

**CONNECTICUT STATE BOARD OF EDUCATION  
Hartford**

**TO:** State Board of Education  
**FROM:** Dr. Dianna R. Wentzell, Commissioner of Education  
**DATE:** October 4, 2017  
**SUBJECT:** State Assessment Achievement and Growth Results, 2016-17

*Executive Summary*

The Connecticut State Department of Education (CSDE) successfully implemented its state summative assessments for 2016-17.

**English Language Arts (ELA) and Mathematics Achievement**

- Smarter Balanced assessments were administered in Grades 3 through 8 for the third consecutive year.
  - In ELA, achievement was down slightly in 2016-17 but still higher than in 2014-15; over 50 percent of students continue to perform in level 3 or 4 in all grades and over 30 percent of districts saw improvement.
  - In mathematics, achievement has increased in each year since 2014-15; for the first time, over 50 percent of students in Grades 3 and 4 performed in level 3 or 4. Half of the Alliance Districts outpaced the statewide improvement, as did students who are black, Hispanic, or low-income. Middle school mathematics instruction remains a significant academic challenge for Connecticut.
  - Matched student cohort growth results from 2015-16 to 2016-17 were lower in both subjects than during the prior year. If students do not reach their growth targets, especially those at lower levels of achievement, then they will not reach higher levels of achievement in future years. There are some bright spots.
- The Connecticut SAT School Day was administered in Grade 11 for the second consecutive year. Achievement was slightly improved in both subjects. Fourteen Alliance Districts outpaced the state improvement in English language arts, while 11 Alliance Districts outpaced the state improvement in mathematics.
- In all grades, average student achievement is below the expected accountability target. Achievement gaps remain large; students with high needs are performing at least one achievement level lower than their peers.
- Performance of students with significant cognitive disabilities is assessed using the CT Alternate Assessment.

**Science Assessment – Changing Landscape**

- New assessments aligned to the Next Generation Science Standards will be field tested in 2017-18 and operational in 2018-19.
- CSDE has sought flexibility from USED to administer the field test to all students in Grades 5 and 8 in lieu of our legacy science assessments; Grade 11 students will also be taking a field test (no more CAPT in Grade 10) but that flexibility is already permissible under current law.
- The alternate science assessment is also being revamped to align to the new standards.

**Next Steps**

These are some of the strategies the CSDE is implementing to improve academic achievement and growth:

- Establish and train cross-divisional teams that include staff from Academics, Talent, Turnaround, Students Supports, and Performance;
- Problem-solve alongside the 10 lowest performing districts;
- Support the strategic and appropriate use of local district assessments;
- Provide secure access for authorized users to relevant data in a timely manner for informed decision-making; and
- Develop and disseminate an Early Indication Tool (EIT) that will identify students who may need additional targeted support.

Prepared by:

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Performance Office



**CONNECTICUT STATE DEPARTMENT OF EDUCATION**

**State Assessment  
Achievement and Growth Results  
2016-17**

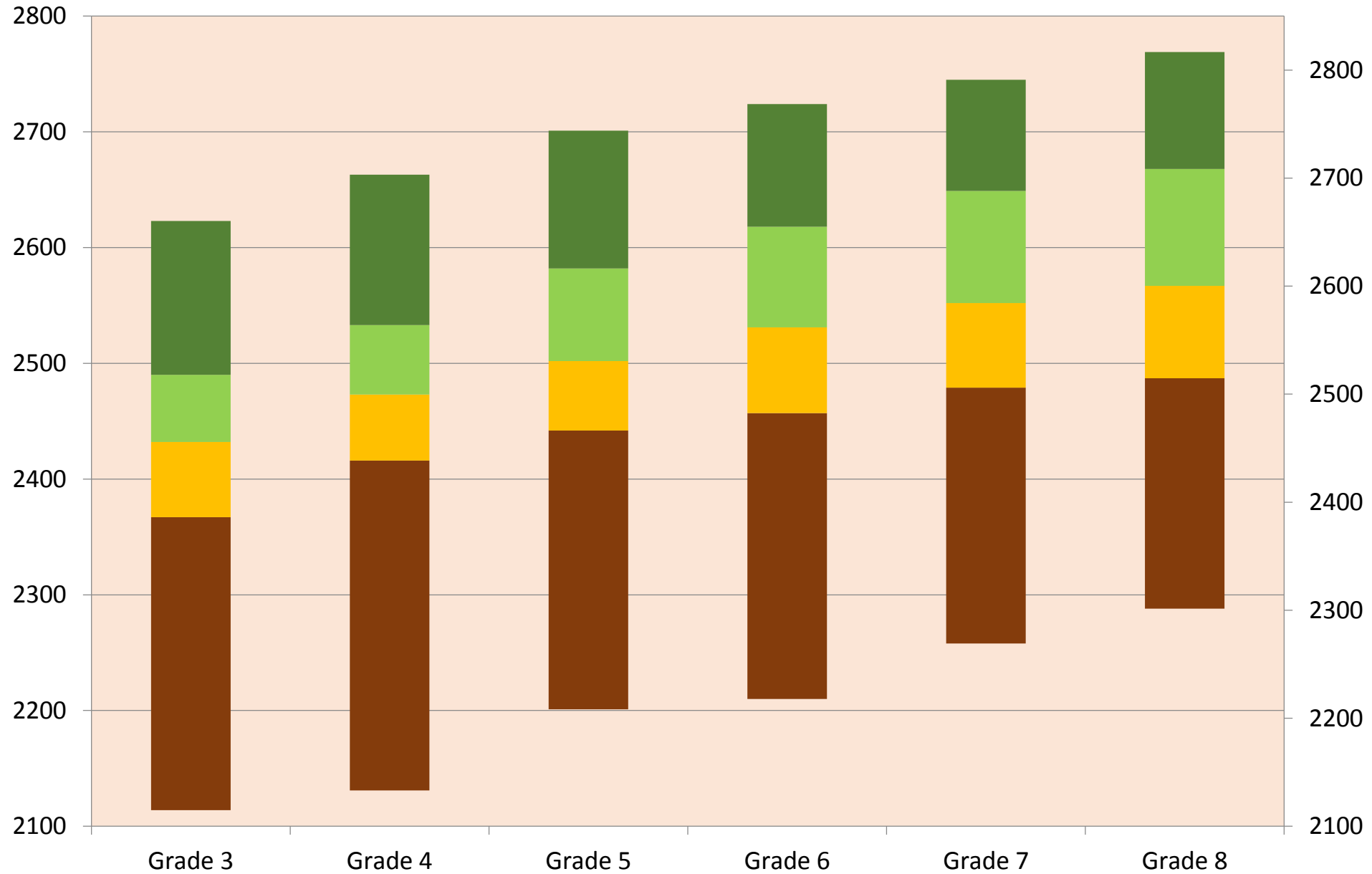
**State Board of Education  
October 2017**

