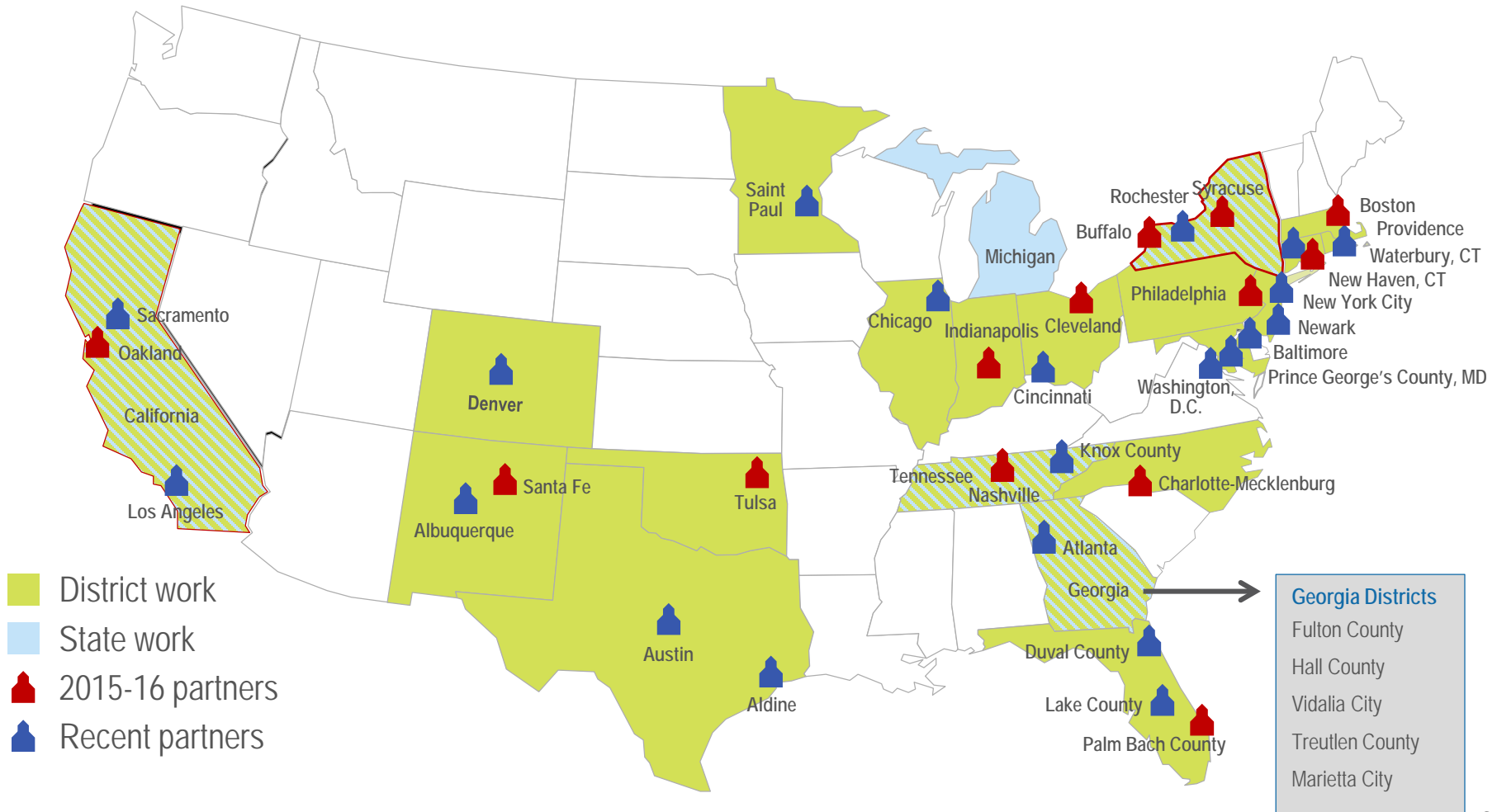


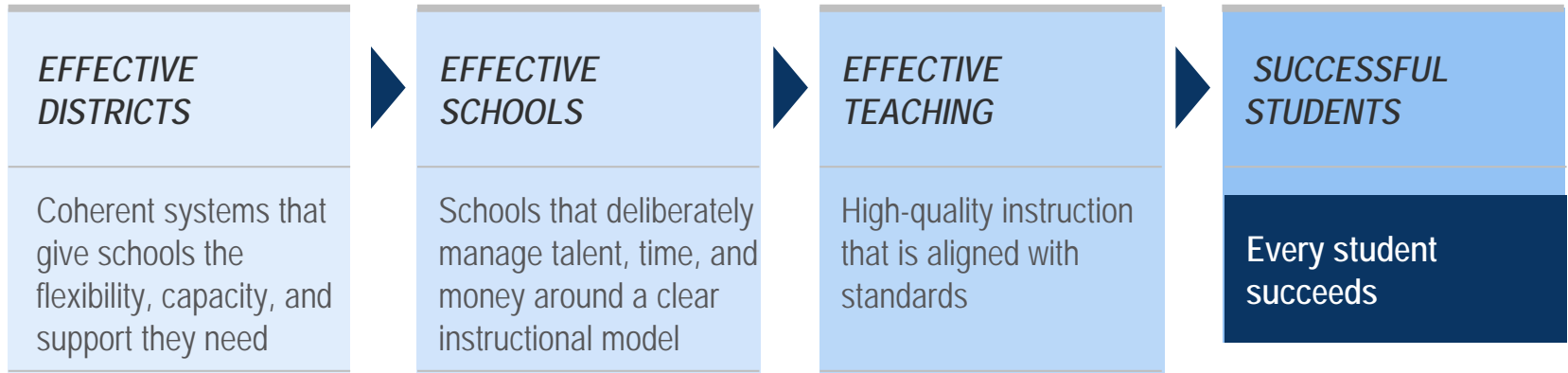
Denver Public Schools:
Leveraging System Transformation to
Improve Student Results
March, 2017

Education Resource Strategies (ERS)
is a non-profit organization
dedicated to transforming how urban
school systems organize resources
(people, time, technology, and money)
so that every school succeeds for every student.

Over the last 10 years, ERS has worked closely with the nation's largest school systems to improve resource use



Why school systems?

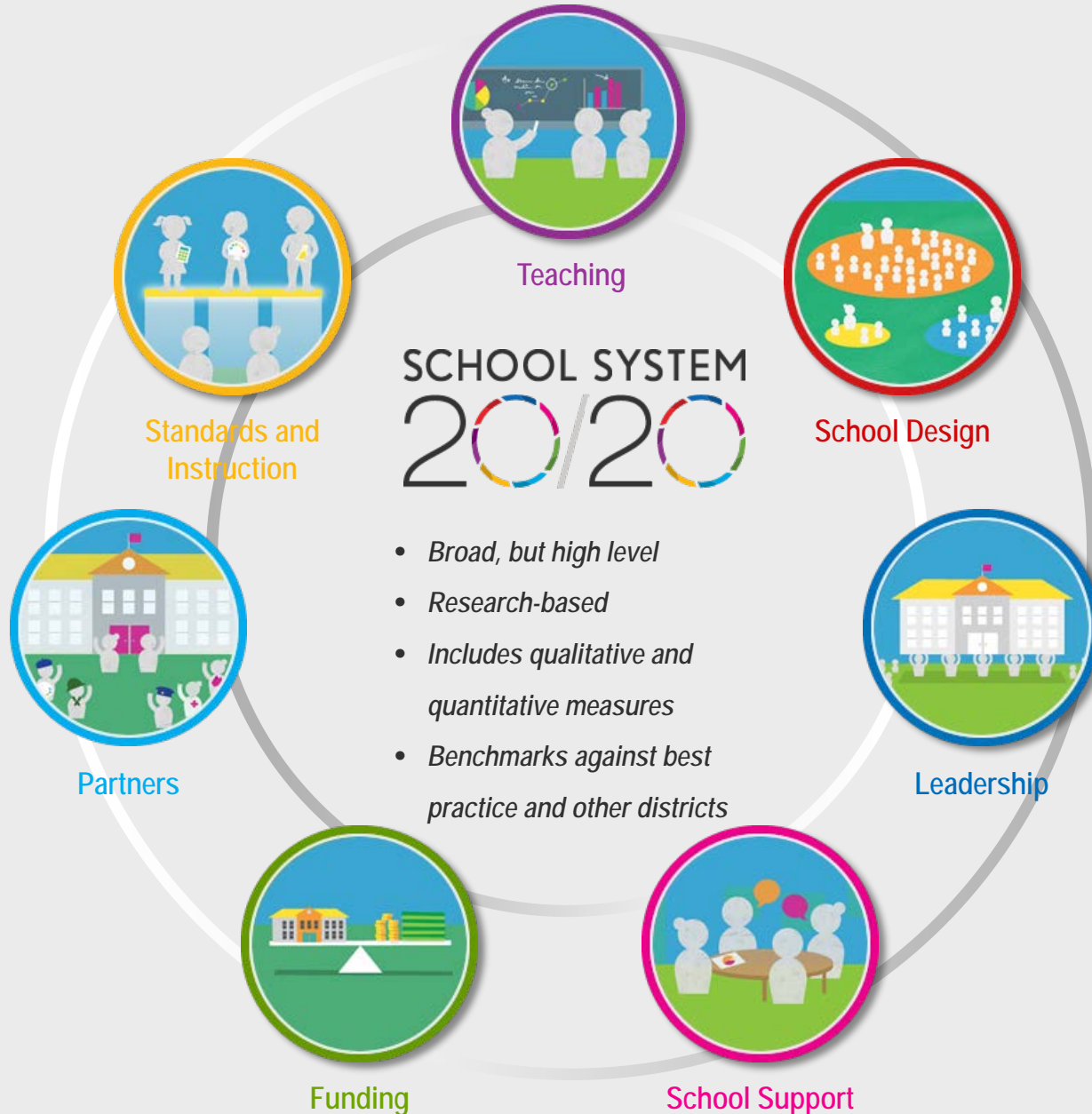


What is the School System 2020 Diagnostic?



- **District Impact:** To help district leaders answer these questions and identify and track changes to *System Conditions* and *Resource Use* that lead to improved student achievement
- **Field Building:** To build a data set of where districts are along this spectrum, to highlight best practices and ultimately to demonstrate that creating system conditions that promote the strategic use of resources in districts and schools drives improved student outcomes

School System 20/20 identifies key transformational levers across seven areas of district activity



To date we have conducted School System 20/20 in 16 districts, including 3 districts we've identified as best practice case studies:

"I've been inundated with so much information, and this is by far the most strategic, easiest to understand and most useful." - Dr. Sonja Santelises, Superintendent, Baltimore City Schools

Addison, NY (2016)
Aldine, TX (2014)
Baltimore City, MD (2016)
Boston, MA (2015)
Charlotte, NC (2016)
Cleveland, OH (2016)
Denver, CO (2016)
El Paso, TX (2017)
Indianapolis, IN (2015)
Lawrence, MA (2014)
Memphis, TN (2017)
Norwalk, CT (2016)
Oakland, CA (2015)
Palm Beach County, FL (2015)
Tulsa, OK (2015)
Spring Branch, TX (2017)

"You were successful in doing what is the hardest thing, which is making the link between budget and school design...If we had this information as we were developing our strategic plan, we would have had a better strategic operating plan."

-Steven Adamowski, Norwalk Superintendent

Looking at this information helps us to understand:

- How does *performance growth* in DPS compare to other districts in Colorado and nationwide?
- What *actions over the past five years* have driven changes in system conditions, resource use, and student outcomes?
- *How does DPS compare* to other leading districts and research-based best practice?
- Where should DPS *target future investments*?
- What can other *district leaders and policy makers* learn from DPS' experience?

