



School Achievement in Denver: The Impact of Charter Schools

January 2012



January 12, 2012

Dear Friends,

A+ Denver with Metro Organizations for People, Democrats for Education Reform - Colorado, Get Smart Schools, Colorado Succeeds, Stand for Children - Colorado, and the Urban League are proud to offer our latest brief, "Student Achievement in Denver: The Impact of Charter Schools."

This study was developed as a follow-up to questions raised after the recent release of "[Start with the Facts: Strengthening the Denver Public Schools Pipeline](#)." This study on the impact of charter schools is designed to spark a deeper level of inquiry about student achievement in Denver.

This report shows that Charter Management Organizations (charter organizations that manage more than one school, currently DSST, West Denver Prep and KIPP) are not only outperforming district and other individual charter schools, but are having a significant impact on the district's overall growth and achievement scores at grades six and above.

It is critical that the district and public understand exactly which efforts and programs are working and in what schools so that the district's improvement strategies and tactics are most effective. To do this, we often need to disaggregate data by type of school, and at the school level itself. Using average district scores can easily obscure what works (and what does not) for individual schools and different grades and student demographics.

While this report neither explains the specific programs and strategies CMOs are using to produce their results, nor provides recommendations for how DPS might further increase student academic outcomes, it does raise a variety of questions that should be investigated further:

- How can DPS and/or the City of Denver better analyze and share district and school performance information so that policy makers and the public can thoughtfully develop improvement efforts?
- Given the data on CMOs and their growth, what are the implications for the next school bond given that charter schools do not benefit from the same level of facility support that district schools do?
- What is the current level of investment by the district in district schools versus charters and CMOs for development of high quality schools? What would be the ideal mix for the district's portfolio of investments to maximize the number of high quality seats in Denver?
- What aspects of the district's teaching and learning improvement efforts are working? And how would we know that?
- What are the implications for district centralized programs such as teaching & learning, and operations as more high quality seats are taken up by CMOs, particularly at the secondary level?

We look forward to working with our members and Denver Public Schools as we have some deeper conversations about the district's strategies for improvement.

The Impact of Charter Schools in Denver

Charter schools in Denver are outperforming district-operated schools¹ on both student academic growth and proficiency.² More importantly, at grade levels with substantial charter school enrollment, the impact on the overall district results is meaningful.

With a small percentage of total student enrollment, the overall impact of charter schools is positive but limited. In 2011, charter schools increased the overall Denver Public Schools (DPS) median growth percentile by 1 point, and the number of proficient students by 0.9 percent. However, in individual grades with high percentages of charter enrollment, the impact is magnified. The largest charter enrollment is currently in sixth grade, where charter schools increased the overall DPS median growth percentile by 4.7 points and the number of proficient students by 1.9 percentage points.

This positive impact of charter schools in Denver is almost entirely due to the achievements of a small number of charter management organizations (CMOs)³ that have academic performance significantly better than both district-operated schools and single-school charters.

Overall Charter School Performance

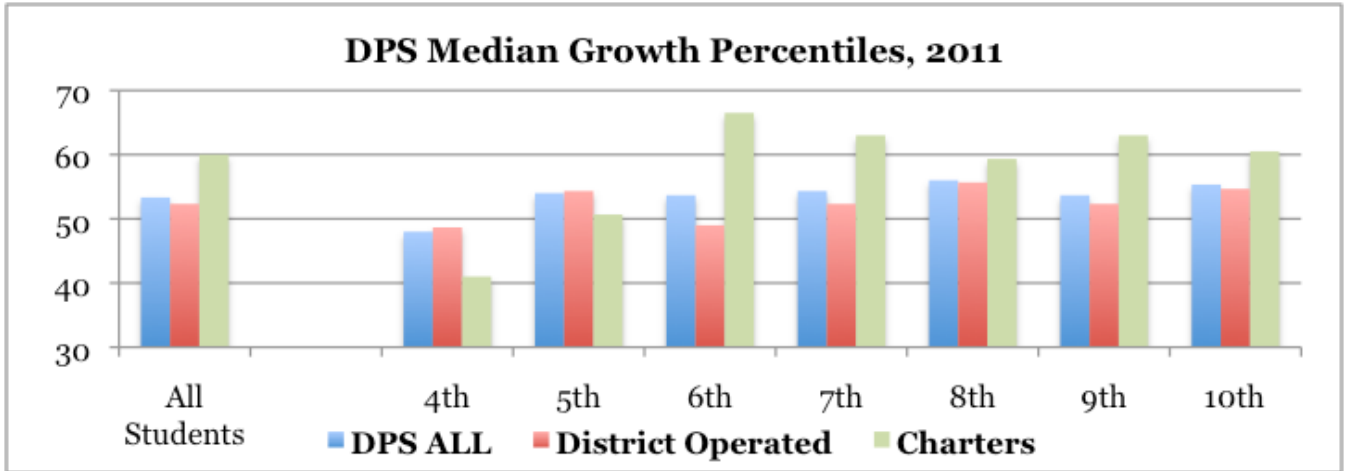
In 2011, DPS measured the academic performance of 137 schools as part of their district summary School Performance Framework (SPF): 116 district-operated schools and 21 charter schools (alternative education campuses are measured separately).