# Agenda

- Academic Achievement
- Matched Student Cohort Growth
- District Perspectives
- Next Steps

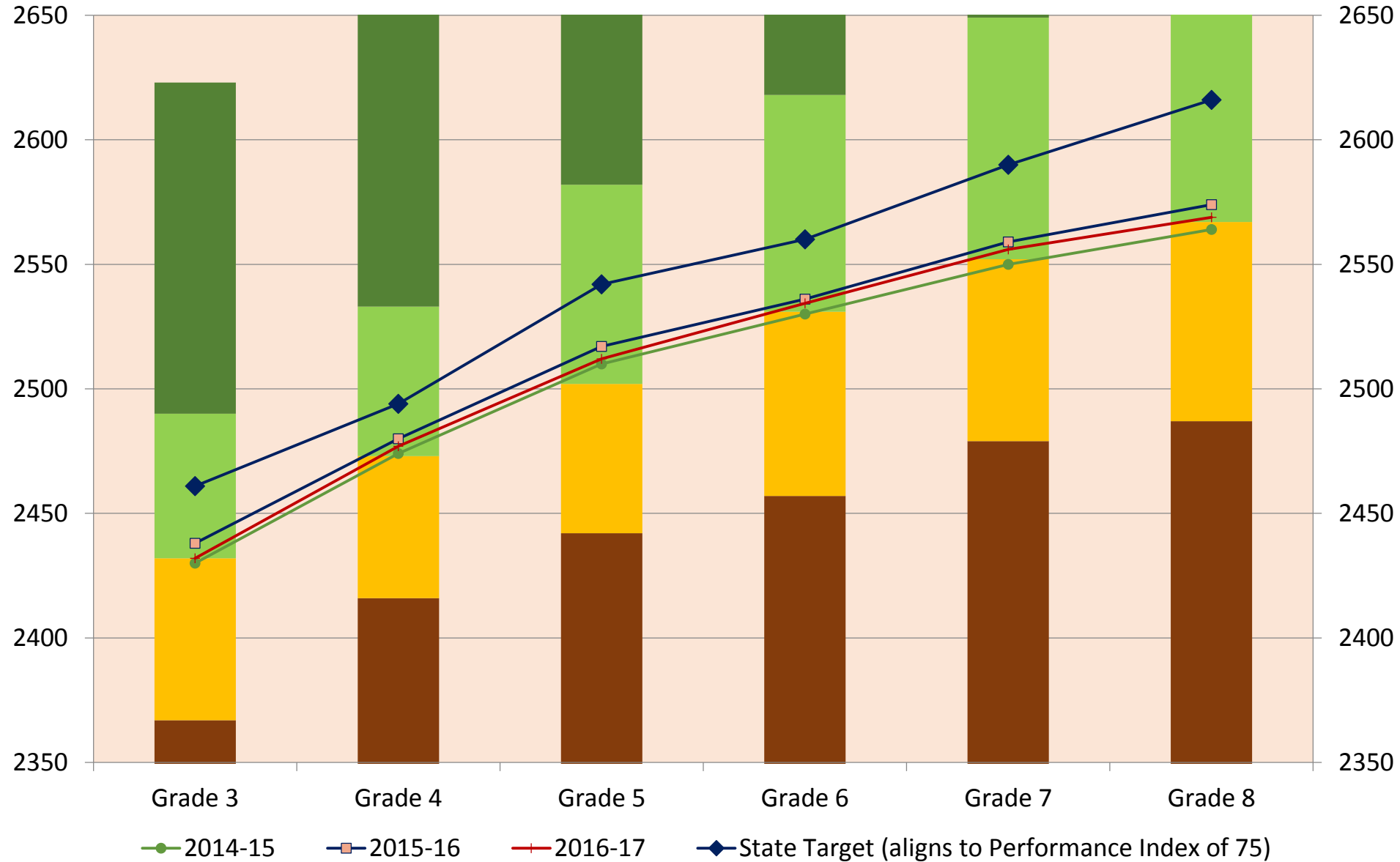


# Smarter Balanced ELA Vertical