

CCR Analysis

Bart Liguori, Commissioner's Delivery Unit
November 2015

In 2010, 34% of all graduating seniors were college or career ready (CCR). The Kentucky Board of Education (KBE) set a goal to cut the percent of students not CCR in half by 2015. 2015 saw the attainment of the goal with 66.9% of graduates being CCR. In 2016, the Kentucky Department of Education (KDE) embarks on a new 5-year goal to reduce the number of non-CCR students in half again. By 2020, Kentucky will increase its CCR rate to 83.5%.

College and Career Readiness

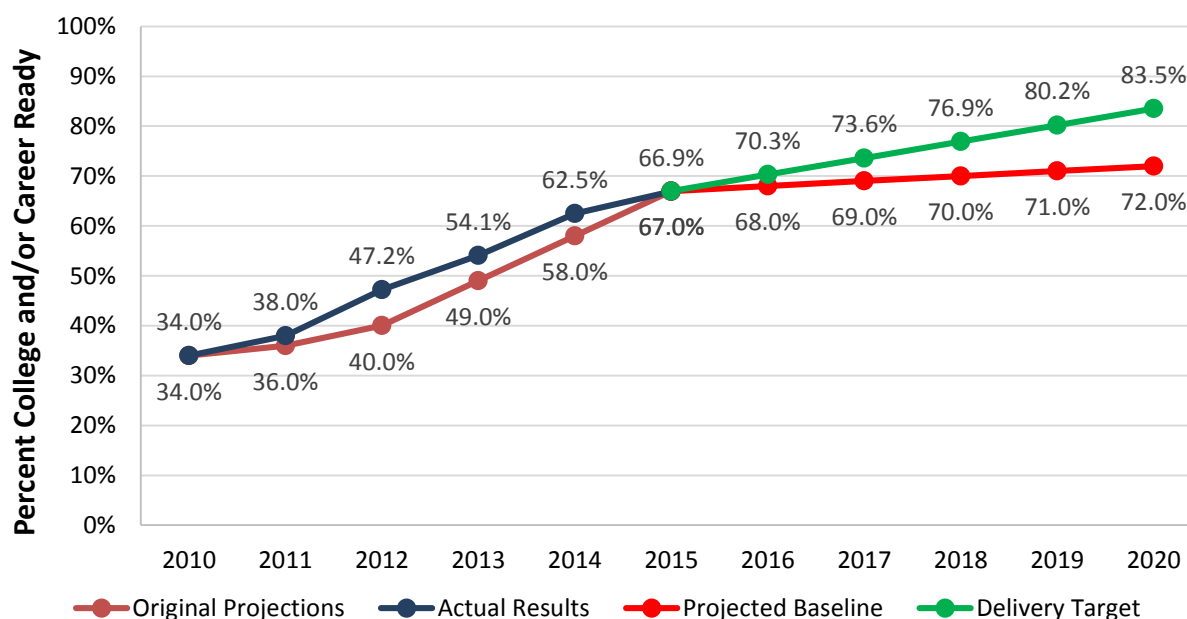


Figure 1: Delivery Targets for College and Career Readiness

Based on past performance, it is an ambitious, yet attainable goal. Each year Kentucky would have to increase its CCR rate by 3.3%. While Kentucky has made great strides in increasing the CCR rate over the last 5 years, there are several potential obstacles that stand in its way:

1. The rate of increase in CCR was only 4.4% in the 2014-2015 school year. This was the lowest increase in the CCR rate since 2011.
2. As seen in Figure 2, the percent of high school juniors who scored above the math ACT benchmark for CCR decreased sharply in the 2014-2015 school year. The percent of students meeting the benchmark in English declined and the percent of students meeting the benchmark in reading did not increase substantially.
3. As more students are graduating CCR, students who are not on track to graduate CCR may have more challenges in attaining the goal.

