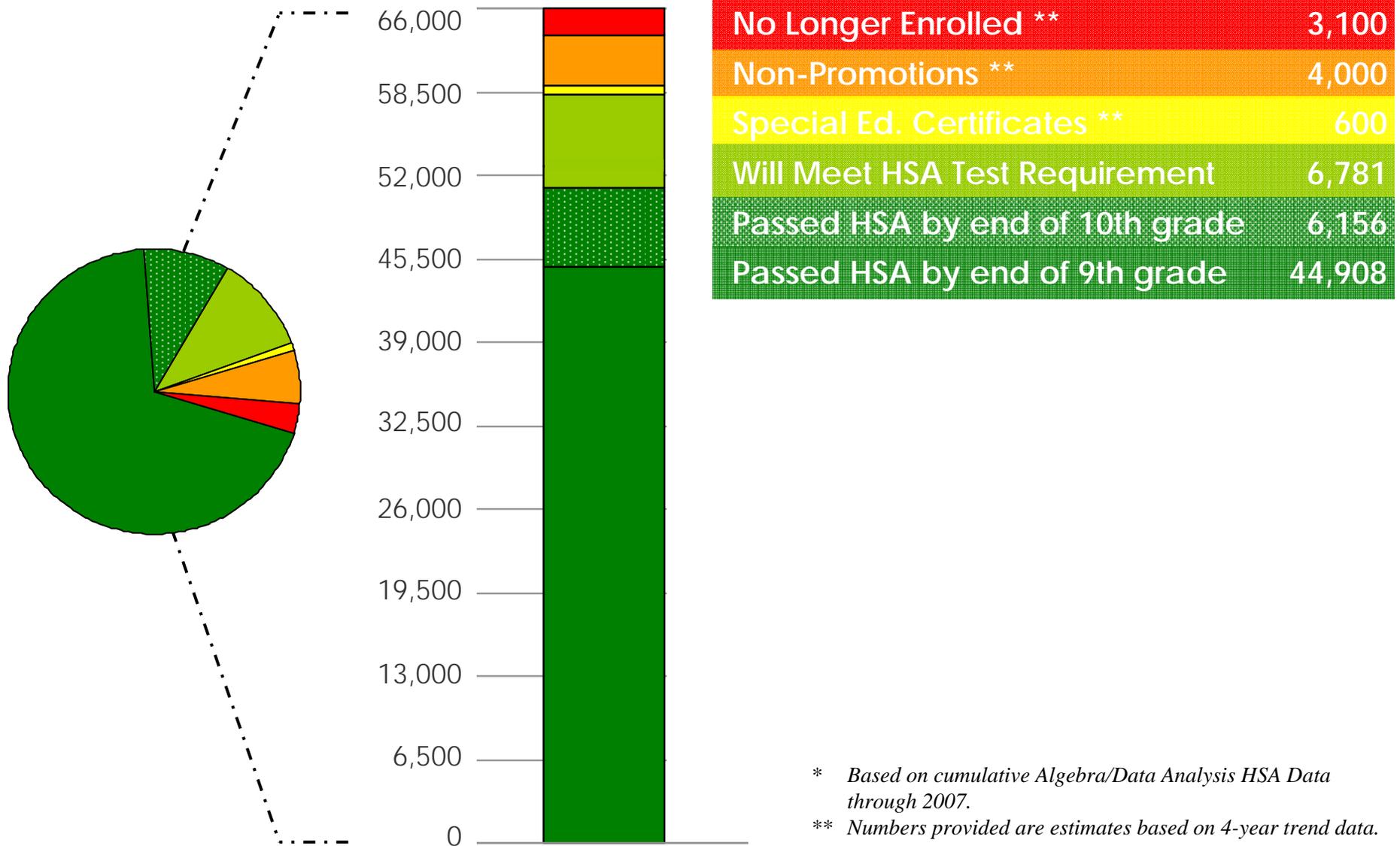
* Based on cumulative Algebra/Data Analysis HSA Data through 2007.

Historically Some Students Do Not Meet All Graduation Requirements



* Based on MSDE graduation and enrollment data.

ALGEBRA: 2009 Outlook for 2007 10th Graders



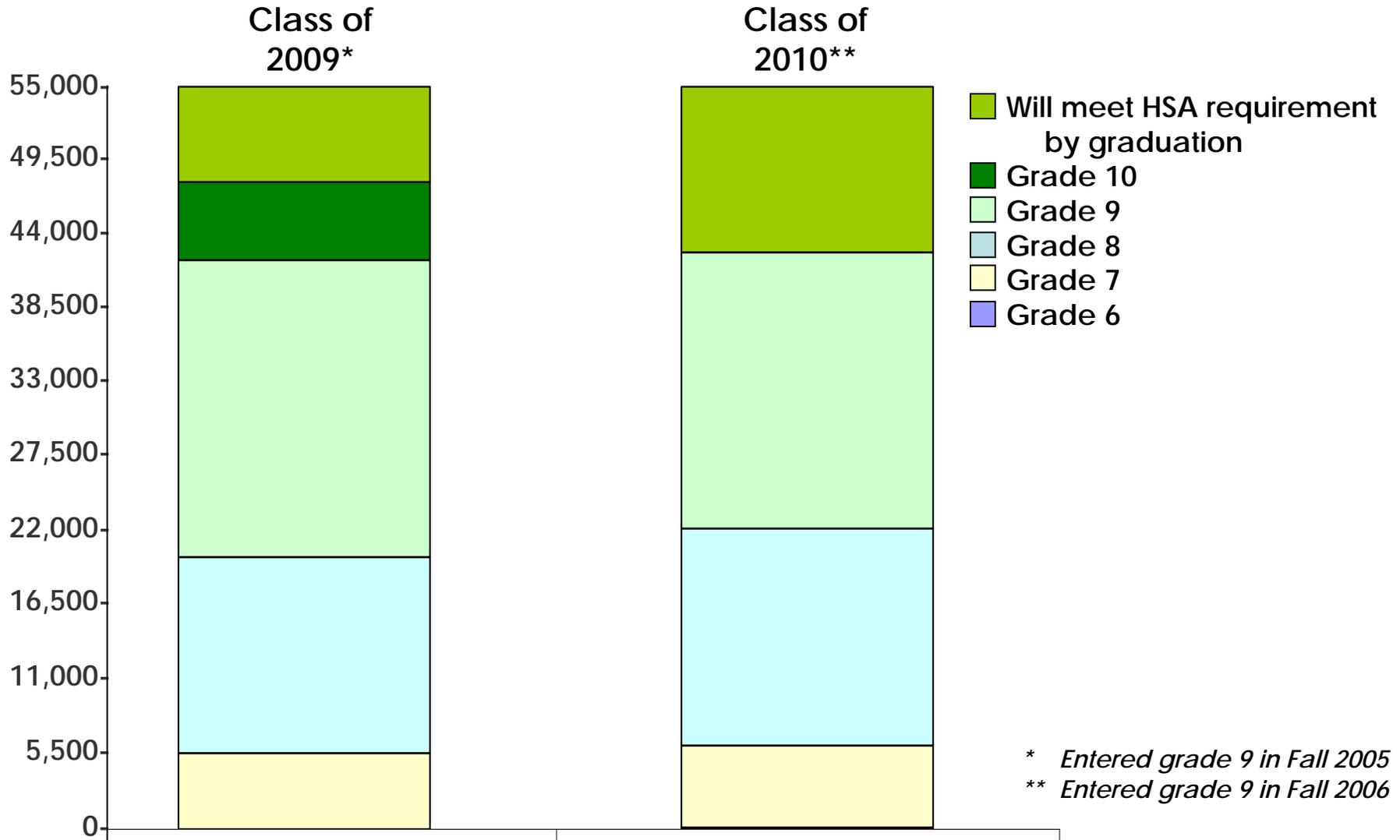
* Based on cumulative Algebra/Data Analysis HSA Data through 2007.

