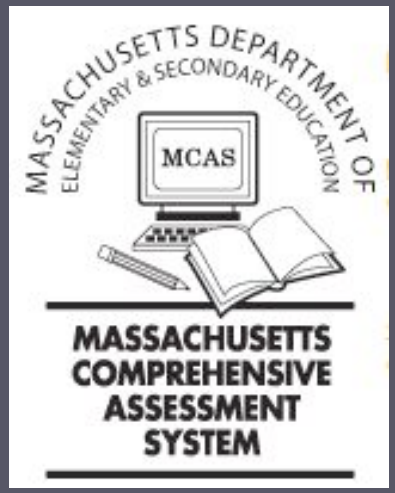
CPS
Cambridge Public Schools



MCAS Presentation to the School Committee
October 7, 2014
Cambridge, MA

Agenda

- MCAS in context
  - Purpose of MCAS
  - CPS in relation to state: All grades and subgroups combined
- Digging Deeper
  - Variation by grade
  - Variation by student group
  - Performance Levels
    - Levels 1 and 2 Schools
    - Level 3 Schools – deeper analysis
- Summary and Questions Raised

Purpose of MCAS

- To determine the progress the district, schools, and individual students have made in acquiring the knowledge and skills as outlined in the Massachusetts Curriculum Frameworks.
- This testing is a snapshot of a school, grade, subgroup, and individual student's progress to date as measured by one assessment.

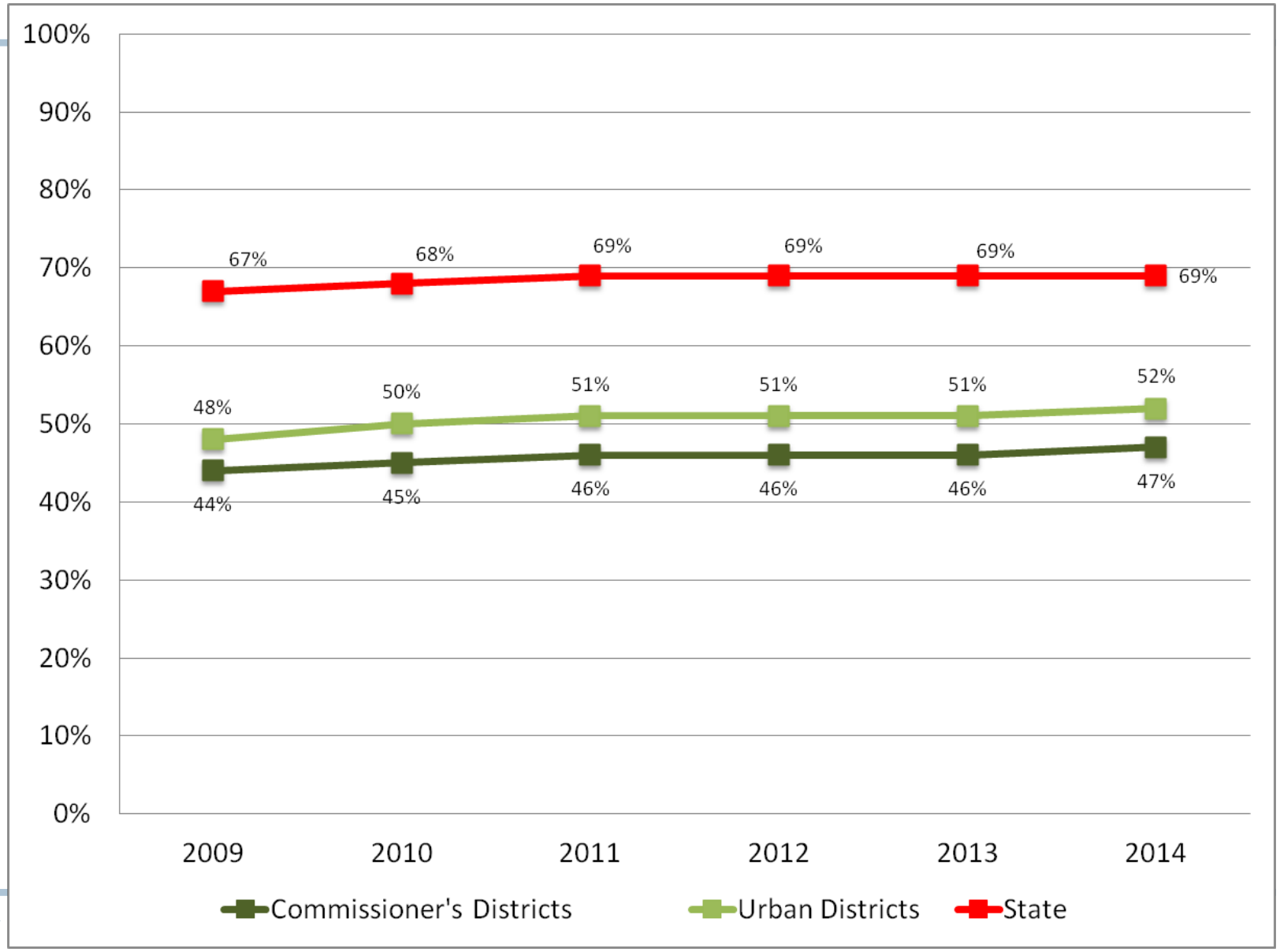
MCAS in Context

CPS and the State of Massachusetts

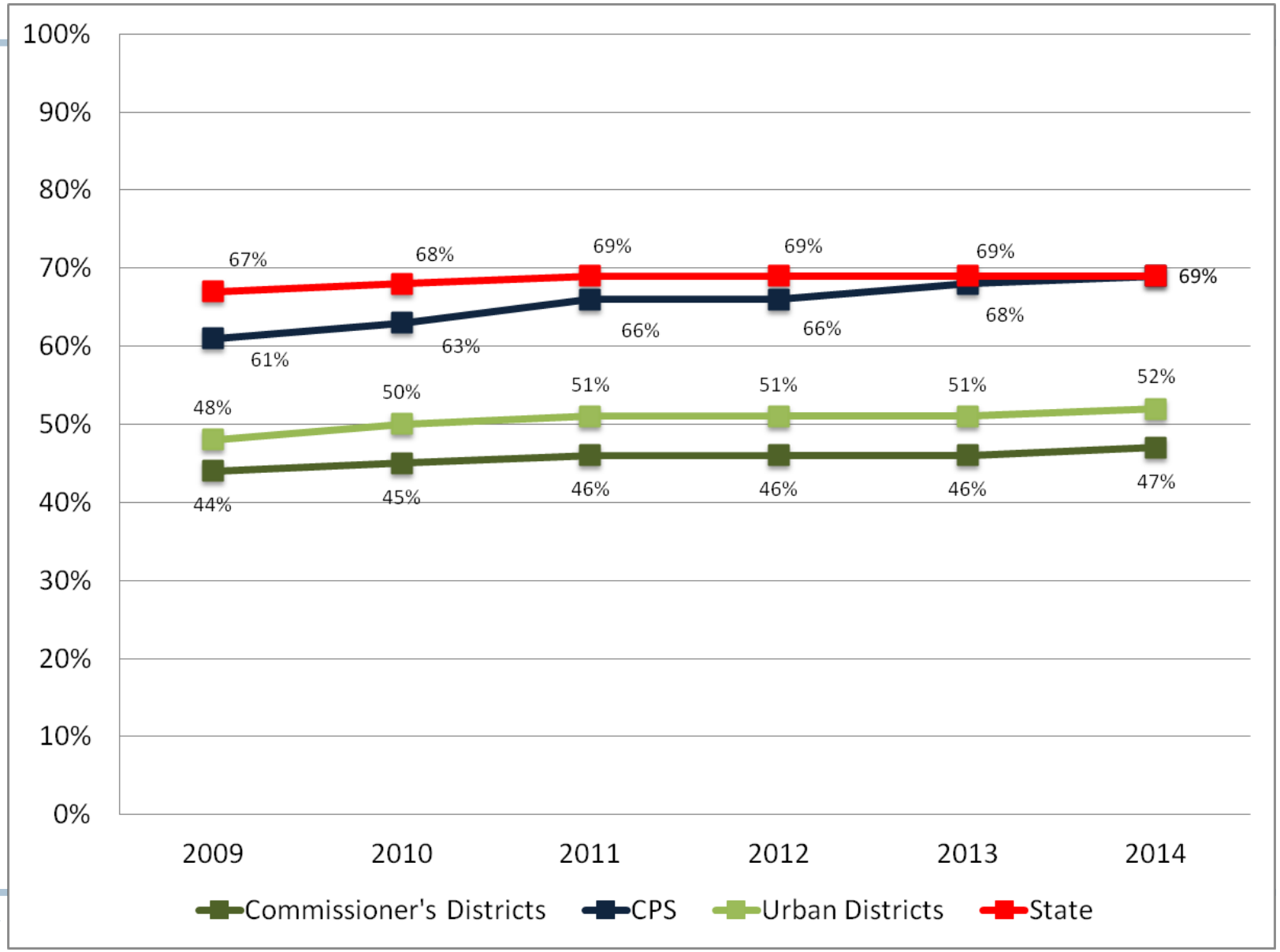
Putting MCAS in Context

- What is happening across the state?
- How does CPS compare?
- Key Takeaways:
  - CPS has made greater gains overall relative to the state.
  - We have closed the performance gap between CPS and the state in ELA and Math.
  - CPS outperforms urban and Commissioner's districts.
  - We have made roughly twice as much progress as urban and Commissioner's districts in both ELA and math.
  - Although we have made twice the progress of the state in science, we are still 3% below the state in science.