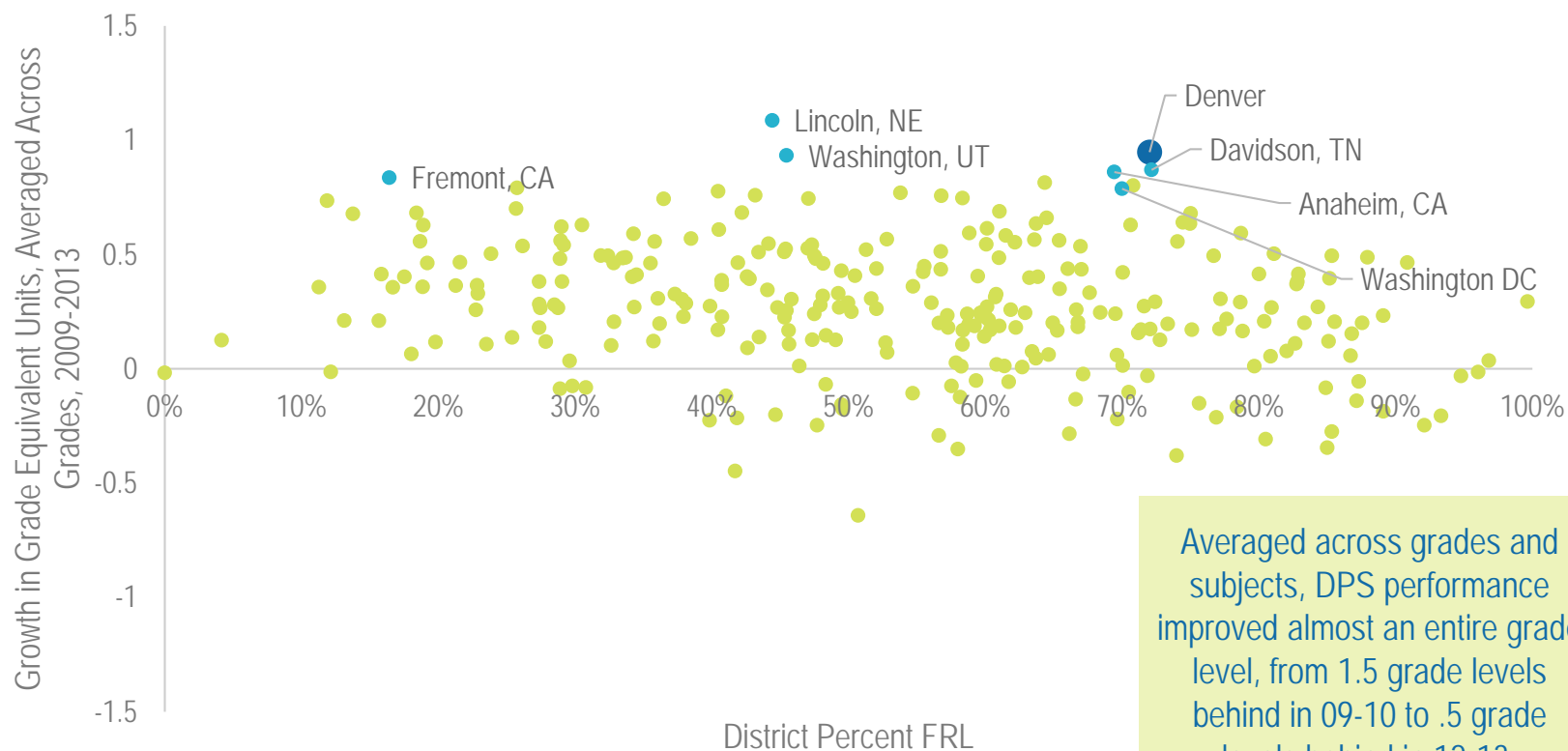
What is our history with DPS?

- ERS has partnered with DPS over the past 8 years on a number of paid engagements
- ERS is currently engaged with DPS in two areas:
 - Teacher compensation workshops
 - New teacher case studies with DPS-specific supplement
- The work we are reviewing today was funded by the *Charles and Lynn Schusterman Foundation* as a case study

DPS' performance story

According to Stanford NCES comparison data, DPS had the second highest growth of any district >25K nationwide between 2009-10 and 2012-13

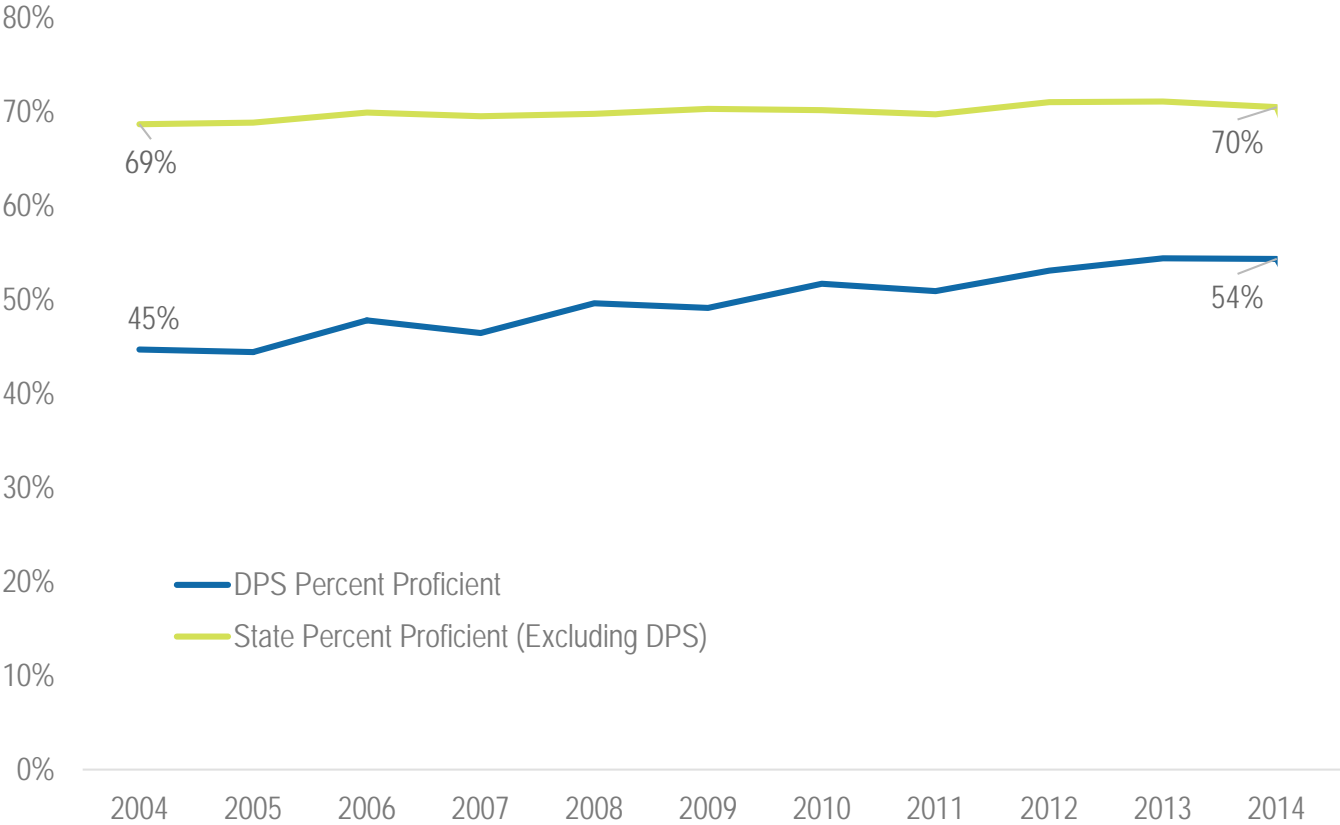
Denver Average Grade Equivalent Unit Growth
2009-2013, Against Large Districts



Averaged across grades and subjects, DPS performance improved almost an entire grade level, from 1.5 grade levels behind in 09-10 to .5 grade levels behind in 12-13.