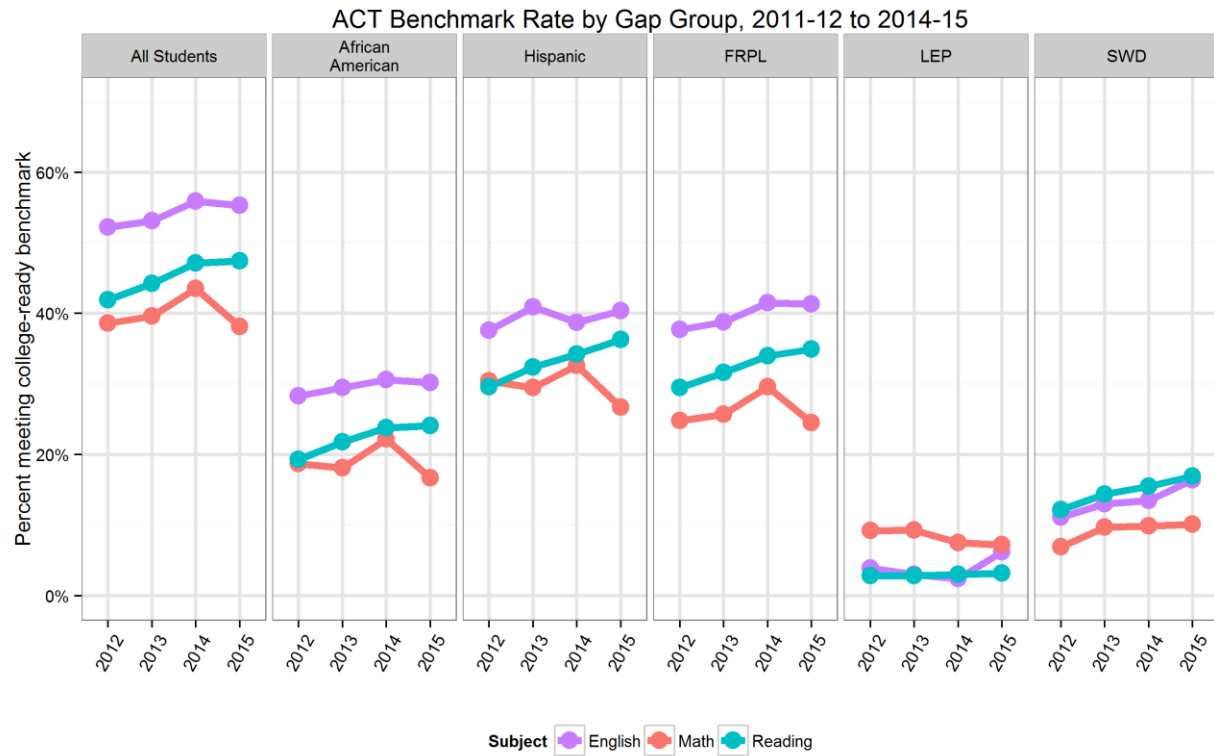


Figure 2. Percent of students meeting ACT benchmarks.

Graduation Rate Analysis

Bart Liguori, Commissioner's Delivery Unit
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In 2013, 86.1% of all students who entered high school four years earlier graduated from high school. The Kentucky Board of Education (KBE) set a goal to increase the four-year adjusted cohort graduation rate to 88.7% by 2015. In 2015, the Kentucky Department of Education (KDE) fell short of that goal by 0.7%; however, in the two years since the goal was set, Kentucky was able to increase its graduation rate by nearly 2 percent. In 2016, KDE embarks on a new 5-year goal to increase the four-year adjusted cohort rate to 93.6%. If KDE were to attain the goal, it would be on track to attain a 98% graduation rate by 2024 in accordance with the U.S Department of Education's requirements.

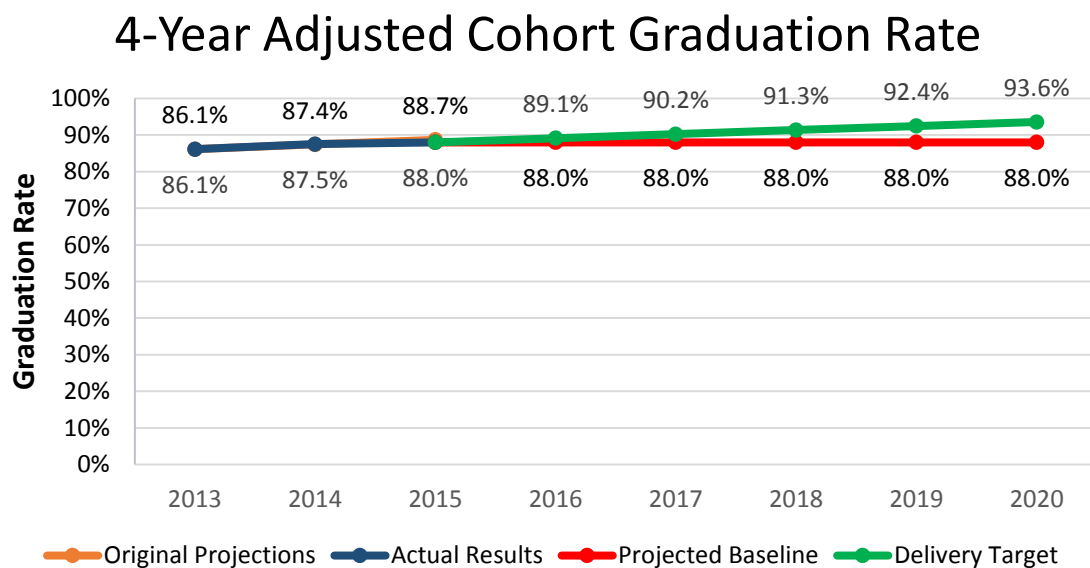


Figure 1: Delivery Targets for Graduation Rate

Based on past performance, it is an ambitious, yet attainable goal. Each year Kentucky would have to increase its graduation rate by 1.1%. While Kentucky has made great strides in increasing the graduation rate over the last two years, there are several potential obstacles that stand in its way:

1. The state only increased its graduation rate by 0.7% in the 2014-2015 school year. This is below the annual growth rate needed to meet the goal.
2. As seen in Figure 2, more than 40% of districts (70 districts total) had a lower graduation rate in 2015 than in 2013.
3. Fayette and Jefferson Counties have graduation rates of 84.6% and 79%, respectively. These two districts educate more than 20% of students statewide. The gains in graduation rates for these two districts are below the state targets set for them. Without adequate gains in these two districts, it will be difficult to attain the state goal.

More than 40% of Districts Fell Behind in Their Graduation Rates

Change in District Graduation Rates 2012-2013 through 2014-2015

Note: Kentucky Needed to Increase Graduation Rate 2.6% in order to Meet Delivery Goal

Change in Graduation Rates

Red: -18.4% to 0.0% (N= 70 Districts)

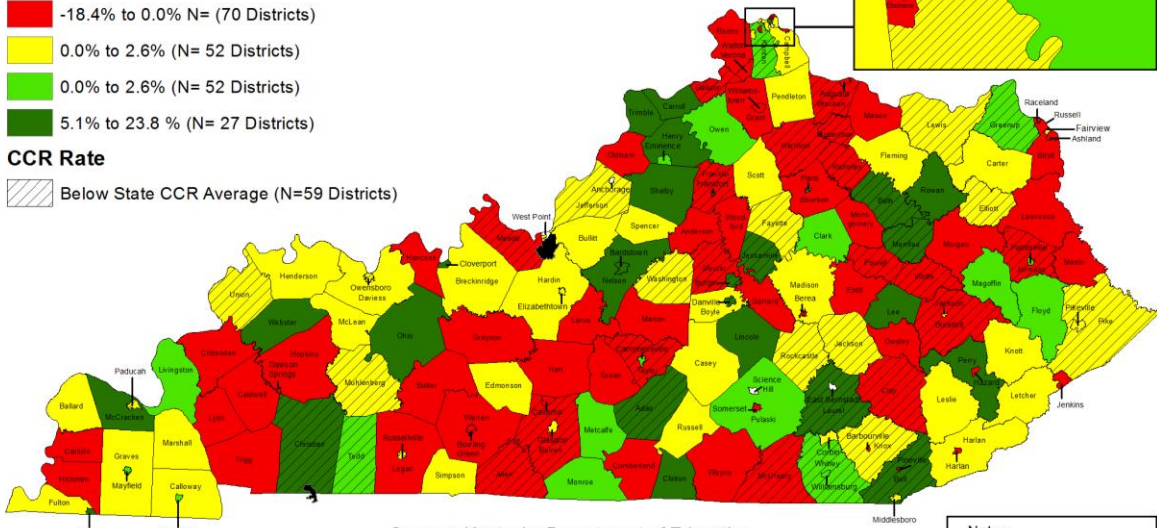
Yellow: 0.0% to 2.6% (N= 52 Districts)

