

# ASSESSMENT BRIEF

DEPARTMENT OF PLANNING, INNOVATION, AND ACCOUNTABILITY  
OFFICE OF STUDENT ASSESSMENT – NOVEMBER 4, 2015

## Standards of Learning Assessment Program Annual Division Highlights

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### ABSTRACT

Virginia Beach City Public Schools combined (grades 3-8 and end-of-course assessments) reading, writing, science, and history passing rates increased 3-5 percentage points from last year. With the exception of World History II (decreased 2 percentage points) and Earth Science (stayed the same), the divisionwide passing rates on all Standards of Learning (SOL) tests increased from last year ranging from 1 to 14 percentage points.

### BACKGROUND

The Standards of Learning (SOL) for Virginia public schools describe the commonwealth's expectations for student learning and achievement in grades K-12 in English, mathematics, science, history/social science, technology, the fine arts, foreign languages, health and physical education, and driver education. Students participate in state-mandated assessments in the core areas of English, mathematics, history/social science, and science.

In 1995, the first SOLs were approved by the Virginia Board of Education. The first SOL assessments were administered in 1998. In spring 2013, all schools administered all writing and non-writing SOL tests online. In spring 2015, five SOL tests were eliminated by the Virginia Board of Education. These tests included grade 3 science, grade 5 writing, and grades 3, 6, and 7 history.

This report summarizes the division-level passing rates for grades 3-8 and end-of-course (EOC) over the past five years. Data are summarized for the division overall combined passing rates for SOL assessments including the alternate and alternative assessments, Virginia Grade Level Alternative (VGLA), the Virginia Alternate Assessment Program (VAAP), and through 2013-2014 the Virginia Modified Achievement Standards Test (VMAST). In 2014-2015, the VMAST assessment was eliminated as an assessment option. Adjusted data (including SOL and alternate and alternative assessments) are presented for subgroups that are monitored under the No Child Left Behind Act of 2001 in the areas of combined reading, writing, mathematics, history, and science for the past five years. Performance data for ethnicity subgroups as well as students with disabilities, students identified as economically disadvantaged, and students who are limited English proficient are summarized in this brief. It is important to note that in 2010-2011, new history assessments were administered at all grade levels, in 2011-2012 new mathematics assessments were administered, and in 2012-2013 new reading, writing, and science tests were administered. Beginning on page 6, each graph that contains a black dotted line indicates either the new assessment year or the separation between the old and new assessment year. New assessments were administered when standards were changed and developed with increased rigor and with technology-enhanced test items. It is typical that test scores decrease when a new test is administered for the first time.

### KEY TOPICS:

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**METHODOLOGY**

The Virginia Beach City Public Schools (VBCPS) data summarized herein were obtained from the VBCPS report card posted on the Virginia Department of Education (VDOE) website. The scores used in this brief for all levels are adjusted. Substitute test scores, retakers, and alternate and alternative assessment scores are included in these results. The VAAP scores are included with most grades 3-8 combined scores and EOC reading and writing combined scores. The VAAP scores are reported separately for grades 5 and 8 content specific history and at the high school level for mathematics, science, and history. Renaissance Academy students are included in the division summary results.

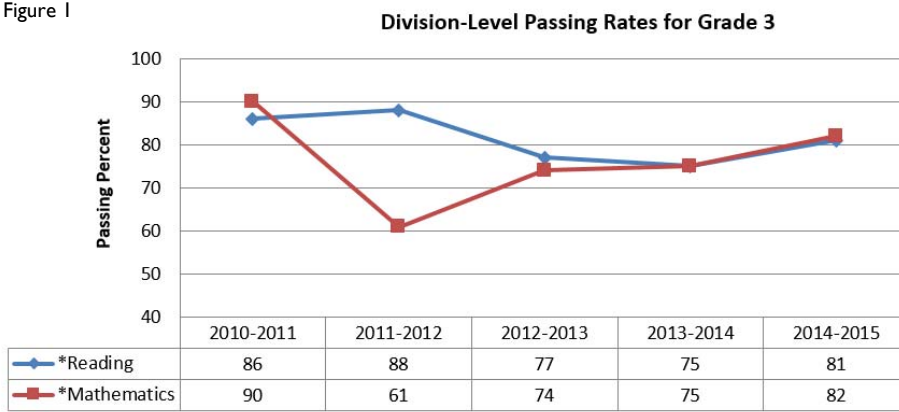
**OVERALL PERCENTILE RANKS – PERCENT PASSING**

**Grade 3**

The division-level passing rate for grade 3 reading showed an 11 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 1. In 2013-2014, there was a 2 percentage-point decrease followed by a 6 percentage-point increase in 2014-2015. In 2011-2012, the year the standards changed in mathematics, grade 3 mathematics

showed a 29 percentage-point decrease. However, scores increased each of the following three years, 13 percentage points in 2012-2013, 1 percentage point in 2013-2014, and 7 percentage points in 2014-2015.

Figure 1



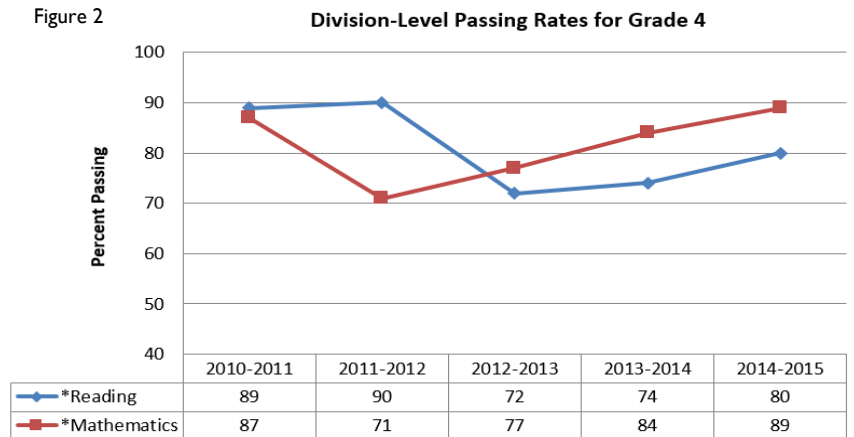
\*Alternate Assessment results are included.

**Grade 4**

The division-level passing rate for grade 4 reading showed an 18 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 2. In 2013-2014, there was a 2 percentage-point increase followed by a 6 percentage-point increase in 2014-2015. In 2011-2012, the year the standards changed in mathematics, grade 4 mathematics showed a 16 percentage-point decrease.

However, scores increased each of the following three years, 6 percentage points in 2012-2013, 7 percentage points in 2013-2014, and 5 percentage points in 2014-2015.

Figure 2

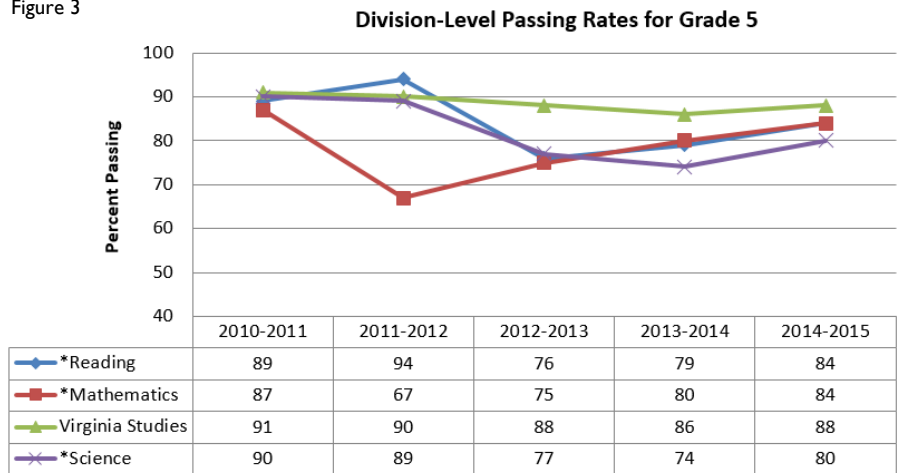


\*Alternate Assessment results are included.