** Numbers provided are estimates based on 4-year trend data.

Algebra: Results Reveal Success Patterns

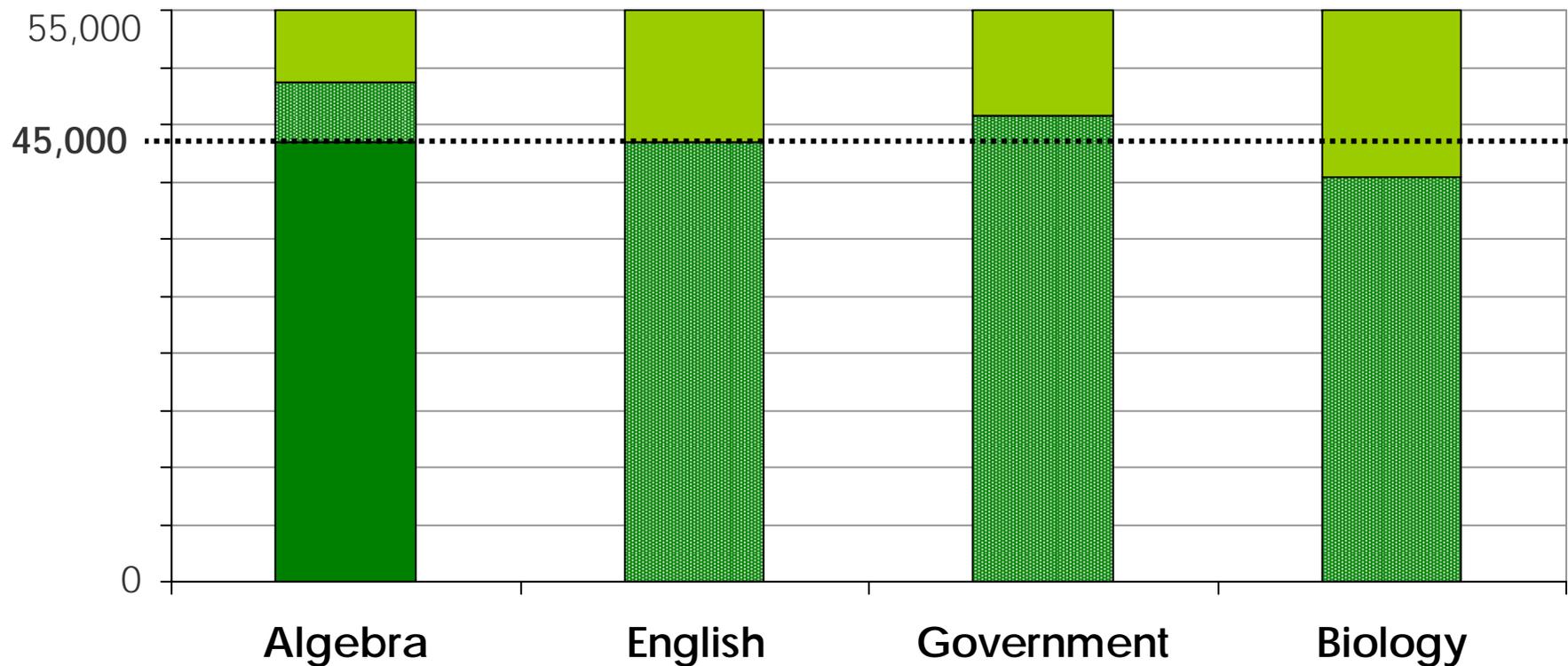
**Algebra results point to success
with future classes and
other HSA content area exams**

ALGEBRA: Class of 2009 HSA Passers vs. Class of 2010 HSA Passers



2009 Outlook for 2007 10th Graders

- Will Meet HSA Test Requirement
- Passed by the end of 10th grade
- Passed by end of 9th grade