Scale



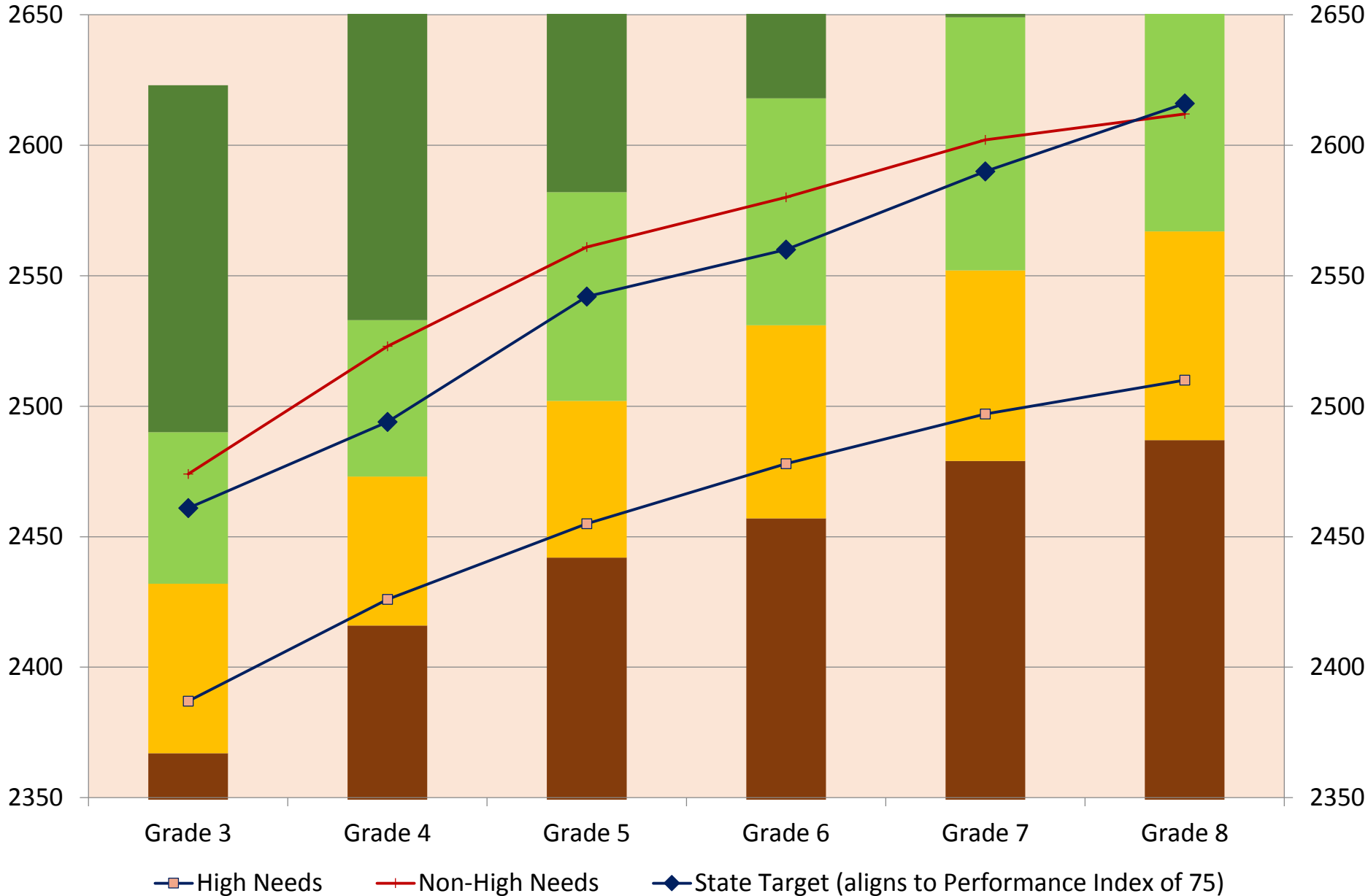
# Smarter Balanced Achievement - ELA

## Average Scale Scores by Grade

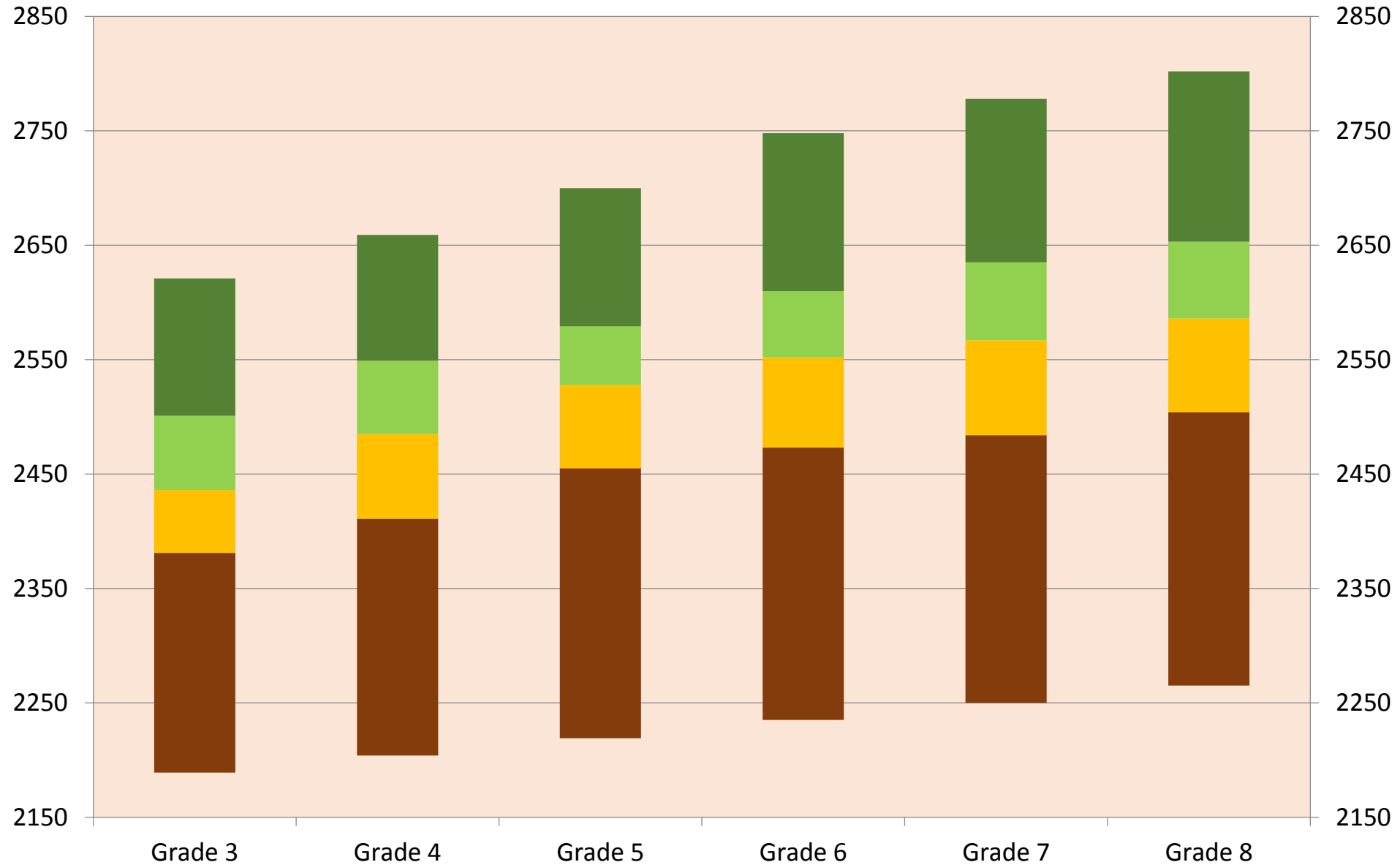