The 21 charter schools, in aggregate, outperformed district-operated schools on median growth percentiles in the cumulative total of all students, and in each secondary school grade. Charter schools lagged the academic growth of district-operated schools in grades four and five (where their enrollment, particularly in CMOs, was low).

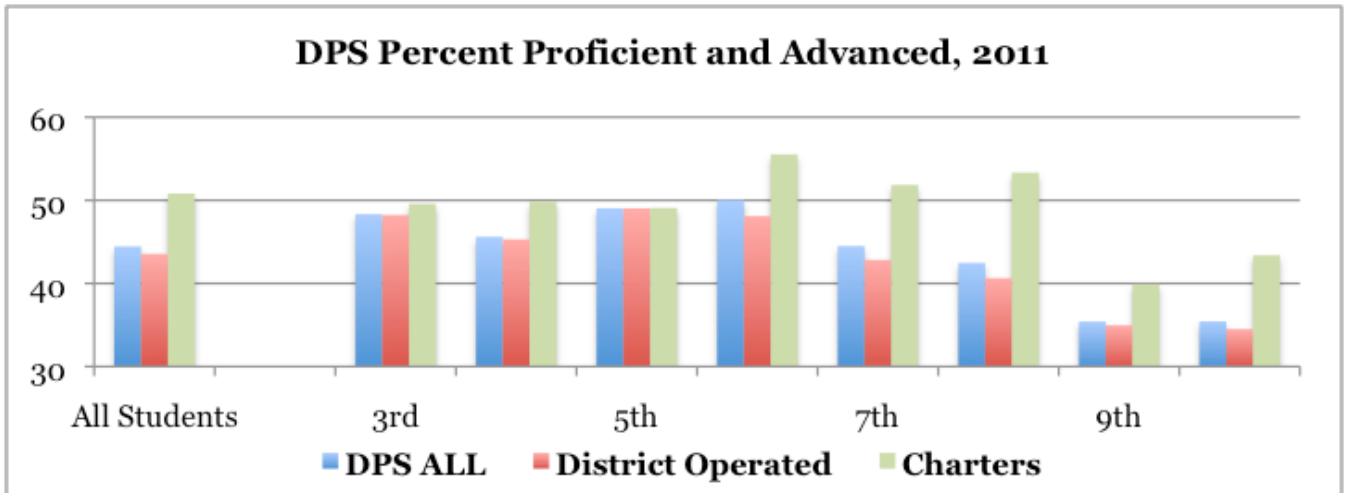
¹ District-operated schools include all public K-12 facilities excepting charters, and include traditional schools, magnet schools and programs, and innovation schools. Alternative education campuses - both district and charters - were not included in the analysis.

² A full examination of academic results would include an examination of adequate growth percentiles. However, for both simplicity and to follow the district's preferred metrics of school performance, this analysis focuses on growth and proficiency measures.

³ CMOs are charter management organizations that operate more than one school. The 2011 SPF lists schools belonging to three CMOs: DSST Public Schools, KIPP, and West Denver Preparatory Charter Schools (WDP).



The charter schools also had a higher percentage of students at or above proficiency, both on an aggregated basis and across every measured grade⁴.