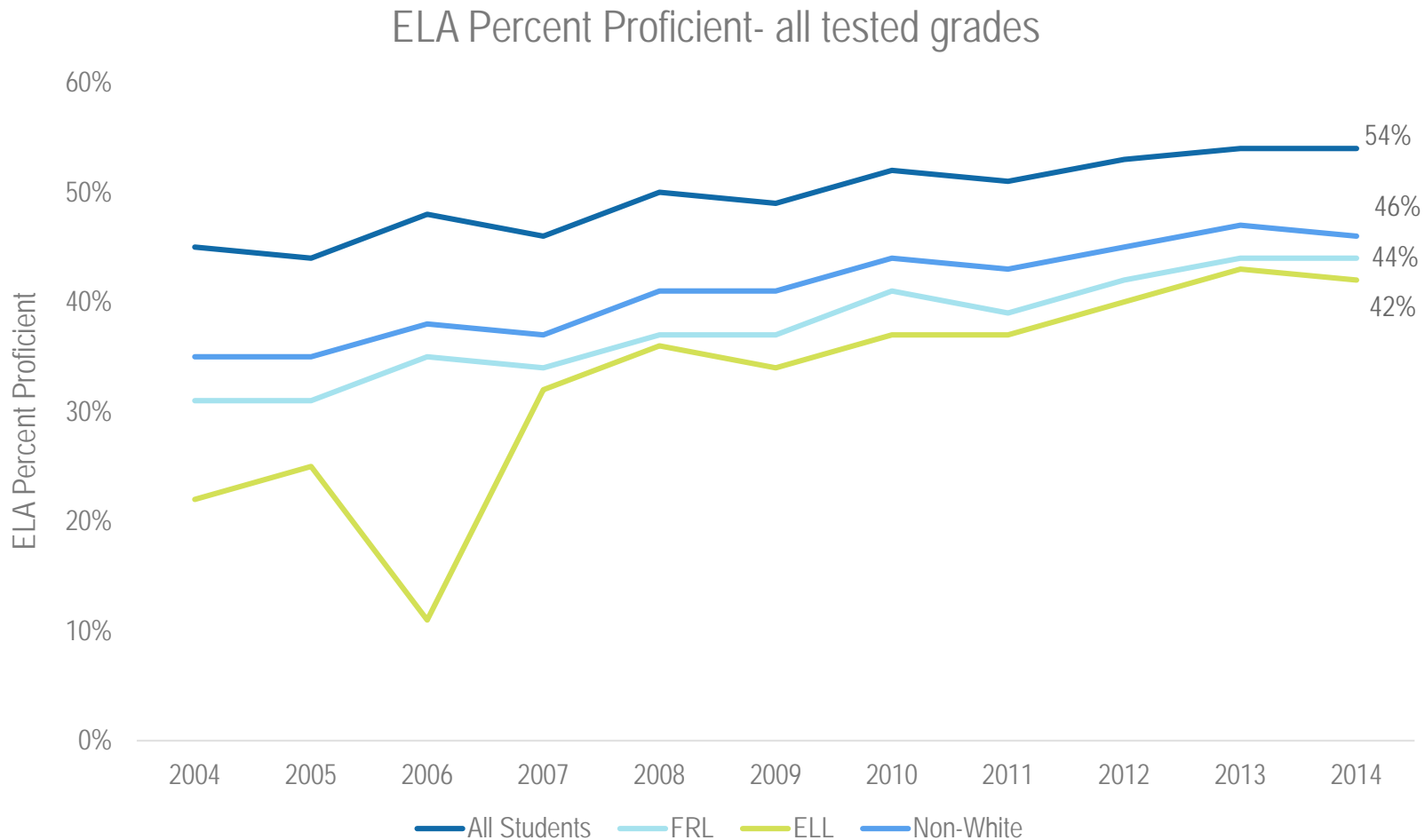
...and within Colorado

DPS vs. Colorado % Proficient & Advanced *TCAP Reading*



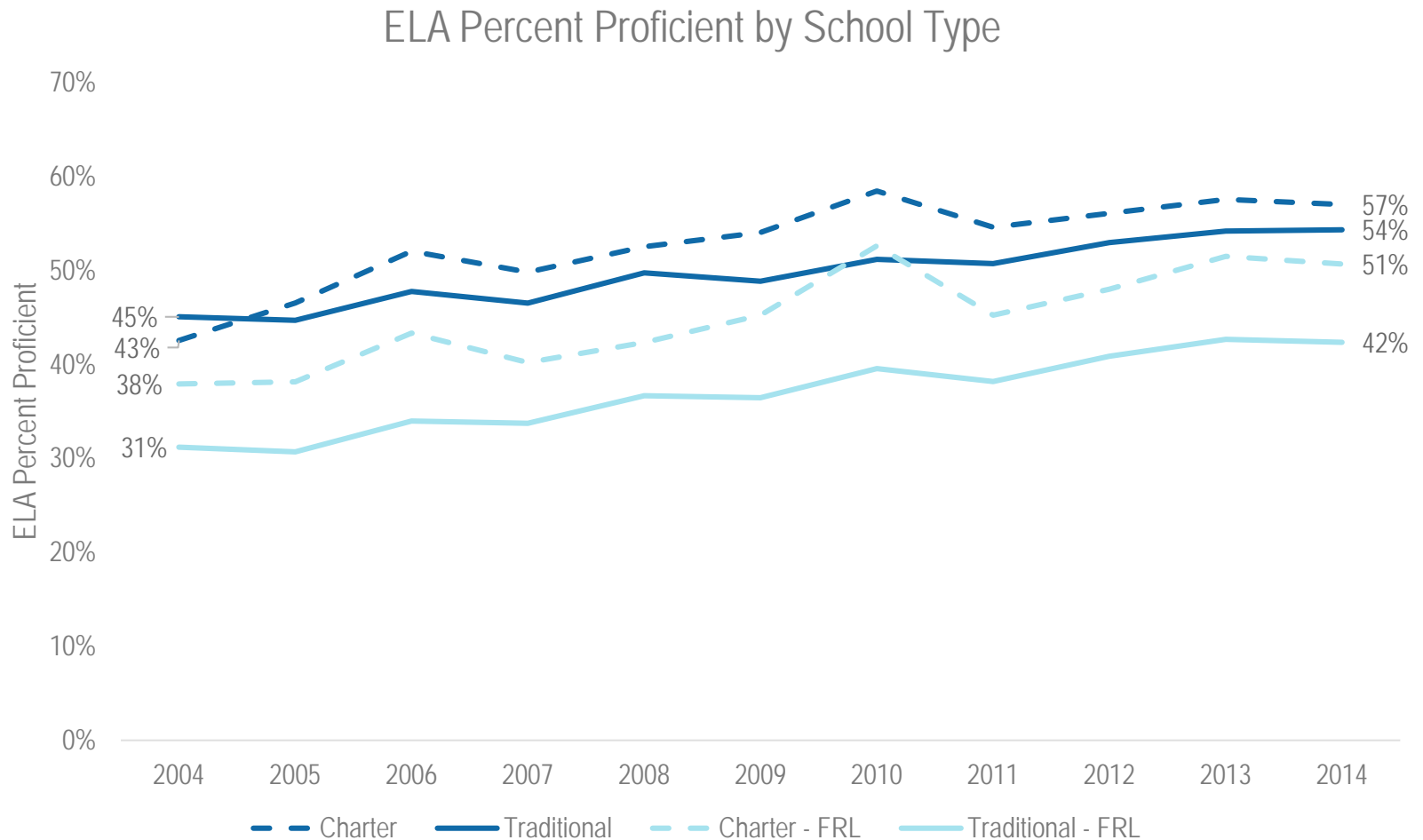
Source: Colorado Department of Education, Achievement Percentile Rank Report

Proficiency increased across all subgroups



Source: CDE website-DPS student enrollment & performance data, 2004-2014

And across both charter *and* district-run schools



Source: CDE website-DPS student enrollment & performance data, 2004-2014

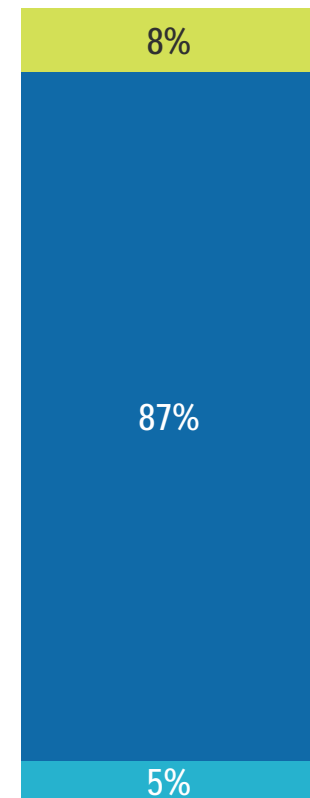
The combination of improvements across charter and district schools with a shift of student into charters increased DPS' % proficient in ELA from 49% to 54% between 2008 and 2014

Charter school improvement: 8% of students were in charter schools from 08-14; proficiency in those schools improved on average 4 points

District-run school improvement: DPS-run schools gained on average 4% pts proficiency since 2008. In 2008 these schools served 92% of students.

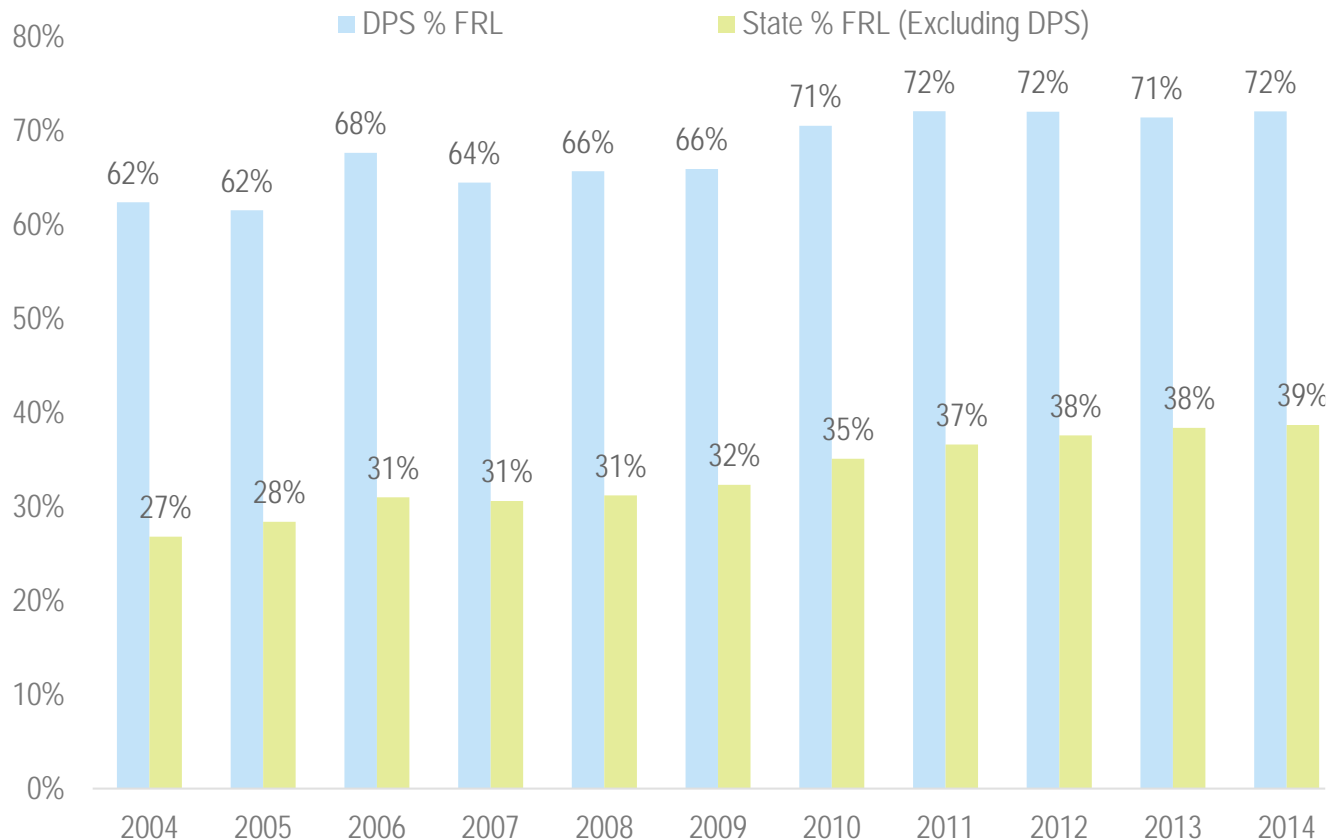
Shift from district-run to charter: From 2008 to 2014, 7% of students moved from district schools to charter schools. In addition to the 4% they would have gained in district schools (in dark blue), the schools they moved into were performing 4% better than the district-run schools, accounting for 5% of the overall improvement.

% of Performance Improvement by source



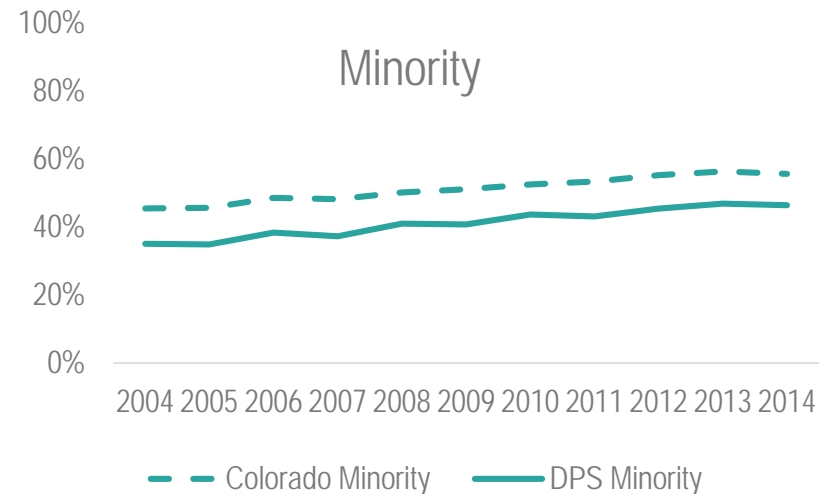
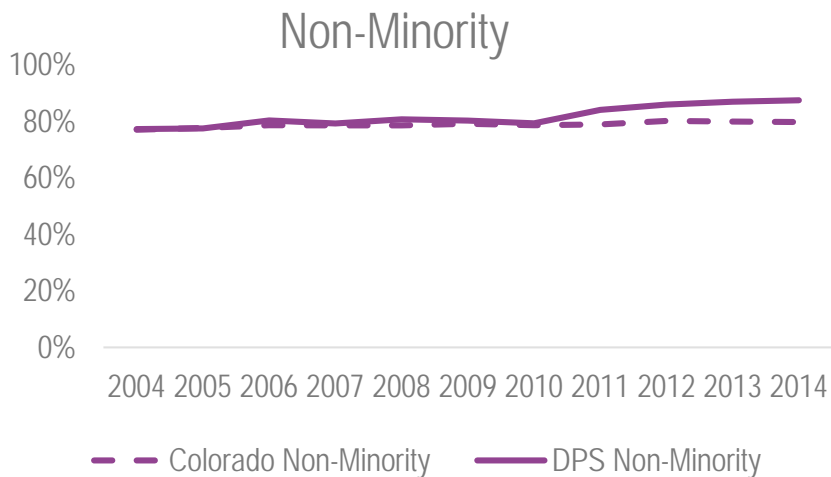
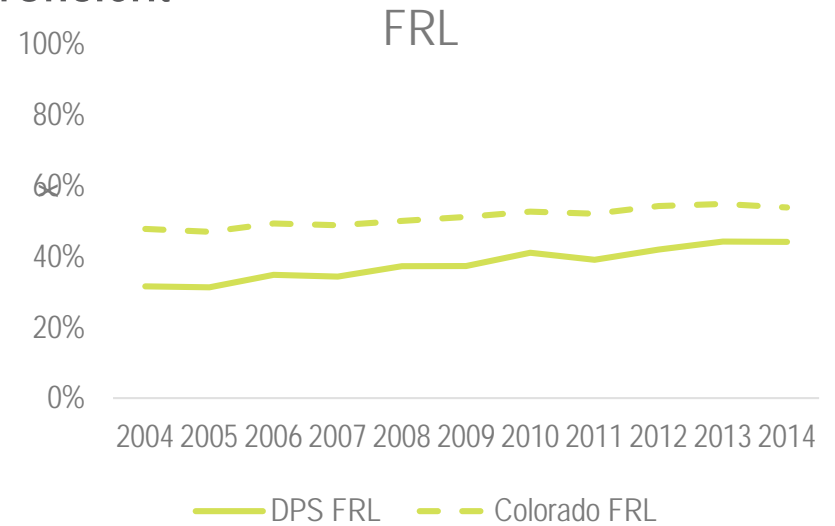
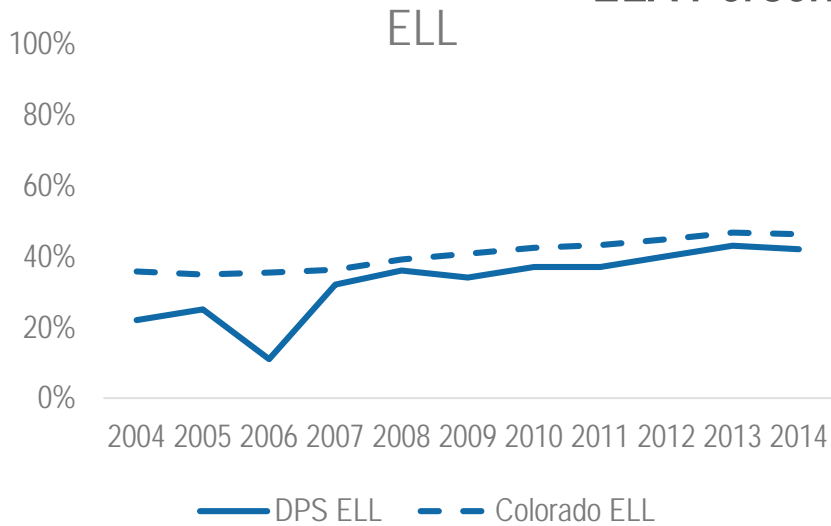
And despite DPS having a significantly higher need population than the rest of the state...