### Grade 5

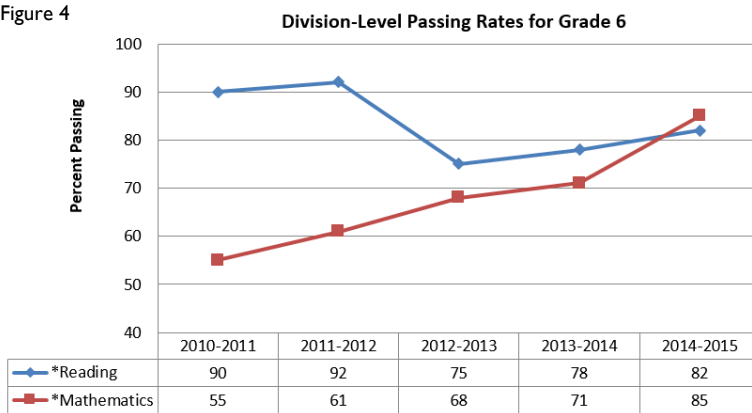
The division-level passing rate for grade 5 reading showed an 18 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 3. In 2013-2014, there was a 3 percentage-point increase followed by a 5 percentage-point increase in 2014-2015. In 2011-2012, mathematics showed a 20 percentage-point decrease. However, scores increased each of the following three years, 8 percentage points in 2012-2013, 5 percentage points in 2013-2014, and 4 percentage points in 2014-2015. From 2010-2011 to 2013-2014, the division-level passing rates for grade 5 history showed slight decreases each year. In 2014-2015, the grade 5 history passing rate increased 2 percentage points. The division-level passing rate for grade 5 science decreased 12 percentage points in 2012-2013, the year the standards changed in science, followed by a 3 percentage-point decrease in 2013-2014 and a 6 percentage-point increase in 2014-2015.

Figure 3



### Grade 6

Figure 4



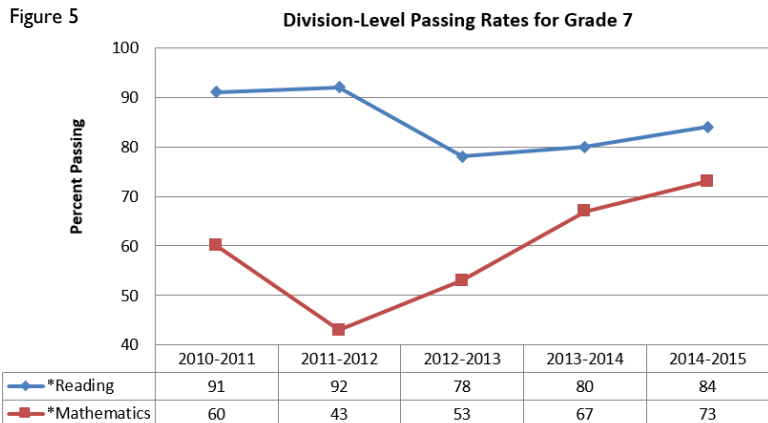
\*Alternate Assessment results are included.

The division-level passing rate for grade 6 reading showed a 17 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 4. In 2013-2014, there was a 3 percentage-point increase followed by a 4 percentage-point increase in 2014-2015. In 2011-2012, the year the standards changed in mathematics, grade 6 mathematics showed a 6 percentage-point increase, in 2012-2013 a 7 percentage-point increase, in 2013-2014 a 3 percentage-point increase, and in 2014-2015 a 14 percentage-point increase.

### Grade 7

The division-level passing rate for grade 7 reading showed a 14 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 5. In 2013-2014, there was a 2 percentage-point increase followed by a 4 percentage-point increase in 2014-2015. In 2011-2012, the year the standards changed in mathematics, grade 7 mathematics showed a 17 percentage-point decrease. However, scores increased each of the following three years, 10 percentage points in 2012-2013, 14 percentage points in 2013-2014, and 6 percentage points in 2014-2015.

Figure 5

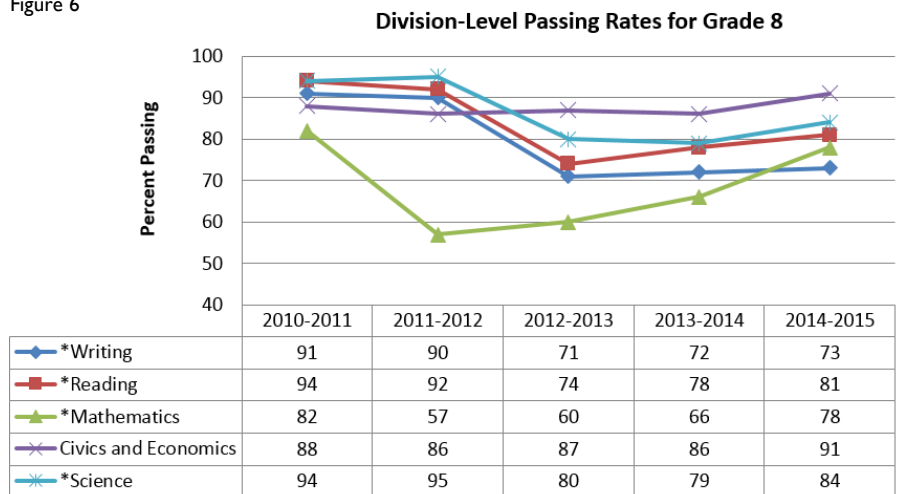


\*Alternate Assessment results are included.

### Grade 8

The division-level passing rate for grade 8 writing showed a 19 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 6. In 2013-2014 and 2014-2015, there was a 1 percentage-point increase. The division-level passing rate for grade 8 reading showed an 18 percentage-point decrease in 2012-2013, the year the standards changed in reading. In 2013-2014, there was a 4 percentage-point increase followed by a 3 percentage-point increase in 2014-2015. In 2011-2012, the year the standards changed in mathematics, grade 8 mathematics showed a 25 percentage-point decrease. However, scores increased each of the following three years, 3 percentage points in 2012-2013, 6 percentage points in 2013-2014, and 12 percentage points in 2014-2015. From 2010-2011 to 2013-2014, the division-level passing rates for Civics and Economics remained relatively stable. In 2014-2015, the Civics and Economics passing rate increased 5 percentage points. The division-level passing rate for grade 8 science decreased 15 percentage points in 2012-2013, the year the standards changed in science, followed by a 1 percentage-point decrease in 2013-2014 and a 5 percentage-point increase in 2014-2015.