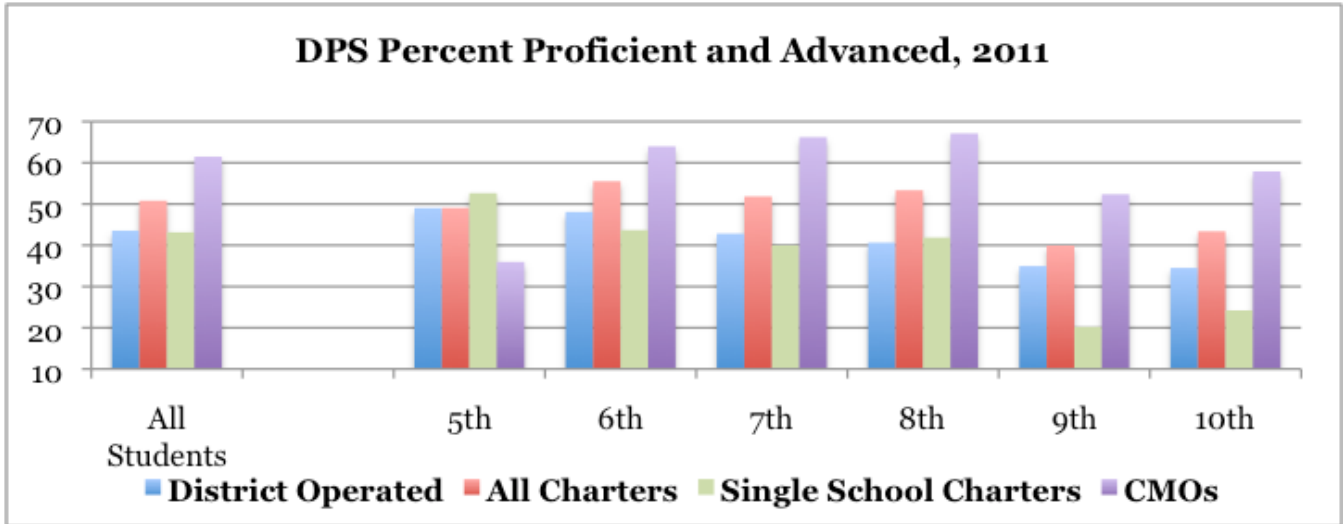


Charter Management Organizations (CMOs)

Of the 21 charter schools on the 2011 DPS School Performance Framework, 13 are single-school charters and eight are run by three charter management organizations: DSST Public Schools (DSST), the Knowledge is Power Program (KIPP), and West Denver Preparatory Charter Schools (WDP). These CMOs currently serve students in grades 5-12, with an emphasis on secondary grade levels (6-12).

With the exception of 5th grade (where they enrolled just 91 students), these CMOs are outperforming district-operated schools and single-school charters on both growth percentiles and proficiency. The enhanced performance is often by a substantial margin.

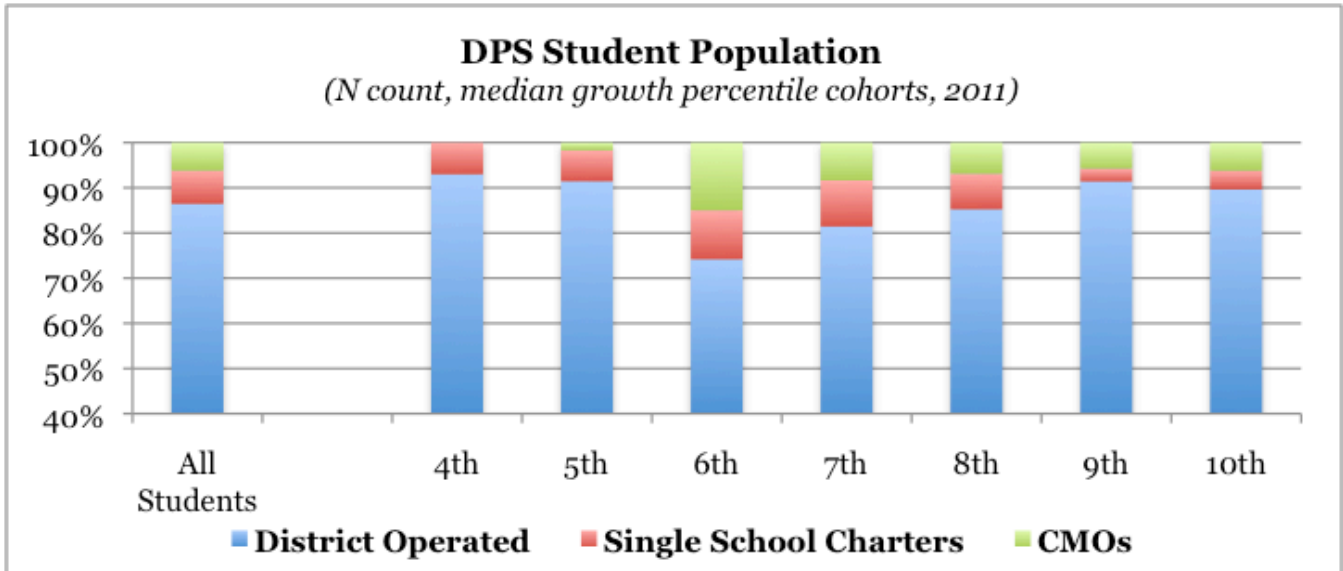
⁴ Proficiency scores are measured in grades 3-10; growth scores in grades 4-10.