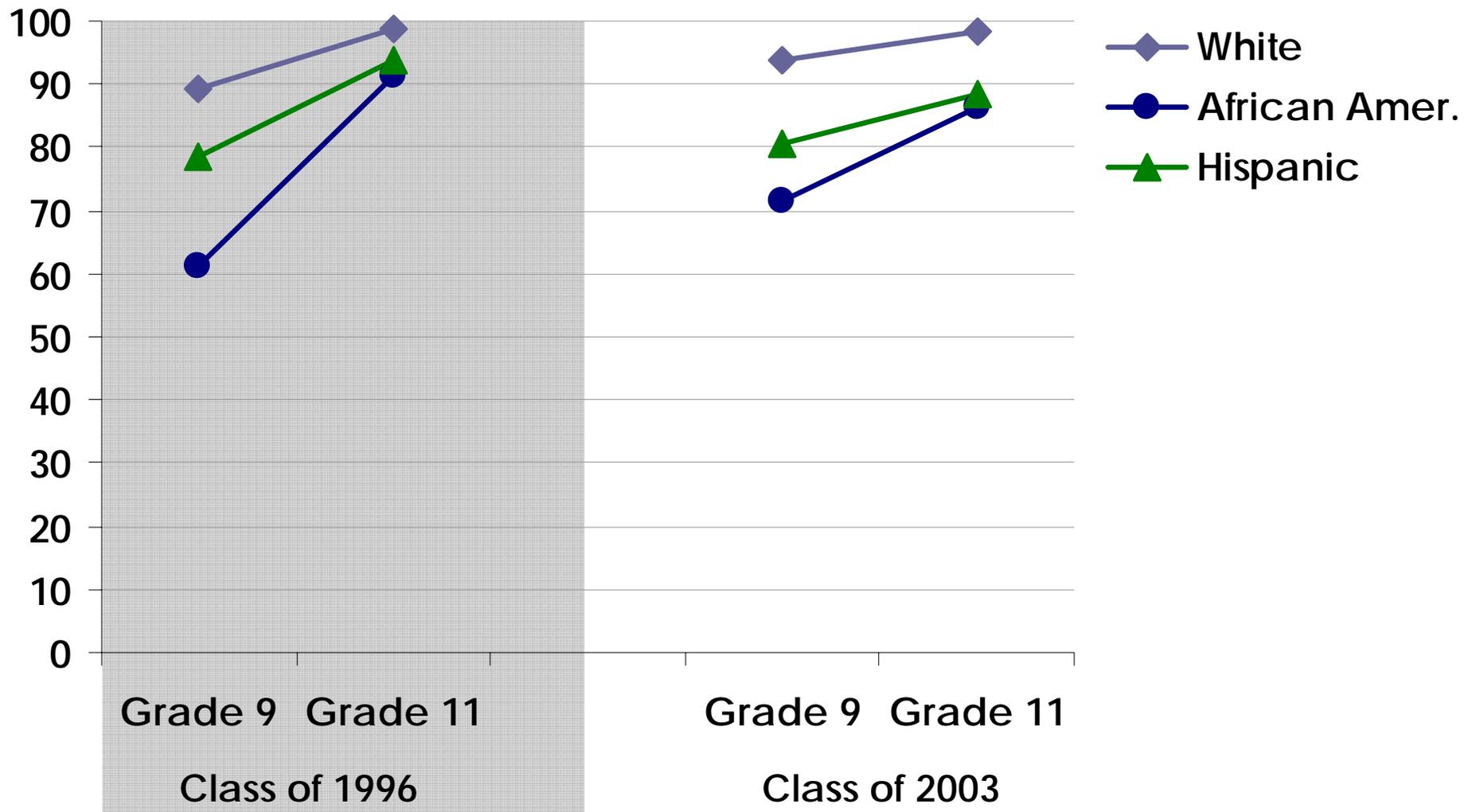


Subgroup Performance Improving

**2007 Subgroups improvements
consistent with other testing programs**

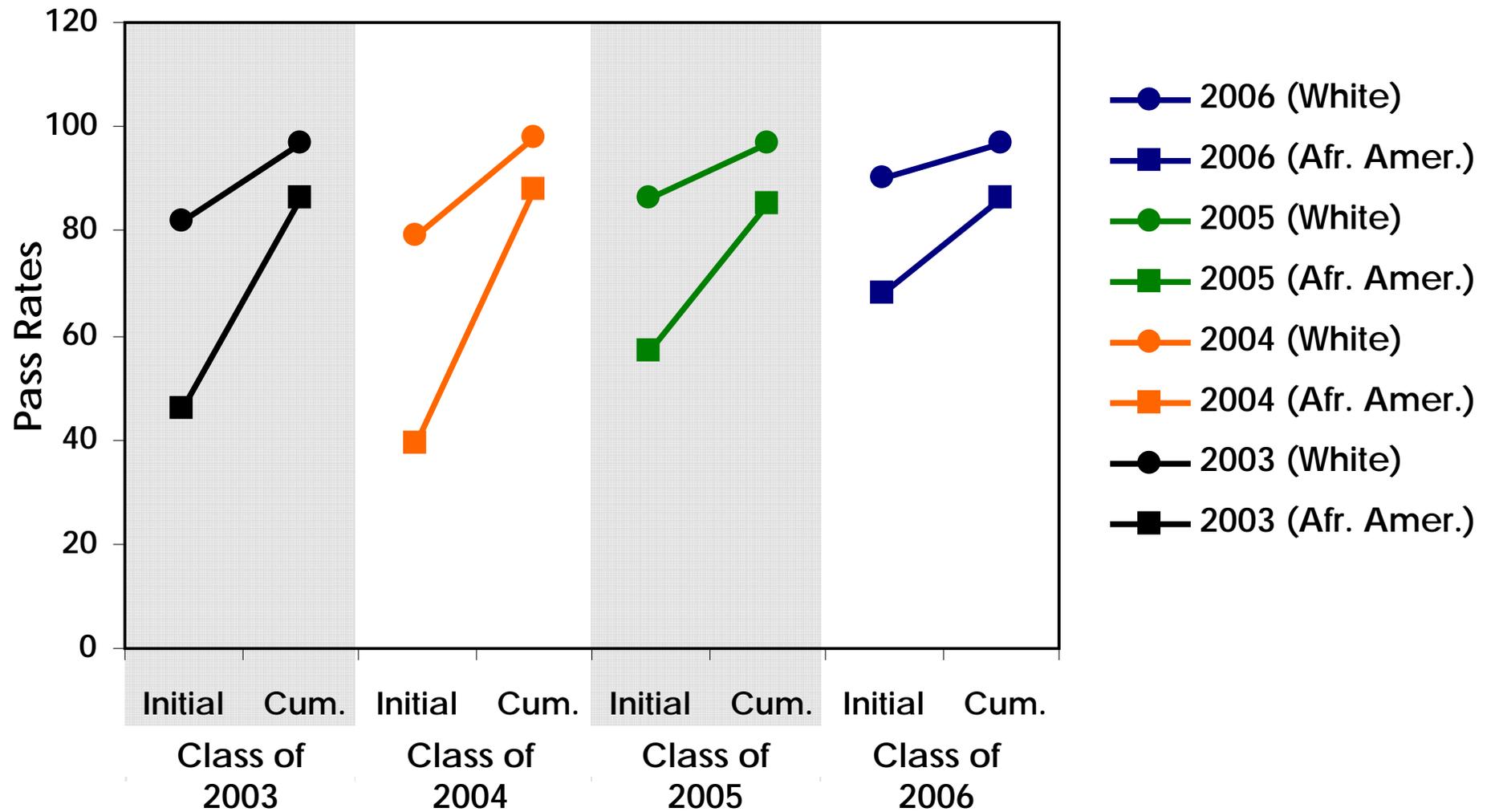
Subgroup Gaps Close Over Time: Maryland Functional Tests (MFT)