Figure 6



### Content Specific History Alternate Assessments (AA)

Figure 7

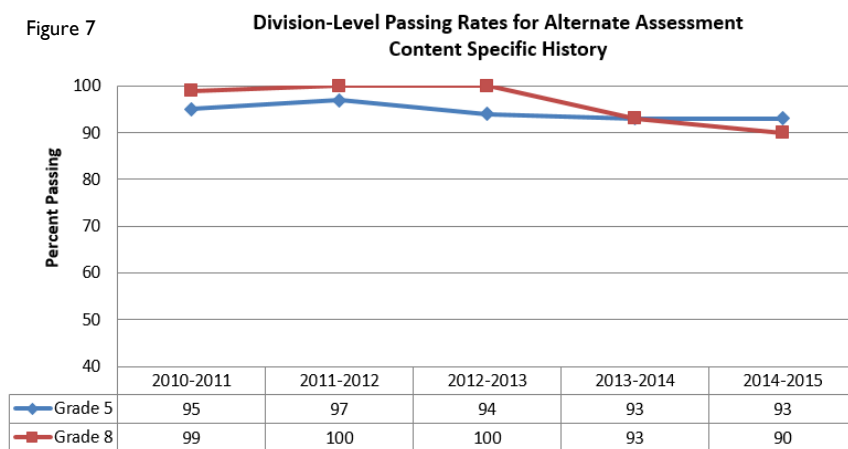
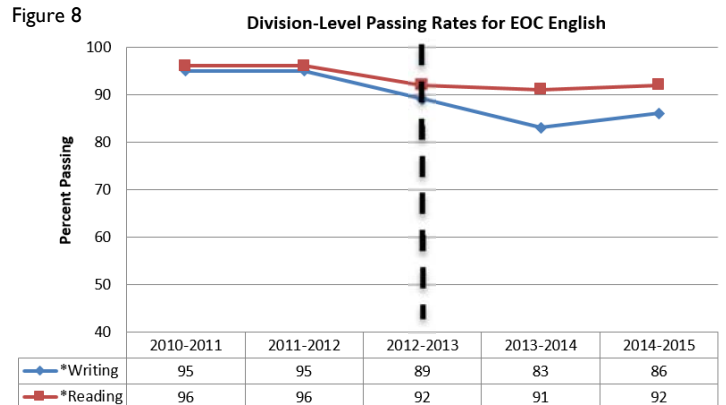


Figure 7 denotes the division-level passing rates for students participating in alternate assessments in grades 5 through 8 in history. The division-level passing rates for students participating in alternate assessments for English, mathematics, and science are included with the SOL results on pages 2-4. The division-level passing rates for students participating in alternate assessments for grades 5 and 8 history have been 90% or higher for each grade level and each year over the past five years.

### End-of-Course English

The division-level passing rate for EOC writing showed a 6 percentage-point decrease in 2012-2013, the year the standards changed in reading, as noted in Figure 8. In 2013-2014, there was a 6 percentage-point decrease followed by a 3 percentage-point increase in 2014-2015. The division-level passing rate for EOC reading showed a 4 percentage-point decrease in 2012-2013, the year the standards changed in reading. In 2013-2014, there was a 1 percentage-point decrease followed by a 1 percentage-point increase in 2014-2015.

Figure 8



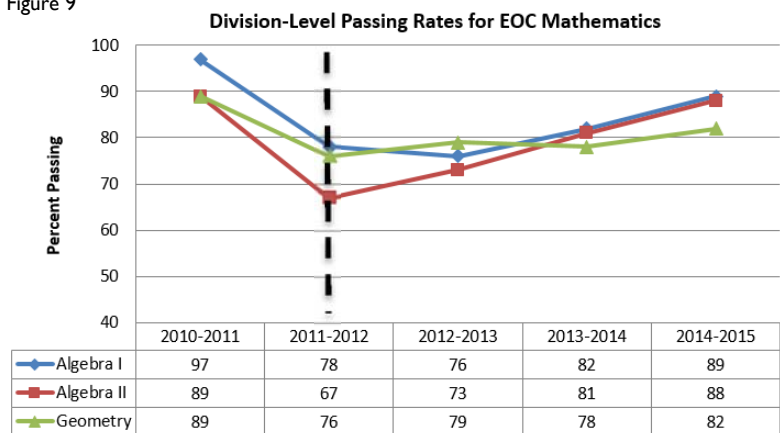
\*Alternate Assessment results are included.

### End-of-Course Mathematics

The division-level passing rates for Algebra I, Algebra II, and Geometry showed a decrease in 2011-2012, the year the standards changed in mathematics, as shown in Figure 9. Algebra I showed a 19 percentage-point decrease followed by a 2-percentage point decrease in 2012-2013.

However, in 2013-2014, Algebra I showed an increase of 6 percentage points, and in 2014-2015, Algebra I showed a 7 percentage-point increase. Algebra II showed a 22 percentage-point decrease followed by increases each of the following three years, 6 percentage points in 2012-2013, 8 percentage points in 2013-2014, and 7 percentage points in 2014-2015. Geometry showed a 13 percentage-point decrease followed by a 3 percentage-point increase in 2012-2013. In 2013-2014, Geometry showed a 1 percentage-point decrease followed by a 4 percentage-point increase in 2014-2015.

Figure 9

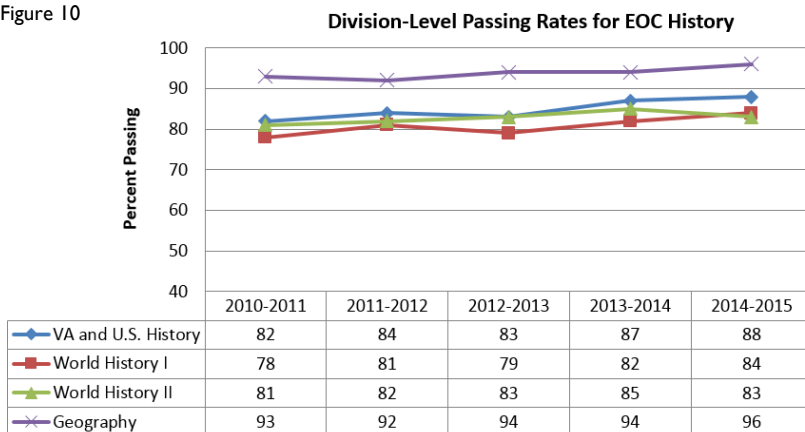


### End-of-Course History

Figure 10 denotes the division-level passing rates for the EOC history SOL tests. The passing rates for VA and U.S. History remained relatively stable from 2010-2011 to 2012-2013. However, passing rates increased 4 percentage points in 2013-2014 and 1 percentage point in 2014-2015. The World History I passing rate increased 3 percentage points in 2011-2012,

decreased 2 percentage points in 2012-2013, and increased each of the following two years, 3 percentage points in 2013-2014 and 2 percentage points in 2014-2015. World History II increased 1 percentage point in 2011-2012, 1 percentage point in 2012-2013, and 2 percentage points in 2013-2014. In 2014-2015, the World History II passing rate decreased 2 percentage points. Passing rates in Geography decreased 1 percentage point in 2011-2012, increased 2 percentage points in 2012-2013, remained the same in 2013-2014, and increased 2 percentage points in 2014-2015.

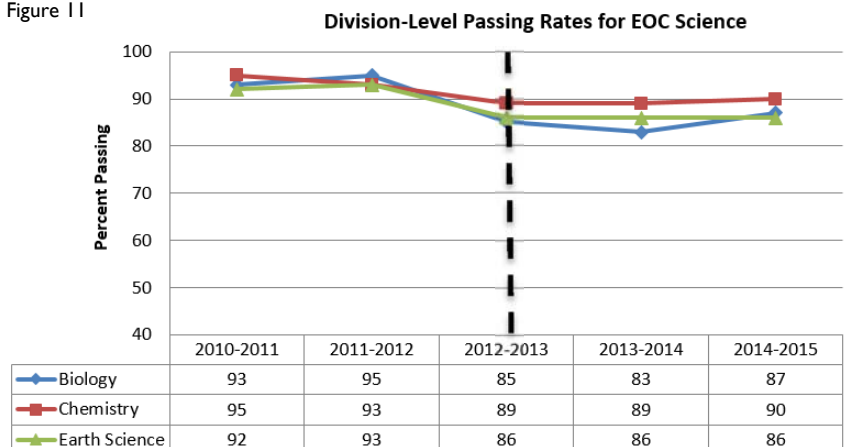
Figure 10



### End-of-Course Science

As noted in Figure 11, the division-level passing rates for the EOC science tests showed decreases in 2012-2013, the year the standards changed: Biology by 10 percentage points, Chemistry by 4 percentage points, and Earth Science by 7 percentage points. The Biology passing rate decreased by 2 percentage points in 2013-2014 and increased by 4 percentage points in 2014-2015. The Chemistry passing rate remained the same in 2013-2014 and increased 1 percentage point in 2014-2015. Earth Science passing rates have remained the same for the past three years.