# Smarter Balanced Achievement Gap - ELA

## Average Scale Scores by Grade, 2016-17



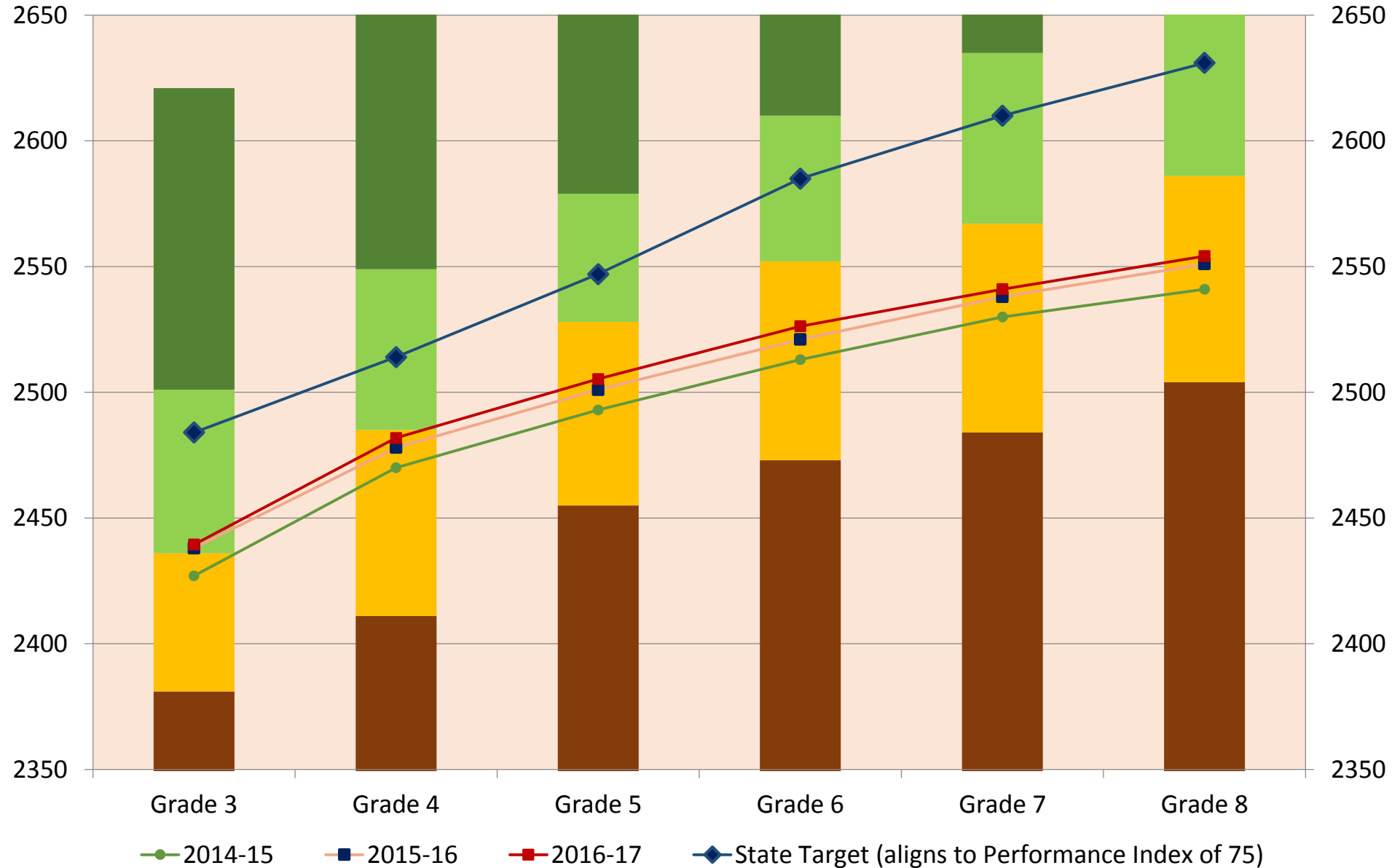
# Smarter Balanced Mathematics Vertical Scale