Math MFT



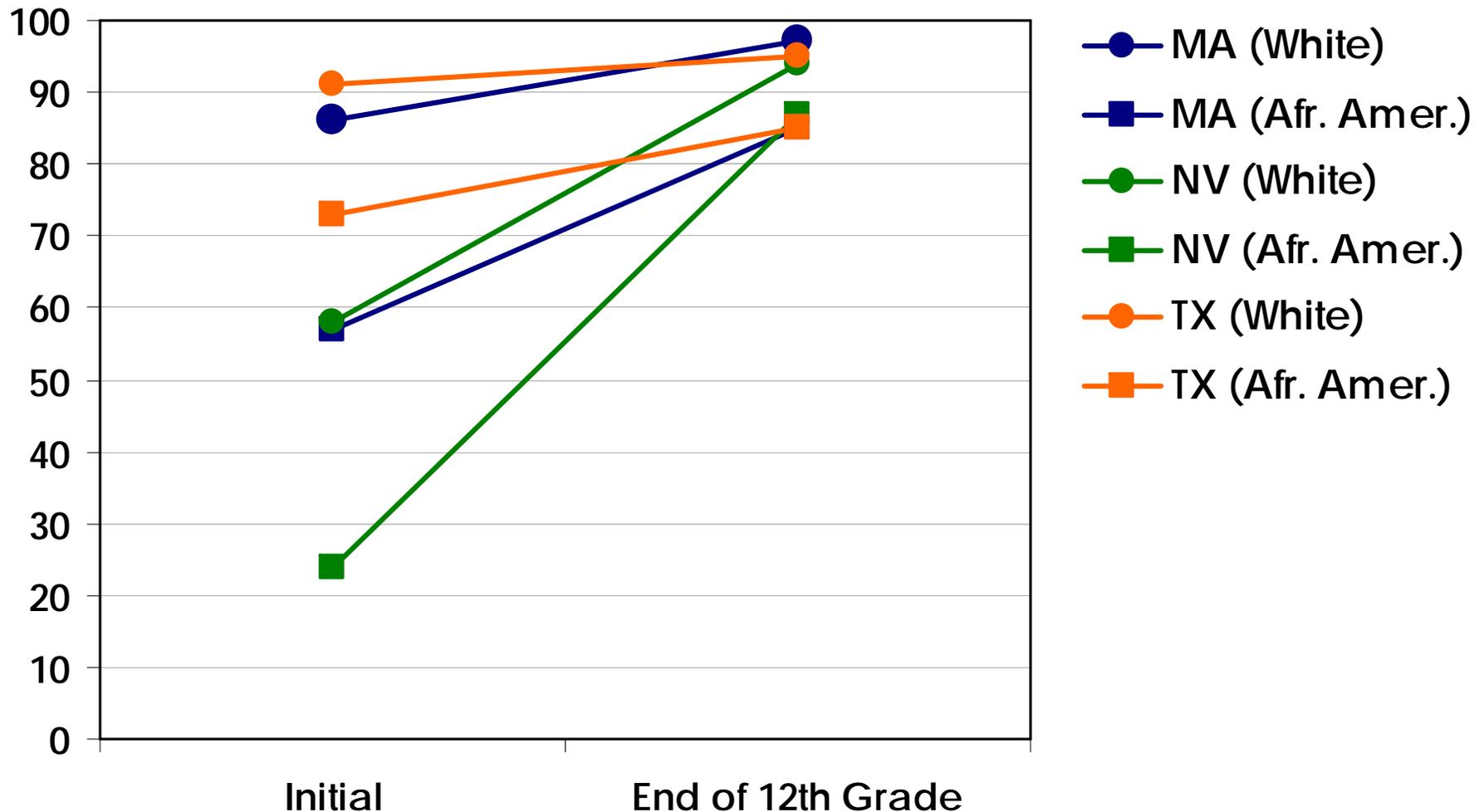
Subgroup Gaps Close by Graduation

Massachusetts High School Exit Exams

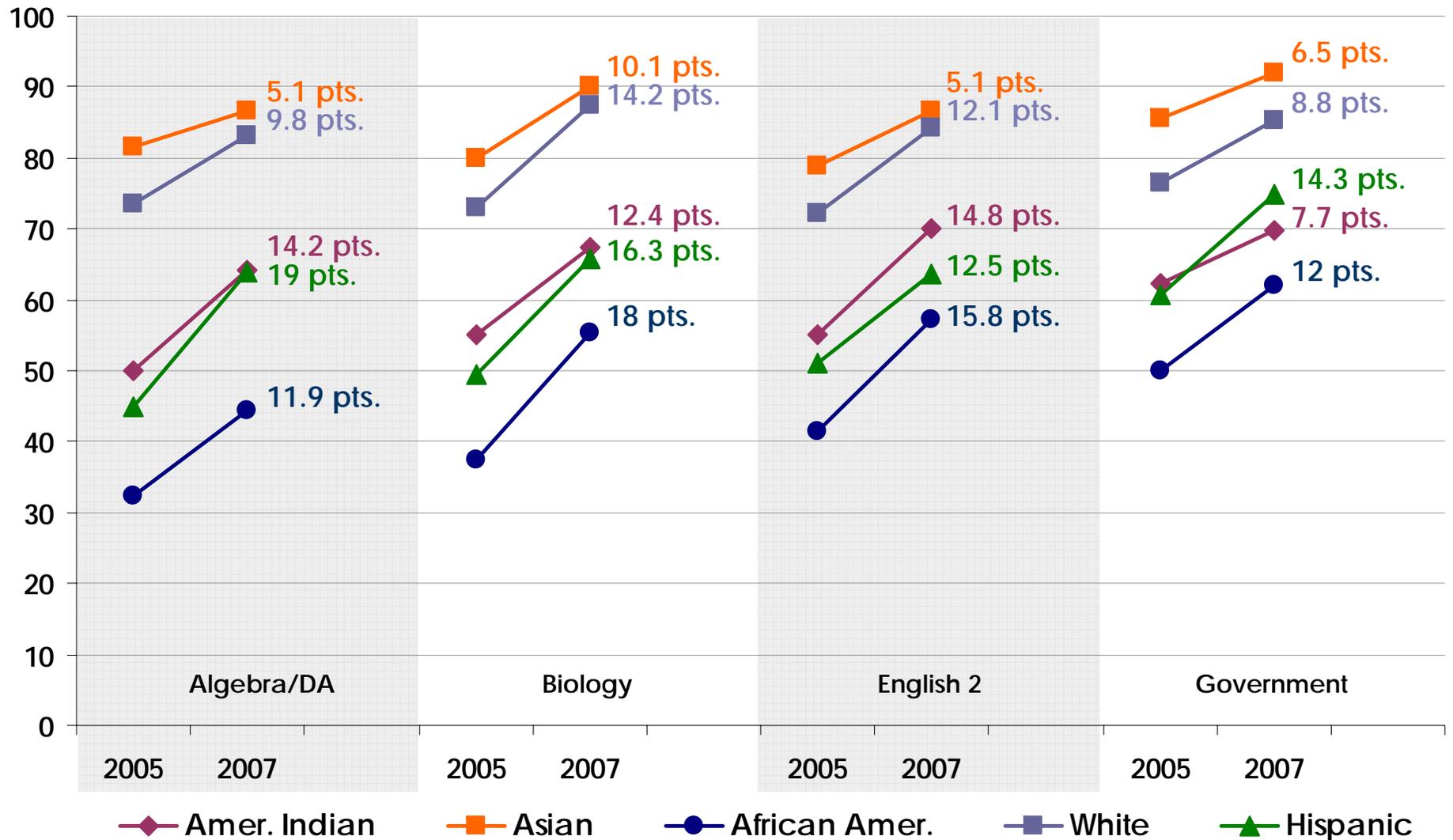


Subgroup Gaps Close in Other States with Exit Exams: Mass., Nev. & Tex.