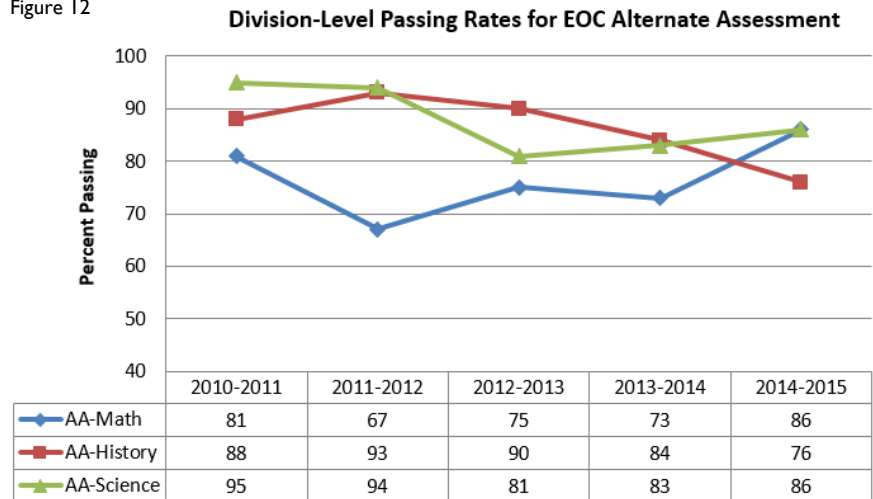
Figure 11



### High School Alternate Assessments (AA)

Figure 12 denotes the division-level passing rates for students participating in high school alternate assessments in mathematics, history, and science. The alternate assessment results for EOC reading and EOC writing are excluded from this analysis because they were reported with the SOL results in Figure 8 on page 4. In 2011-2012, the year the standards changed in mathematics, the passing rate for students participating in alternate assessments for mathematics showed a 14 percentage-point decrease. However, in 2012-2013, the passing rate for students participating in alternate assessments for mathematics showed an increase of 8 percentage points. The mathematics passing rate decreased 2 percentage points in 2013-2014 and increased 13 percentage points in 2014-2015. In 2011-2012, the history passing rate increased 5 percentage points. The passing rate has decreased each of the last three years, 3 percentage points in 2012-2013, 6 percentage points in 2013-2014, and 8 percentage points in 2014-2015. The division-level science passing rate for students participating in alternate assessments for science decreased 13 percentage points in 2012-2013, the year the standards changed in science. However, in 2013-2014, the science passing rate increased 2 percentage points and in 2014-2015 increased 3 percentage points.

Figure 12

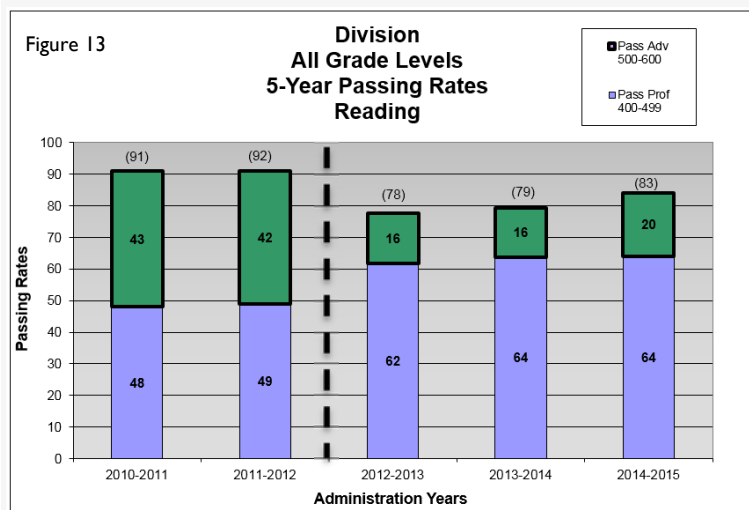


### PASS PROFICIENT AND PASS ADVANCE RATES

The following figures show the adjusted overall combined division passing rates for SOL assessments (including alternate and alternative assessments) administered in grades 3-8 and at the high school level over the last five years. In spring 2015, five SOL tests were eliminated by the Virginia Board of Education. These tests included grade 3 science, grade 5 writing, and grades 3, 6, and 7 history. Each bar represents the overall passing rate. In some cases, due to rounding, the pass advanced and pass proficient passing rates will not equal the overall passing rate. The two colors represent the percentage of students scoring pass proficient and pass advanced which make up the overall passing rate. The blue portion of the bar represents students scoring pass proficient with a scaled score between 400 and 499, and the green portion of the bar represents the percentage of students scoring in the pass advanced range, which is a scaled score between 500 and 600. Although one of our goals is to achieve a high passing rate, we continue to work toward increasing the number of students scoring in the pass advanced range. Each graph that contains a black dotted line indicates the separation between the old and new assessment year.

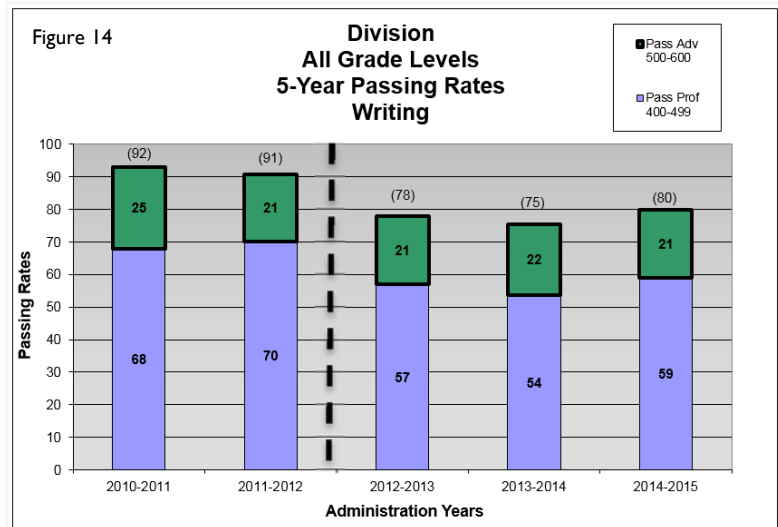
#### Reading

As noted in Figure 13, the division overall combined passing rates for reading was 91% in 2010-2011 and 92% in 2011-2012. In 2012-2013, the year the standards changed, the passing rate decreased 14 percentage points and the pass advanced rate decreased 26 percentage points from the previous year. In 2013-2014, the passing rate increased 1 percentage point while the pass advanced rate remained the same at 16%. In 2014-2015, the passing rate increased 4 percentage points and the pass advanced rate increased 4 percentage points to 20%.