% of students eligible for free and reduced lunch



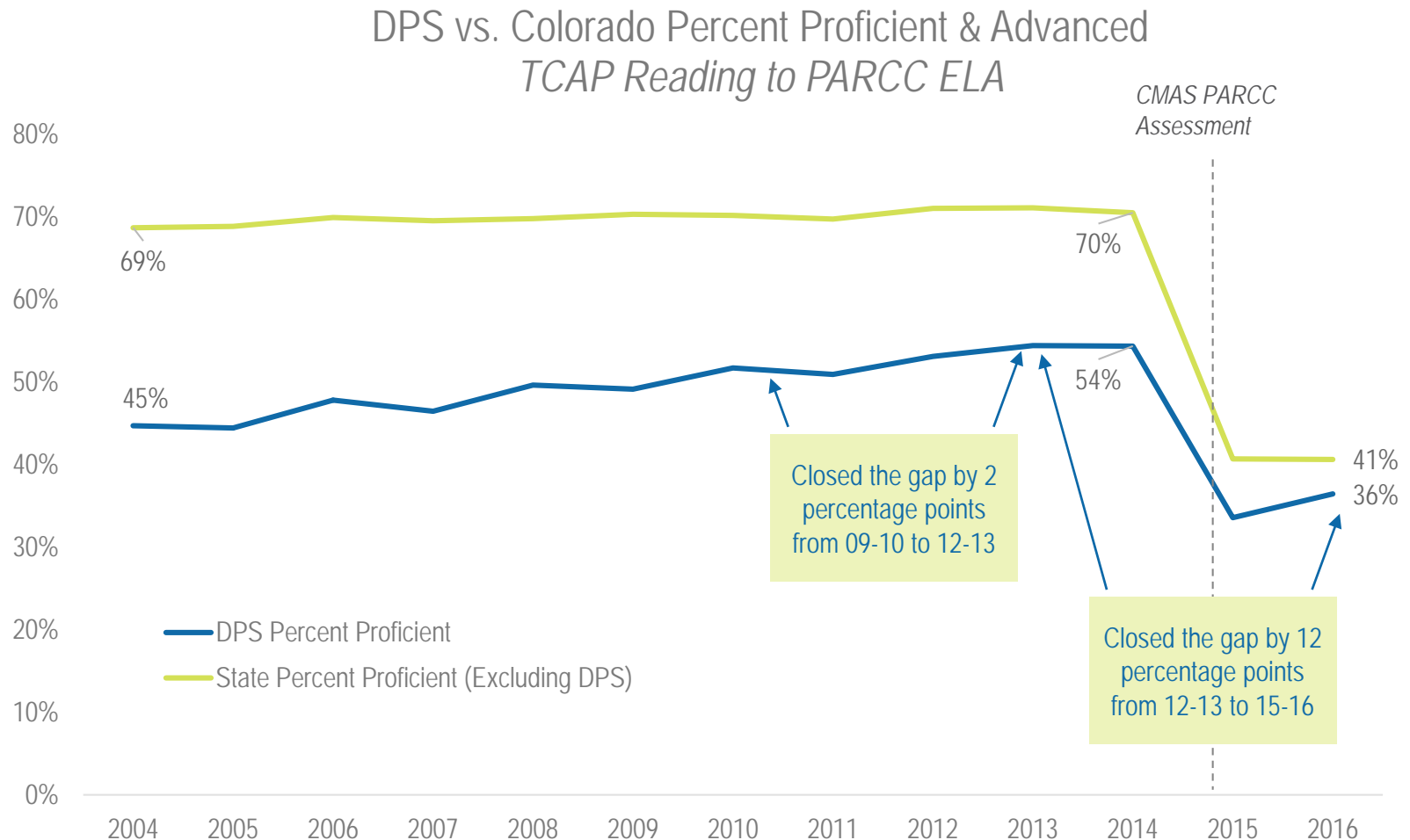
..gaps with the state for ELL and FRL students narrowed; and as of 2014 DPS was outperforming the state with white students

ELA Percent Proficient



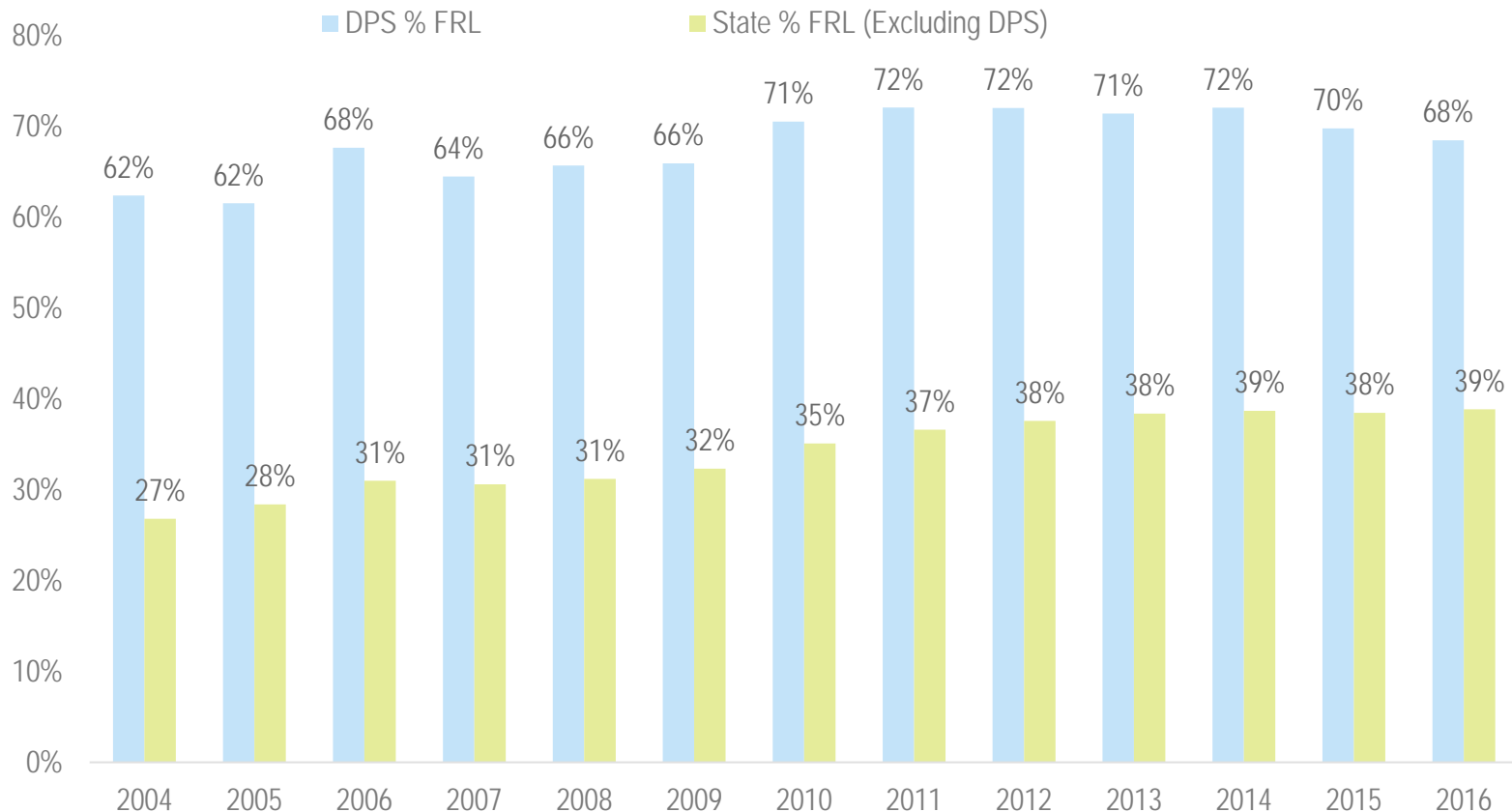
Source: CDE website-DPS student enrollment & performance data, 2004-2014

Though we don't have national comparison data beyond 2013, state data indicates that DPS' improvement trajectory has continued and even steepened



More than might be suggested by the narrowing need gap with the rest of the state








% of students eligible for free and reduced lunch









Source: Colorado Department of Education, Achievement Percentile Rank Report

How did DPS do it?