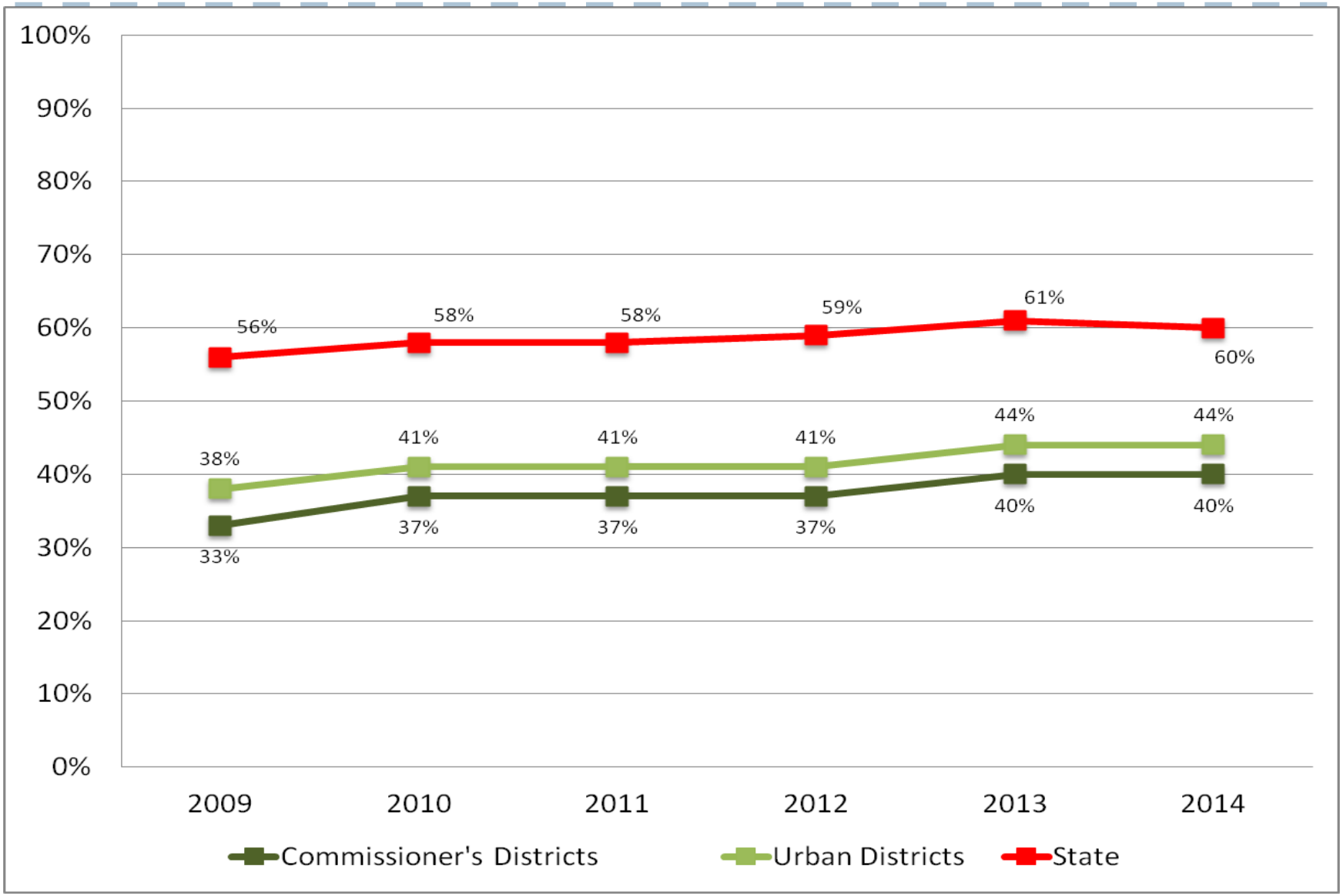
ELA MCAS Results 2009-14



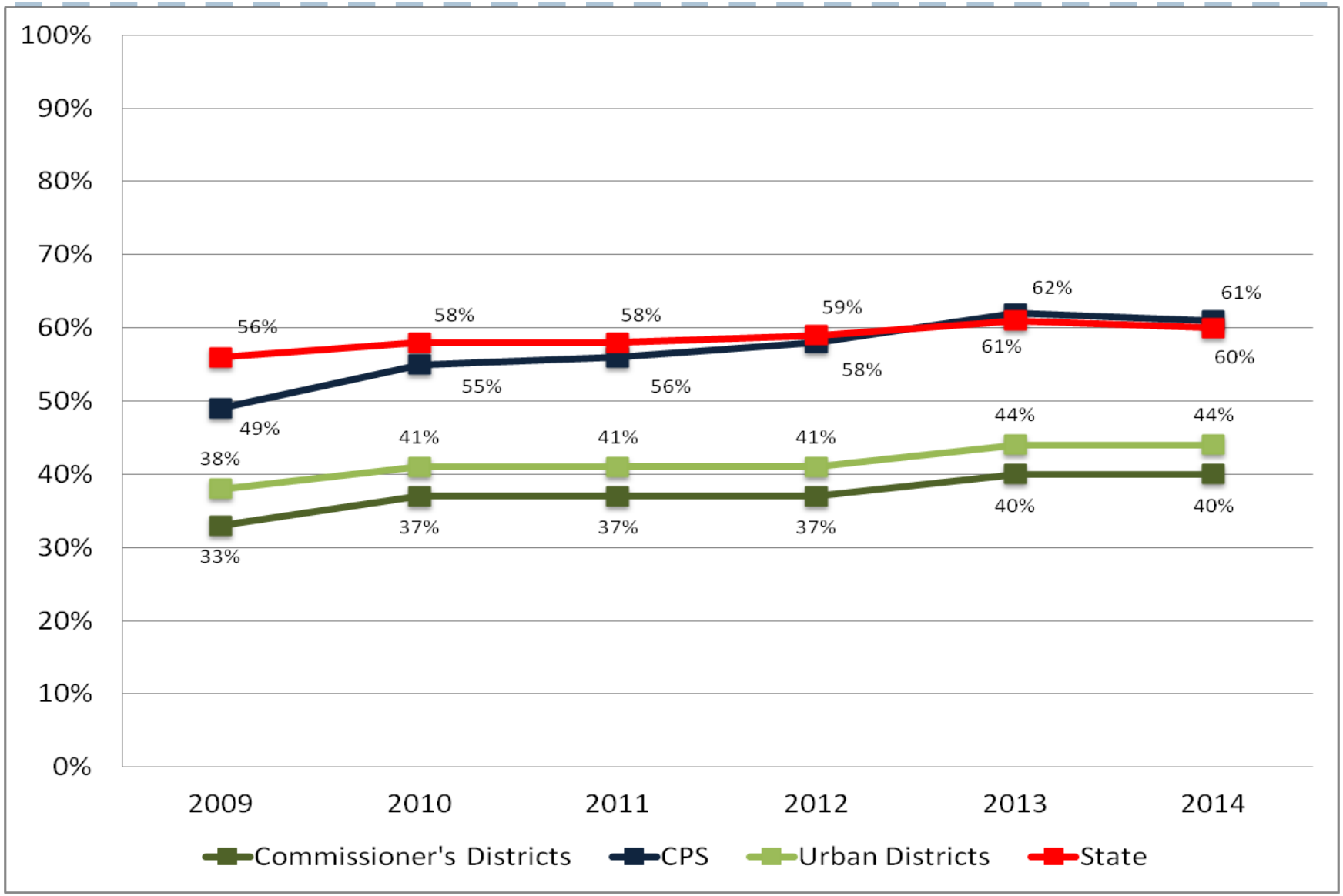
ELA MCAS Results 2009-14



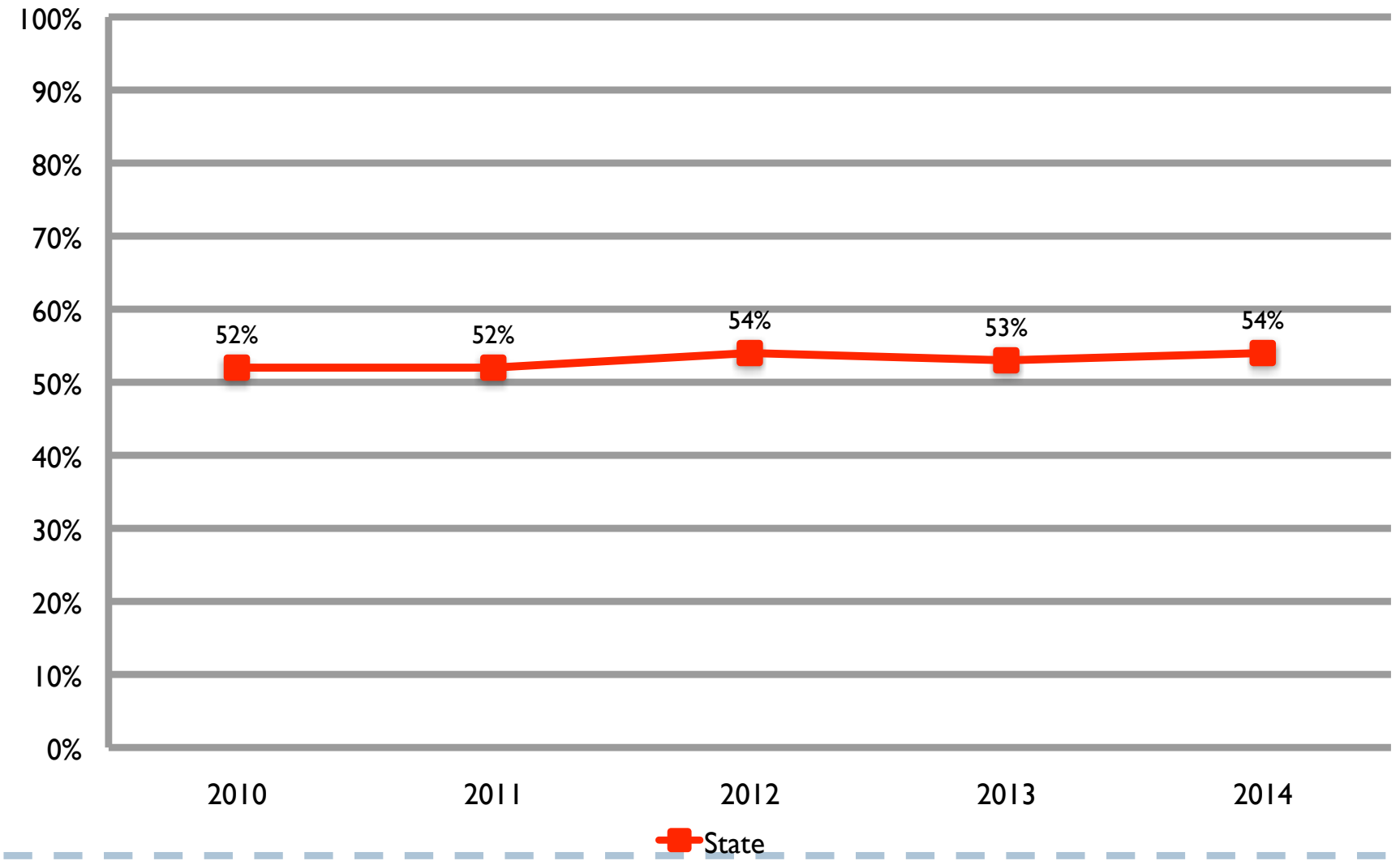
Math MCAS Results 2009-14



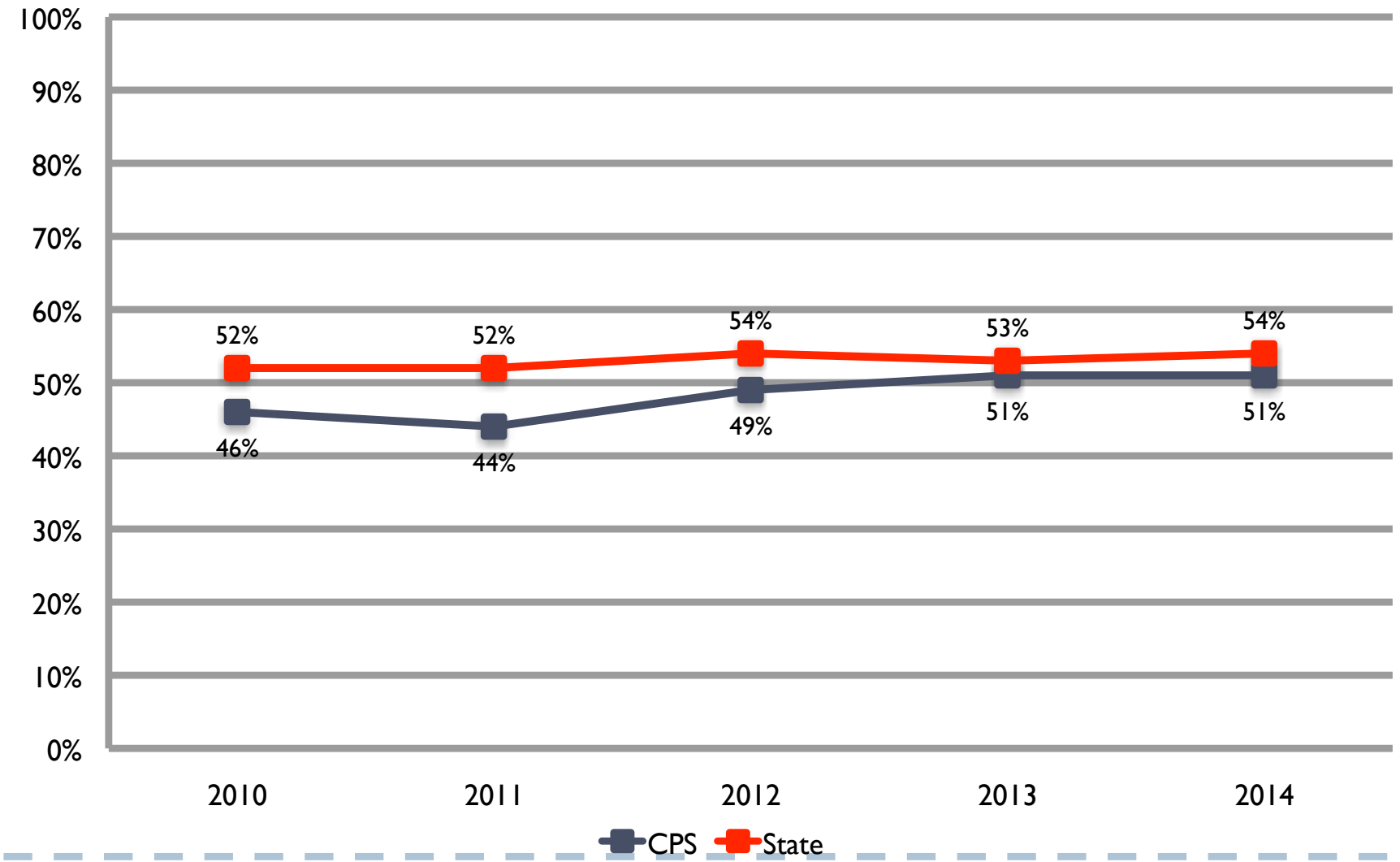
Math MCAS Results 2009-14



Science MCAS Results 2010-14



Science MCAS Results 2010-14



Summary

- CPS has made greater gains overall relative to the state.
- We have closed the performance gap between CPS and the state in ELA and Math.
- CPS outperforms urban and Commissioner's districts.
- We have made roughly twice as much progress as urban and Commissioner's districts in both ELA and math.
- Although we have made twice the progress of the state in science, we are still 3% below the state in science.

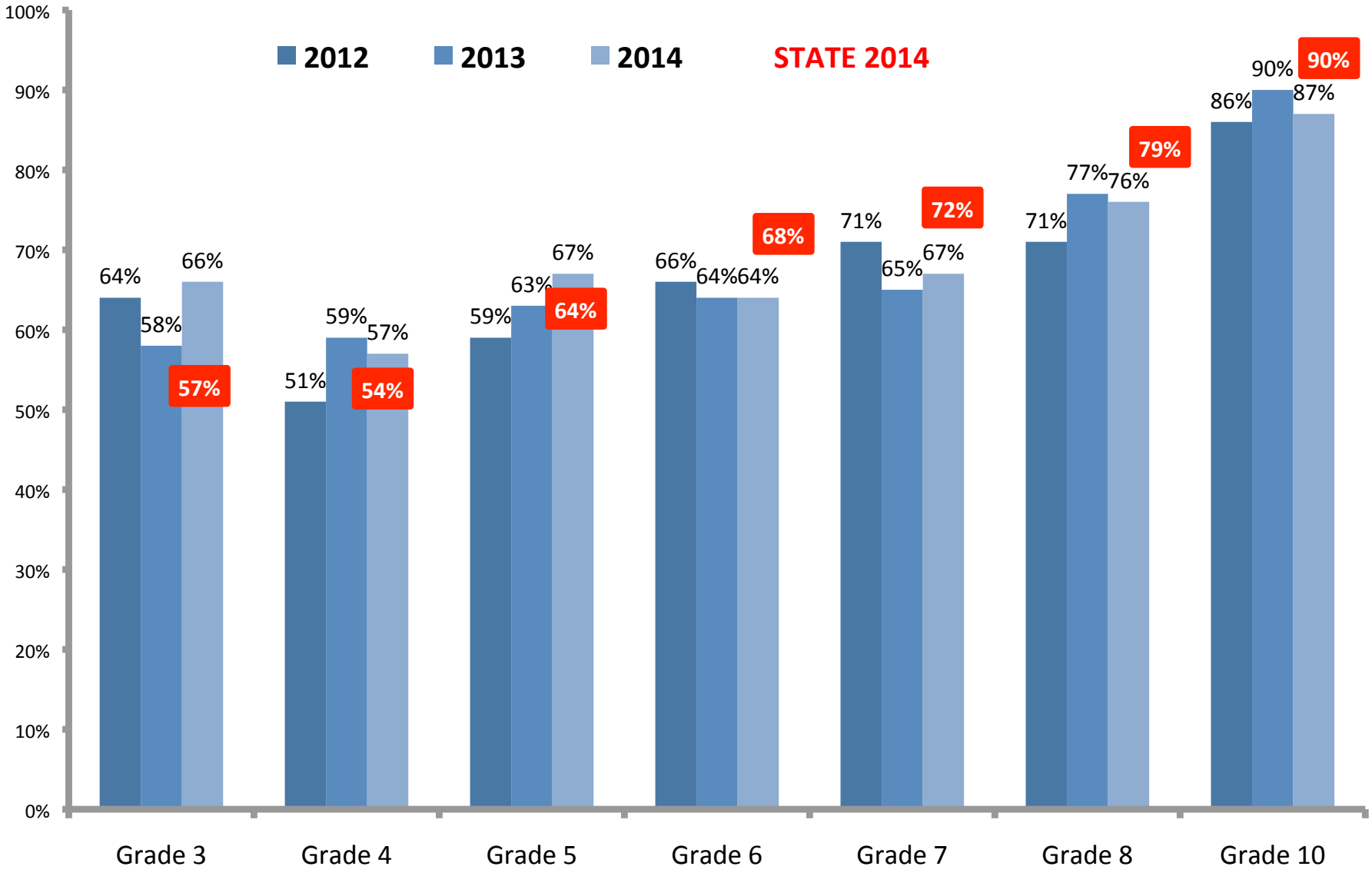
MCAS performance

Grade and Grade band

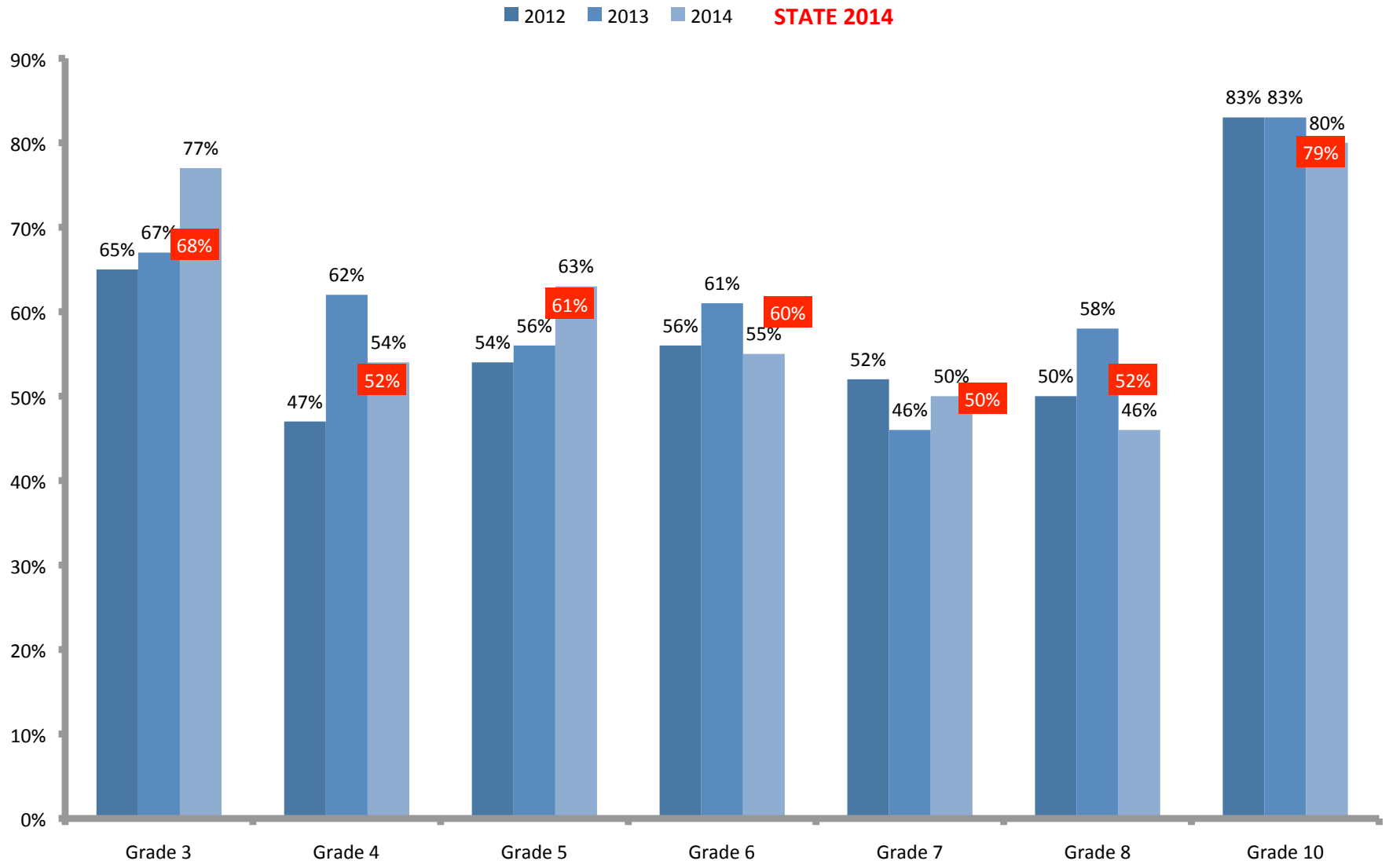
Digging Deeper

- How does MCAS performance vary by grade and grade band?
- Key Takeaways:
  - Elementary Schools
    - CPS outperforms the state at grades 3, 4, 5 ELA and math and has made greater growth than the state in every subject since 2009.
  - Upper Schools
    - The state outperforms CPS in grades 6 – 8 ELA and math
    - There has been a decrease in performance in math and science from 2013 to 2014, while ELA scores have remained flat.
  - CRLS
    - Since 2009, we have seen an overall upward trend in proficient/ advanced at CRLS in every subject.
  - Overall
    - The state outperforms CPS at every grade level tested in science.