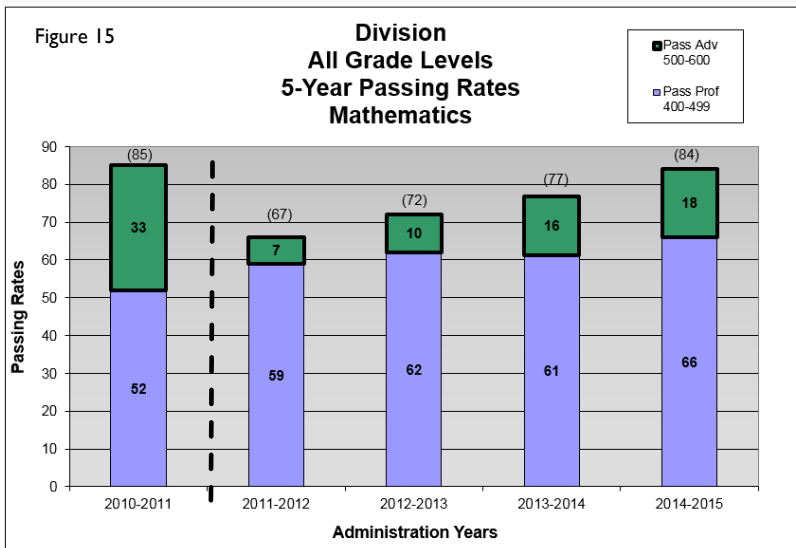


### Writing

As noted in Figure 14, the division overall combined passing rates for writing was 92% in 2010-2011 and 91% in 2011-2012. In 2012-2013, the year the standards changed, the passing rate decreased 13 percentage points and the pass advanced rate remained the same from the previous year. In 2013-2014, the passing rate decreased by 3 percentage points while the pass advanced rate increased by 1 percentage point to 22%. In 2014-2015, the passing rate increased 5 percentage points and the pass advanced rate decreased 1 percentage point to 21%.



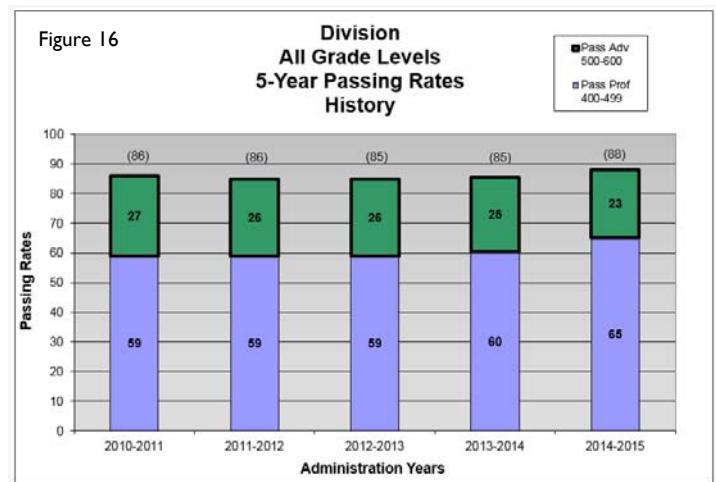
### Mathematics



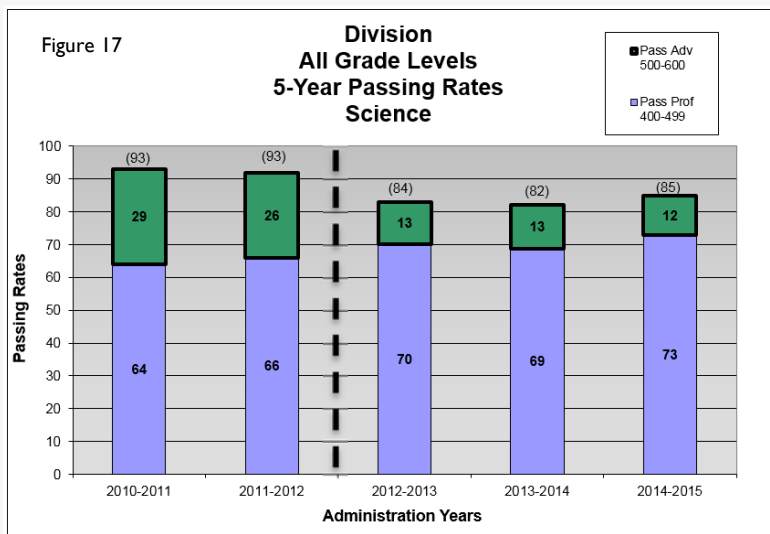
As noted in Figure 15, the division overall combined passing rates for mathematics was 85% in 2010-2011. In 2011-2012, the year the standards changed, the passing rate decreased 18 percentage points and the pass advanced rate decreased 26 percentage points from the previous year. In 2012-2013, the passing rate increased 5 percentage points and the pass advanced rate increased 3 percentage points. In 2013-2014, the passing rate increased again by 5 percentage points and the pass advanced rate increased 6 percentage points to 16%. In 2014-2015, the passing rate increased 7 percentage points and the pass advanced rate increased 2 percentage points to 18%.

### History

As noted in Figure 16, the division overall combined passing rates for history ranged from 85% to 88% over the past five years. The pass advanced rates ranged from 23% to 27% over the past five years. The pass advanced rate has remained relatively stable over the past five years.



Science



As noted in Figure 17, the division overall combined passing rates for science remained the same at 93% in 2010-2011 and 2011-2012. In 2012-2013, the year the standards changed, the science passing rate decreased 9 percentage points and the pass advanced rate decreased 13 percentage points from the previous year. In 2013-2014, the passing rate decreased 2 percentage points while the pass advanced rate remained the same at 13%. In 2014-2015, the passing rate increased 3 percentage points and the pass advanced rate decreased 1 percentage point to 12%.

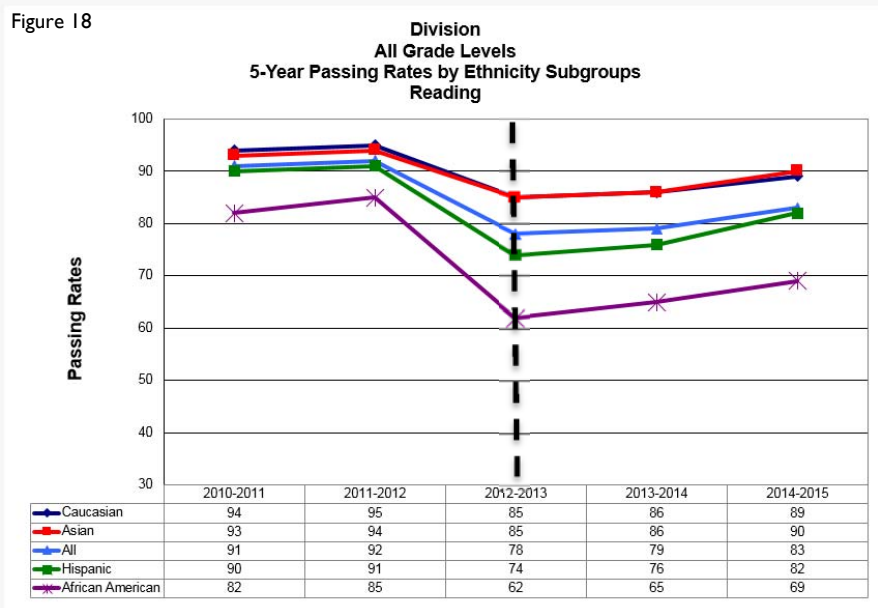
FIVE-YEAR PASSING RATES BY ETHNICITY SUBGROUPS

In addition to looking at overall passing rates and pass advanced rates, it is important to disaggregate SOL data by identified subgroups. Adjusted data (including alternate and alternative assessments) were disaggregated by subgroups that are monitored under The No Child Left Behind Act of 2001. Data will be presented in this document for combined reading, writing, mathematics, history, and science for the past five years. In spring 2015, five SOL tests were eliminated by the Virginia Board of Education. These tests included grade 3 science, grade 5 writing, and grades 3, 6, and 7 history. Each graph that contains a black dotted line indicates the new assessment year.