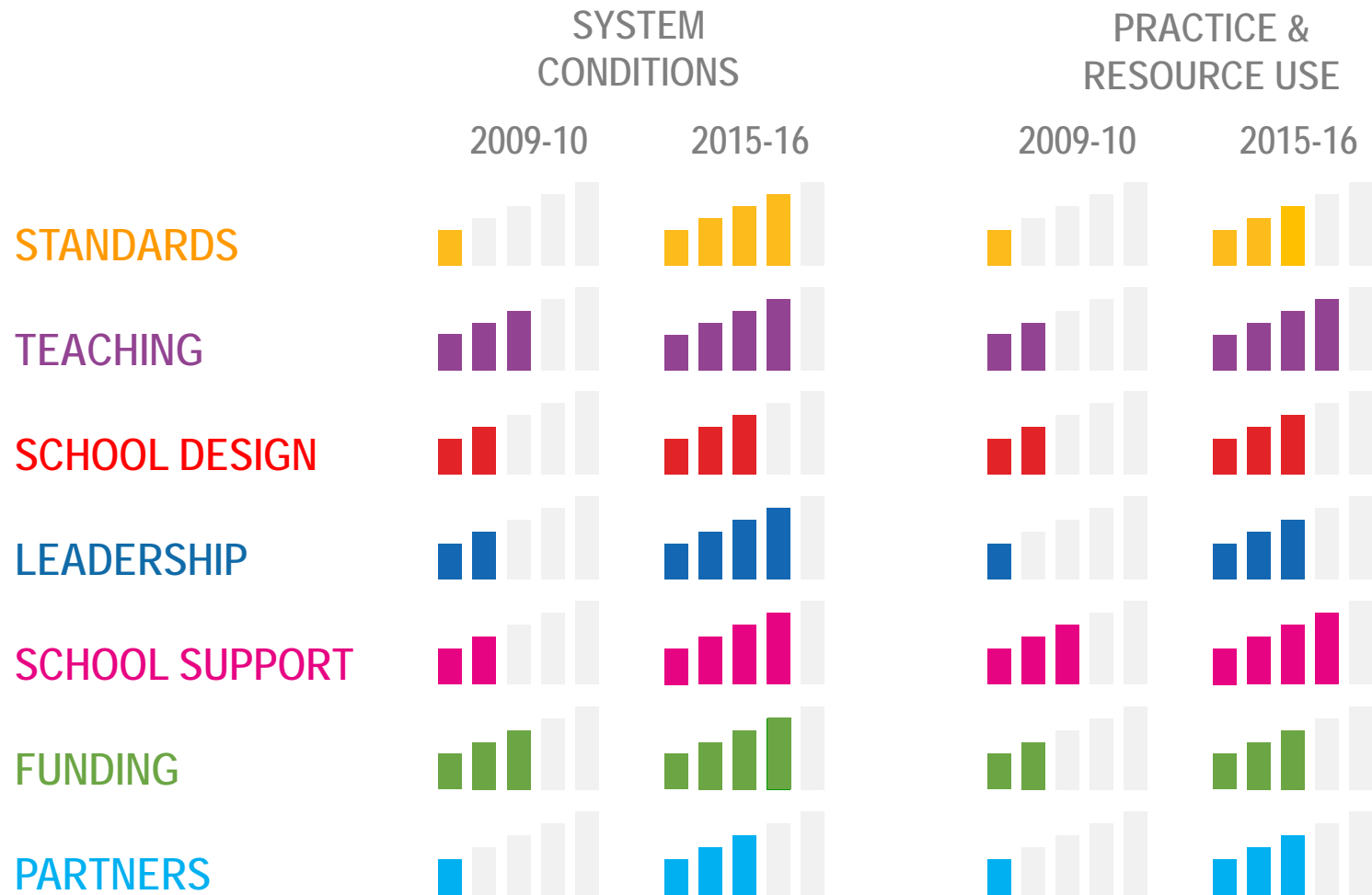
The School System 20/20 framework identifies the key transformations we believe that districts must make to drive significant, sustained improvement

System 20/20 Area	Key transformations
 STANDARDS	<ul style="list-style-type: none"> Rigorous, information-age standards with effective curricula, instructional strategies, and assessments to achieve them.
 TEACHING	<ul style="list-style-type: none"> Selective hiring, development, and strategic assignment to schools and teams. Career path and compensation enable growth and reward contribution.
 SCHOOL DESIGN	<ul style="list-style-type: none"> Schools with restructured teams and schedules: personalized learning and support that responds to student needs and promotes instructional collaboration.
 LEADERSHIP	<ul style="list-style-type: none"> Clear standards and accountability with the support school leaders need to succeed.
 SCHOOL SUPPORT	<ul style="list-style-type: none"> A central office that serves as a strategy partner, leveraging data to increase efficiency and identify best practices.
 FUNDING	<ul style="list-style-type: none"> A central office that serves as a strategy partner, leveraging data to increase efficiency and identify best practices.
 PARTNERS	<ul style="list-style-type: none"> Partnering with families, community institutions, youth service organizations, and online instructors to serve students' needs.

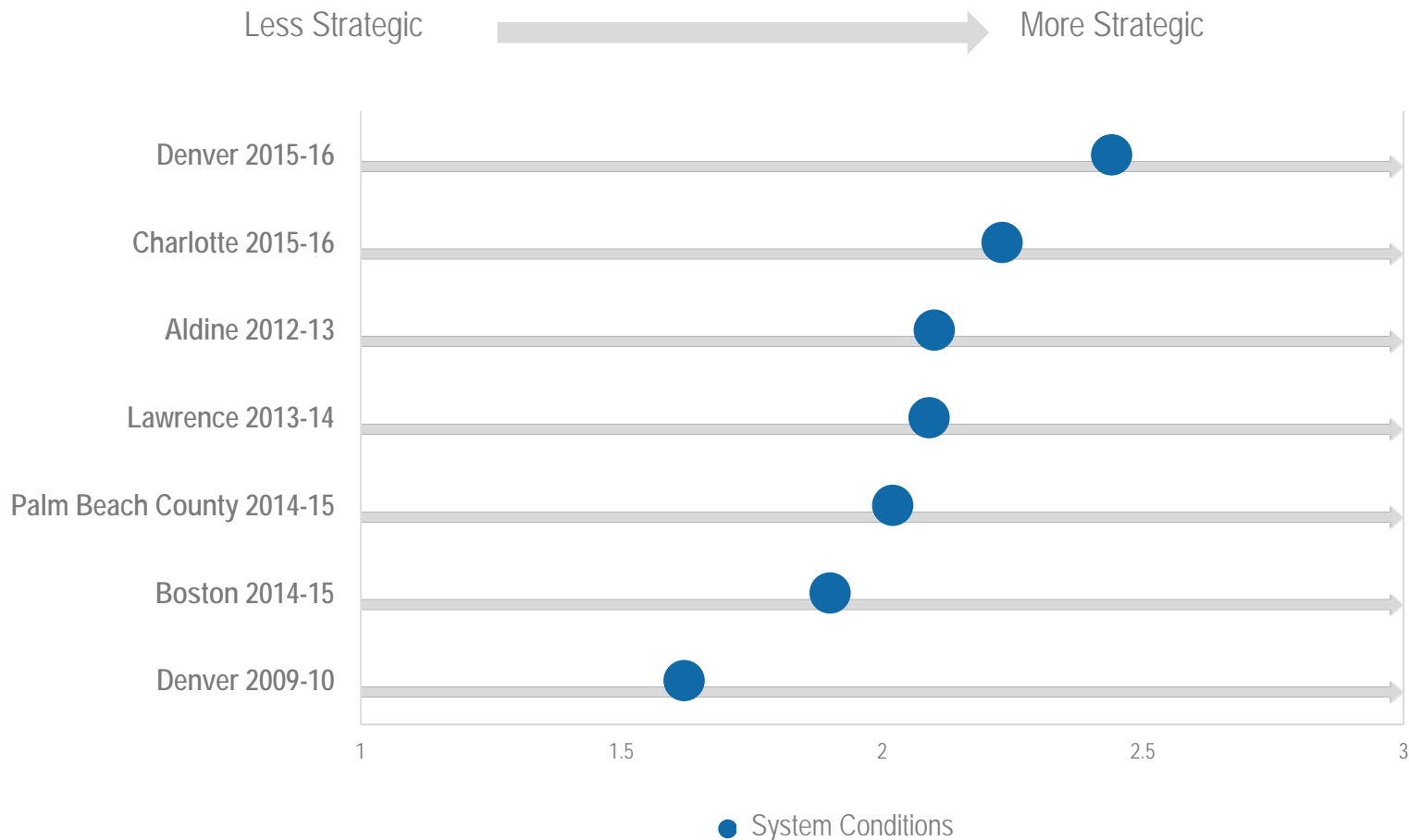
For over a decade, DPS has undertaken a broad array of structural changes aimed at many of these key levers

System 20/20 Area	DPS Actions
 STANDARDS	<ul style="list-style-type: none"> • Development of CCRS readiness assessment for schools • Creation of curriculum and instructional support resources
 TEACHING	<ul style="list-style-type: none"> • Implementation of LEAP • Teacher leadership program • Incentives to attract teachers to highest-need subjects and schools • Cross-district year-long plan for professional development
 SCHOOL DESIGN	<ul style="list-style-type: none"> • Increased school level flexibility • Focus on whole child
 LEADERSHIP	<ul style="list-style-type: none"> • Expanded principal pipeline and development programs • Implement LEAD • Incentives to attract and retain effective principals in high-need schools
 SCHOOL SUPPORT	<ul style="list-style-type: none"> • Data systems • Accountability system • Lower instructional superintendent ratios, especially for turnaround schools
 FUNDING	<ul style="list-style-type: none"> • Shared funding system across charter and district run schools • Incorporation of ELL weights into funding system • Active management of school portfolio across district-run and charter schools

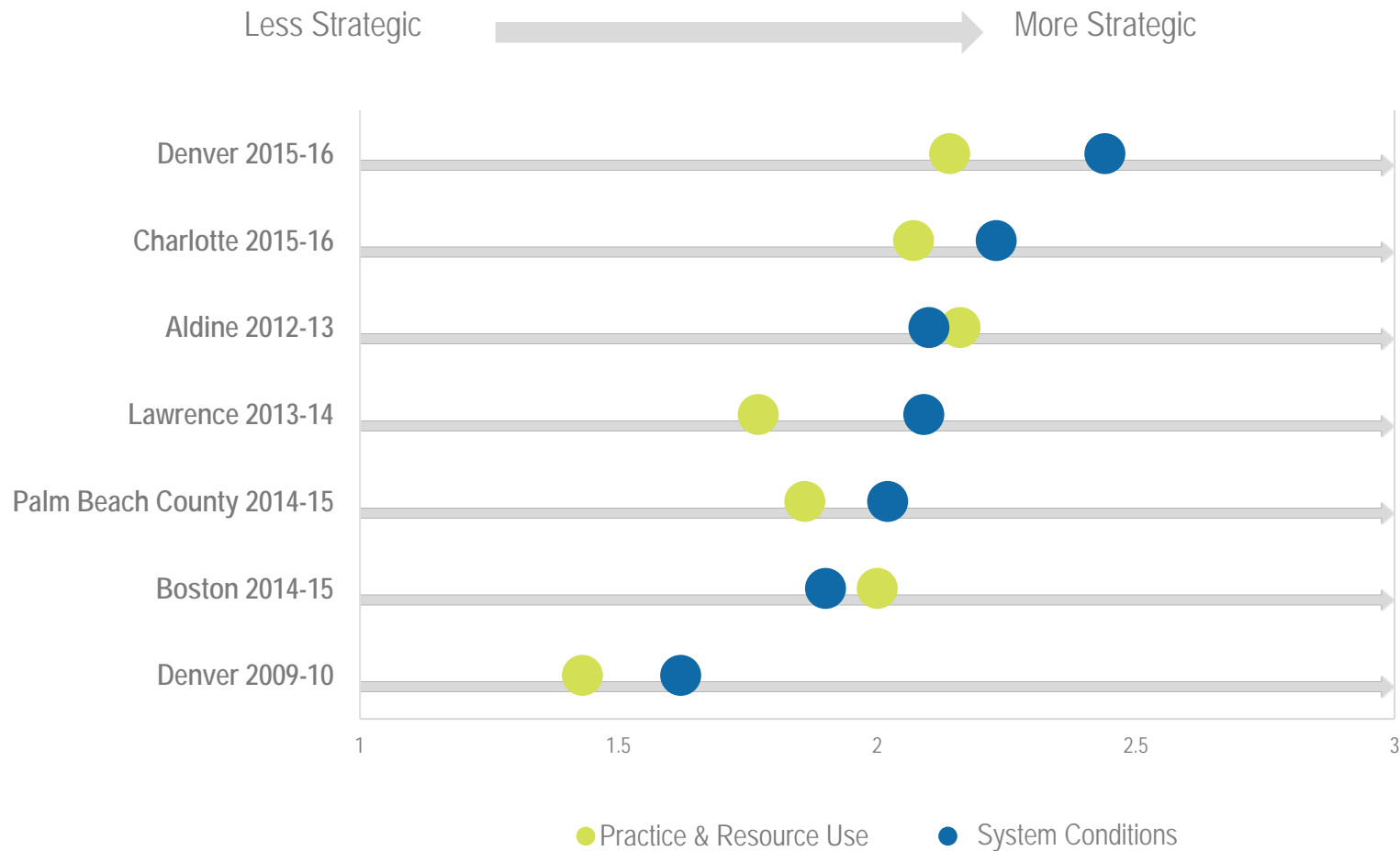
The result is a measurable improvement in system conditions and practice & resource use



These efforts have created the most strategic enabling conditions of any district we've studied



Practice & resource use in DPS lags system conditions, but is also among the leaders of districts we've studied

