Green: 0.0% to 2.6% (N= 52 Districts)

Dark Green: 5.1% to 23.8 % (N= 27 Districts)

CCR Rate

Hatched: Below State CCR Average (N=59 Districts)



Source: Kentucky Department of Education

Prepared by: Bart Liguori, Office of the Commissioner of Education
For More Information Visit: <http://openhouse.education.ky.gov>
Please note: Anchorage, East Bernstadt, Science Hill, Southgate and West Point are K-8 Districts

Notes:

- * Independent districts are identified within county.
- * Military bases are shown in black.
- * Data as of 10/1/2015

Figure 2. Increase in Graduation Rates for Kentucky Districts from 2012-2013 to 2014-2015

Proficiency Analysis

Alex Spurrier, Commissioner's Delivery Unit
November 2015

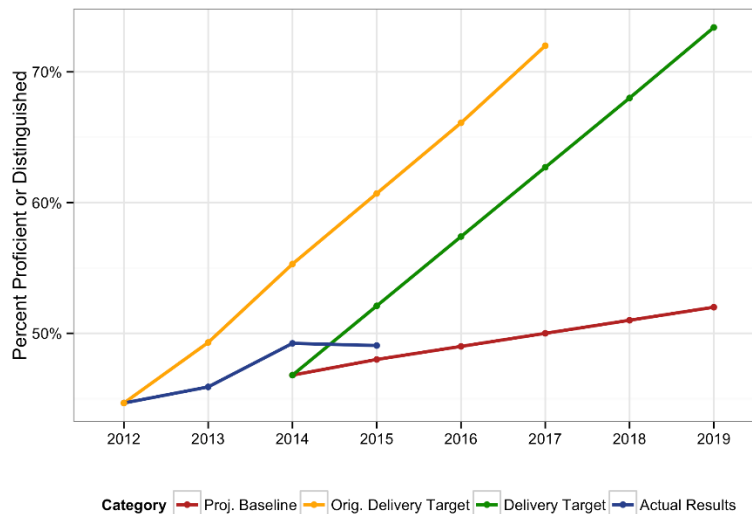


Figure 1. Delivery Targets for Combined Reading and Math Proficiency

Proficiency rates are not on track to meet the delivery targets set by the Kentucky Board of Education (KBE). In particular, middle and high school performance is stagnant. The state's lack of sufficient progress towards proficiency-related goals should concern *all shareholders involved in Kentucky public schools*. If we are able to better understand where we are falling short, it will help us to better prioritize our policies, programs, and resources to better meet the needs of the students we serve.

Kentucky's delivery targets for combined reading and math proficiency were originally set in 2011-2012, outlining ambitious goals for the state that would eventually lead to three out of four students meeting proficiency at the end of the 2016-2017 school year. These original targets were set at the same time the state rolled out the more rigorous standards and the Kentucky Academic Standards-aligned K-PREP exams. Educators were still adjusting to the new standards and exams during the 2012-2013 school year. As a result, the state's proficiency rates only grew modestly, falling far short of the delivery target for that year.

After three years, the state "re-baselined" the delivery targets. In practice, this maintained a similarly rigorous annual growth goal, but shifted the "start" and "end" points. This is reflected in *Figure 1*, which shows the original and current delivery targets as nearly parallel lines in orange and green, respectively. A "baseline" trajectory is illustrated in red, showing our best estimate of what the state's growth would be if KDE did nothing to push on these delivery targets.

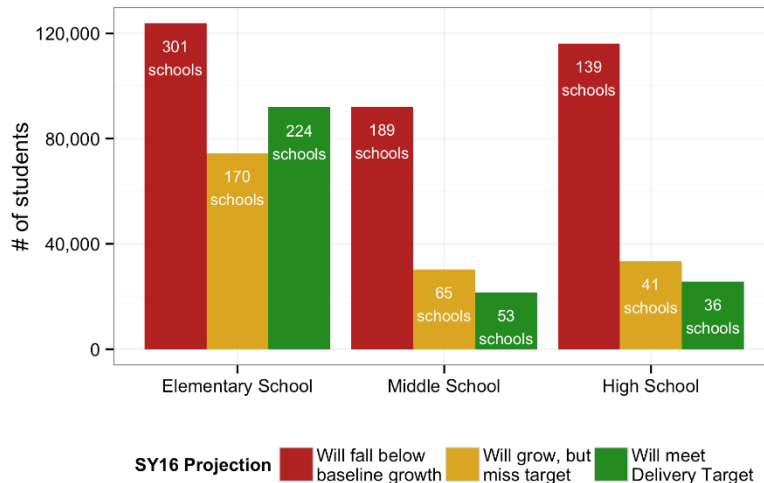


Figure 2. Proficiency Projections for 2015-2016

The state seemed to be on track to meet the delivery target for 2015 (illustrated by the blue line in *Figure 1*), but the decrease in proficiency put the state in a different position for 2016. In order to meet the state's target for 2016, the state will need to improve twice as fast as it has from 2012-2015.¹

If current trends continue, a relatively small portion of Kentucky's public schools will be on track to meet the KBE's delivery targets. If we use schools' current growth rates to predict how well they will perform compared to their delivery targets for the current school year, just under a third of elementary school students' schools will meet their SY16 delivery target, while 42.3% will be in a school falling *below baseline growth*. The outlook is more dire at the middle and high school levels. **More than 60% of these students are in schools that are likely to fall below baseline growth.** Only 1 in 5 middle and high school students currently attend schools that are likely to meet their SY16 delivery targets for proficiency.