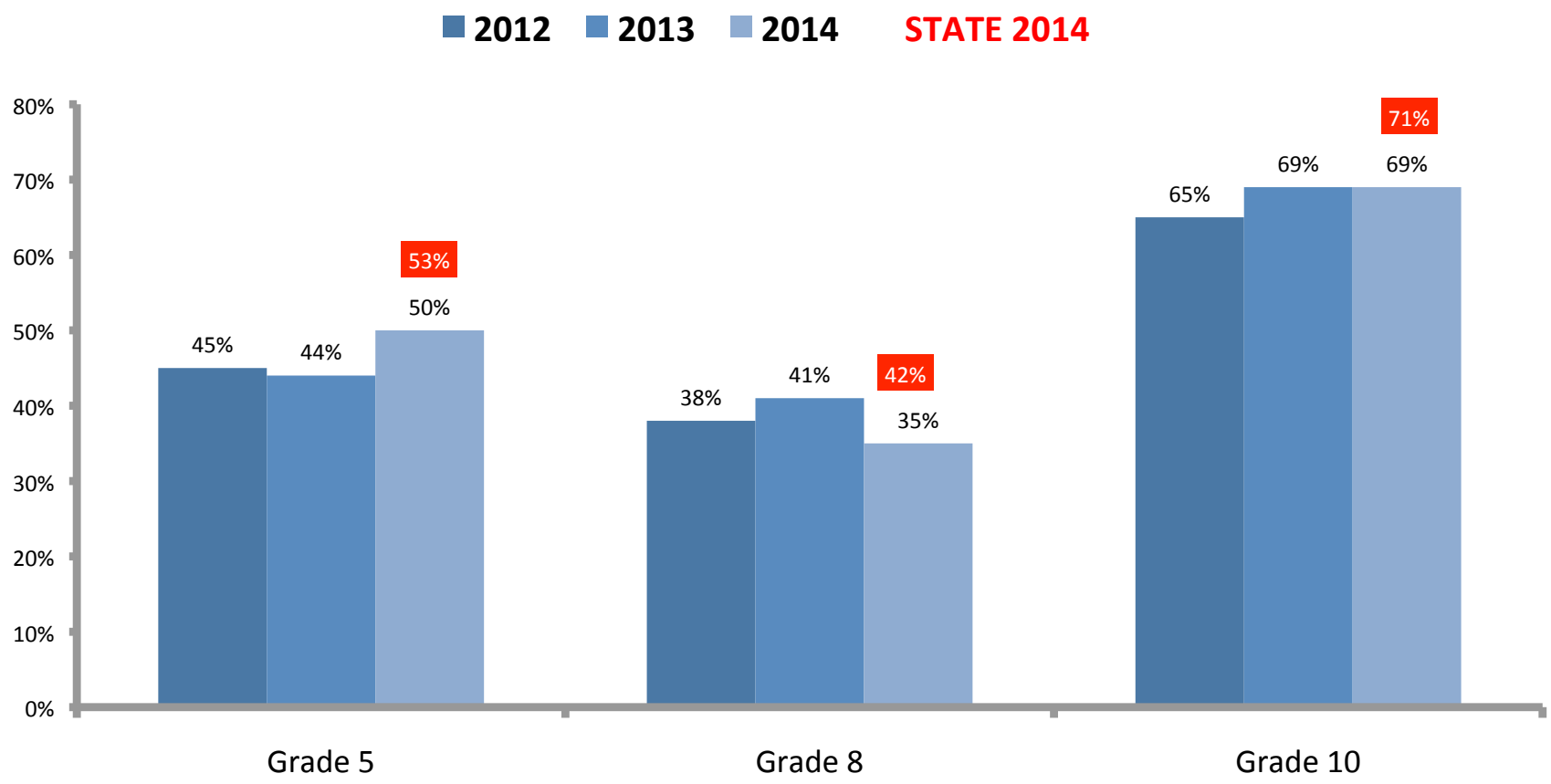
ELA - % Proficient/Advanced by Grade

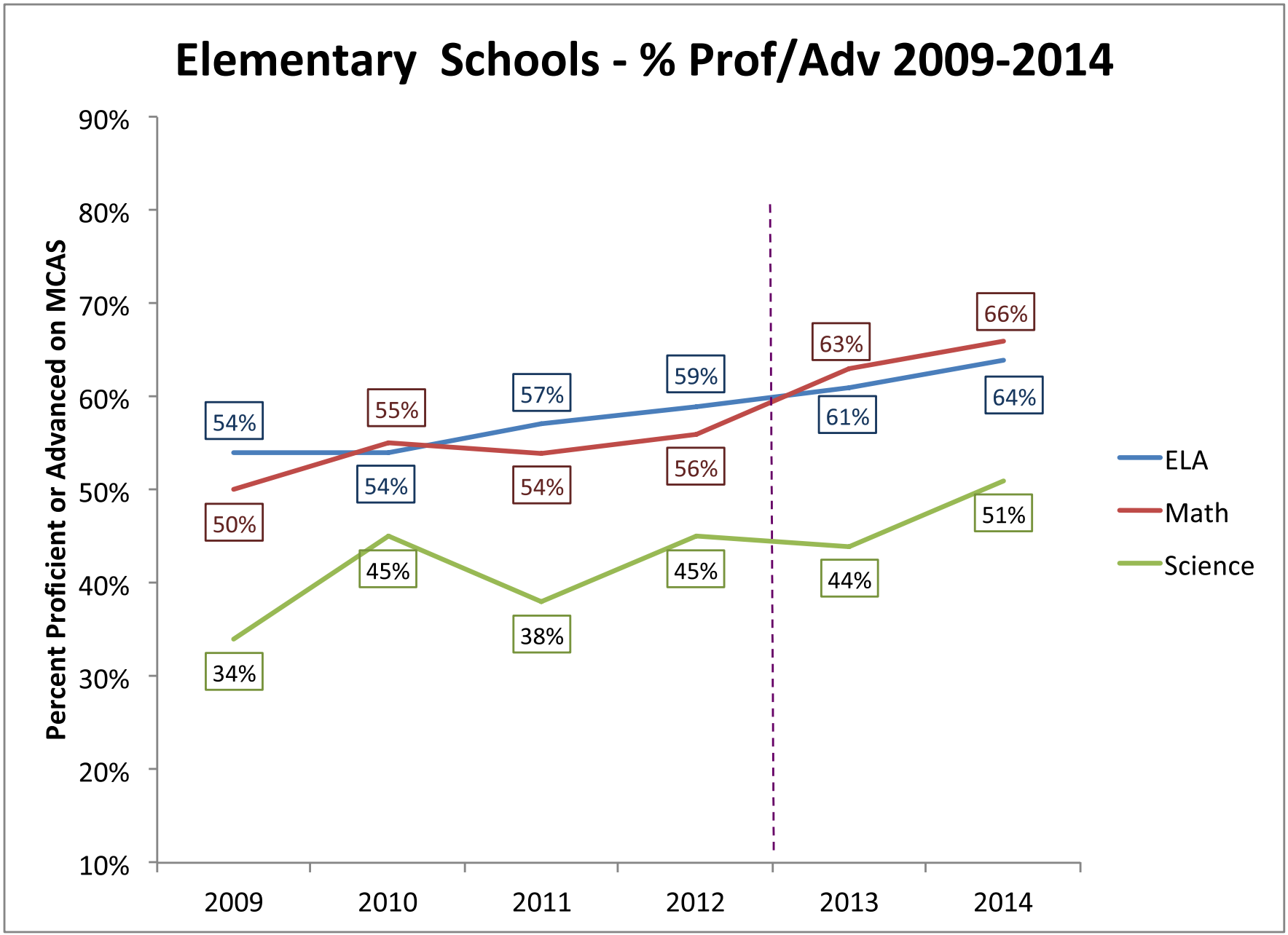


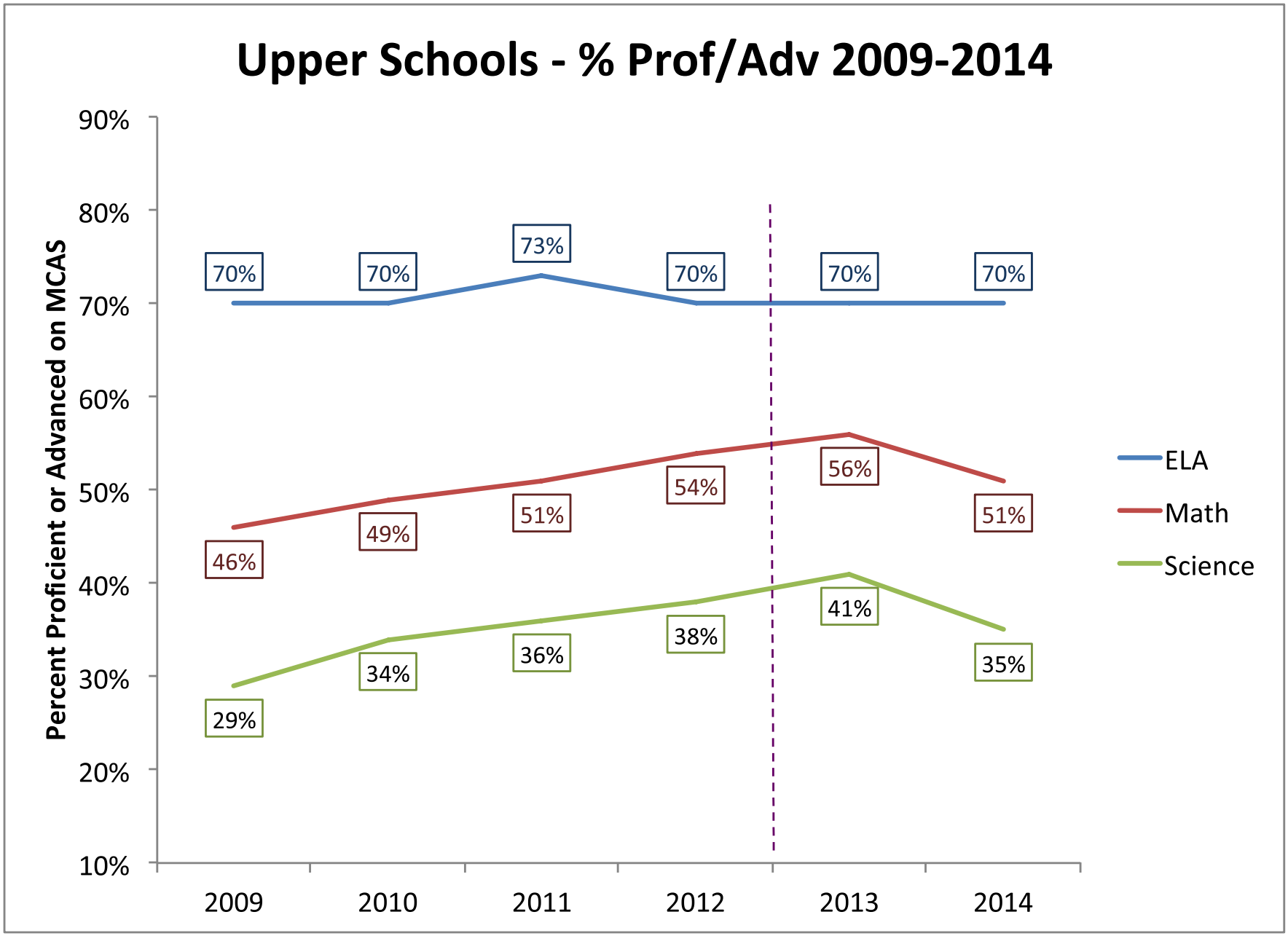
Math - % Proficient/Advanced by Grade

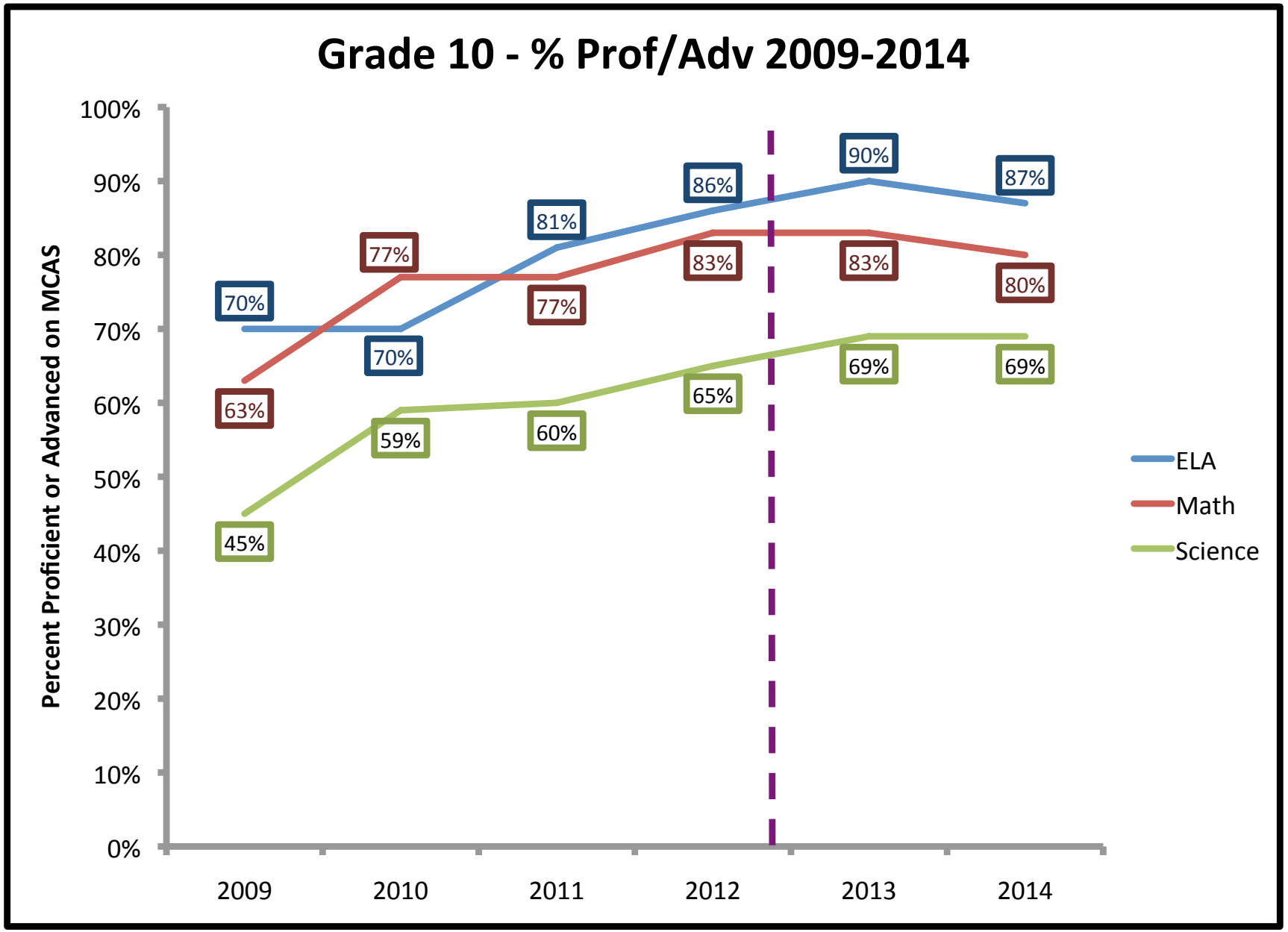


Science - % Proficient/Advanced by Grade




Elementary Schools - % Prof/Adv 2009-2014
Percent Proficient or Advanced on MCAS
90%
80%
70%
60%
50%
40%
30%
20%
10%
2009
2010
2011
2012
2013
2014
54%
55%
57%
59%
61%
64%
50%
54%
54%
56%
63%
66%
34%
45%
38%
45%
44%
51%
ELA
Math
Science


Upper Schools - % Prof/Adv 2009-2014
Percent Proficient or Advanced on MCAS
90%
80%
70%
60%
50%
40%
30%
20%
10%
2009
2010
2011
2012
2013
2014
70%
70%
73%
70%
70%
70%
46%
49%
51%
54%
56%
51%
29%
34%
36%
38%
41%
35%
ELA
Math
Science


Grade 10 - % Prof/Adv 2009-2014
Percent Proficient or Advanced on MCAS
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
2009
2010
2011
2012
2013
2014
70%
70%
81%
86%
90%
87%
63%
77%
77%
83%
83%
80%
45%
59%
60%
65%
69%
69%
ELA
Math
Science

Summary

- Elementary Schools
  - CPS outperforms the state at grades 3, 4, 5 ELA and math and has made greater growth than the state in every subject since 2009.
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- CRLS
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- Overall
  - The state outperforms CPS at every grade level tested in science.

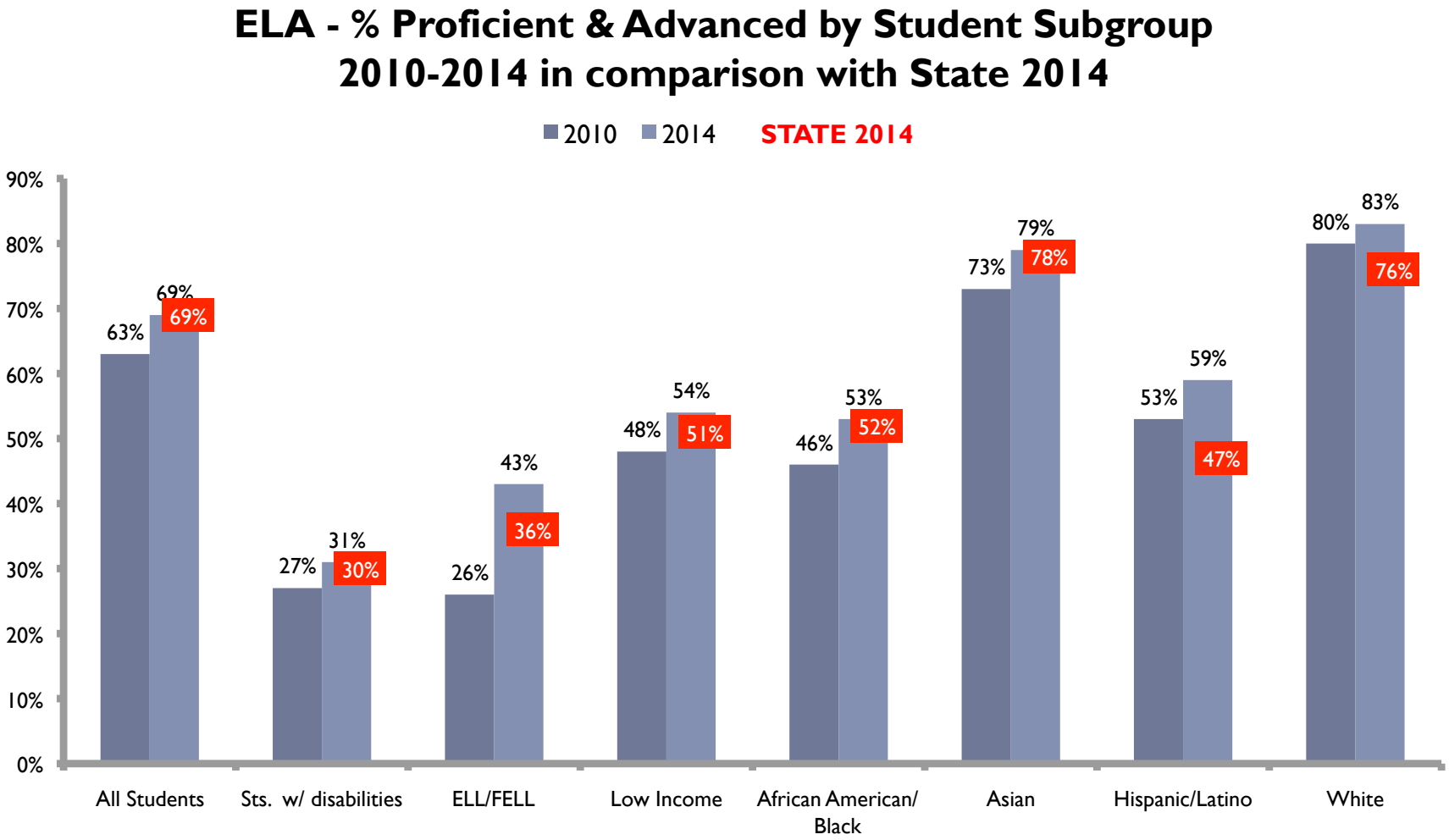
MCAS Performance

Student Groups and Gap Narrowing Progress

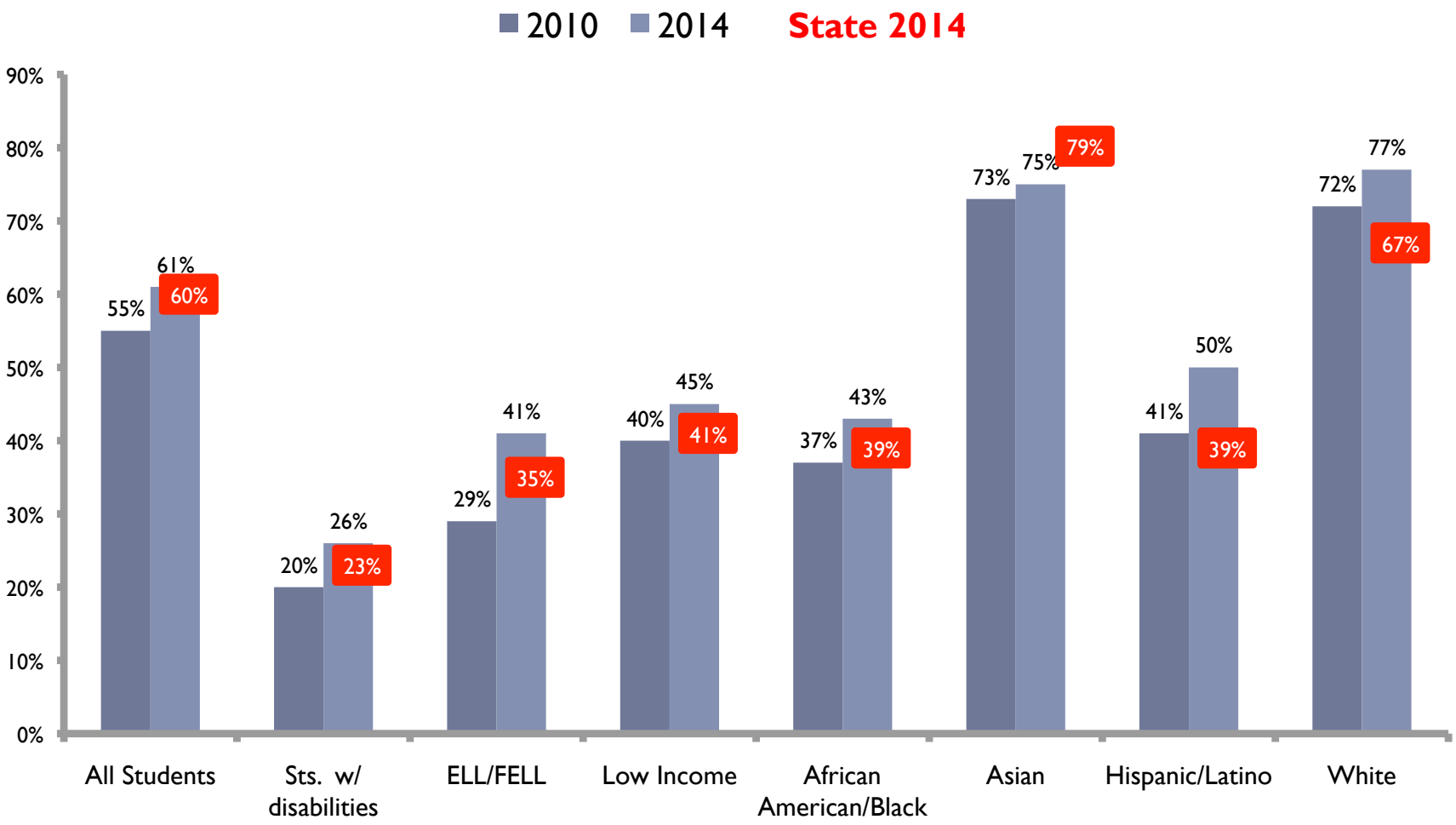
Digging Deeper

- How are different student groups progressing on MCAS in CPS?
- Are achievement gaps narrowing?
- Key Takeaways:
  - For grades 3 – 10 ELA, CPS performance roughly equals the state for every student group. CPS outperforms the state for ELL, Hispanic/Latino, and White students.
  - In grades 3 – 5, achievement gaps are narrowing for many student groups, especially African American / Black students in every subject with increases of 10%, 12%, and 11% in ELA, math, and science, respectively.
  - Achievement gaps are not narrowing at grades 6 - 8.
  - In grade 10, achievement gaps are narrowing for many student groups, most notably in ELA. In particular African American/ Black students, Hispanic/ Latino, low income students, ELL students, and students with disabilities have increased 21 – 28% in ELA proficient/advanced over the last 5 years.