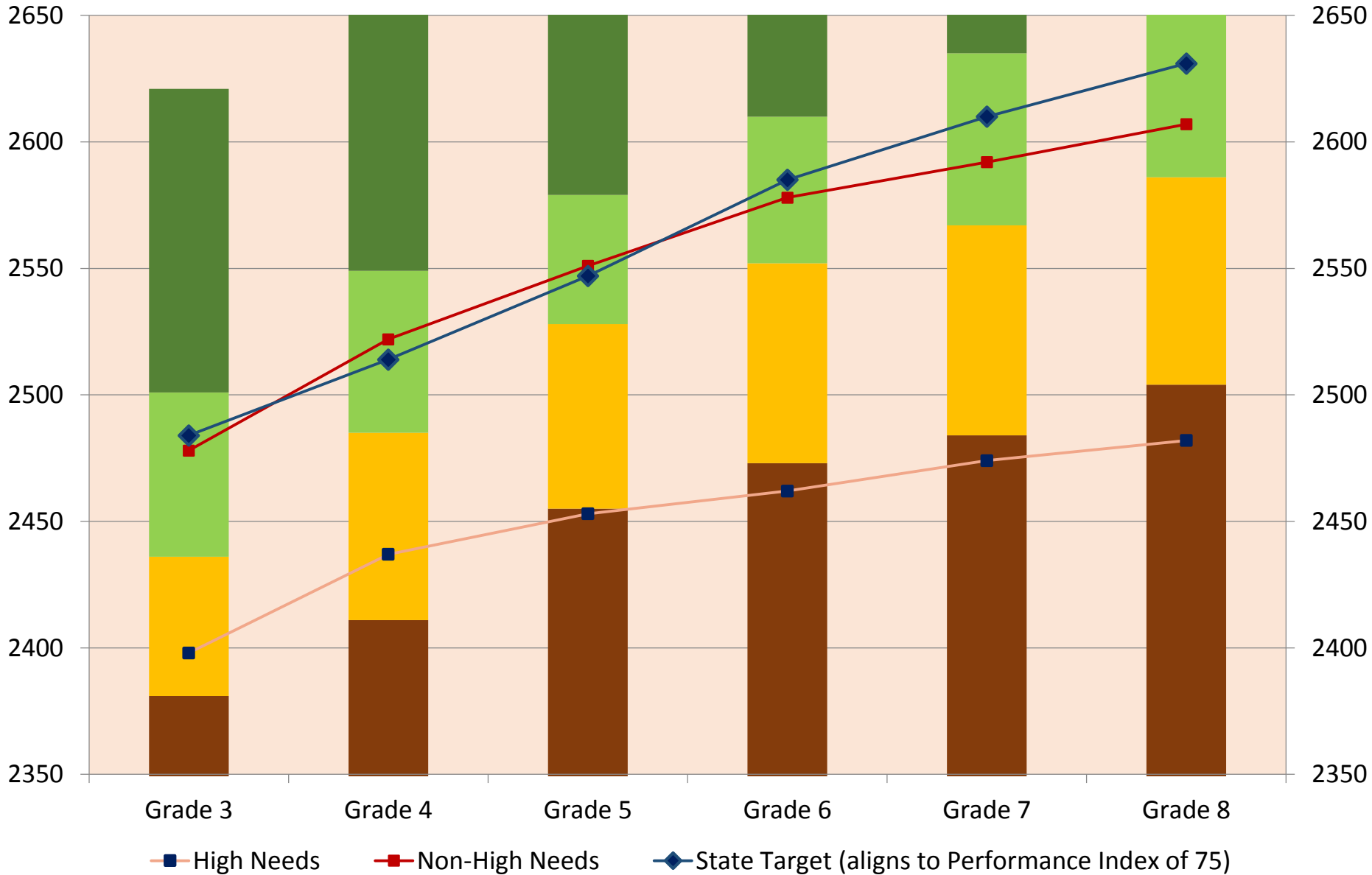
# Smarter Balanced Achievement - Mathematics