SY16 School Projection	Elementary	Middle	High
Will fall below baseline growth	43.3% of students	61.6% of students	64.4% of students
Will grow, but miss target	24.5% of students	21.2% of students	19.0% of students
Will meet Delivery Target	32.2% of students	17.3% of students	16.7% of students

¹The state improved by 4.4 percentage points from 2012-2015. In order to meet the 2016 delivery target, it needs to improve by 8.33 percentage points.

Gap Student Analysis

Alex Spurrier, Commissioner's Delivery Unit
November 2015

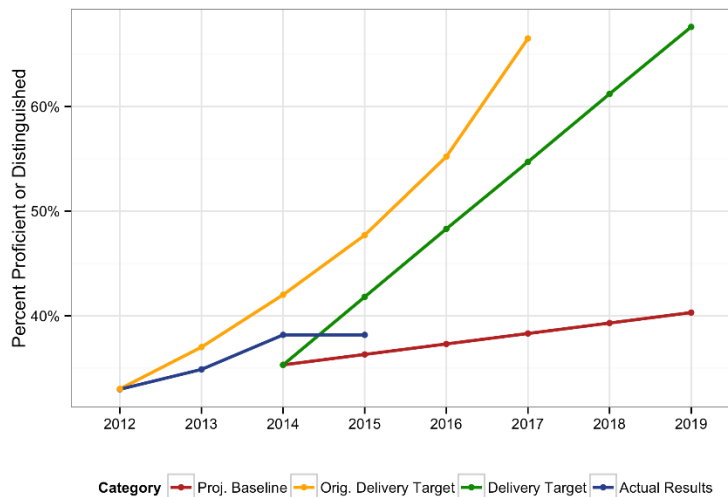


Figure 1. Delivery Targets for Gap Student Performance

Schools are not on track to meet the delivery targets set by the Kentucky Board of Education (KBE) for gap student performance. In particular, middle and high school performance is stagnant. The state's lack of sufficient progress towards proficiency-related goals for gap students should concern all shareholders involved in Kentucky public schools.

Kentucky's delivery targets for combined reading and math proficiency were originally set in 2011-2012, outlining ambitious goals for the state that would eventually lead to two out of three non-duplicated gap students meeting proficiency at the end of the 2016-2017 school year. These original targets were set at the same time the state rolled out the more rigorous standards and Kentucky Academic Standards-aligned K-PREP exams. Educators were still adjusting to the new standards and exams during the 2012-2013 school year. As a result, the state's proficiency rates only grew modestly, falling far short of the delivery target for that year.

After three years, the state "re-baselined" the delivery targets to maintain a similarly rigorous annual growth goal, but shifted the "start" and "end" points. This is reflected in Figure 1, which shows the original and current delivery targets as nearly parallel lines in orange and green, respectively. A "baseline" trajectory is illustrated in red, showing our best estimate of what the state's growth would be if KDE did nothing to push on these delivery targets.

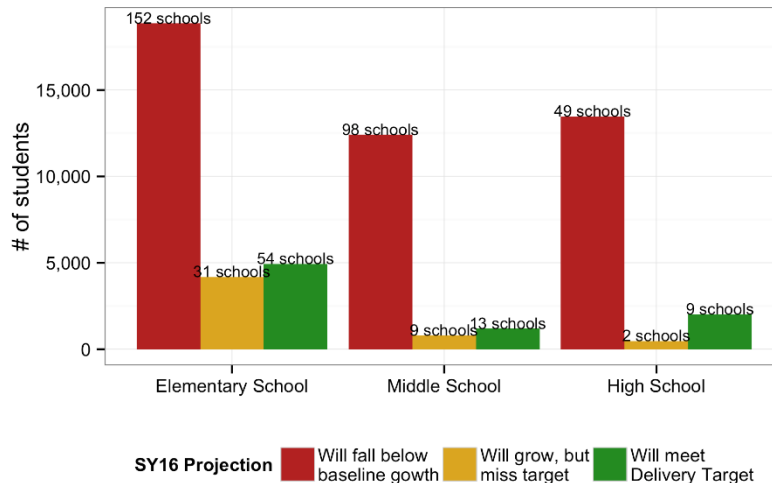


Figure 2. Projected 2016 School Performance

The state seemed to be on track to meet the delivery target for non-duplicated gap students in 2015 (illustrated by the blue line in *Figure 1*), but the flat results for gap student proficiency put the state in a different position for 2016. In order to meet the state's target for 2016, the state will need to improve twice as fast as it has from 2012-2015.²

Kentucky schools' impact on African-American student performance is of particular concern. If current trends continue, a very small portion of Kentucky's public schools will be on track to meet KBE's delivery targets for African-American students. If we use schools' current growth rates to predict how well they will perform compared to their delivery targets for the current school year, only 22.8% of African-American elementary school students' schools will meet their SY16 delivery target, while nearly two-thirds will be in a school falling *below baseline growth*. The outlook is more dire at the middle and high school levels. **More than 80% of African-American middle/high school students are in schools that are likely to fall below baseline growth for African-American students.**

SY16 School Projection	Elementary	Middle	High
Will fall below baseline growth	64.1% of students	81.7% of students	81.7% of students
Will grow, but miss target	13.1% of students	7.5% of students	3.3% of students
Will meet Delivery Target	22.8% of students	10.8% of students	15.0% of students

²The state improved non-duplicated gap student performance by 5.2 percentage points from 2012-2015. In order to meet the 2016 delivery target, it needs to improve by 10.13 percentage points.