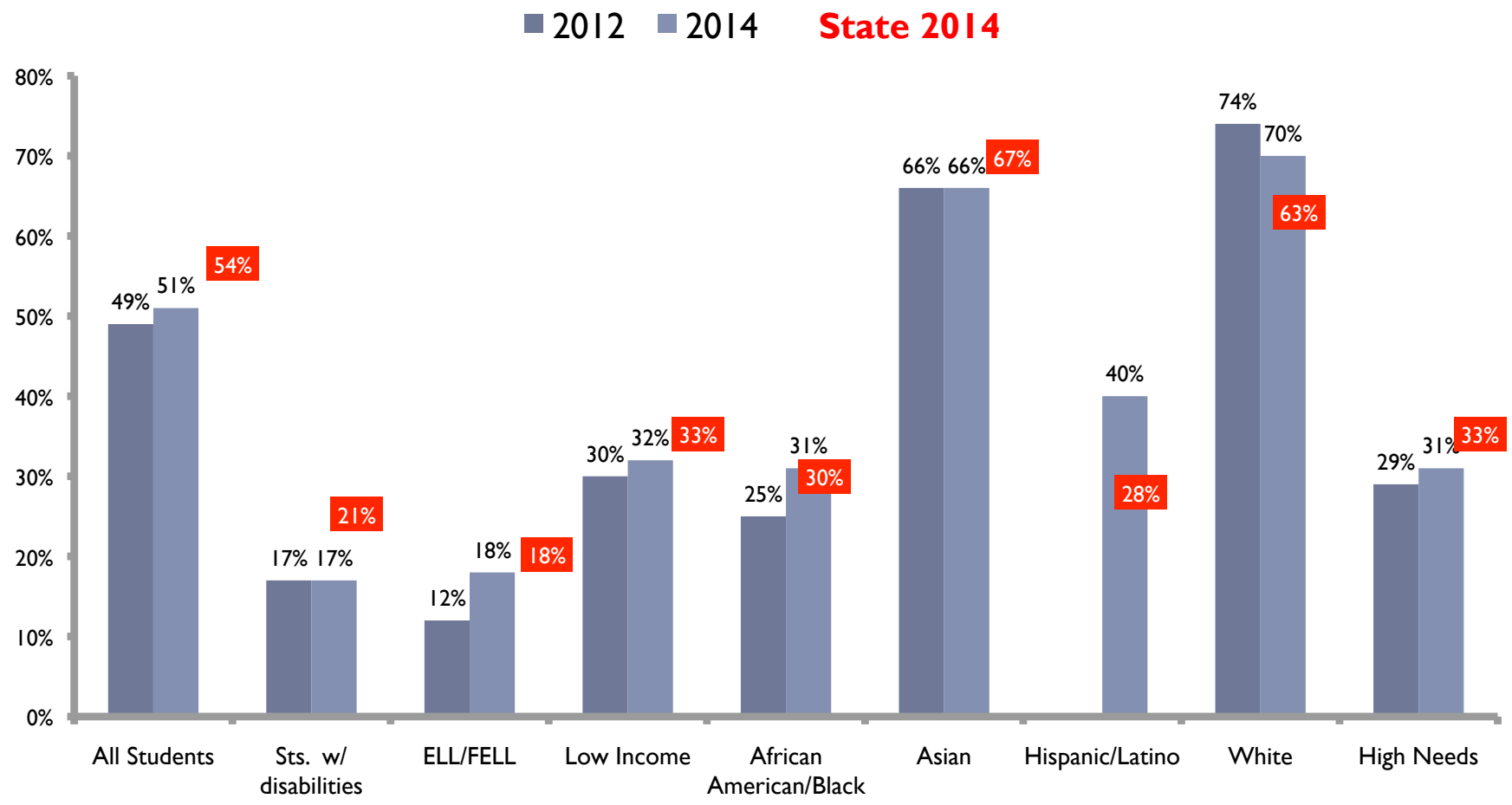
Grades 3-10 ELA Subgroups % Prof/Adv Change Between 2010-2014 and State 2014



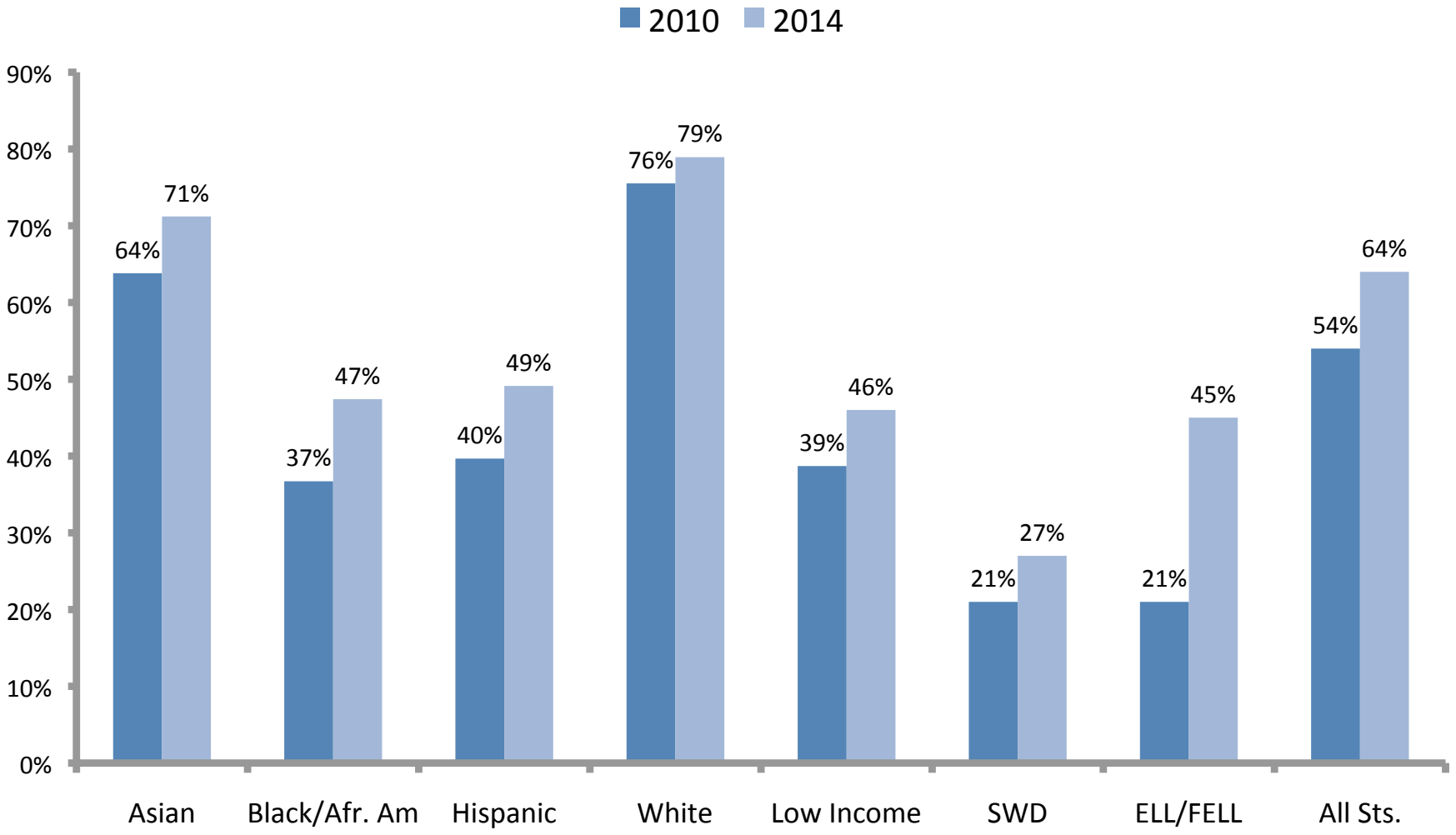
Grades 3-10 Math Subgroups % Prof/Adv Change Between 2010-2014 and State 2014



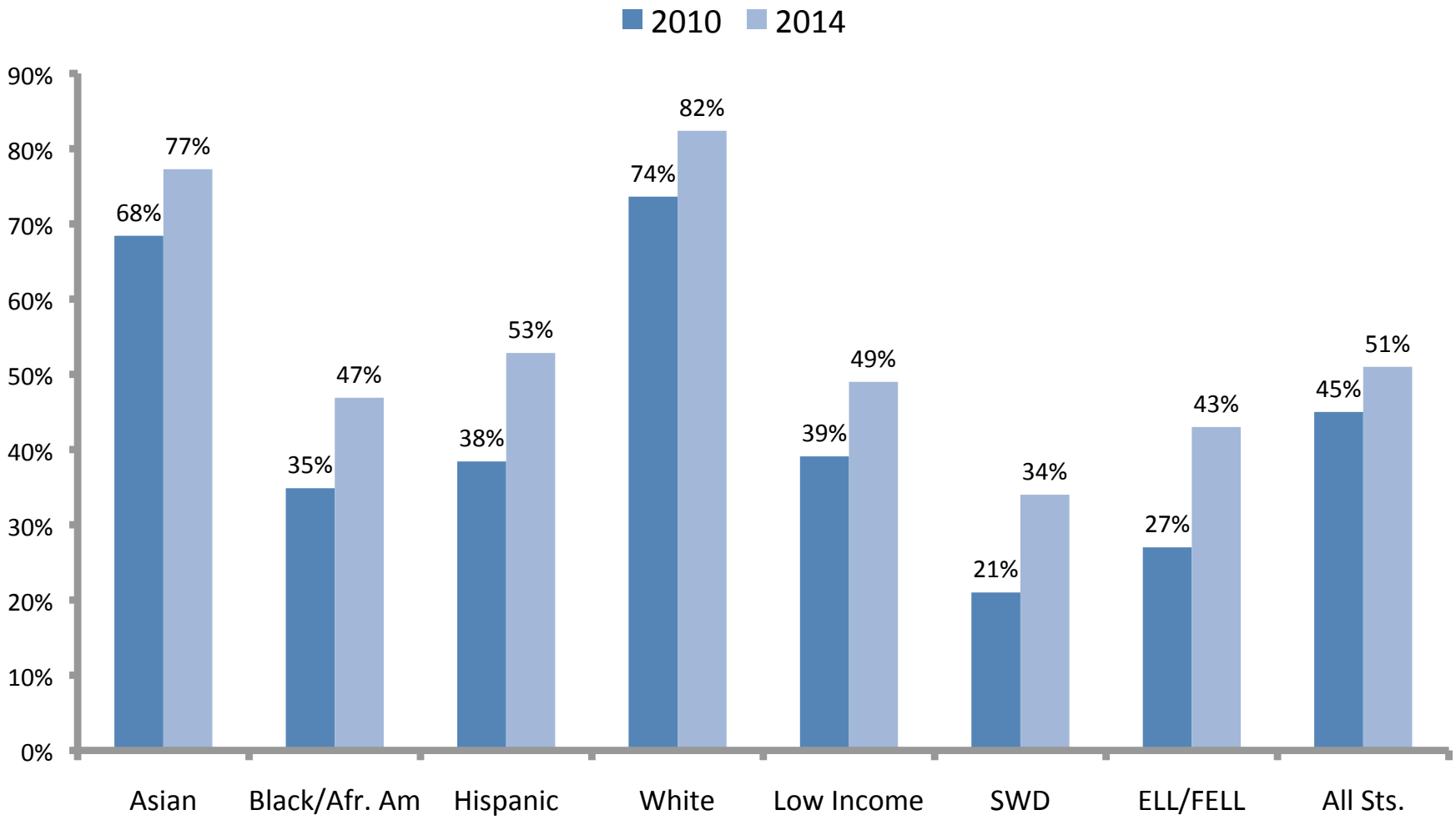
Grades 3-10 Science Subgroups Change Between 2010-2014 with State 2014



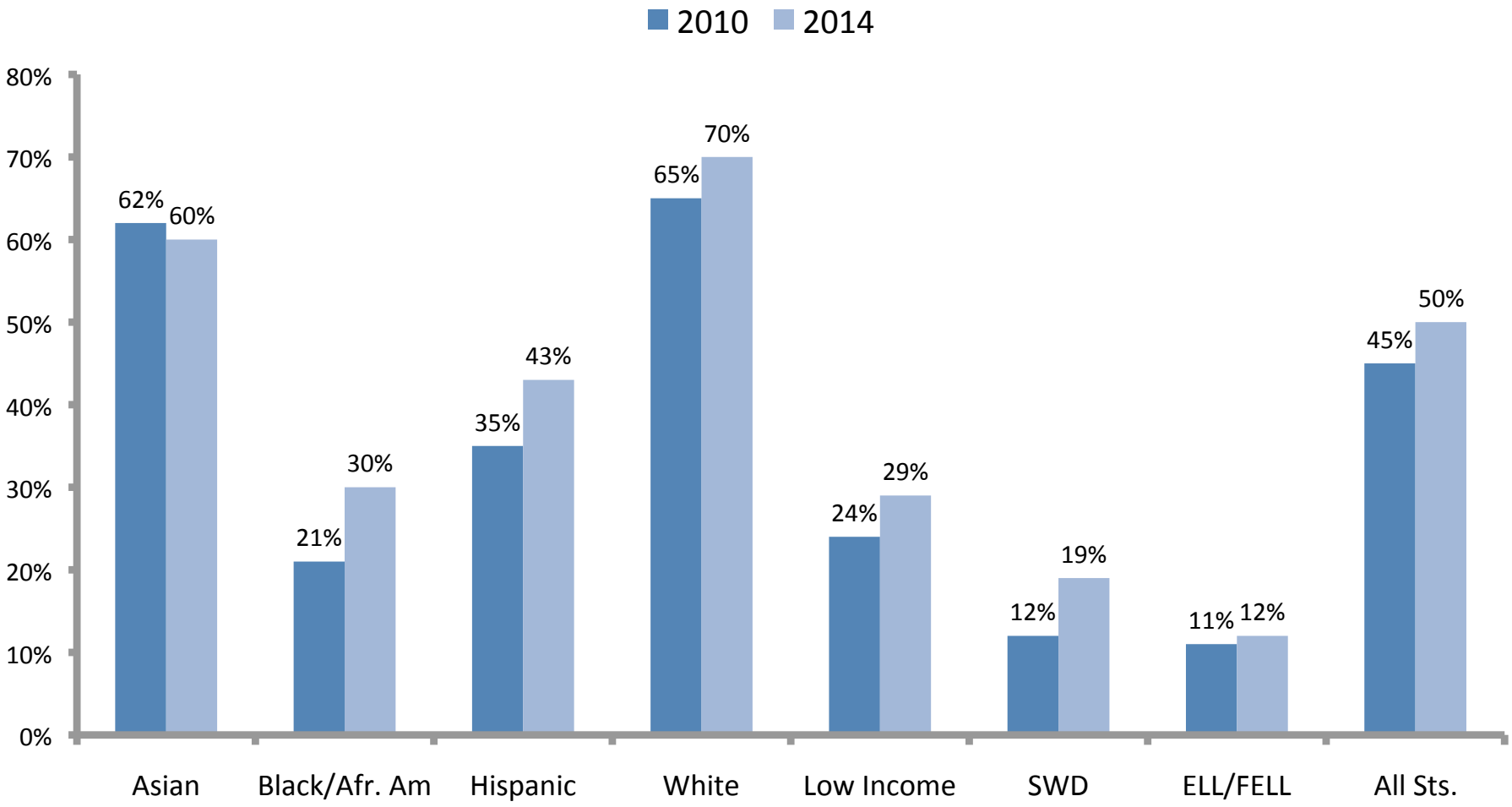
ELA Grades 3-5 - % Proficient & Advanced by Student Subgroup 2010-2014