Reading

As noted in Figure 18, the passing rate for each subgroup shows a significant decrease in 2012-2013, the year the standards changed. In 2013-2014, the passing rates for all of the subgroups increased 1 percentage point to 3 percentage points. In 2014-2015, the passing rate for all subgroups increased 3 to 6 percentage points. When comparing the four largest ethnic subgroups, the passing rate for the African American subgroup showed the largest increase in 2013-2014 with a 3 percentage-point increase and the passing rate for the Hispanic subgroup showed the largest increase in 2014-2015 with a 6 percentage-point increase. The reading passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

Figure 18

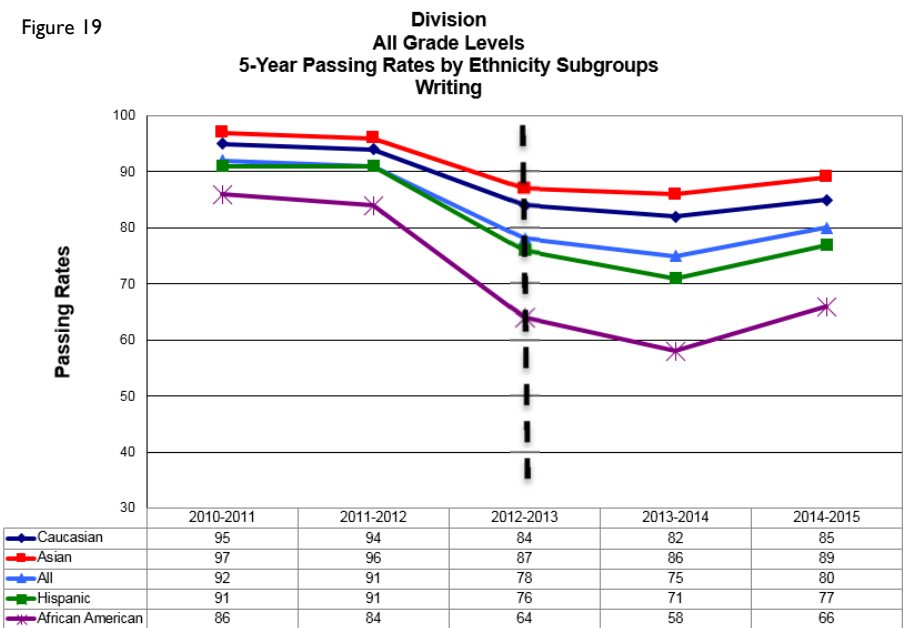




## Writing

As noted in Figure 19, the passing rate for each subgroup shows a significant decrease in 2012-2013, the year the standards changed. In 2013-2014, the passing rate for all of the subgroups decreased 1 percentage point to 6 percentage points. In 2014-2015, the passing rate for all subgroups increased 3 to 8 percentage points. When comparing the four largest ethnic subgroups, the passing rate for the African American subgroup showed the largest increase in 2014-2015 with an 8 percentage-point increase. The writing passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

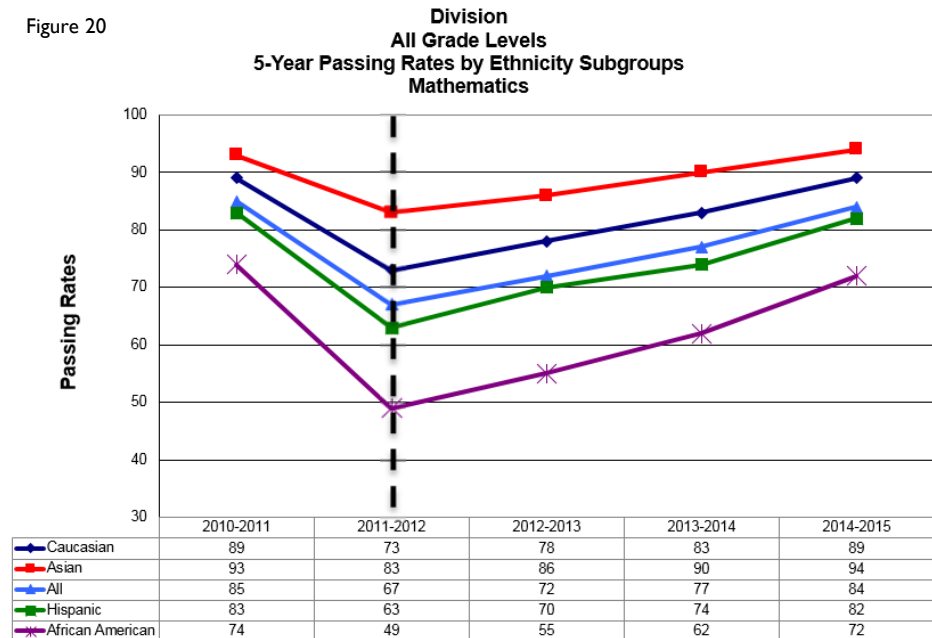
Figure 19



## Mathematics

As noted in Figure 20, the passing rate for each subgroup shows a significant decrease in 2011-2012, the year the standards changed. In 2012-2013, the passing rate for all of the subgroups increased 3 to 7 percentage points. In 2013-2014, the passing rate for all of the subgroups increased 4 to 7 percentage points. In 2014-2015, the passing rate for all subgroups increased 4 to 10 percentage points. When comparing the four largest ethnic subgroups, the passing rate for the African American subgroup showed the largest increase in 2014-2015 with a 10 percentage-point increase. The mathematics passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

Figure 20

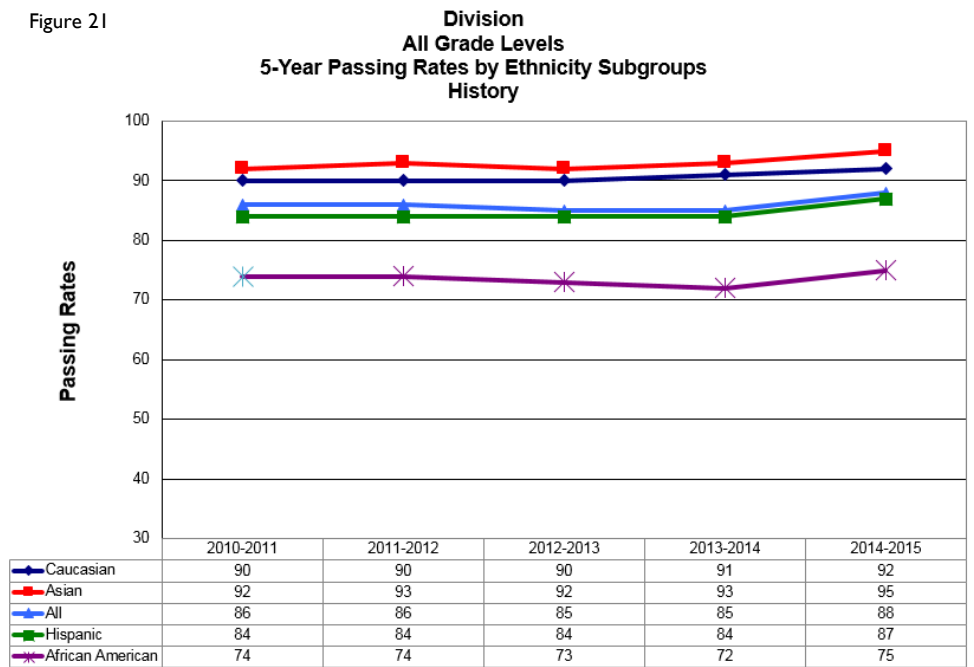


10 percentage points. When comparing the four largest ethnic subgroups, the passing rate for the African American subgroup showed the largest increase in 2014-2015 with a 10 percentage-point increase. The mathematics passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