Novice Reduction Analysis

Alex Spurrier, Commissioner's Delivery Unit
November 2015

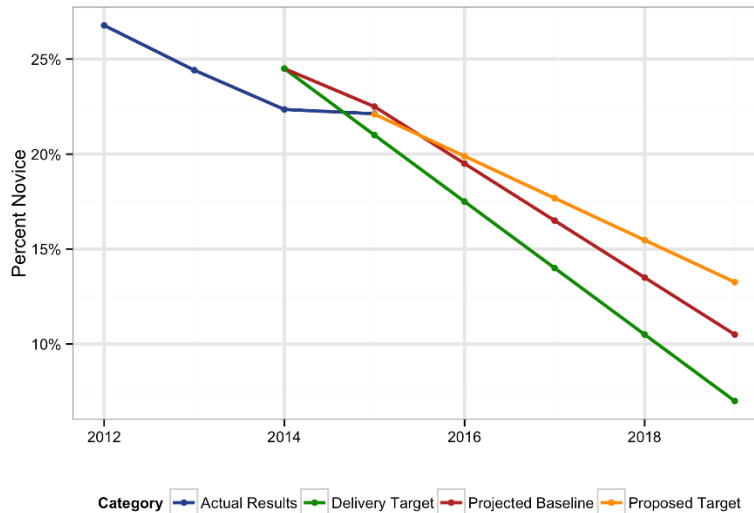


Figure 1. Delivery Targets for Combined Reading and Math Novice Reduction

Novice reduction rates are not on track to meet the delivery targets set by the Kentucky Board of Education (KBE). The state's progress with novice reduction at the elementary and middle school levels is encouraging, but the lack of sufficient novice reduction at the high school level should concern *all shareholders involved in Kentucky public schools*.

Kentucky's delivery targets for novice reduction were originally set in 2014-2015, outlining ambitious goals for the state that would eventually lead to only 7% of students scoring at the novice level by the end of the 2018-2019 school year. This is reflected in *Figure 1*, which shows the current delivery targets in green.

The state seemed to be on track to meet the delivery target for 2015 (illustrated by the blue line in *Figure 1*), but a mostly flat rate of students scoring at novice put the state in a different position for 2016. In order to meet the state's target for 2016, the state will need to realize a novice rate reduction equal to the reduction from 2012-2015 in a single school year.³

As an alternative, a new set of targets aligned with the state's accountability goals could provide more achievable goals for schools (illustrated by the orange line in *Figure 1*). This approach would seek to cut the novice rate in half over five years, which is equal to a 2.21 percentage point reduction in the statewide novice rate each year.

³The state reduced the portion of students scoring at the novice level by 4.6 percentage points from 2012-2015. In order to meet the 2016 delivery target, it needs to reduce novice rates by another 4.6 percentage points.

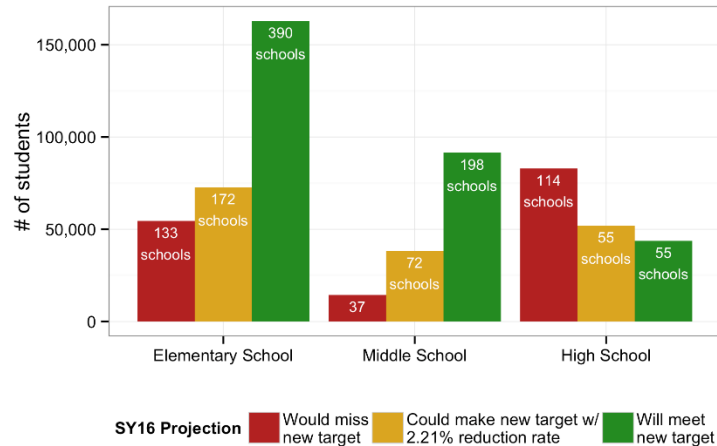


Figure 2. Novice Reduction Projections

If current trends continue, a majority of elementary and middle school students will be attending Kentucky public schools that are on track to meet the proposed novice reduction delivery targets. If we take an optimistic (yet still realistic) view that schools could achieve the 2.21 percentage point reduction the new targets set for the state average, more than 80% of these students would attend schools meeting the proposed targets. Schools that are likely to meet the proposed target with their current novice reduction rate are shown in green in *Figure 2* and schools that could meet the targets with a 2.21 percentage point reduction are represented in yellow in *Figure 2*.

High school novice reduction is a separate story. Only one in four Kentucky high school students attend a school that would meet the proposed SY16 novice reduction target. Even if every high school had a novice reduction of 2.21 percentage points, **50% of high school students would still be in schools missing their novice reduction target**. This indicates that KDE may want to consider targeting more novice reduction efforts at the high school level.

SY16 School Projection	Elementary	Middle	High
Would miss new SY16 target	19.1% of students	12.1% of students	50.9% of students
Within 2.21% of new target	24.7% of students	23.5% of students	24.6% of students
Would meet new SY16 target	56.1% of students	64.5% of students	24.6% of students

Kindergarten Readiness Analysis

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In the fall of 2014, Kentucky began screening all of its students entering kindergarten for the basic skills needed for success. It was found that 49.0% of all kindergartners screened using the Brigance screener were ready for kindergarten. The Kentucky Board of Education (KBE) set a goal to increase the kindergarten readiness rate to 74.5% by 2019. The results for this measure are released in the fall of the year in which the students are screened. In the fall of 2015, the kindergarten readiness rate was 50.1%. This was short of the 59.2% target needed for goal attainment. In order to meet the target for the fall of 2016, the kindergarten readiness rate would need to increase to 64.3% as seen in Figure 1. Being that the increase from the fall of 2013 to the fall of 2015 was only 1.1%, this is an unlikely scenario.