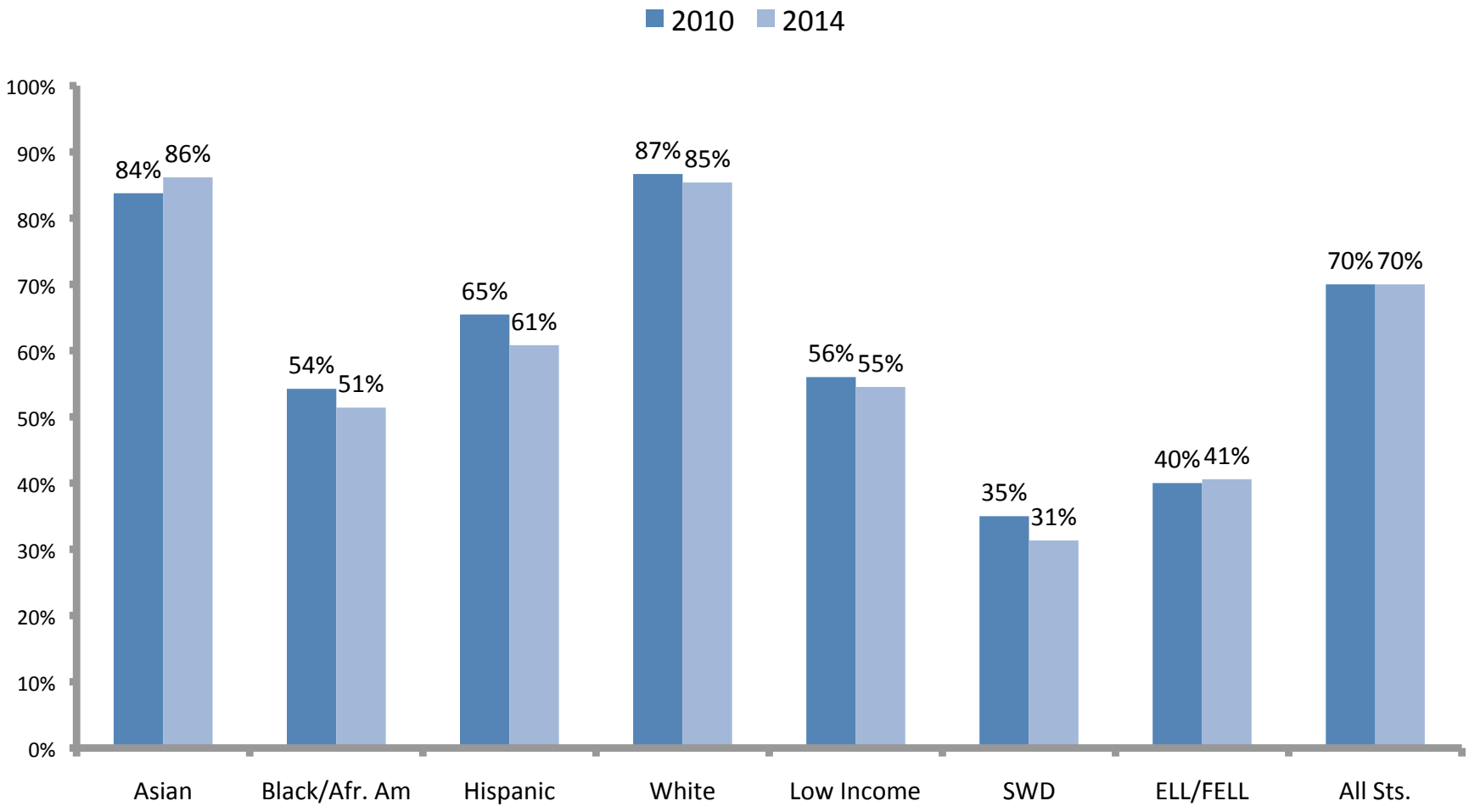
Math Grades 3-5 - % Proficient & Advanced by Student Subgroup 2010-2014



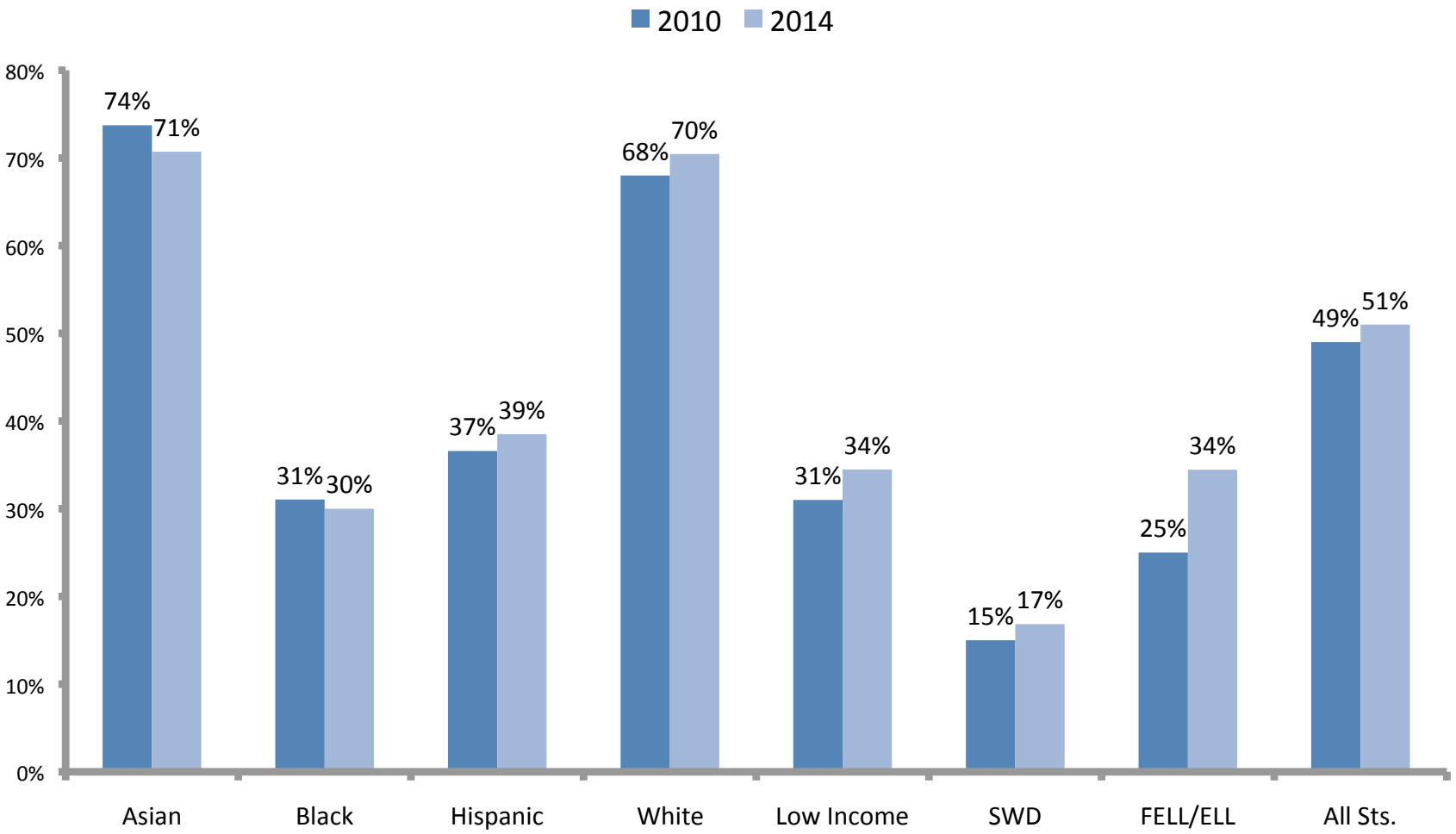
Science Grade 5 - % Proficient & Advanced by Student Subgroup 2010-2014



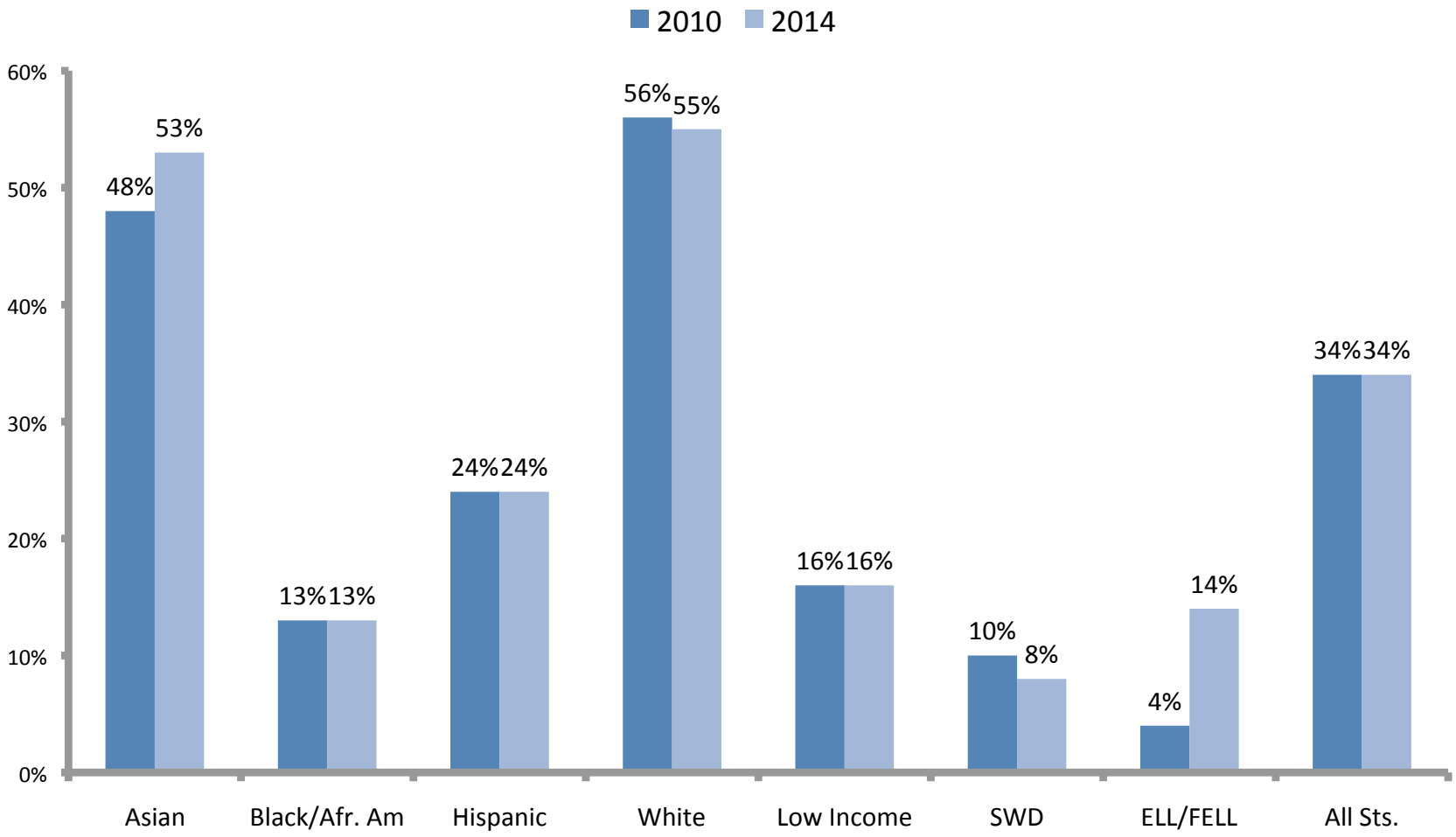
ELA Grades 6-8 - % Proficient & Advanced by Student Subgroup 2010-2014



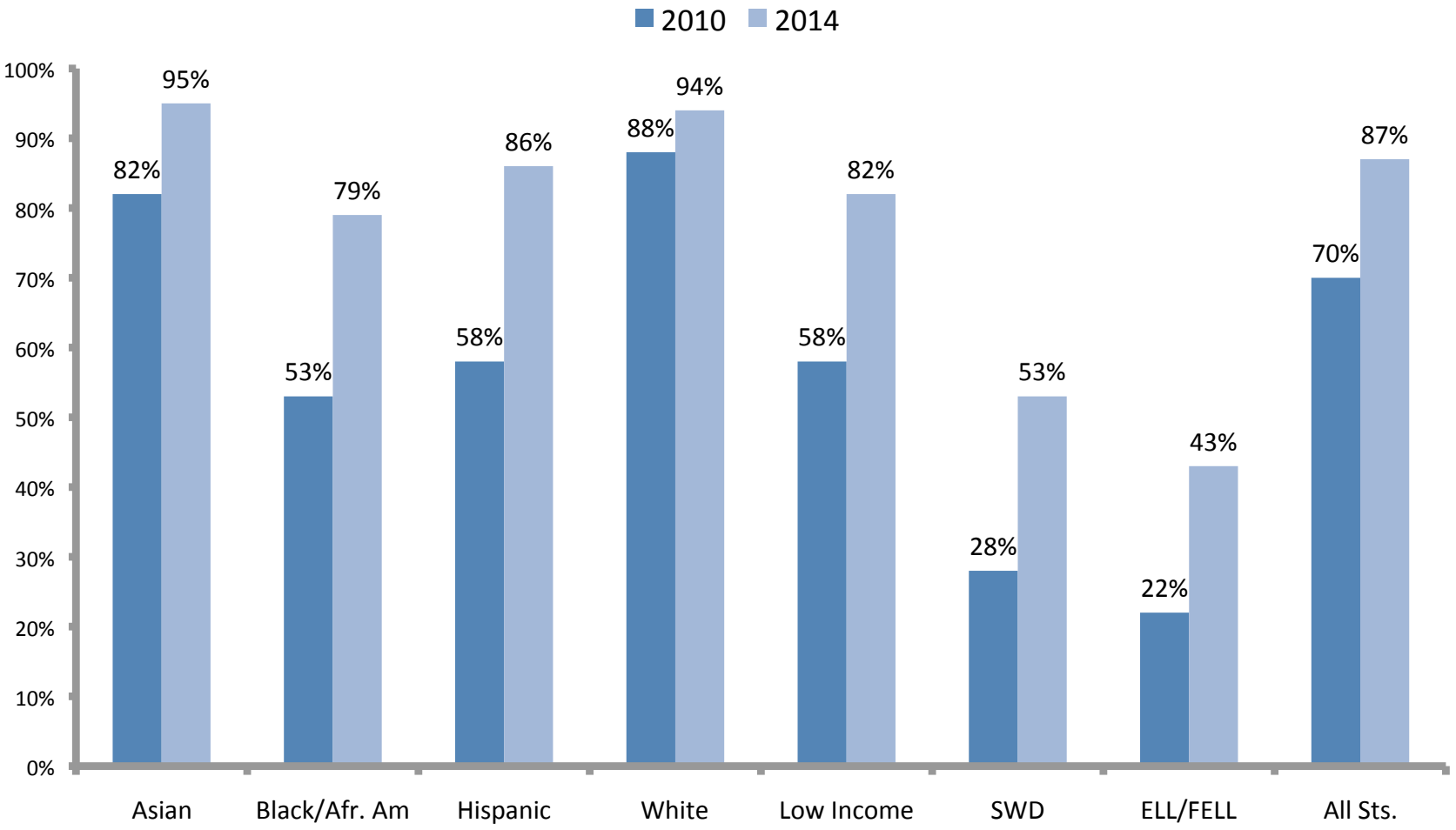
Math Grades 6-8 - % Proficient & Advanced by Student Subgroup 2010-2014



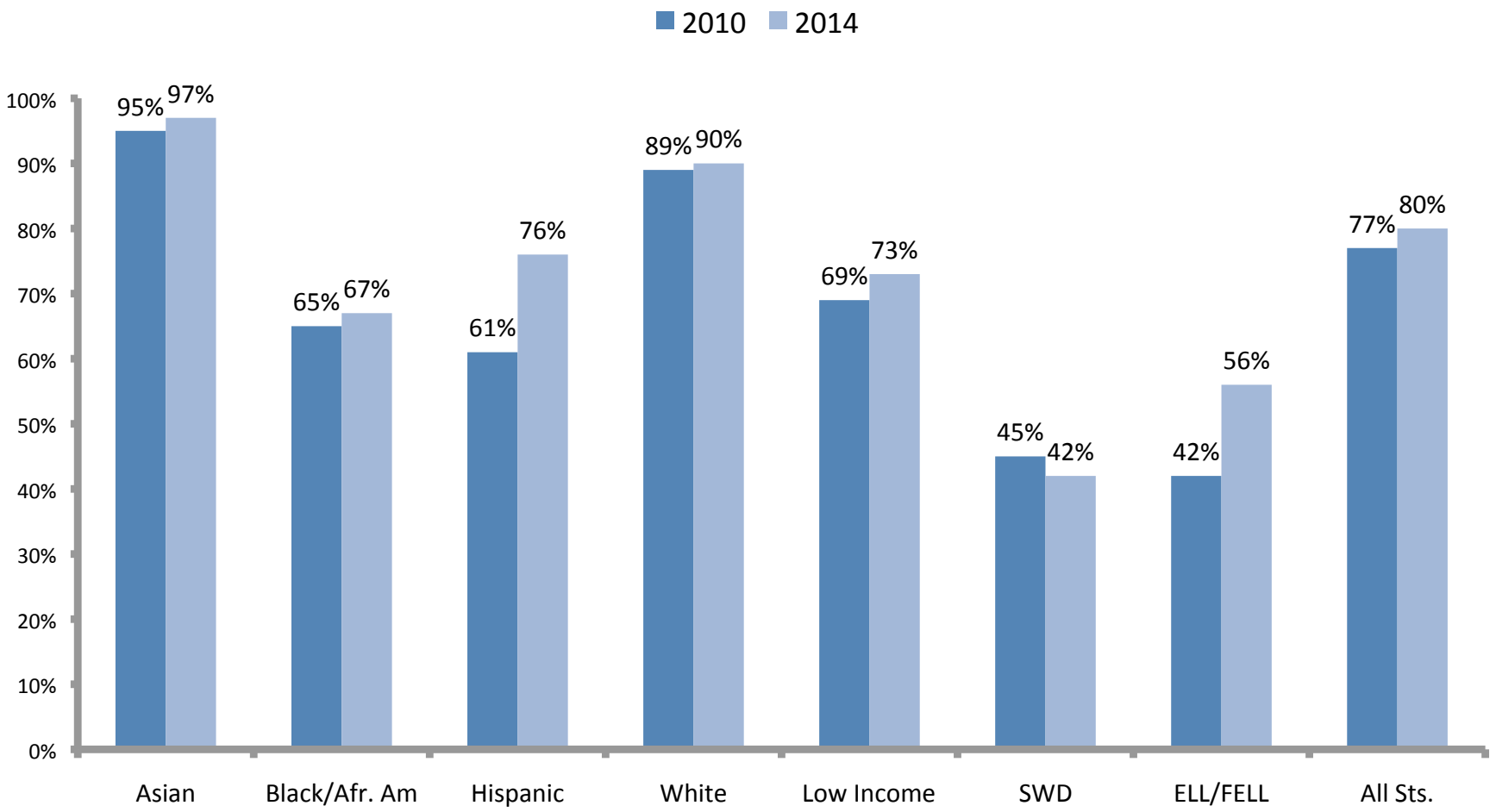
Science Grade 8 - % Proficient & Advanced by Student Subgroup 2010-2014