## Average Scale Scores by Grade



# Smarter Balanced Achievement Gap - Mathematics

## Average Scale Scores by Grade, 2016-17

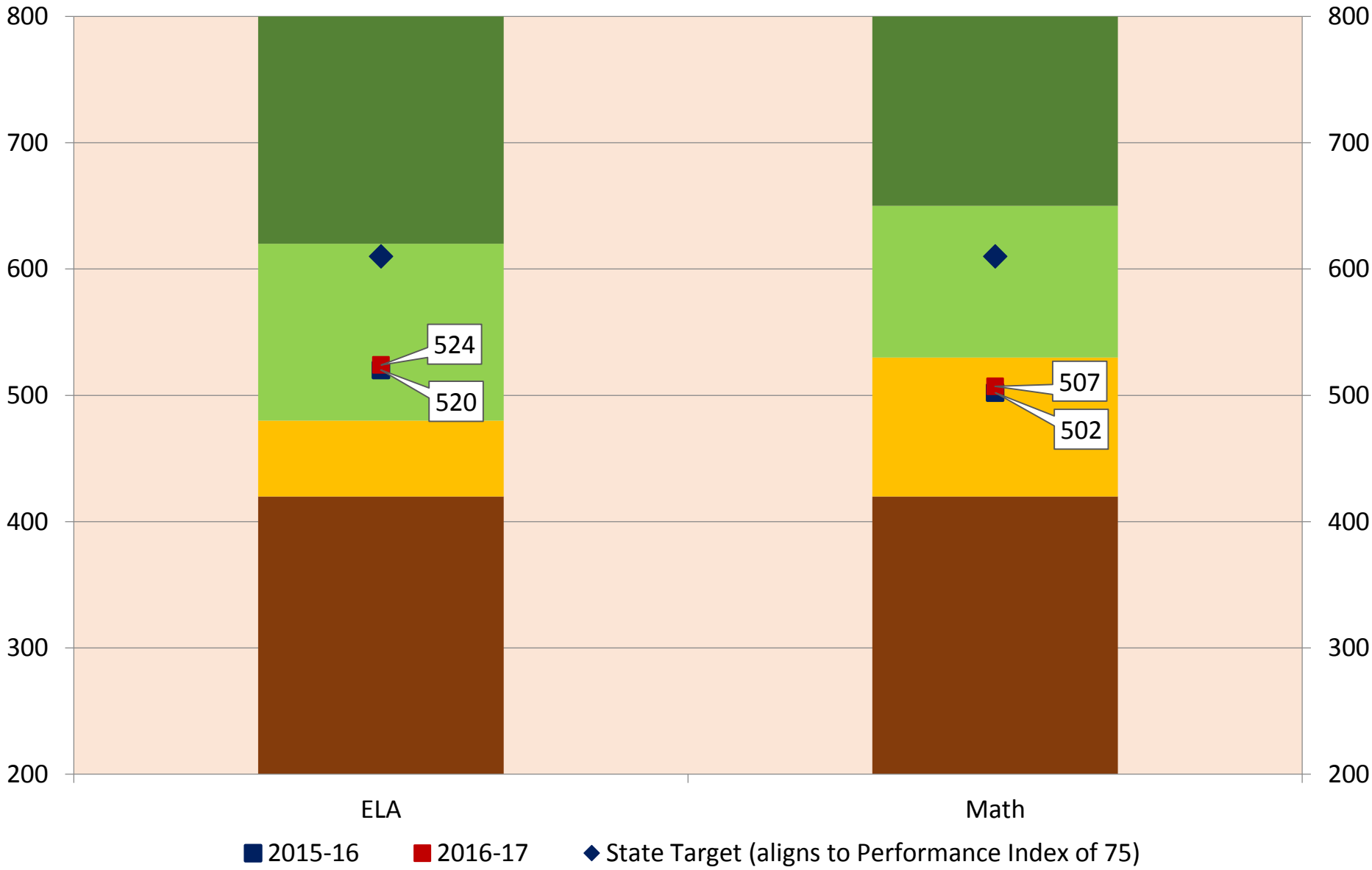


# Smarter Balanced Academic Achievement - Observations

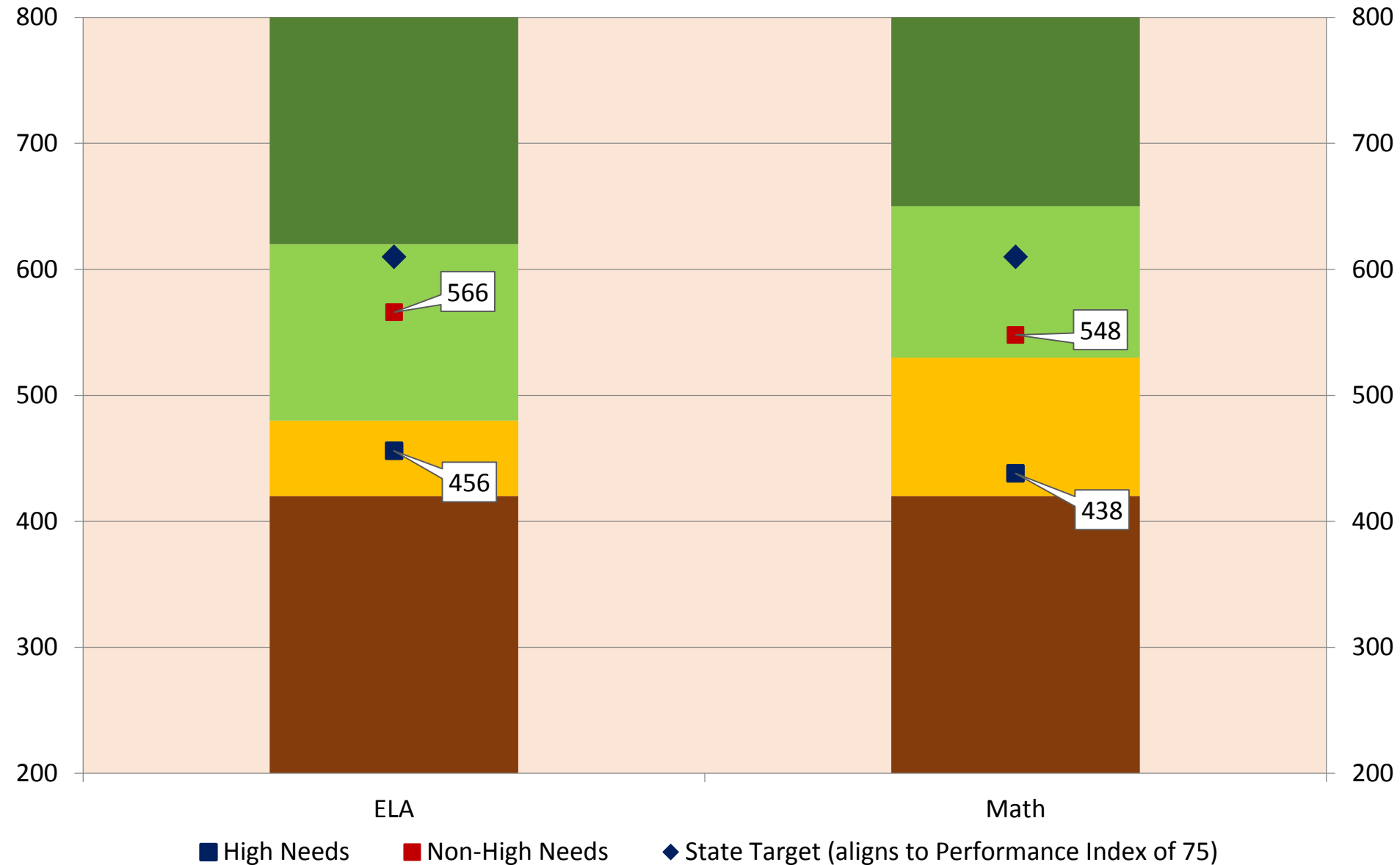
- ELA
  - Achievement was down slightly in 2016-17 but still higher than in 2014-15.
  - Over 50 percent of students continue to perform in level 3 or 4 in all grades; over 30 percent of districts saw improvement.
- Mathematics
  - Achievement has increased in each year since 2014-15.
  - For the first time, over 50 percent of students in Grades 3 and 4 performed in level 3 or 4.
  - Half of the Alliance Districts outpaced the statewide improvement, as did students who are black, Hispanic, or low-income.
  - Middle school mathematics instruction remains a significant academic challenge for Connecticut.
- Achievement gaps remain large; students with high needs are performing at least one achievement level lower than their peers.



# Connecticut SAT School Day: Average Scale Scores



# Connecticut SAT School Day: Average Scale Scores Achievement Gap 2016-17



# Understanding the Redesigned SAT Scale Scores

- Scale range is the same (200 – 800) but the scores do not mean the same thing.
- The redesigned SAT concords lower on the old SAT. Here are a couple of examples:
  - A score of 530 on the redesigned Math SAT concords to a 500 on the old SAT.
  - A score of 480 on the redesigned ELA SAT concords to a 860 out of 1600 on the old SAT.