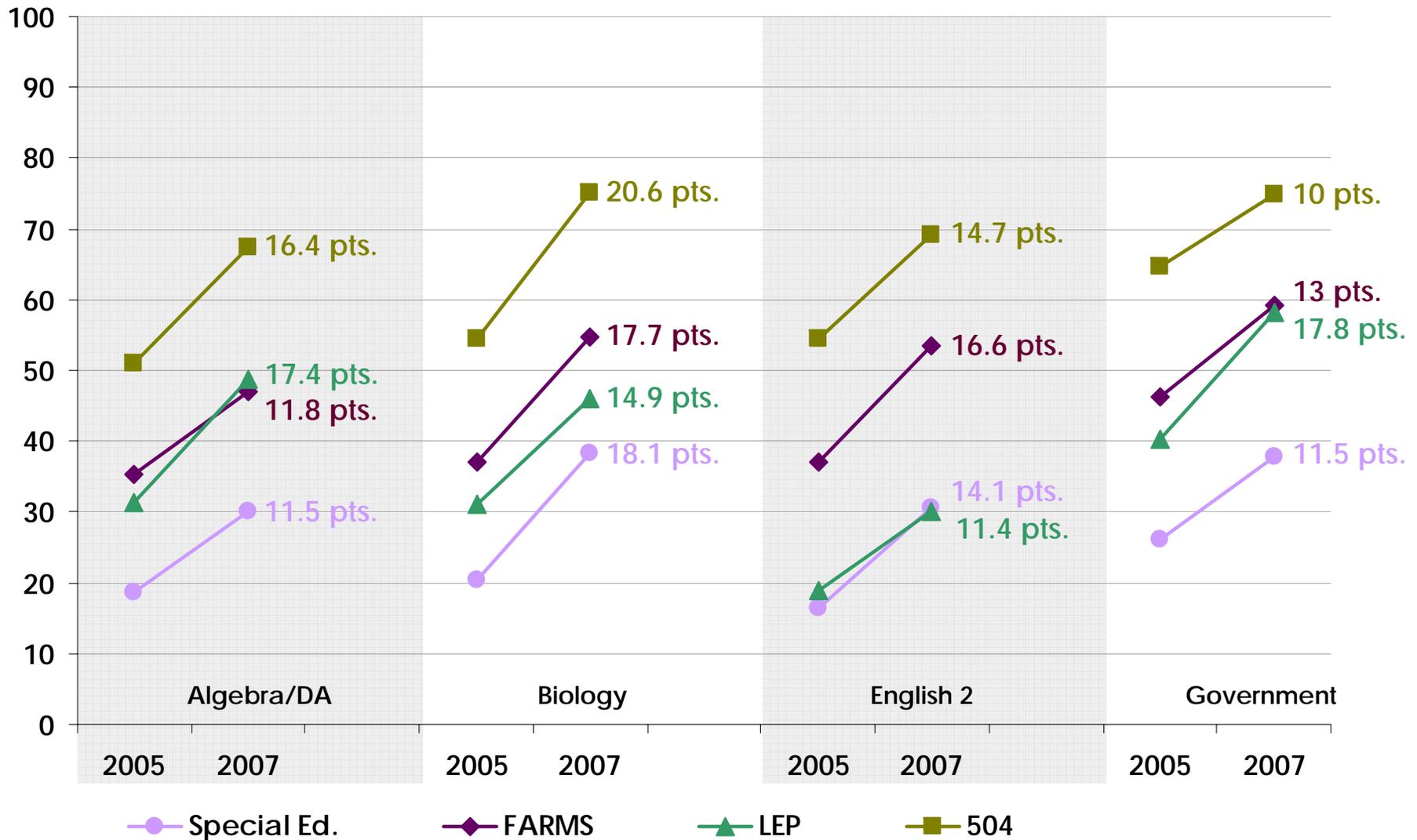
Class of 2005 Pass Rates



Subgroups Making Gains on All Tests: Grades 5-10

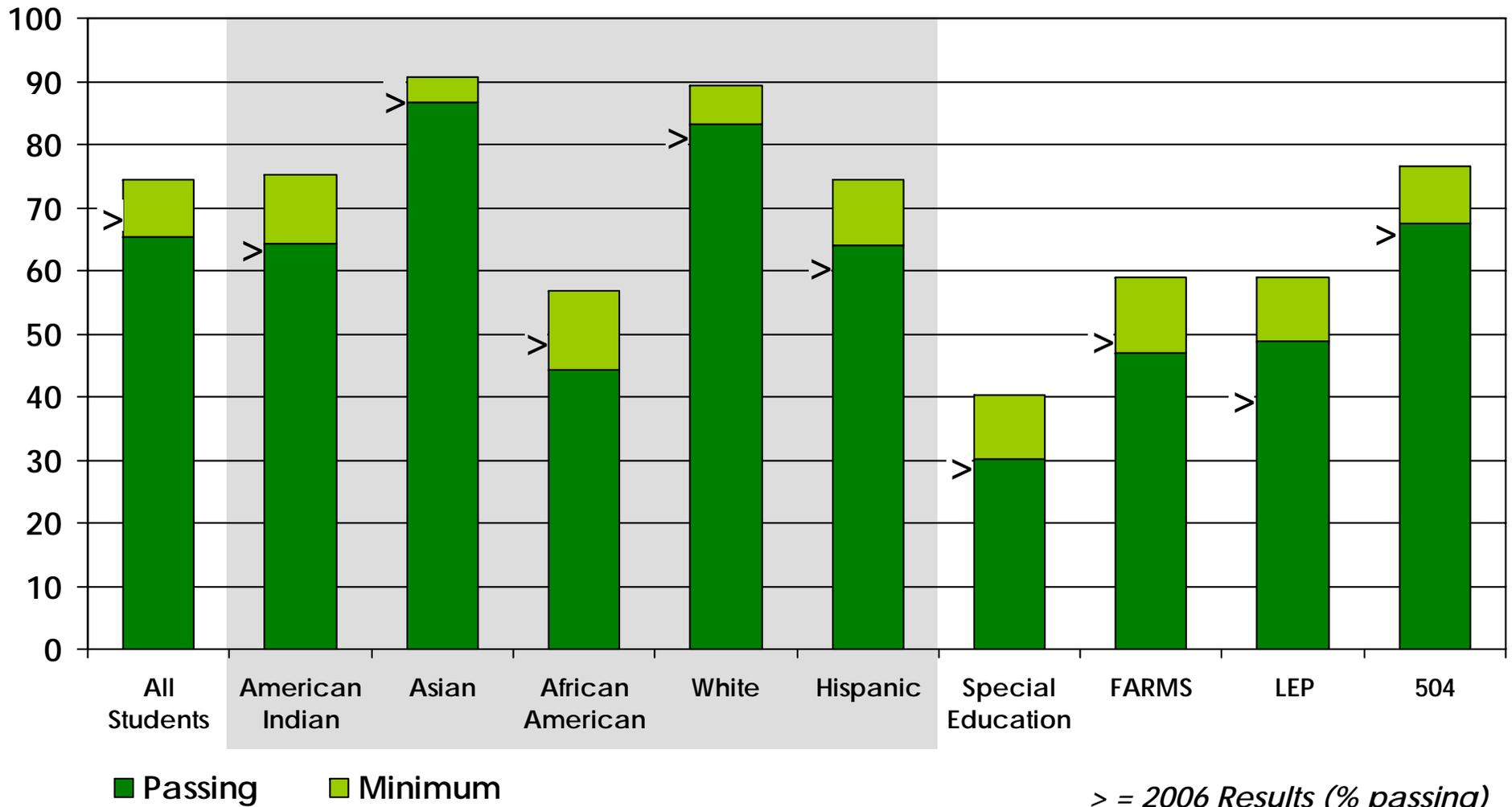