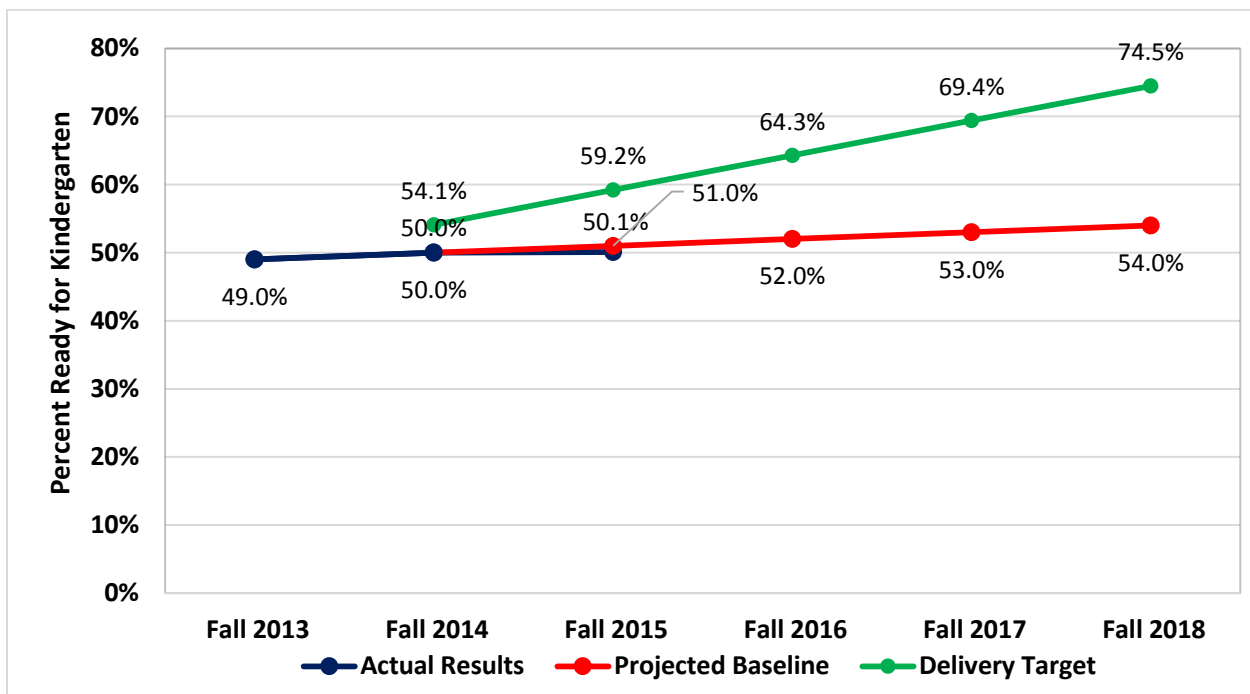


Figure 1: Delivery Targets for Kindergarten Readiness

In order to meet subsequent targets, KDE will have to increase the kindergarten readiness rate of its preschoolers in state-funded preschool and Head Start. Together, state-funded preschool and Head Start account for nearly half of all preschool children. Figure 2 shows that kindergarten readiness rates for students in state-funded preschool and Head Start lag behind those of students in child care settings. This is true throughout all regions of the state.

State-funded Preschool and Head Start Kindergarten Readiness Rates Lag Behind Child-Care Readiness Rate in 2014-2015