- Connecticut's accountability expectation for average SAT performance is appropriately more rigorous.



# Three Ways to Understand Change in Performance

	Achievement Change	“Rough Cohort” Change	Matched Student Cohort Growth
<p><b>What is it?</b></p> <p><b>How does it work?</b></p>	Compares student achievement across years (e.g., achievement of grade 4 students in 2014-15 is compared to the achievement of grade 4 students in 2015-16)	Compares the achievement of a group of students from one grade in year 1 to a group of students in the next higher grade in year 2 (e.g., grade 3 in 2014-15 to grade 4 in 2015-16)	Compares the achievement of the <b>same student</b> from one grade in year 1 to the next higher grade in year 2 (e.g., student in grade 3 in 2014-15 to grade 4 in 2015-16)
<p><b>Who is compared?</b></p>	Different students across different years	Mostly the same students though there can be some mismatches due to student mobility, entry, and exit	The same students from one year to the next... no mismatches
<p><b>What is measured?</b></p>	Proficiency rate (e.g., percent at or above level 3) and/or average scale scores	Proficiency rate (e.g., percent at or above level 3) and/or average scale scores	The amount of growth to standard achieved by each student and groups of students
<p><b>What does it offer?</b></p>	The starting point for understanding change	A “rough estimate” of growth	The gold standard for growth and for understanding curricular and instructional effectiveness