Subgroups Making Gains on All Tests: Grades 5-10



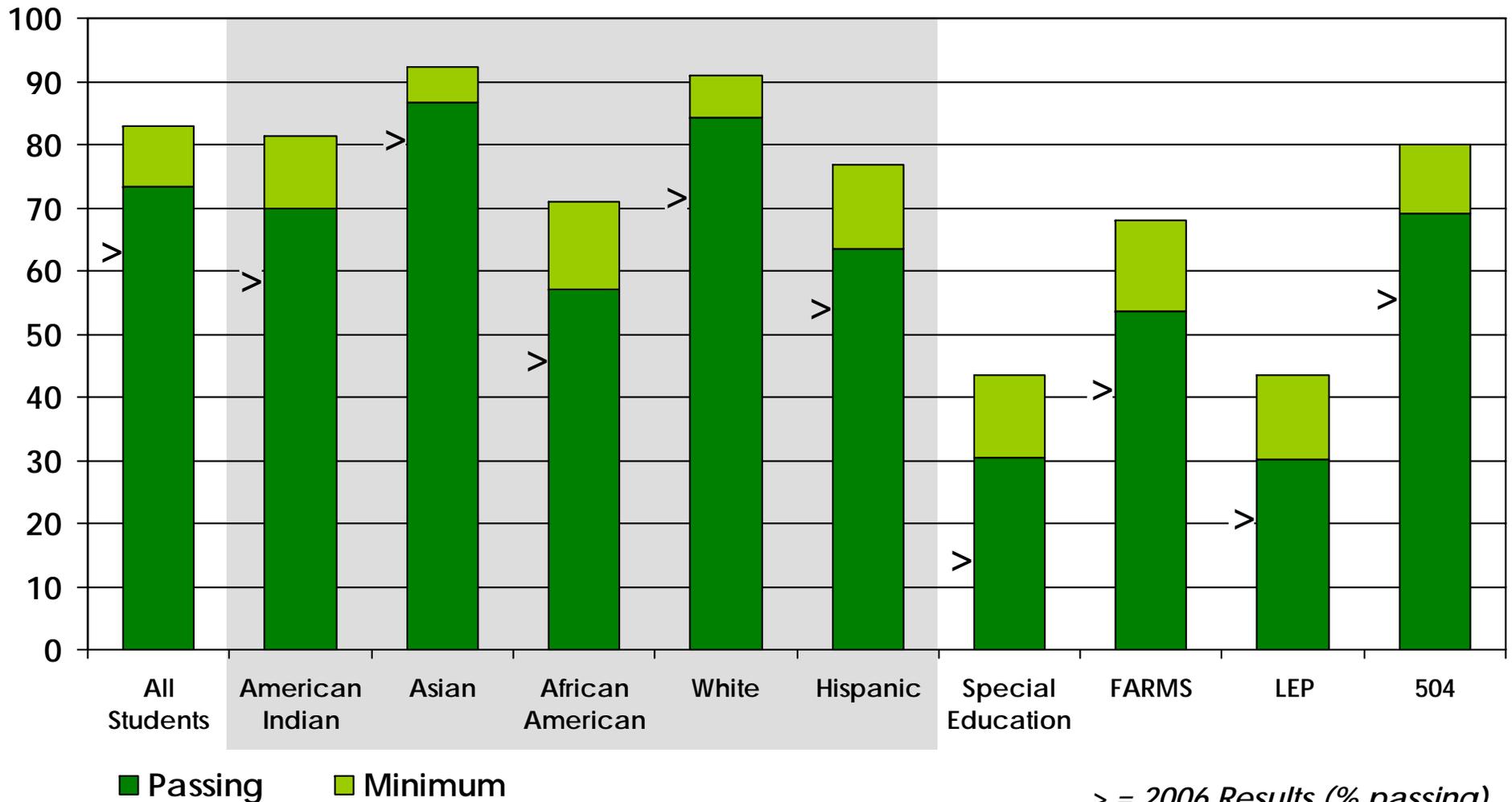
Passing & Minimum Score by Subgroup: Grades 5-10