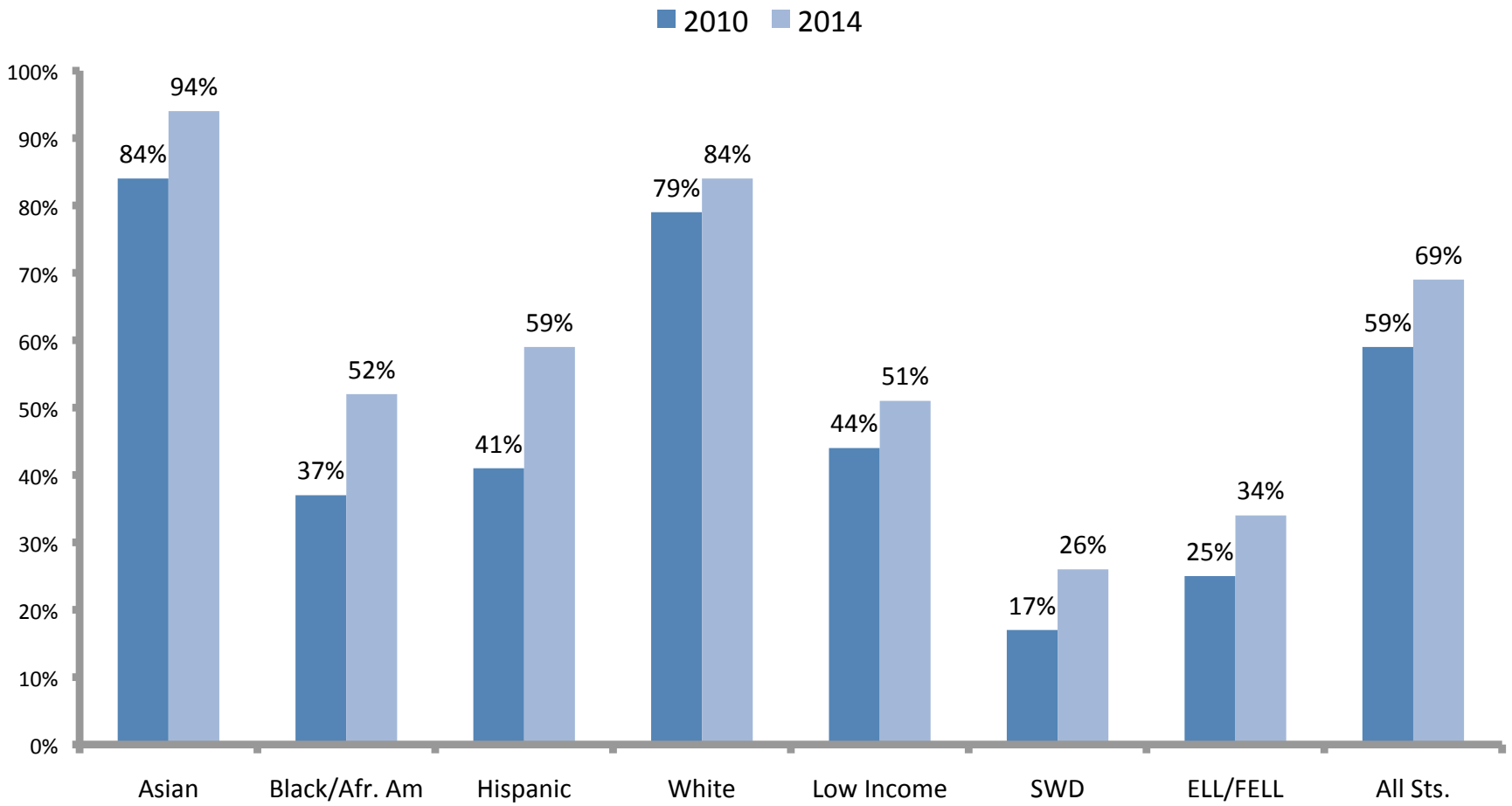
ELA Grade 10 - % Proficient & Advanced by Student Subgroup 2010-2014



MATH Grade 10 - % Proficient & Advanced by Student Subgroup 2010-2014



Science Grade 10 - % Proficient & Advanced by Student Subgroup 2010-2014



Summary

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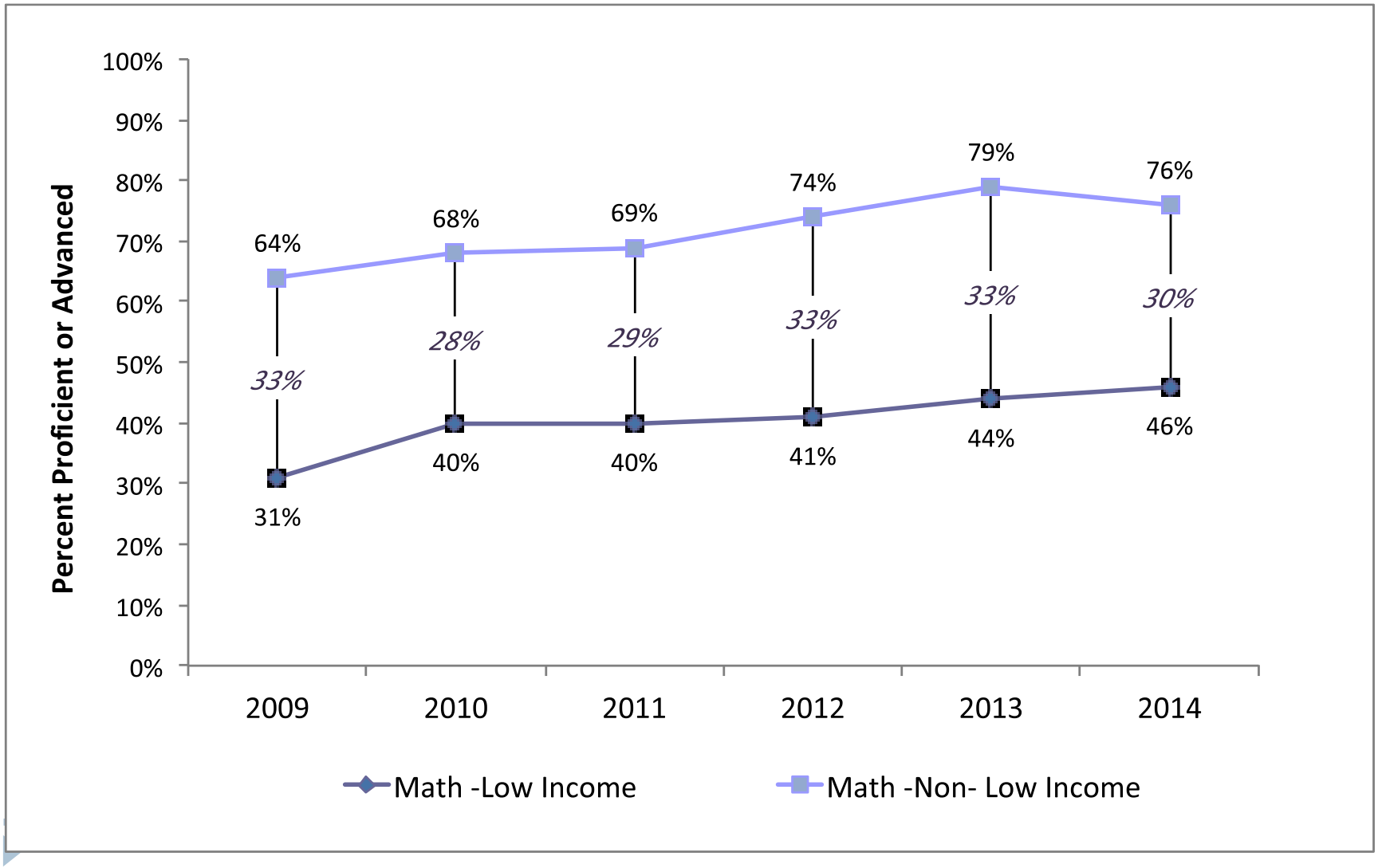
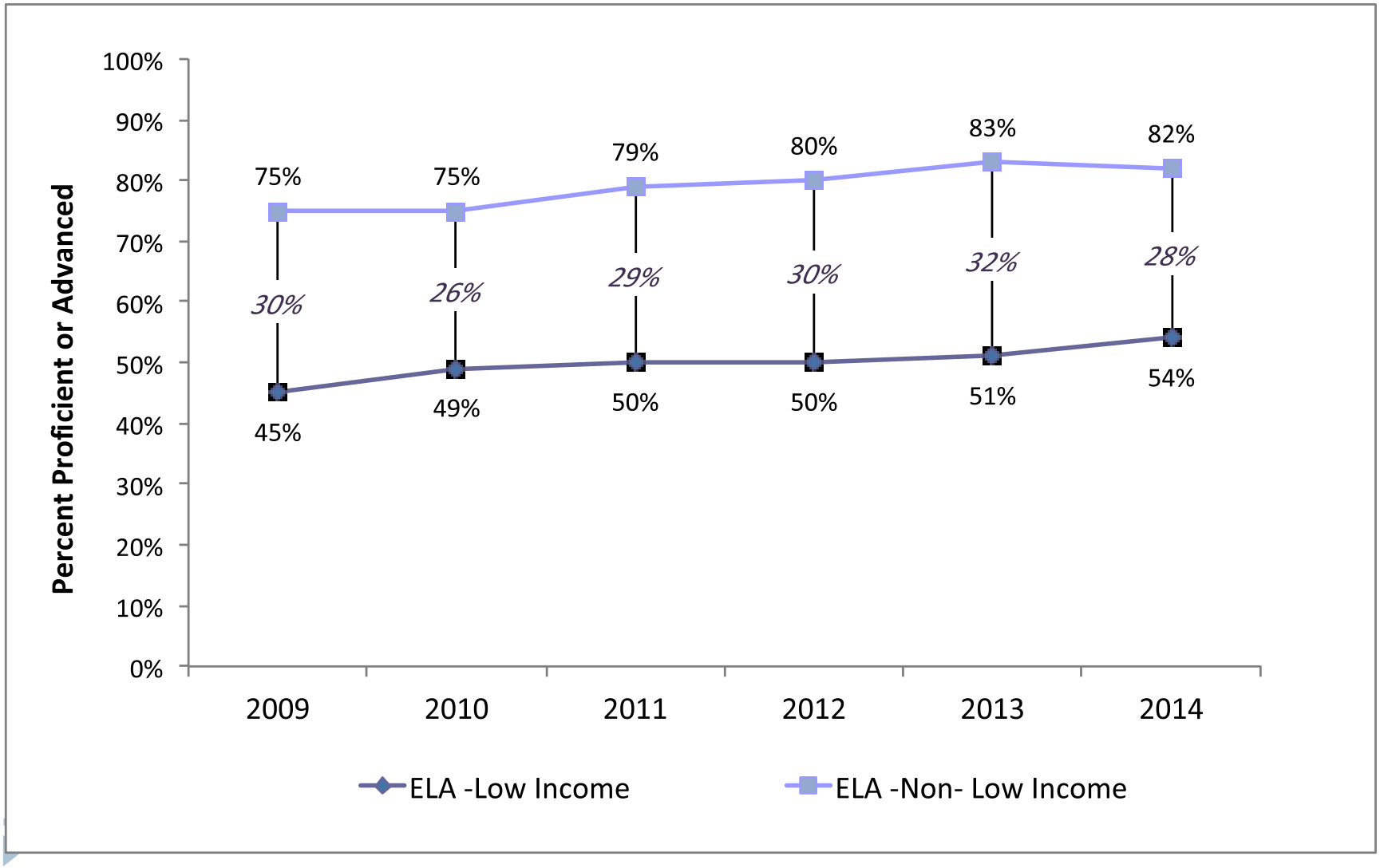
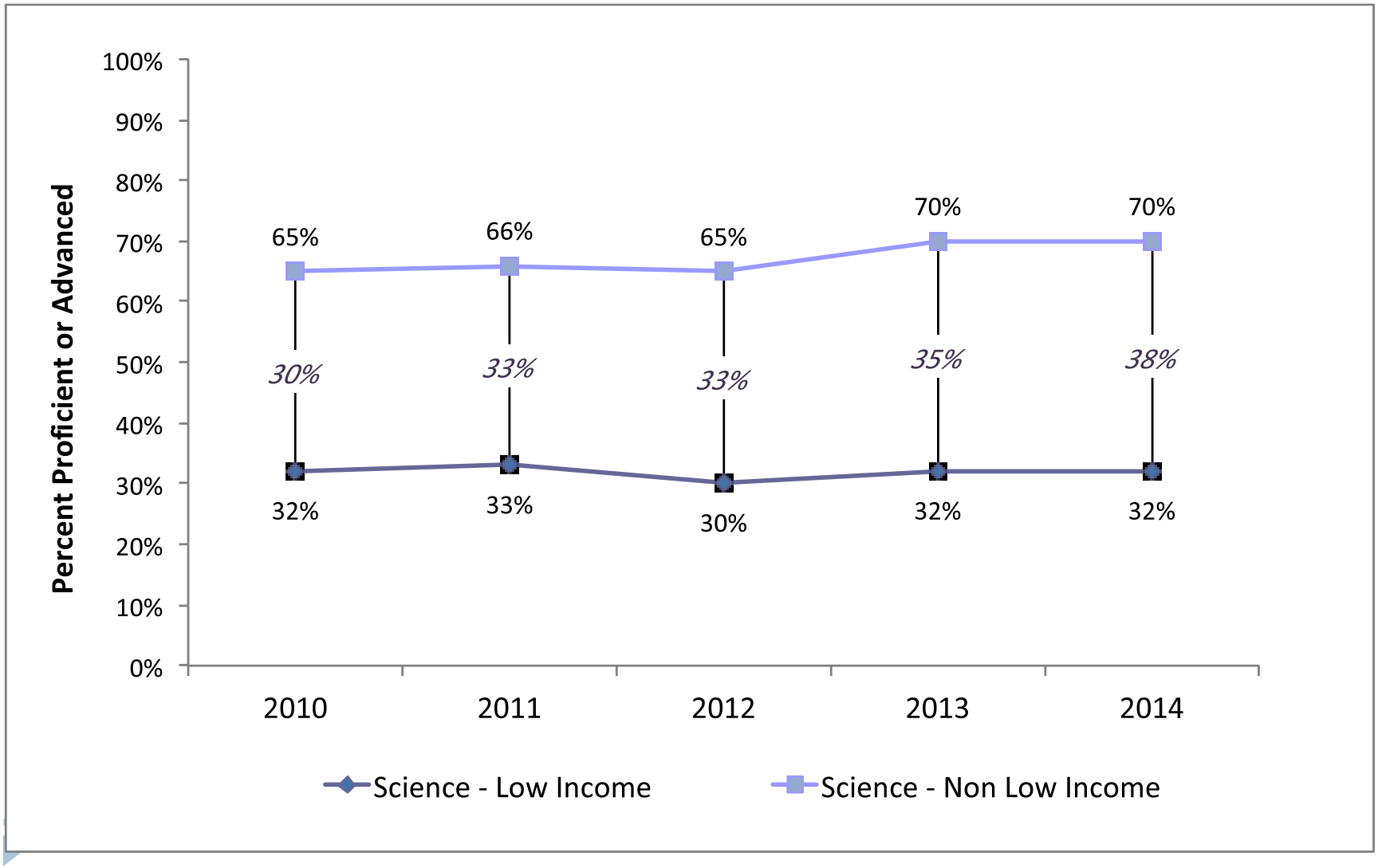
Grades 3 – 10 Math - % Proficient/Advanced for Low Income & Non-Low Income Students



Grades 3-10 ELA - % Proficient/Advanced for Low Income & Non-Low Income Students



Grades 3-10 Science - % Proficient/Advanced for Low Income & Non-Low Income Students



Performance Levels

A Deeper Analysis

Digging Deeper

- What can we learn by analyzing data behind DESE performance levels (1 – 3)?
  - Analyzing data behind performance levels forces schools to:
    - Identify targets met or missed, which provide information as to what practices are to be considered to be brought to scale.
    - Identify areas in need of greater focus.
  - Provides for trend analysis that incorporates performance plus growth.
  - A Level 3 school can make great gains in a year and still remain a Level 3 school.
- How does CPS compare overall to the state in the number of Level 1, 2, and 3 Schools?
  - In 2014, 10 schools were classified as Level 1, 4 schools were classified as Level 2, and 3 schools were classified as Level 3. This is a significant improvement since 2012, when only 4 of CPS schools were Level 1.