Key Funding & Portfolio findings

- *DPS is unique in how you have leveraged your chartering authority to create a more level playing field across district-run and charter schools*
 - Willingness to put teeth into accountability systems by closing chronically underperforming schools
 - Strategic approach to opening new schools that avoids the unplanned and fragmented enrollment impacts on surrounding schools often seen in other districts
 - Deliberately moving beyond choice to increase equity of access
 - Implementation of single system designed to ensure equitable funding across all schools
- *This approach has resulted in better options for students*
 - Increase in high quality seats across all regions; largest in regions with fewest high quality seats
 - More similarity in student needs between district-run and charter schools than in many districts
- *But high quality options are still lagging in some high need regions*

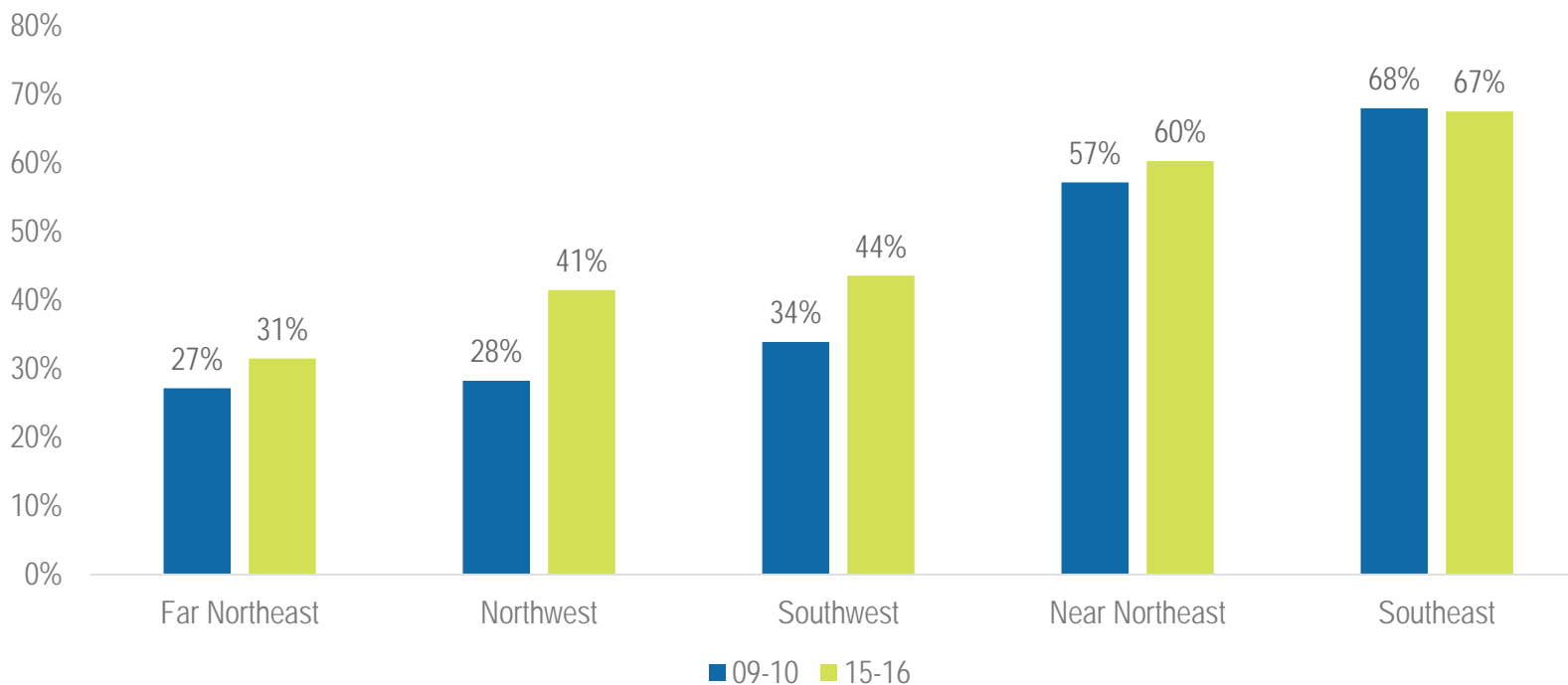
DPS has the most sophisticated portfolio management approach of all districts we've studied



		Metric	Less Strategic	More Strategic
Funding and Portfolio	Portfolio	School opening and closing decisions support long-term portfolio goals.		   
		The district calculates the cost of different school types and has a clear plan for staffing small and specialty schools to balance access		   
		The district has deliberately created a portfolio of school governance types and decision models (e.g., charter, autonomy) to reflect district capacity and to meet the needs of the students in the district.		   
		The district has deliberately created a portfolio of school grade levels and sizes to meet the needs of the students in the district.		  
		The district has deliberately created a portfolio of school program offerings (e.g., magnet, academy, specialized programming, themed schools) to meet the needs of the students in the district.		   
		The district proactively balances the number of seats by deliberately reducing the number of seats at one school when seats are added at another.		  

Across the district, the number of high-quality seats has increased most in areas with the lowest access

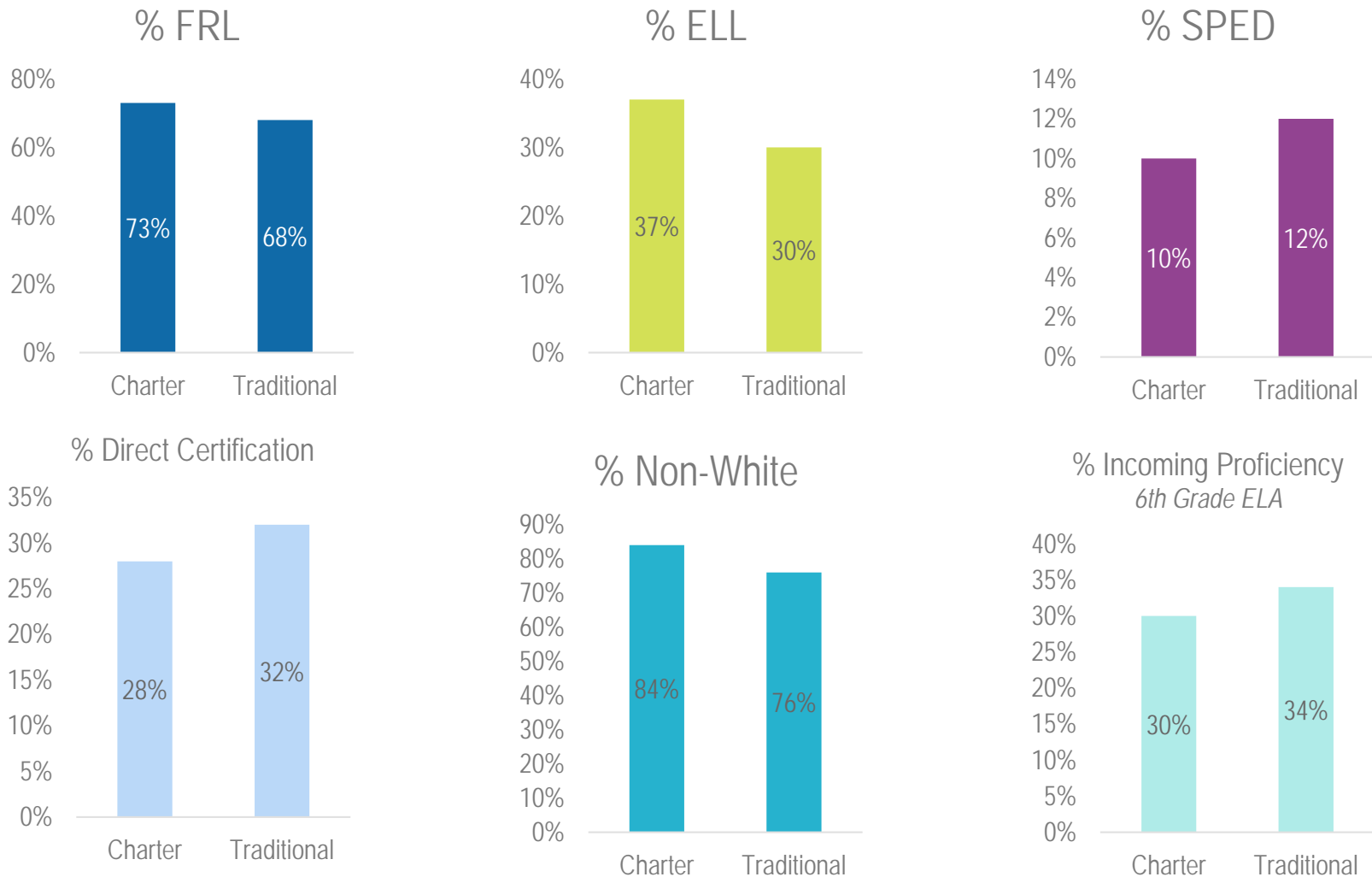
Percent of Students in High-Quality Seats by Year



15-16 % Poverty	81%	78%	89%	58%	45%
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Source: DPS school enrollment and performance data 09-10 and 15-16

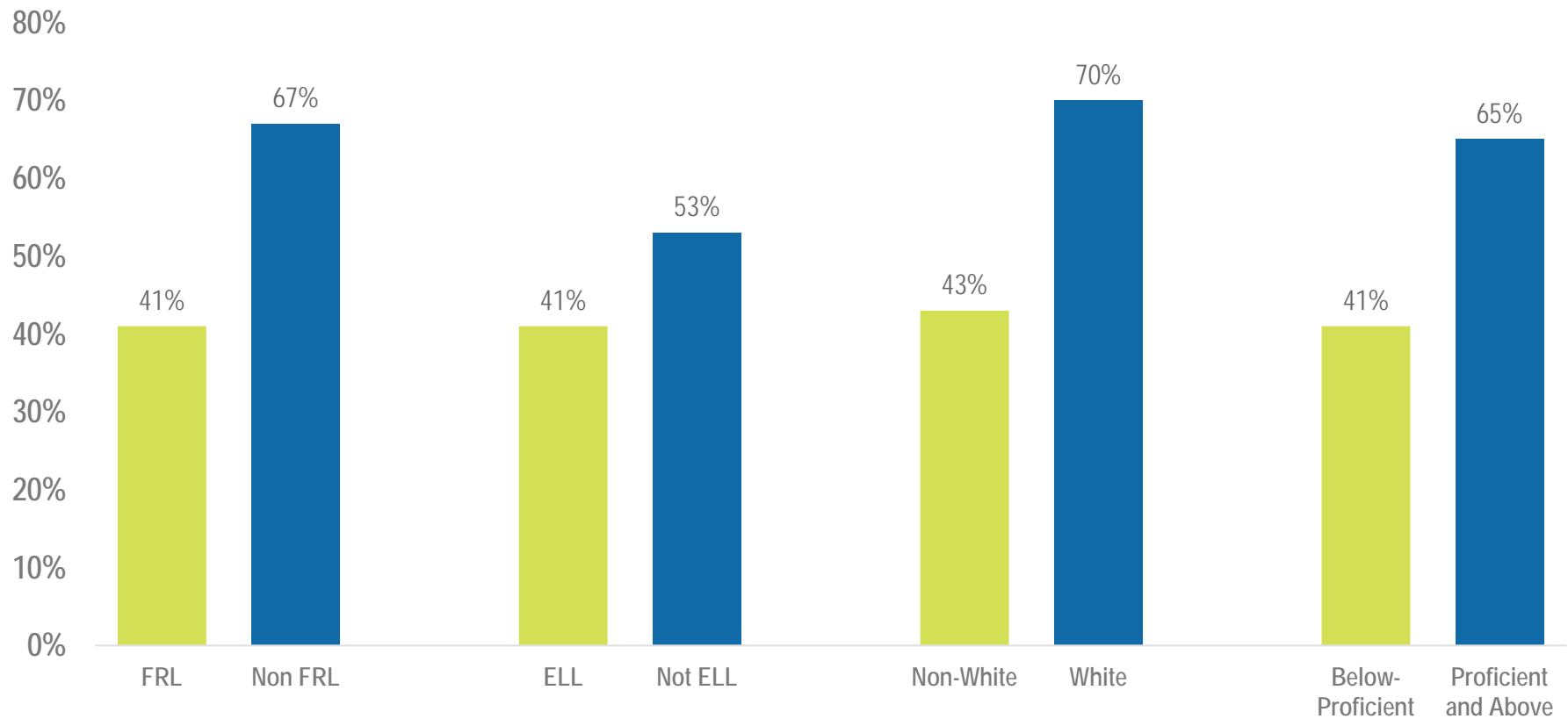
DPS has more similarity in student needs between charter and district-run schools than we see in many other districts