**History**

The overall history passing rate for all subgroups remained relatively stable over the past five years as noted in Figure 21. In 2014-2015, the passing rate for all subgroups increased 1 percentage point to 3 percentage points. The history passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

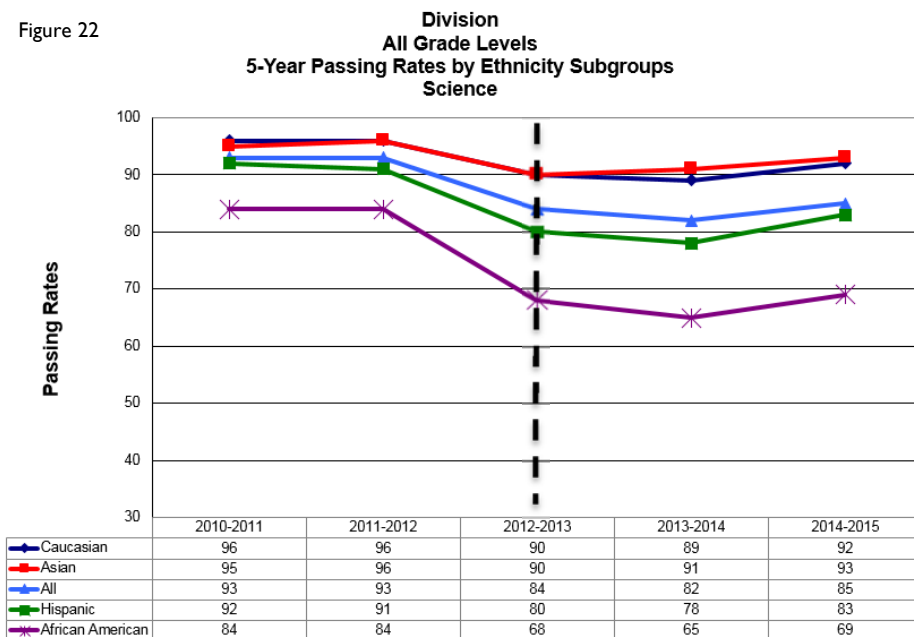
Figure 21



**Science**

As noted in Figure 22, the passing rate for each subgroup shows a significant decrease in 2012-2013, the year the standards changed. In 2013-2014, the passing rate for all of the subgroups with the exception of the Asian subgroup decreased 1 percentage point to 3 percentage points. In 2014-2015, the passing rate for all subgroups increased 2 to 5 percentage points. When comparing the four largest ethnic subgroups, the passing rate for the Hispanic subgroup showed the largest increase in 2014-2015 with a 5 percentage-point increase. The science passing rates for the African American subgroup continue to fall below the passing rates of other ethnicity subgroups.

Figure 22



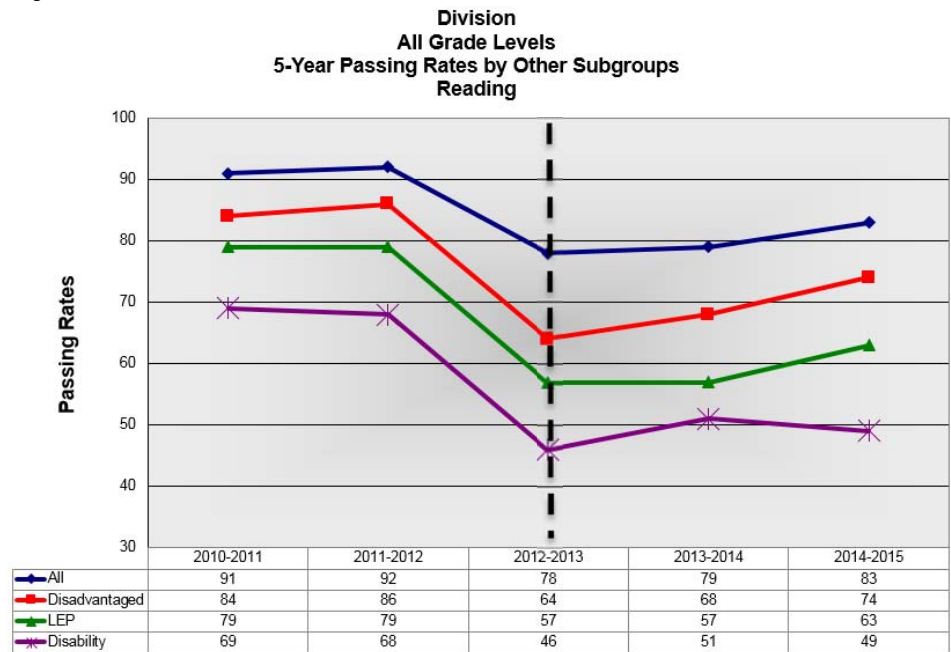
**FIVE-YEAR PASSING RATES BY OTHER SUBGROUPS**

In addition to ethnicity, it is necessary to closely monitor student performance for other subgroups, which include students with disabilities (Disability), students identified as economically disadvantaged (Disadvantaged), and students who are limited English proficient (LEP). Test scores from VGLA and VAAP are included in these results. In spring 2015, five SOL tests were eliminated by the Virginia Board of Education. These tests included grade 3 science, grade 5 writing, and grades 3, 6, and 7 history. The pass rate for the “All Students” subgroup is included for comparison purposes. Each graph that contains a black dotted line indicates the new assessment year.

## Reading

As noted in Figure 23, the reading passing rates decreased for all subgroups in 2012-2013, the year the standards changed. The economically disadvantaged and students with disabilities subgroups showed increases in 2013-2014, 4 and 5 percentage points respectively, and the limited English proficiency subgroup showed no change. In 2014-2015, the economically disadvantaged and limited English proficiency subgroups each showed an increase of 6 percentage points and the students with disabilities subgroup showed a decrease of 2 percentage points. The reading passing rates for the students with disabilities subgroup continue to fall below the passing rates of other subgroups.

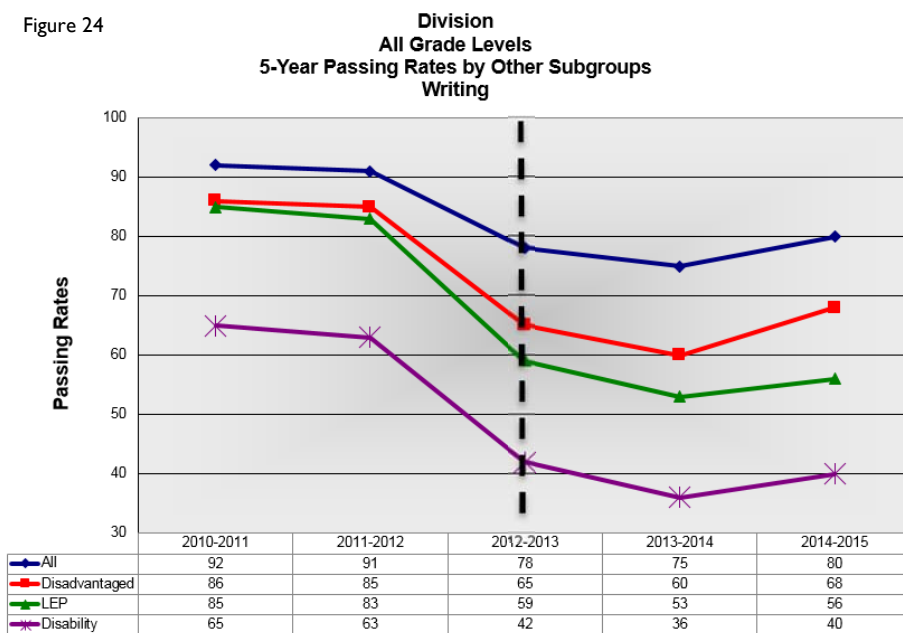
Figure 23



## Writing

As noted in Figure 24, the writing passing rates decreased for all subgroups in 2012-2013, the year the standards changed. All three subgroups showed decreases in 2013-2014, ranging from 3 to 6 percentage points. In 2014-2015, all three subgroups showed increases ranging from 3 to 8 percentage points. The writing passing rates for the students with disabilities subgroup continue to fall below the passing rates of other subgroups.