How Performance Levels are Determined

- **Annual** PPI combines information about narrowing proficiency gaps, growth, (and at high school also graduation and dropout rates) into a number between 0 and 100
- A PPI of 75 means on track toward meeting goals
- Must have at least 30 students to report student groups
- Annually calculated by meeting targets in…

Subject	Component #1	Component #2	Component #3
ELA	Composite Performance Index (a measure of MCAS proficiency)	Student Growth Percentile (measure of MCAS growth)	Extra Credit: reduce warning/ failing or increase advanced
Math			
Science		Not available	

Cumulative PPI

- **Cumulative PPI** is the average of a school's annual PPIs over the most recent four year period, **weighting recent years the most** (4-3-2-1)
- All schools in MA are classified into Levels 1 – 2 using cumulative PPI for all students *and* high needs students.
  - Level 1: Cumulative PPI = 75 + for all students and high needs
  - Level 2: Either or both group (all students and high needs students) has Cumulative PPI less than 75

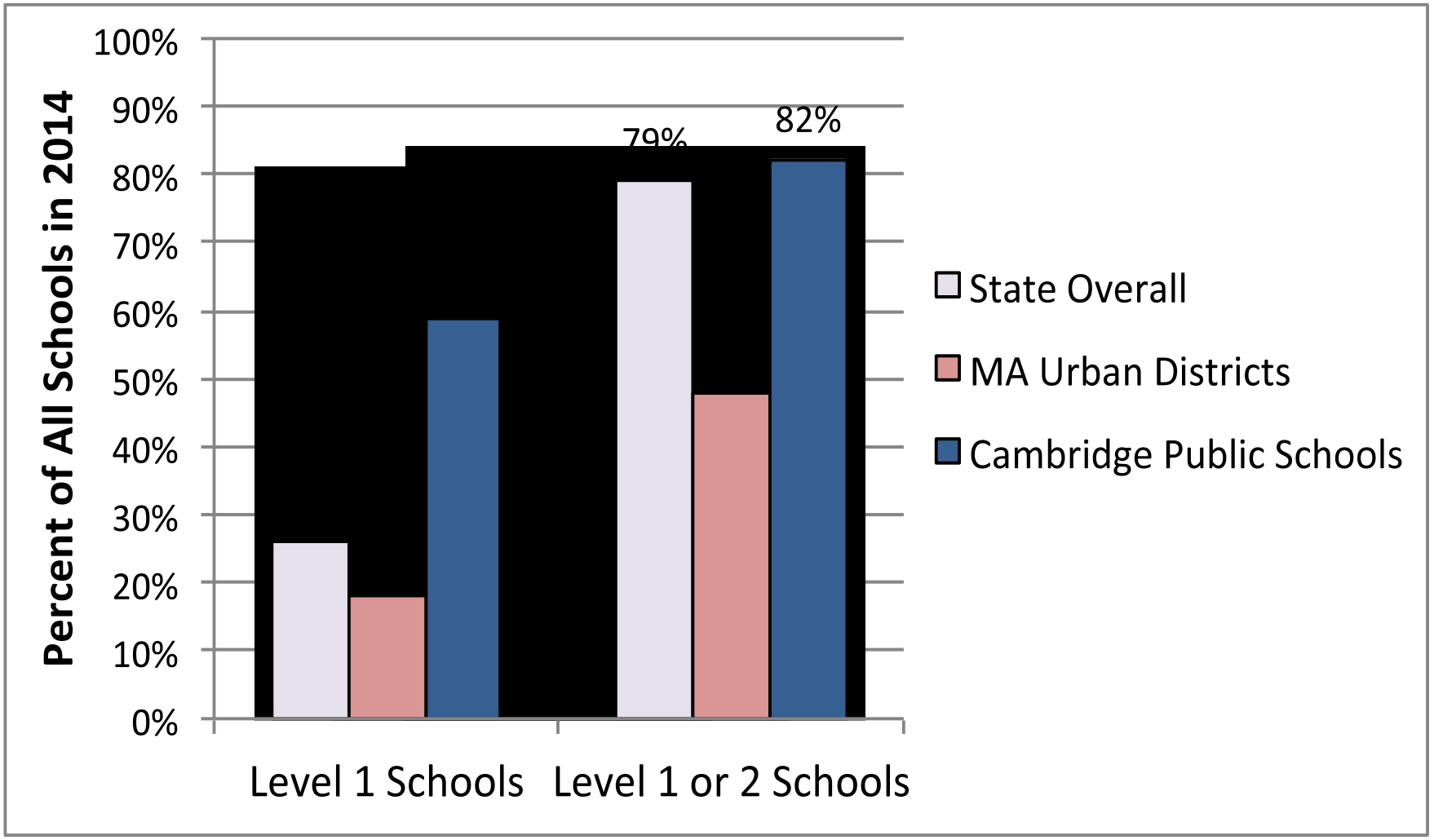
School Percentiles

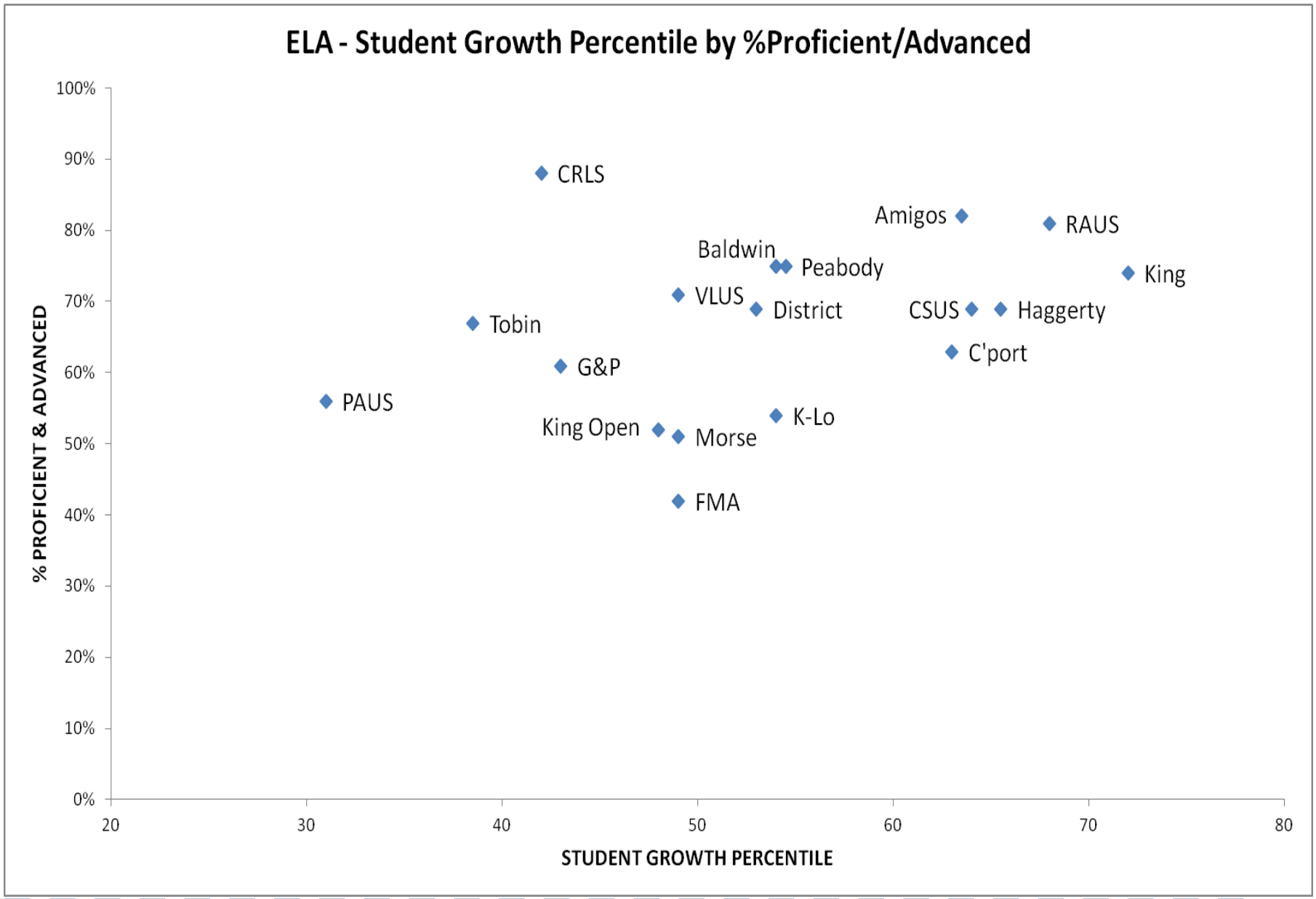
- **School Percentile** is an indication of a school's overall **performance** relative to other schools that serve the same or individual grades.
- Calculated somewhat similarly to PPI (e.g. weighting years 4-3-2-1), except that **achievement is weighted three times higher than improvement**
  - Thus, a school can have a high cumulative PPI, but a low school %ile.
  - There is less transparency from DESE re: calculations of School %iles.

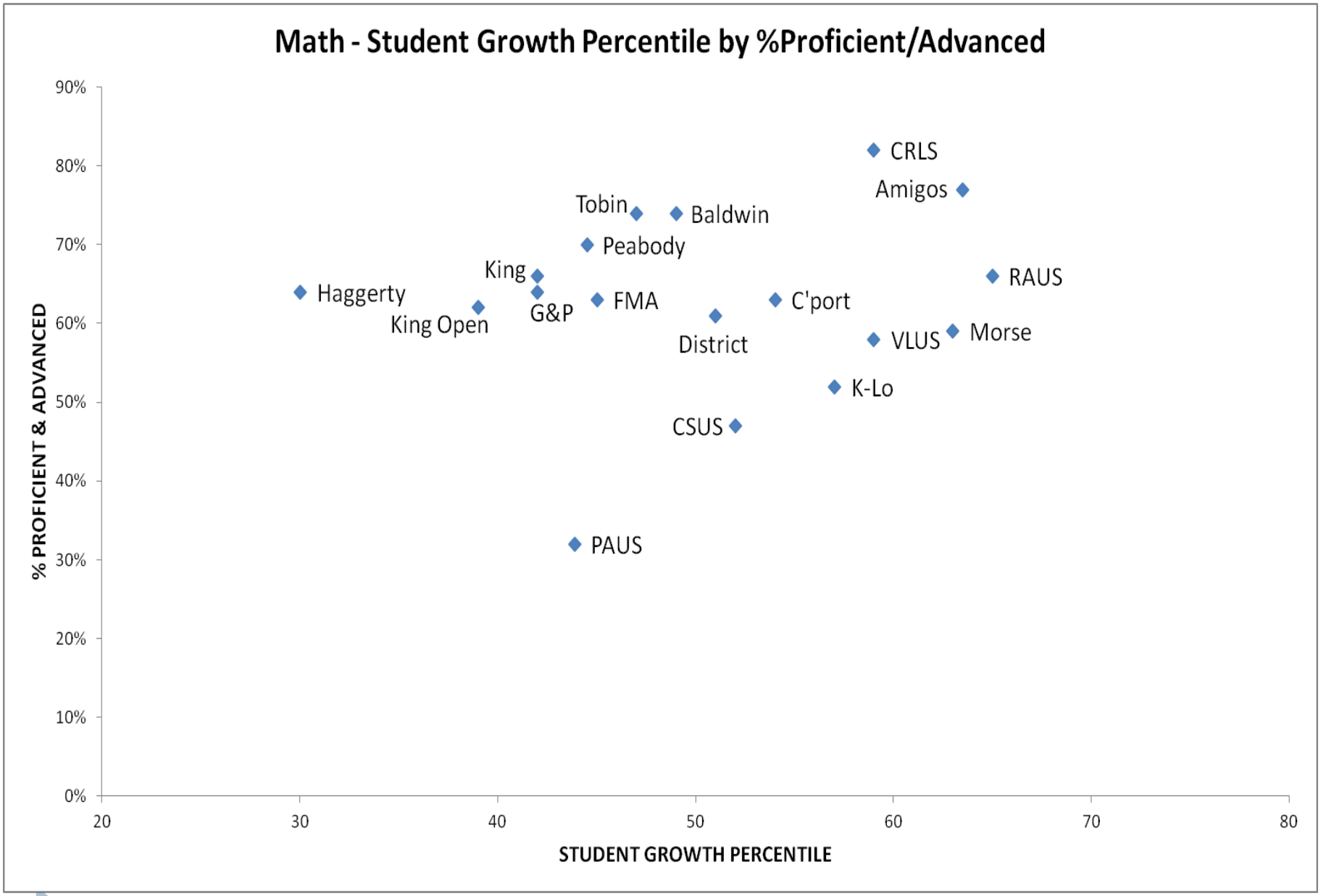
Level 3 Determination

- **Level 3 Schools Determined By**:
  - **School Percentile in lowest 20%** of all schools at same or similar grade level in state OR
  - **One or more subgroups** in lowest 20% of that subgroup
- Levels 4 and 5: Most serious designation, made by Commissioner

Level 1 and 2 Schools in CPS vs. State

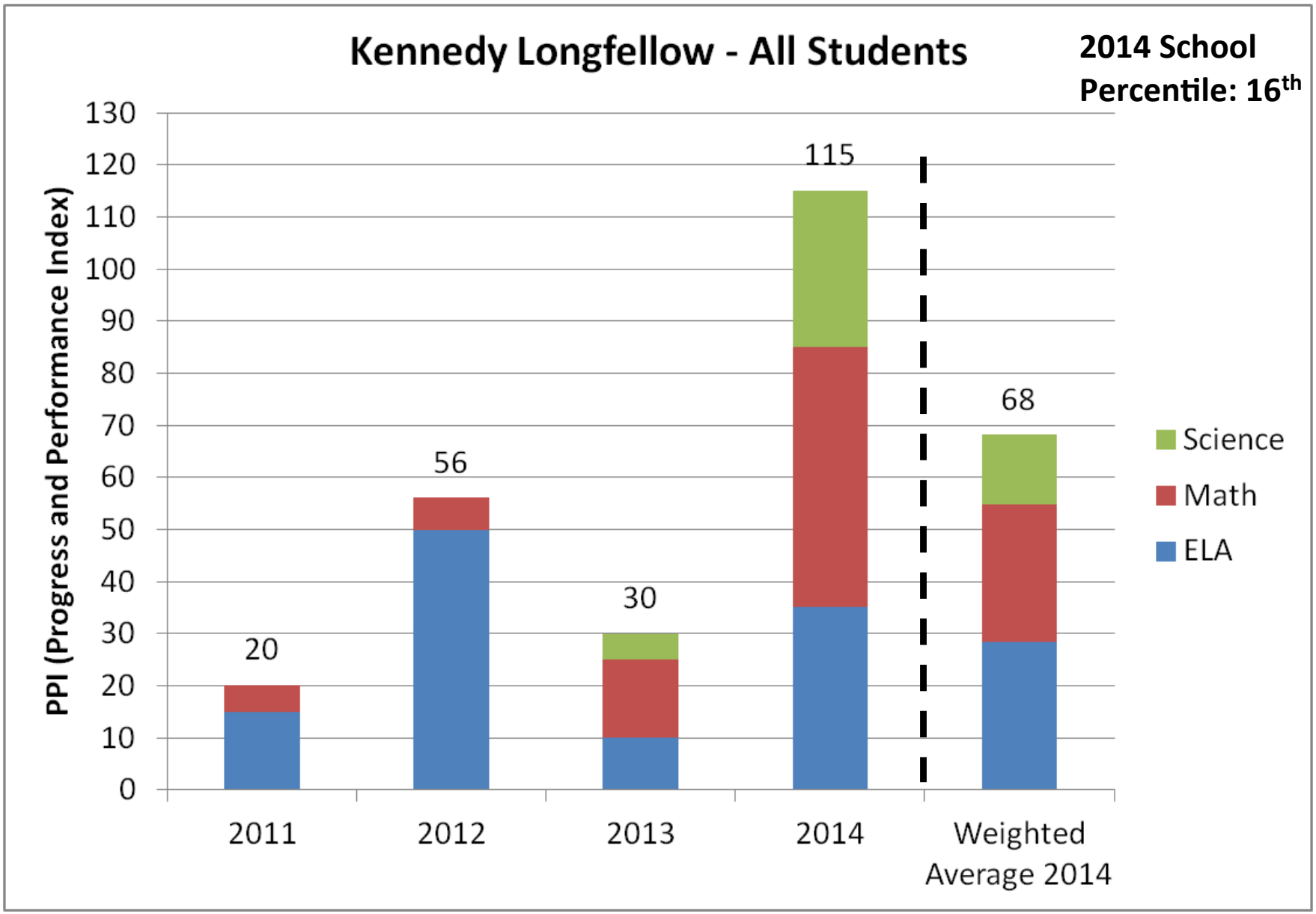


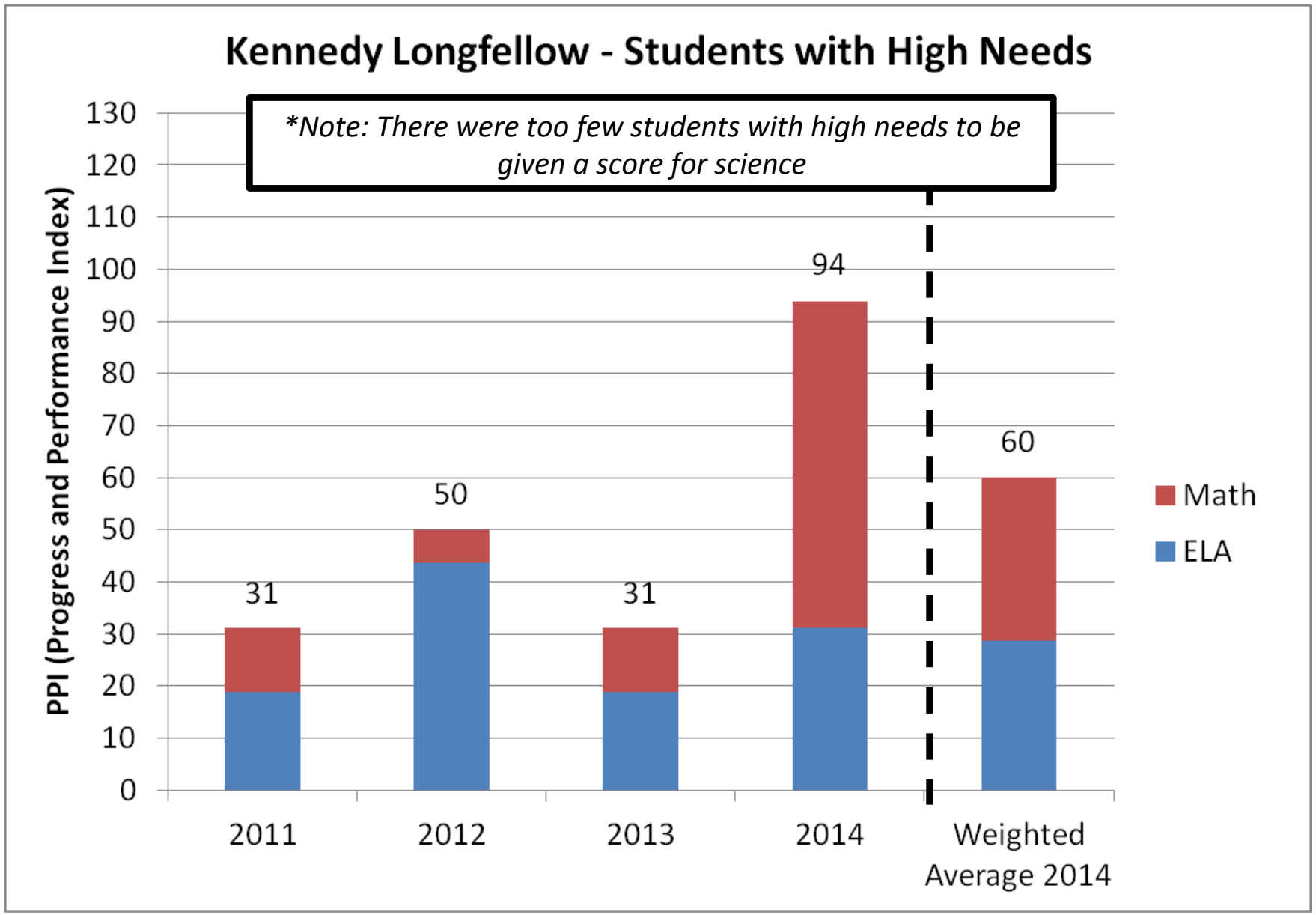

ELA - Student Growth Percentile by %Proficient/Advanced
% PROFICIENT & ADVANCED
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
20
30
40
50
60
70
80
STUDENT GROWTH PERCENTILE
CRLS
Amigos
RAUS
Baldwin
Peabody
King
VLUS
District
CSUS
Haggerty
Tobin
C'port
G&P
PAUS
K-Lo
King Open
Morse
FMA