Source: DPS school enrollment 09-10 and 15-16

But access for high-need students still lags behind

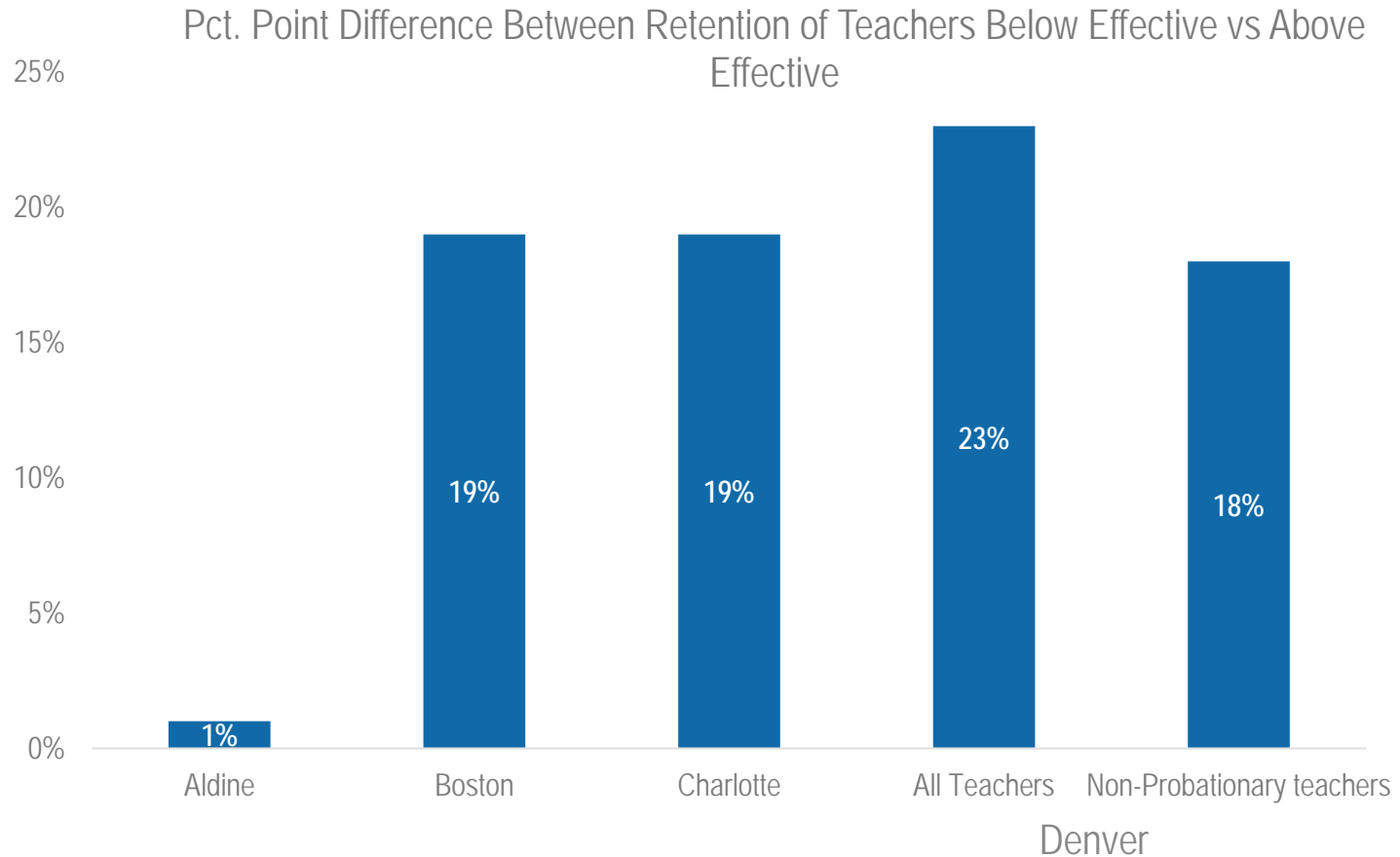
Percent of Students in High-Quality Seats, 2015-16



Key Teaching and Leadership Findings

- *DPS investment in LEAP, LEAD and growth supports for teachers and leaders seems to be paying off*
 - Increased rigor in teacher evaluation
 - High retention of strongest performers coupled with relatively higher attrition of lowest performers
- *But high need schools are lagging in teacher and leader stability and quality*
 - Turnover and % novice teachers and leaders is much higher in higher need schools
 - ProComp incentives for priority schools compete with incentives for high growth/high performing schools
 - Schools are not consistently maximizing the opportunities provided by the district, particularly around the hiring timeline, and teacher leaders

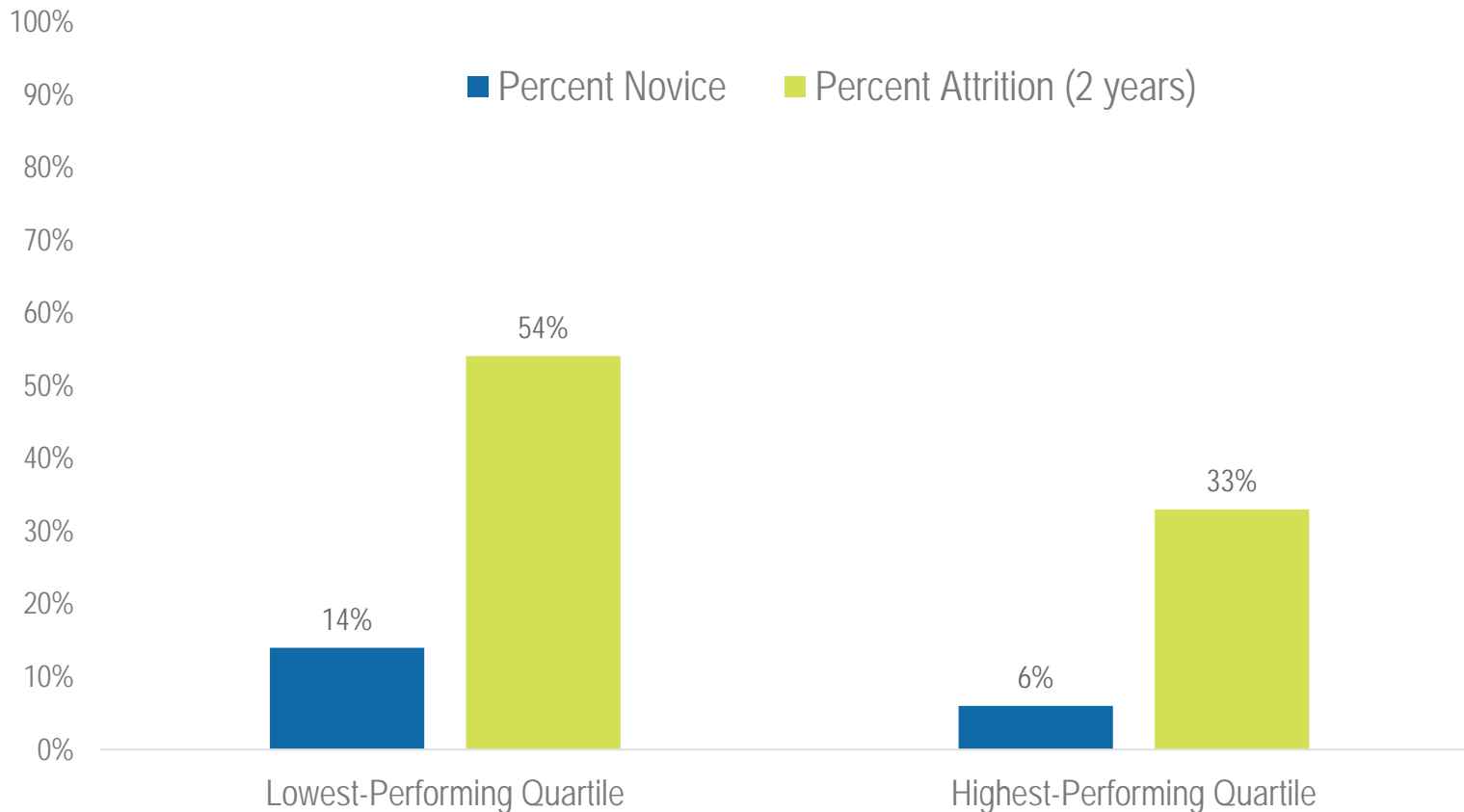
DPS' highest performing teachers are also most likely to stay, which is a leading indicator of teaching quality



	Aldine	Boston	Charlotte	All Teachers	Non-Probationary teachers
Retention of Teachers above effective	86%	89%	89%	91%	92%
Retention of Teachers below effective	85%	70%	70%	68%	74%

However, low-performing schools tend to have a higher share of novice teachers and higher attrition rates

Percent Novice SY17 and Within School Attrition (SY15-SY17)
by Performance Quartile



Key School Design/Standards/School Support Findings

- *DPS has implemented strong enabling conditions and supports for school improvement*
 - School-level flexibilities
 - Curriculum, assessments, and instructional support
 - Instructional superintendent support targeted to lowest performers
- *But these conditions do not consistently result in strategic school designs that meet the needs of all students and teachers*
 - Lack of consistent, adequate, high-quality collaborative planning time is constraining shifts in instructional practice
 - Inconsistent matching of talent and time to student need within schools is a missed opportunity to improve student outcomes

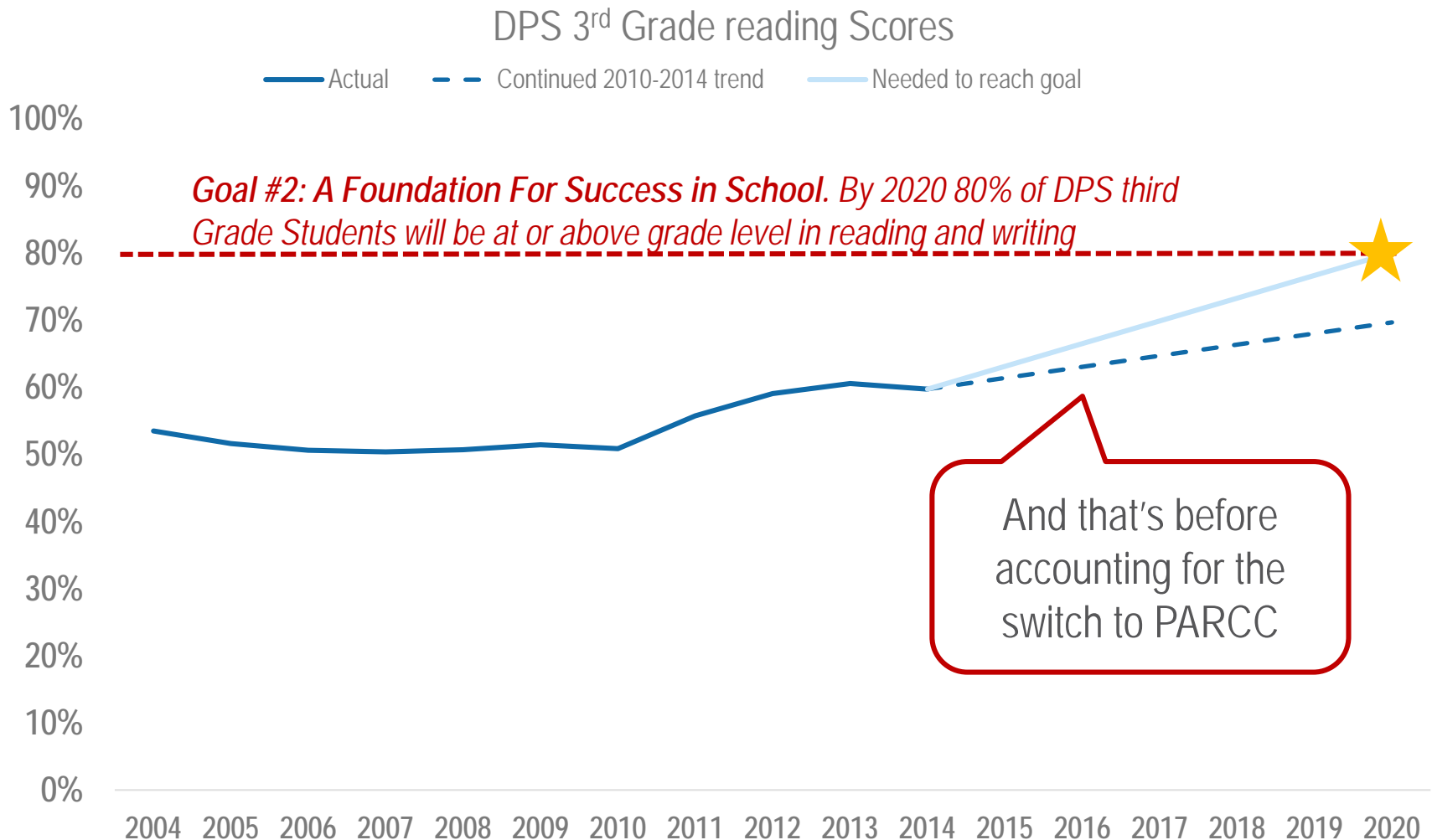
DPS schools have more flexibility than comparison districts