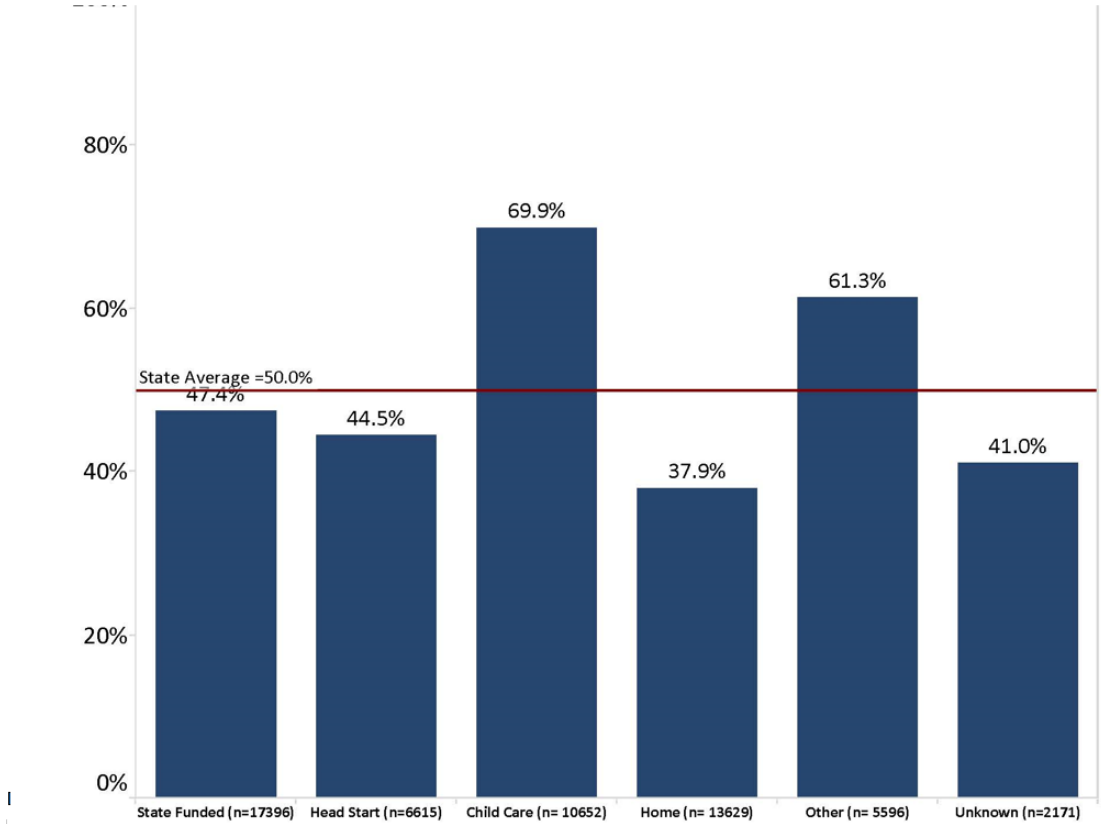


Figure 2. Kindergarten Readiness Rates for students by prior setting

Third Grade Proficiency Analysis

Bart Liguori, Commissioner's Delivery Unit
November 2015

In the fall of 2012, the combined math and reading proficiency rate for 3rd grade students was 46.1%. The Kentucky Board of Education (KBE) set a goal to increase the kindergarten readiness rate to 73.1% by 2017. Because the progress was off track in the 2013-2014 school year, KBE re-baselined the goal to the average of the previous 3 years, which was 47.2%. From this, a goal was set to increase the combined reading and math 3rd grade proficiency rate to 73.6% by 2019. In the 2014-2015 school year the combined 3rd grade proficiency rate was 51.0%. While an increase from the previous year, it was short of the target of 52.5% needed for goal attainment. In order to meet the target for the 2015-2016 school year, the 3rd grade proficiency rate would need to increase to 57.8% as seen in Figure 1. Being that the increase from the 2013-2014 to 2014-2015 school year was only 1.0%, this is an unlikely scenario.

Third Grade Proficiency

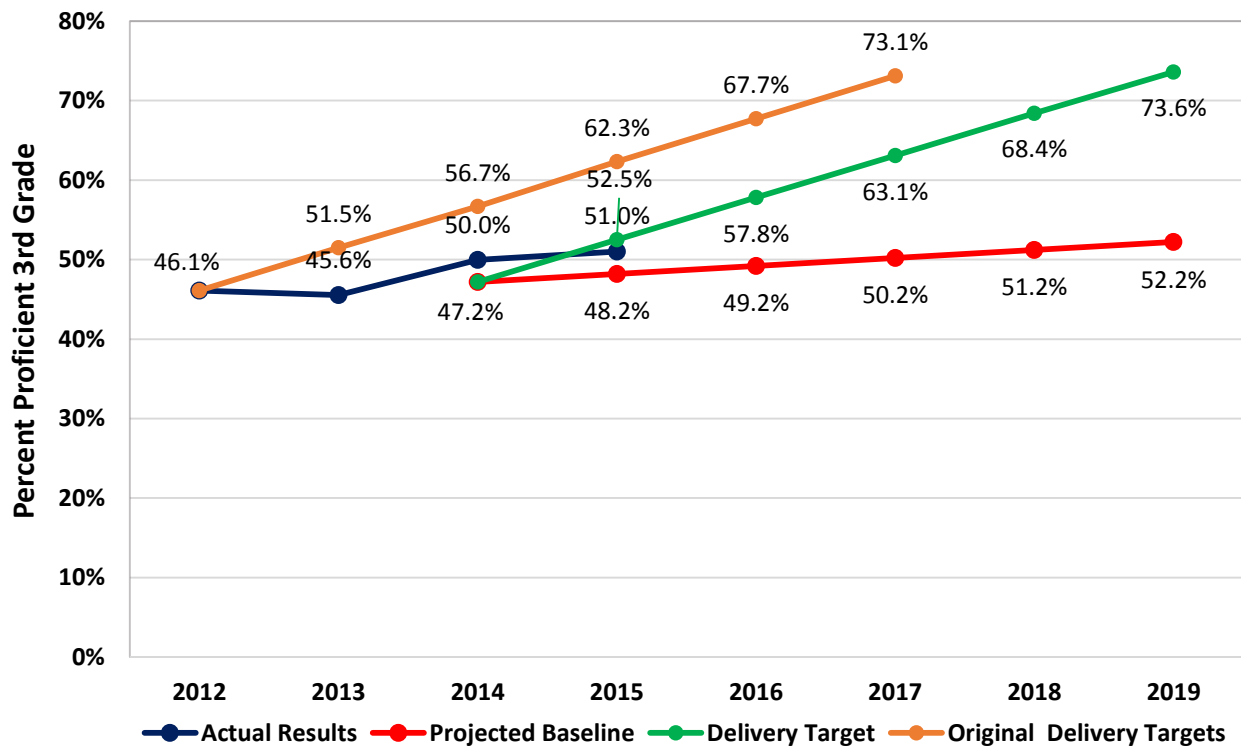


Figure 1: Delivery Targets for Kindergarten Readiness

In order to increase the proficiency rate of these students, Kentucky needs to increase the proficiency rates of the gap student population, which represents 69.9% of tested 3rd graders. Figure 2 depicts the distance from the delivery target for all 3rd grade students and each gap group population.

Combined 3rd grade reading/math proficiency improved, but is off track to meet delivery targets