2007 Algebra/DA



Passing & Minimum Score by Subgroup: Grades 9-10

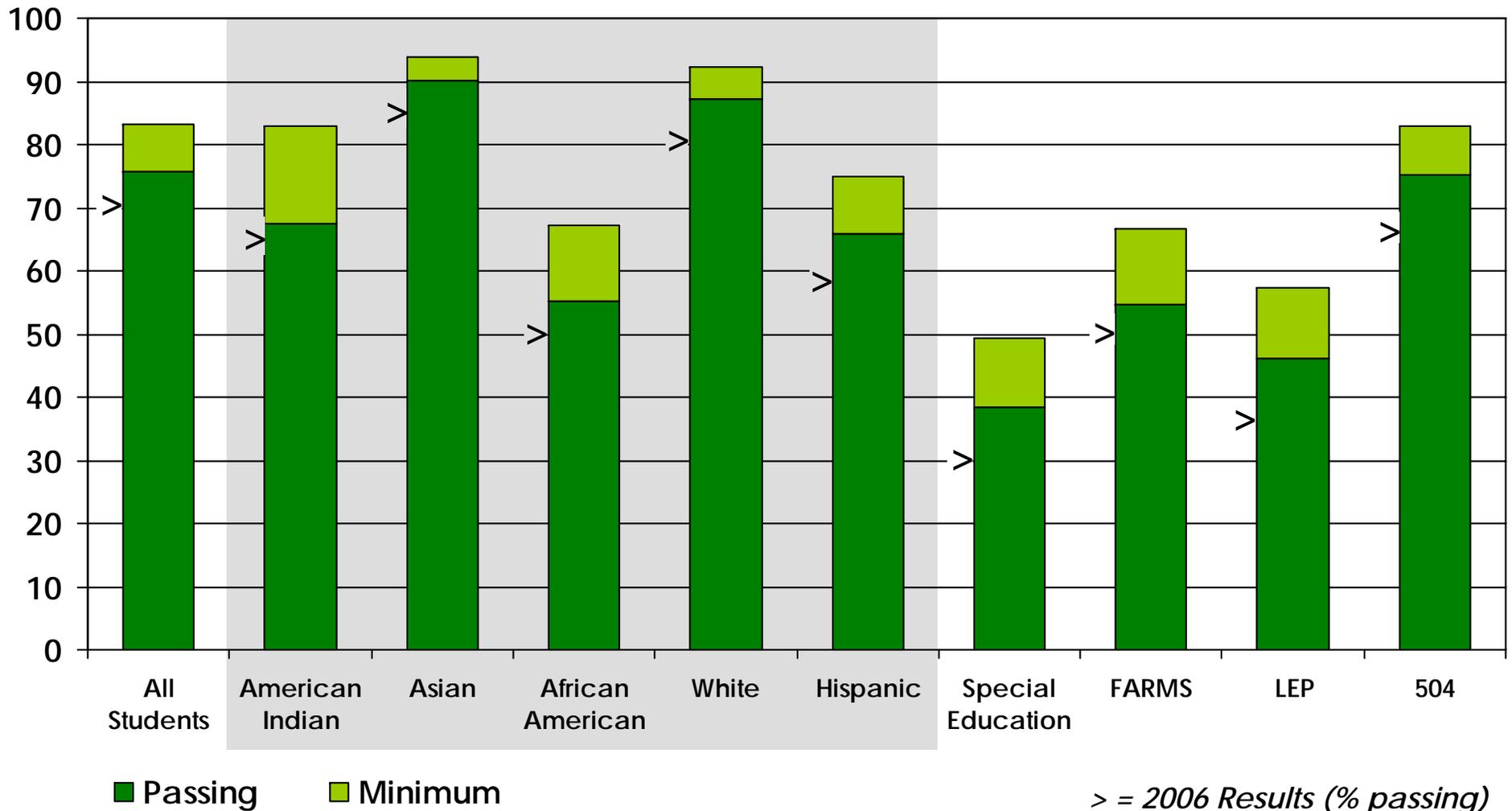
2007 English



> = 2006 Results (% passing)