		Metric	Less Strategic	More Strategic	
School Design	Flexibility	Schools have flexibility over how they spend their budget, including class size and staffing ratios, and can trade staff positions, positions for \$, and \$ for positions.			
		Schools have the flexibility to hire teachers whose skills and expertise match school and student needs.			
		Schools have the flexibility to make schedule changes without a contract renegotiation or a full faculty vote.			
		Schools have the flexibility to vary special education service and instructional models as long as they meet IEP requirements.			
		Schools have the flexibility to vary teacher teams, assignments, and schedules with data support in order to provide time for collaboration and match resources to student needs.			

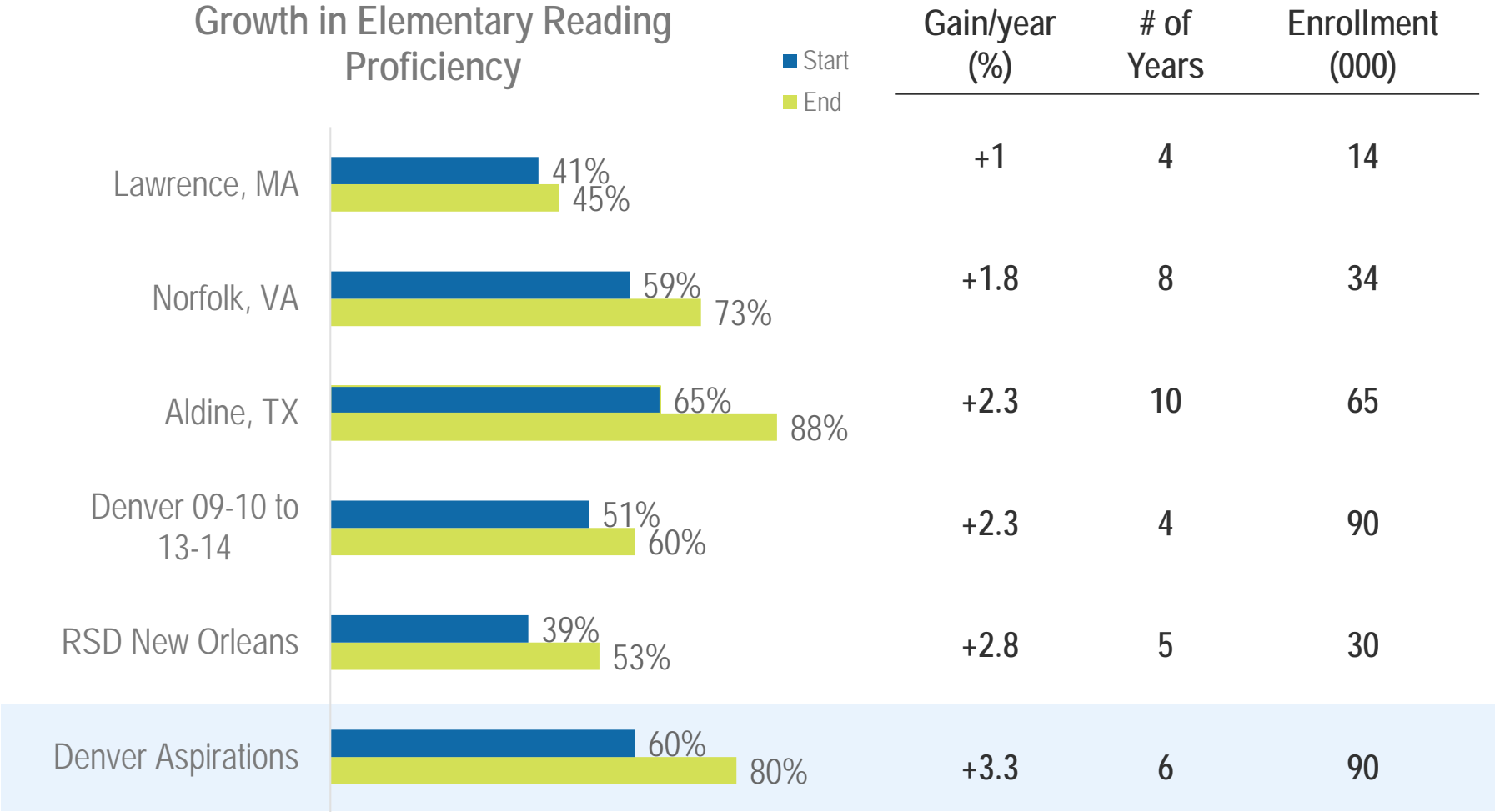
Looking forward

Denver's 2020 goal is even more ambitious than its already impressive gains



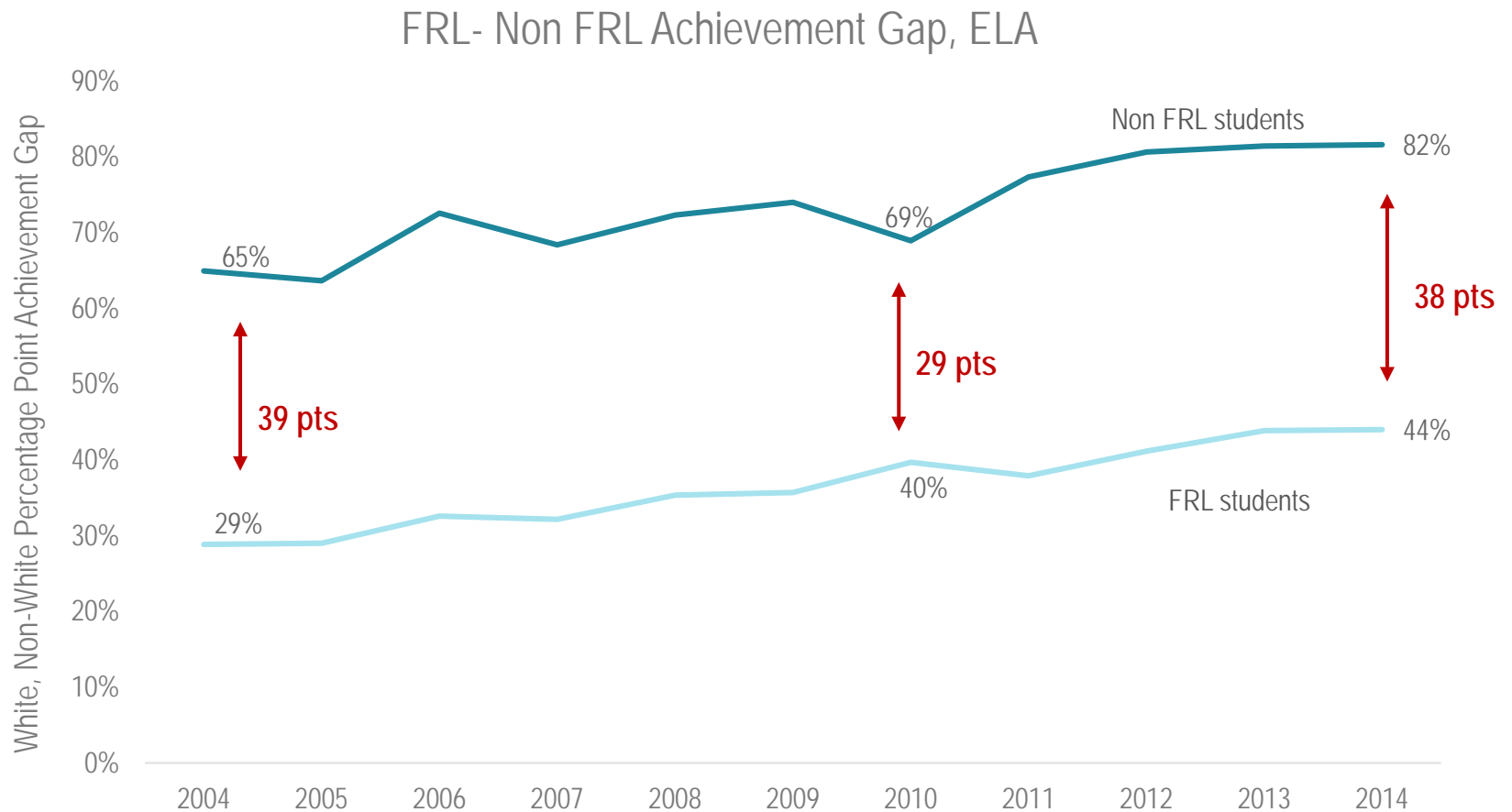
Source: CDE website-DPS student performance data, 2004-2014; ERS projection

Reaching DPS' 3rd grade reading goals will require greater gains than those seen in even the most successful districts



Source: ERS database, DPS performance data, Denver 2020 plan

And while system-wide efforts have raised performance for all, significant achievement gaps remain



Source: 2004-2014 TCAP data for all tested grades from CDE website

Note: we limited this view to TCAP data because only one year of PARCC data is publicly available disaggregated by FRL status to date.

Targeting support to high-need schools and students will be key to continuing progress and closing gaps

- ***Focus portfolio management efforts on maintaining and increasing equity as demographics shift***

Leverage portfolio management and student enrollment processes to maximize opportunities for high-needs students including strategic deployment of proven models and operators and policies that encourage integration in gentrifying neighborhoods.

- ***Leverage talent management to support high need schools***

Continue work to build structures to help lower performing/higher need schools attract, develop and retain talent, including increasing support for the high number of new teachers in these schools.

- ***Support schools in implementing high-quality strategic school designs***

Improve support for school leaders to implement strategic school designs and strong professional learning practices in order to turn district-wide systems into on the ground changes that improve student performance.

DPS' journey holds valuable lessons for any district working to transform student outcomes

- ***The importance of creating effective system supports through a sustained and integrated redesign approach***

DPS' systematic creation of the enabling structures and conditions for high-quality schools across all of the School System 20/20 areas has steadily improved performance in district-run schools and should continue to drive improvement into the future.

- ***The power of a system-wide approach to human capital management***

DPS' has focused on creating the conditions to attract, develop and retain high performing teachers and leaders across all areas of the system including evaluation, compensation and career paths and professional development.

- ***The value of deliberate portfolio management***

DPS has accelerated overall district performance growth through a deliberate approach to portfolio management coupled with its chartering authority. Notably, this has also avoided the unplanned under-enrollment and performance degradation in district schools that too often accompanies charter growth.

- ***The challenge of driving from enabling conditions through to practice***

Translating strong enabling conditions into school-level changes in practice and resource use requires active support to build capacity and change behaviors.



Thank you!



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