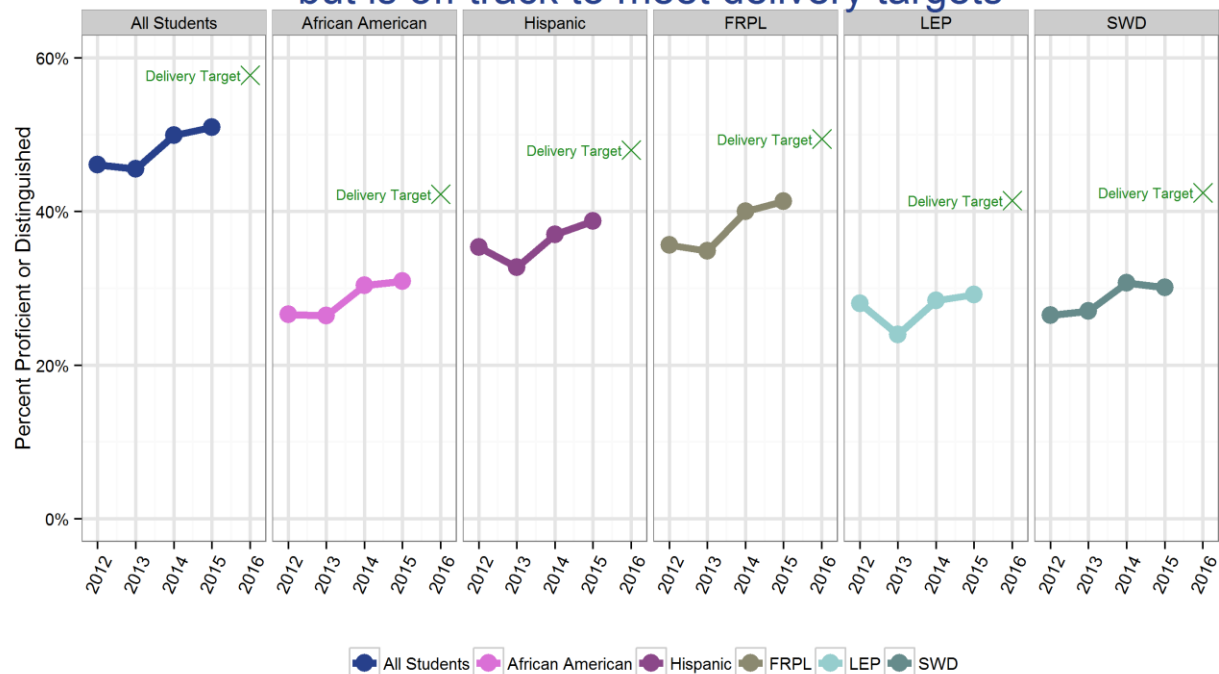


Figure 2. Third Grade Proficiency Rates for all gap student groups

Program Review Analysis

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After piloting the program review process in the 2012-2013 school year, the Kentucky Board of Education included school and district program review scores into their accountability scores in the 2013-2014 school year and set delivery targets for program reviews. Despite having less than 40% of programs being proficient and distinguished in the pilot year, 65.5% of programs were proficient or distinguished in the 2013-2014 school year. Figure 1 depicts the delivery targets for program reviews. In 2014-2015, nearly 80% of programs statewide were proficient. This is well above the target required to make the 2018-2019 goal of 82.8% of all programs rated proficient and distinguished.

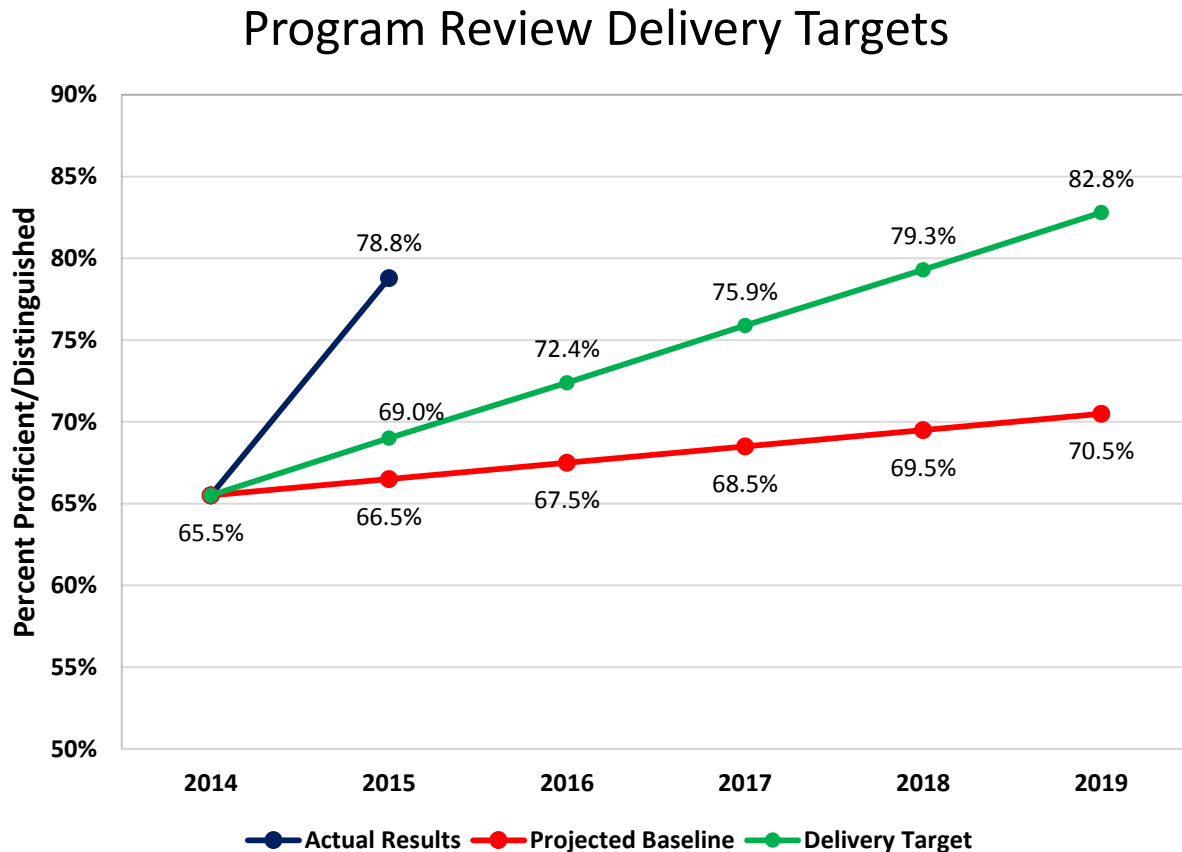


Figure 1. Delivery Targets for Program Reviews