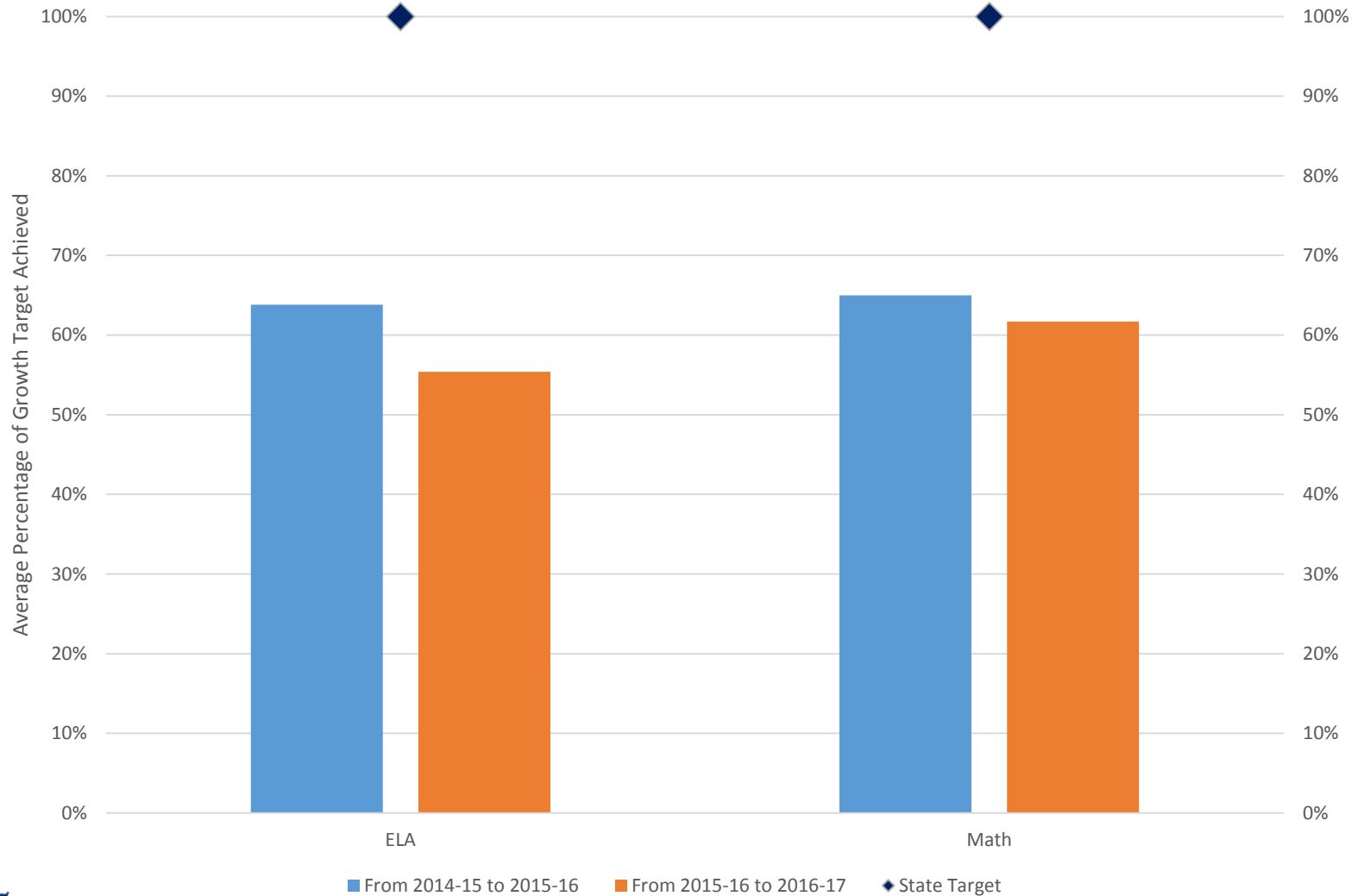
# Smarter Balanced Matched Student Cohort Growth

- Criterion referenced: does not depend on how others do
- Continuous: all growth counts; no golden bands
- Familiar: similar to approach used with CMT
- Transparent: easily replicable; no “black-box” adjustments
- Collaborative: transparency allows for conversation/reflection
- Fair: excludes “partial-year” students
- Achievable: based on actual growth of Connecticut students
- Ambitious: encourages growth above target





# Smarter Balanced Matched Cohort Growth Results



# Matched Cohort Growth Results – Observations

- Growth from 2015-16 to 2016-17 was lower than growth from 2014-15 to 2015-16, especially in ELA.
- Growth rates were lower for students at all levels of achievement.
- If students do not reach their growth targets, especially those at lower levels of achievement, then they will not reach higher levels of achievement in future years.
- There are some bright spots.



# District Perspectives

- Vernon Public Schools
  - Superintendent: Joseph Macary
  - Assistant Superintendent: Robert Testa
  
- Regional School District # 10 (Burlington, Harwinton)
  - Superintendent: Alan Beitman
  - Assistant Superintendent: Cheri Burke



# A Note about Alternate Assessments and Science

- Performance of students with significant cognitive disabilities in ELA and Mathematics is assessed using the CT Alternate Assessment.
- The Science assessment landscape is changing.
  - New assessments aligned to the Next Generation Science Standards will be field tested in 2017-18 and operational in 2018-19.
  - CSDE has sought flexibility from USED to administer the field test to all students in Grades 5 and 8 in lieu of our legacy science assessments; Grade 11 students will also be taking a field test (no more CAPT in Grade 10) but that flexibility is already permissible under current law.
  - The alternate science assessment is also being revamped to align to the new standards.



# Next Steps – Integrated and Targeted Response

- Establish and train cross-divisional teams that include staff from Academics, Talent, Turnaround, Students Supports, and Performance
- Problem-solve alongside the 10 lowest performing districts
- Support the strategic and appropriate use of local district assessments (e.g., don't measure overall achievement but instead use assessments that provide teachers with specific information about what students can and cannot do)
- Provide secure access for authorized users to relevant data in a timely manner for informed decision-making
- Develop and disseminate an Early Indication Tool (EIT) that will identify students who may need additional targeted support