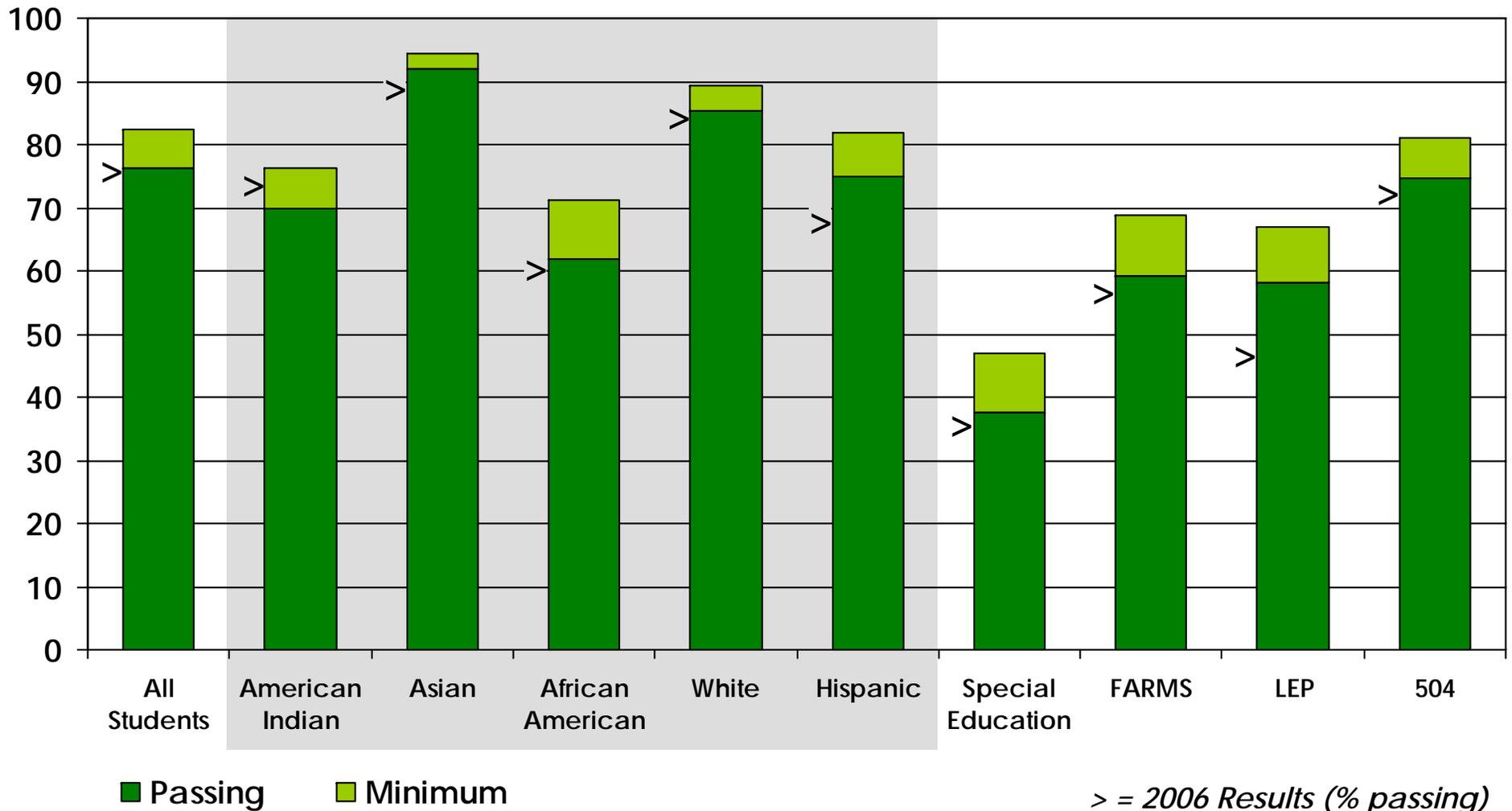
Passing & Minimum Score by Subgroup: Grades 9-10

2007 Biology



Passing & Minimum Score by Subgroup: Grades 9-10

2007 Government



2007 Summary

- All systems showing progress, including subgroups.
- On-schedule for 2009.
- Good to have an alternative for some.
- Continue to monitor program.
- By 2009, we expect nearly all remaining eligible graduates to pass the HSAs.

Opportunities to Meet HSA Requirement

**Students have many opportunities
to meet requirements
and graduate on time**

Opportunities to Meet HSA Requirement

➤ Passed All HSA Tests

➤ Multiple Retesting

- Students receive remediation

➤ Combined-Score Option

- Student meets minimum scores & total 4-test score is 1602 or more

➤ Comparable HSA

- For Students Challenged with Traditional Tests

➤ Modified HSA

- For Special Education Students

➤ Bridge Plan for Academic Validation

Bridge Plan for Academic Validation

HSA Test Performance

- ✓ Student did not pass tests or meet combined-score option requirements

Eligibility Criteria

- ✓ Taken HSA Multiple Times
- ✓ Met all other local school system graduation requirements
- ✓ Good Course Grades
- ✓ Good Attendance
- ✓ Acceptable GPA (Grade Point Average)
- ✓ Participated in Remediation

Substantive Project

- ✓ Individualized Student Project using Pre-set State and Local Specifications (Design built from Comparable-HSA work)

For More Information

- **Websites:**
 - www.MdReportCard.org
 - www.HSAexam.org
 - www.MdK12.org

2007 High School Assessments (HSA) Results

Questions and Answers