Figure 24

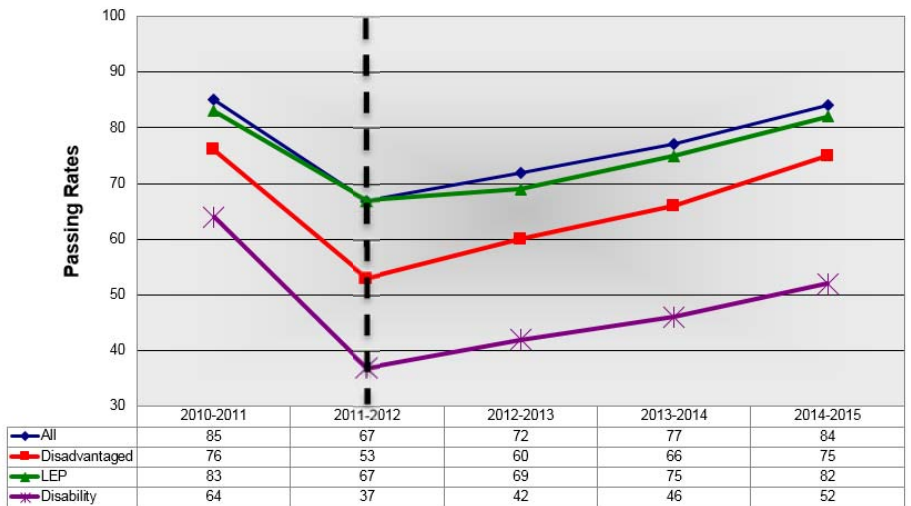


### Mathematics

As noted in Figure 25, the mathematics passing rates decreased for all subgroups in 2011-2012, the year the standards changed. All three subgroups showed increases in 2012-2013 ranging from 2 to 7 percentage points, in 2013-2014 ranging from 4 to 6 percentage points, and in 2014-2015 ranging from 6 to 9 percentage points. The mathematics passing rates for the students with disabilities subgroup continue to fall below the passing rates of other subgroups.

Figure 25

Division  
All Grade Levels  
5-Year Passing Rates by Other Subgroups  
Mathematics

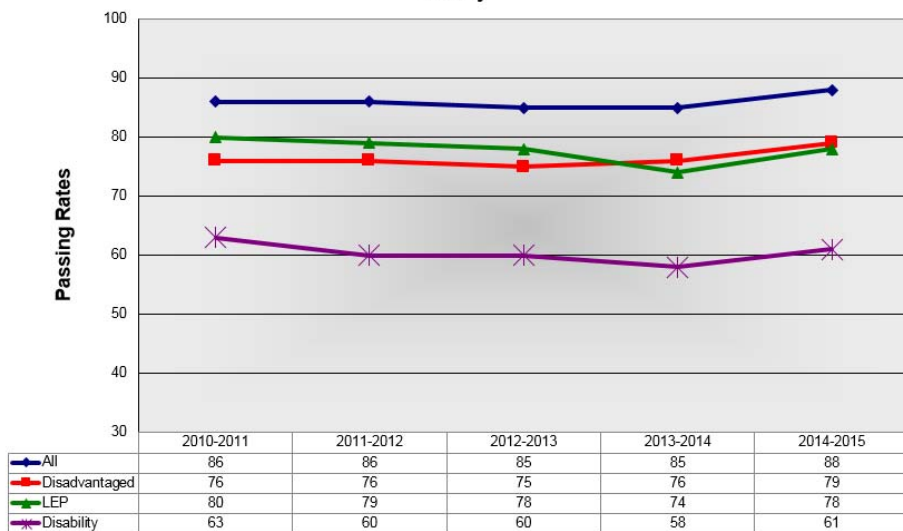


### History

As noted by Figure 26, the history passing rates for all subgroups remained relatively stable over the past five years. The passing rates for all three subgroups showed increases from last year ranging from 3 and 4 percentage points. The history passing rates for the students with disabilities subgroup continue to fall below the passing rates of other subgroups.

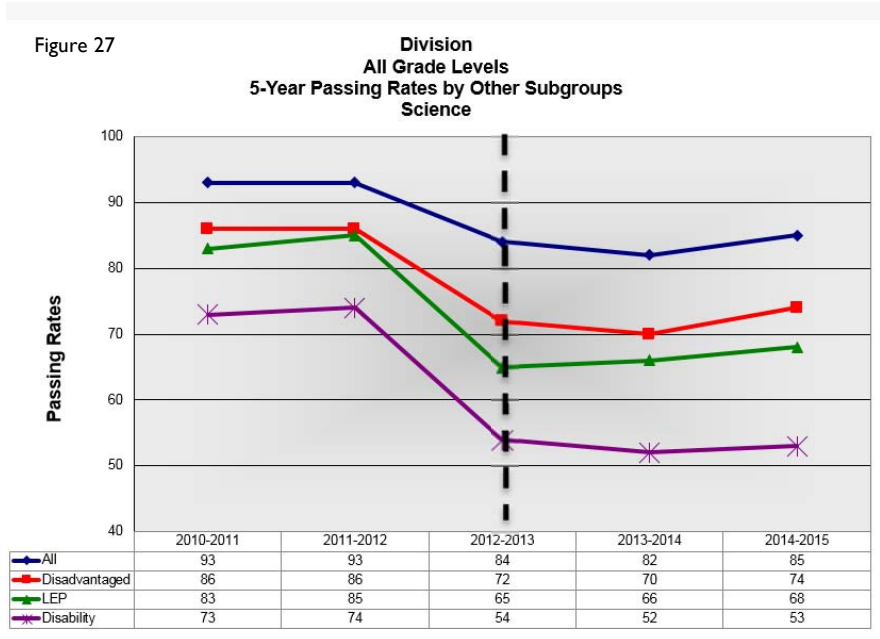
Figure 26

Division  
All Grade Levels  
5-Year Passing Rates by Other Subgroups  
History



**Science**

As noted in Figure 27, the science passing rates decreased for all subgroups in 2012-2013, the year the standards changed. In 2013-2014, the passing rates for the economically disadvantaged and the students with disabilities subgroups each showed a decrease of 2 percentage points while the limited English proficiency subgroup showed a 1 percentage-point increase. All three subgroups showed increases in 2014-2015 ranging from 1 percentage point to 4 percentage points. The science passing rates for students with disabilities continue to fall below the other subgroups.



**SUMMARY**

When looking at the overall division passing rates by grade level/test and by subgroup, passing rates for reading and writing decreased in 2012-2013 (the year the new reading assessments were administered); however, increases were shown across most grade levels/tests and most subgroups each of the past two years. Passing rates for mathematics decreased in 2011-2012 (the year the new mathematics assessments were administered); however, increases were shown across most grade levels/tests and by all subgroups over the past three years. History passing rates remained relatively stable over the past five years. Passing rates for science decreased in 2012-2013 (the year the new science assessments were administered); however, increases were shown across most grade levels/tests by all subgroups over the past two years.

When examining data by ethnicities, the passing rates for the African American subgroup continues to fall below the passing rates of other ethnicity subgroups. When paralleling other subgroups monitored under The No Child Left Behind Act of 2001, the students with disabilities subgroup continue to show passing rates below the subgroups of economically disadvantaged students and students identified as limited English proficient students.