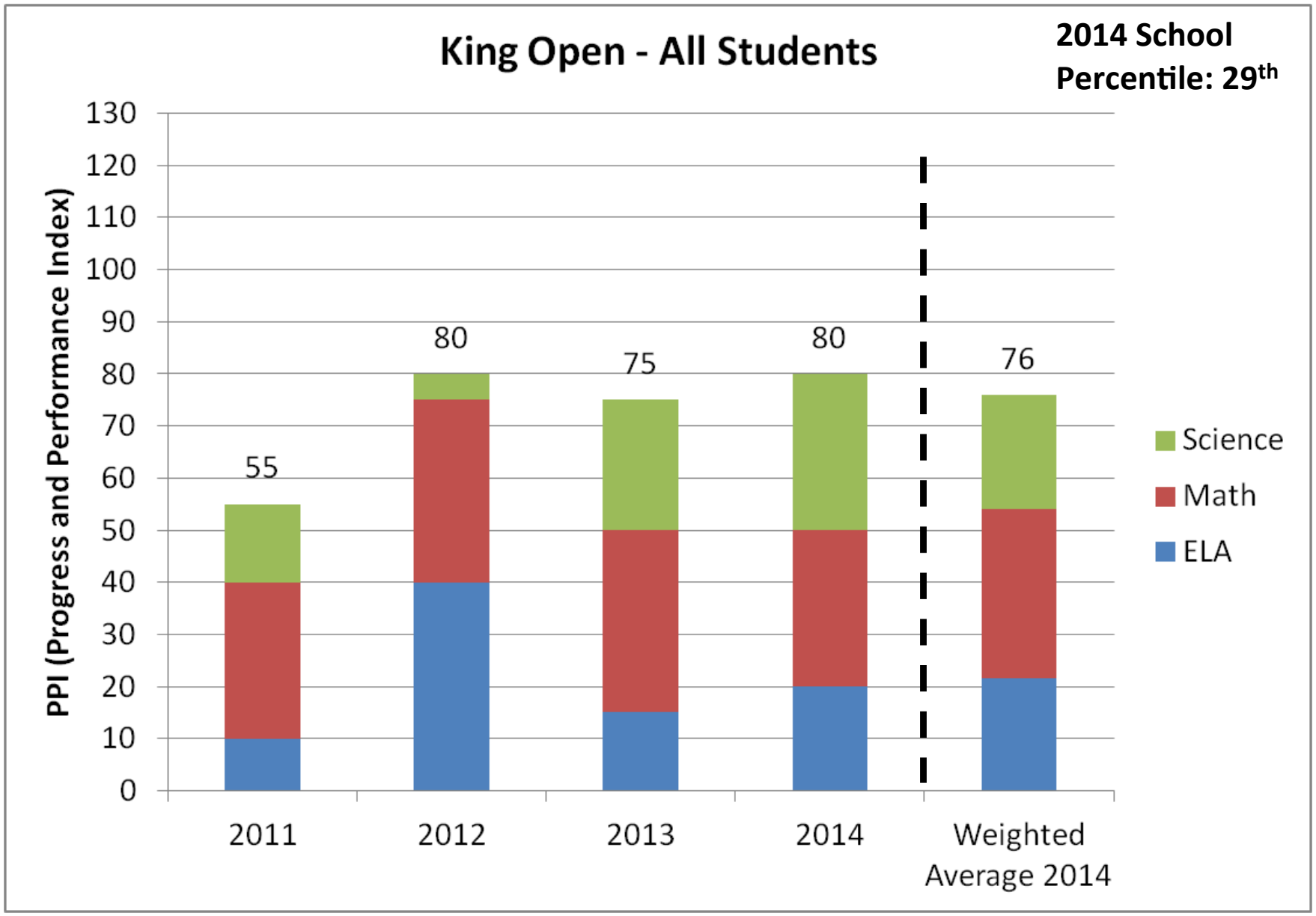

Math - Student Growth Percentile by %Proficient/Advanced
% PROFICIENT & ADVANCED
STUDENT GROWTH PERCENTILE
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
20
30
40
50
60
70
80
CRLS
Amigos
Tobin
Baldwin
Peabody
King
RAUS
Haggerty
G&P
FMA
C'port
King Open
District
VLUS
Morse
K-Lo
CSUS
PAUS

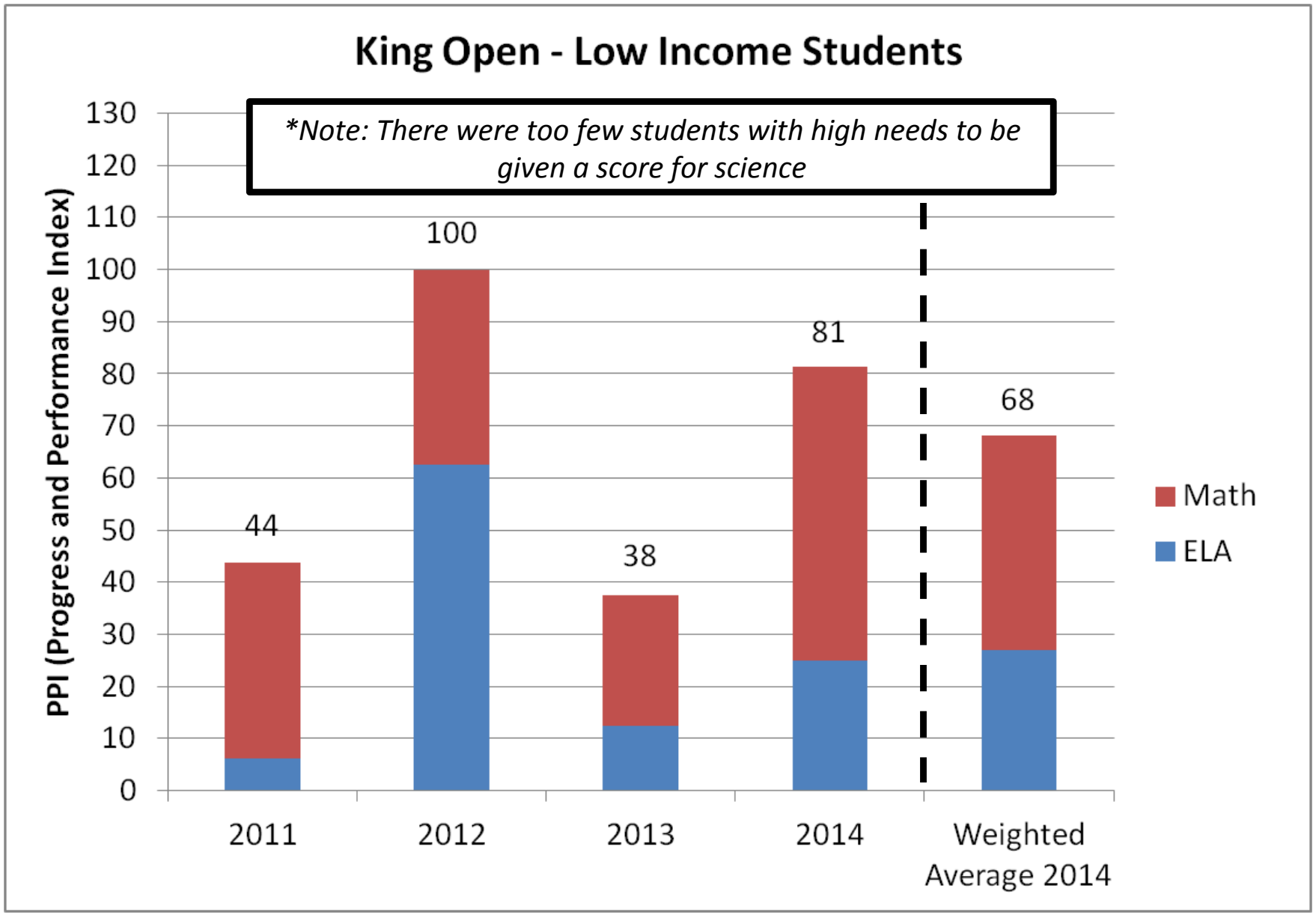
Focusing on Level 3 Schools

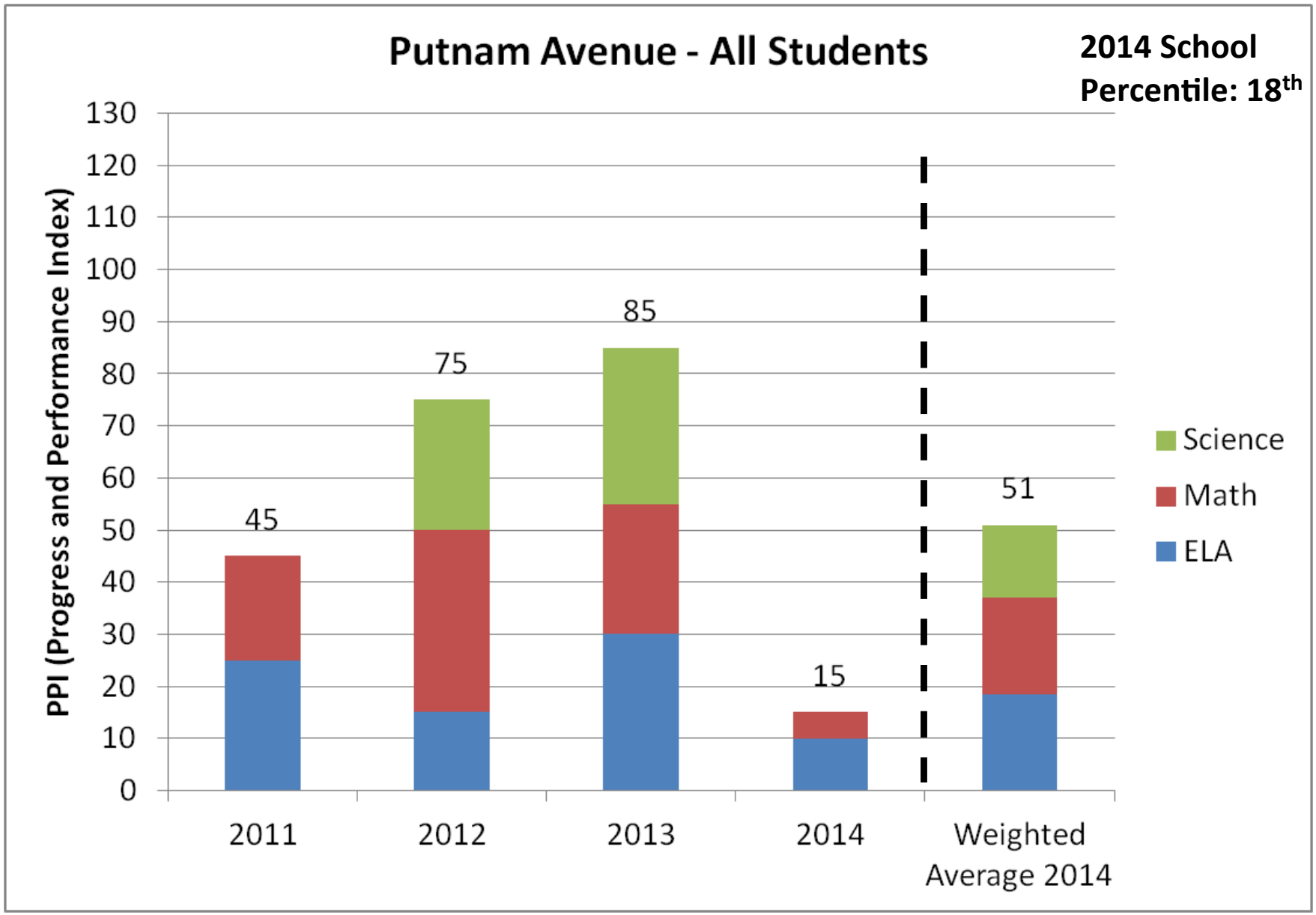
- Although 82% of CPS schools are Level 1 or 2, we have three Level 3 Schools this year:
  - Kennedy Longfellow
  - King Open
  - Putnam Avenue
- It is important to understand the history of performance and growth at these schools to understand how to best support their progress

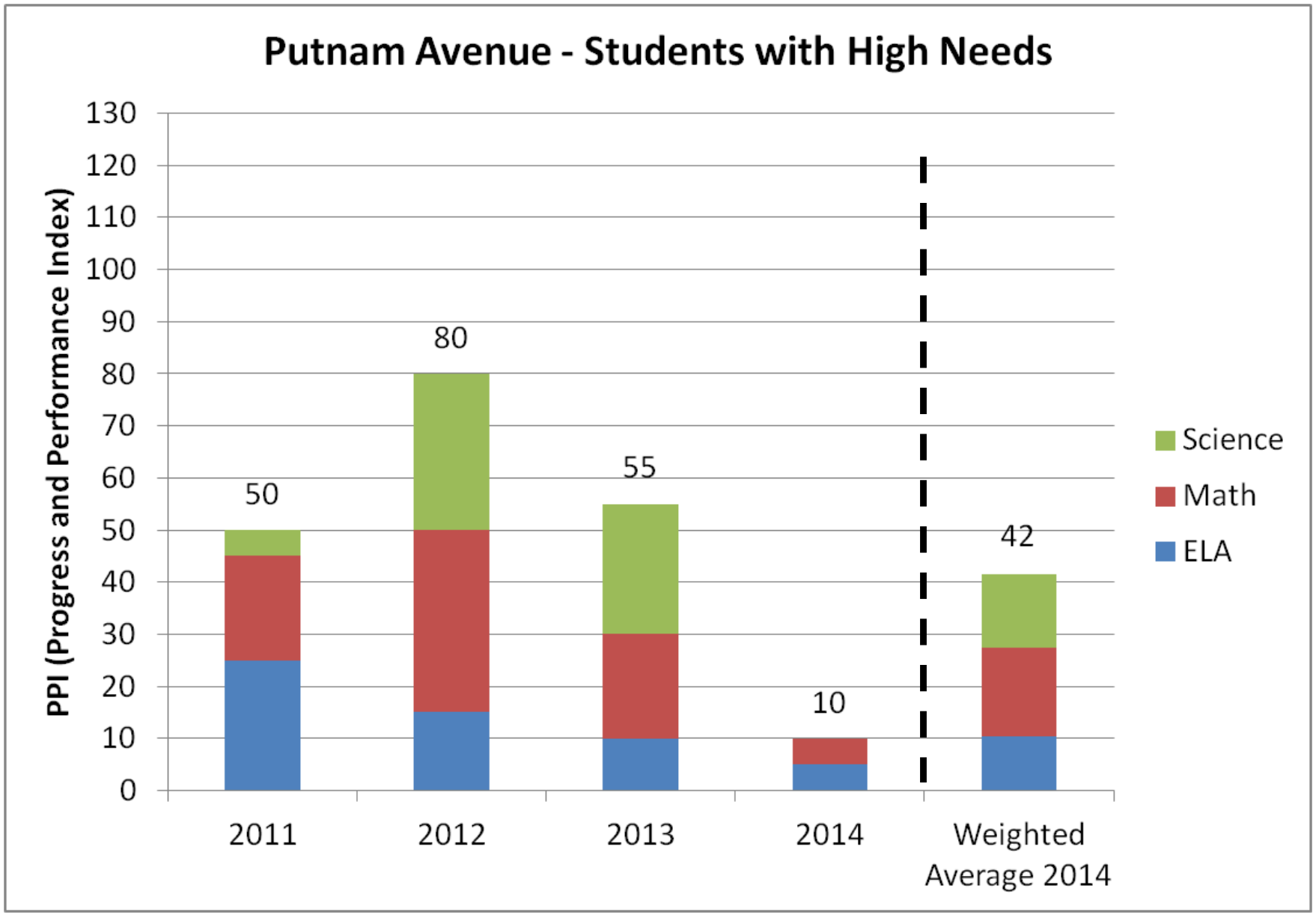

Kennedy Longfellow - All Students
2014 School Percentile: 16th
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
20
56
30
115
68
2011
2012
2013
2014
Weighted Average 2014
Science
Math
ELA


Kennedy Longfellow - Students with High Needs
*Note: There were too few students with high needs to be given a score for science
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
31
50
31
94
60
2011
2012
2013
2014
Weighted Average 2014
Math
ELA


King Open - All Students
2014 School Percentile: 29th
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
55
80
75
80
76
2011
2012
2013
2014
Weighted Average 2014
Science
Math
ELA


King Open - Low Income Students
*Note: There were too few students with high needs to be given a score for science
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
44
100
38
81
68
2011
2012
2013
2014
Weighted Average 2014
Math
ELA


Putnam Avenue - All Students
2014 School Percentile: 18th
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
45
75
85
15
51
2011
2012
2013
2014
Weighted Average 2014
Science
Math
ELA


Putnam Avenue - Students with High Needs
PPI (Progress and Performance Index)
130
120
110
100
90
80
70
60
50
40
30
20
10
0
50
80
55
10
42
2011
2012
2013
2014
Weighted Average 2014
Science
Math
ELA

Overall Summary

- Level 3 Schools in Year 2 of Level 3 status have shown significant improvement in 2014.
- PAUS has completed an extensive data analysis and identified key strategies for improvement that will be presented in their SIP.
- Gains across elementary schools in ELA, Math, and Science are noteworthy.
- Grades 6 – 10 progress in ELA, Math, and Science requires further analysis and attention.
- Progress amongst student groups (e.g. African American/ Black, Hispanic/Latino, Students with Disabilities) have shown significant growth since 2009.

Questions for All of Us Moving Forward

- Is what we are doing working? How do we know?
- Are we building confidence and self-esteem in our students?
- Are we building supportive learning environments?
- Are we infusing a sense of academically engaged time within our classrooms with our students?
- Are our district and/or school improvement strategies targeted to meet areas of greatest need evidenced in the data?
- What are the strengths, weaknesses, opportunities, and threats that will impact our district improvement moving forward?

Current Areas of Focus

- Educator Evaluation System Year 3
- Developing Capacity in Instructional Leadership – Highly Effective Teaching Project
- Curriculum & Instruction: Curriculum Review Cycle.
- Educator Development and Support
- Office of Student Services: Strategic Planning Process
- District Improvement Plan
- Establish District-Wide Framework for Response to Intervention

Current Areas of Focus

- Continued RETELL training for all teachers & administrators
- Continued improvement planning in *all* schools
- District Accountability Review and Targeted support from state's District & School Assistance (DSAC) Center


Thank
You