Charter School Impact on DPS

In 2011, the overwhelming majority of Denver public school students attended district-operated schools.⁵ Given the relatively small number of students who attend charters, any premium or deficit in academic performance has traditionally been diluted by the far larger pool of students attending district-operated schools.

However, charter enrollment has grown so that there are now specific grades where charter schools have sufficient volume such that their performance makes a material impact in the calculation of overall DPS scores.

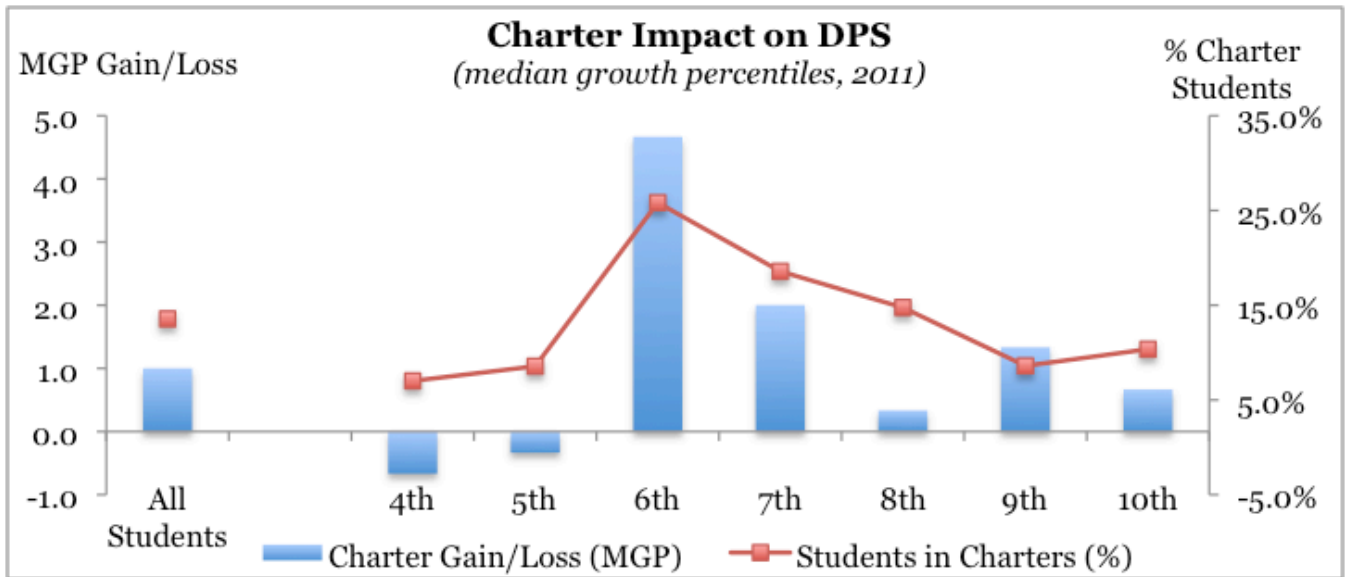


⁵ On the 2011 Denver School Performance Framework, total charter enrollment was 9.4%. In the CDE data, which consists of students in grades 3-10 who have taken the CSAP, charter students composed 13.6% of growth scores and 12.5 % of proficiency scores.

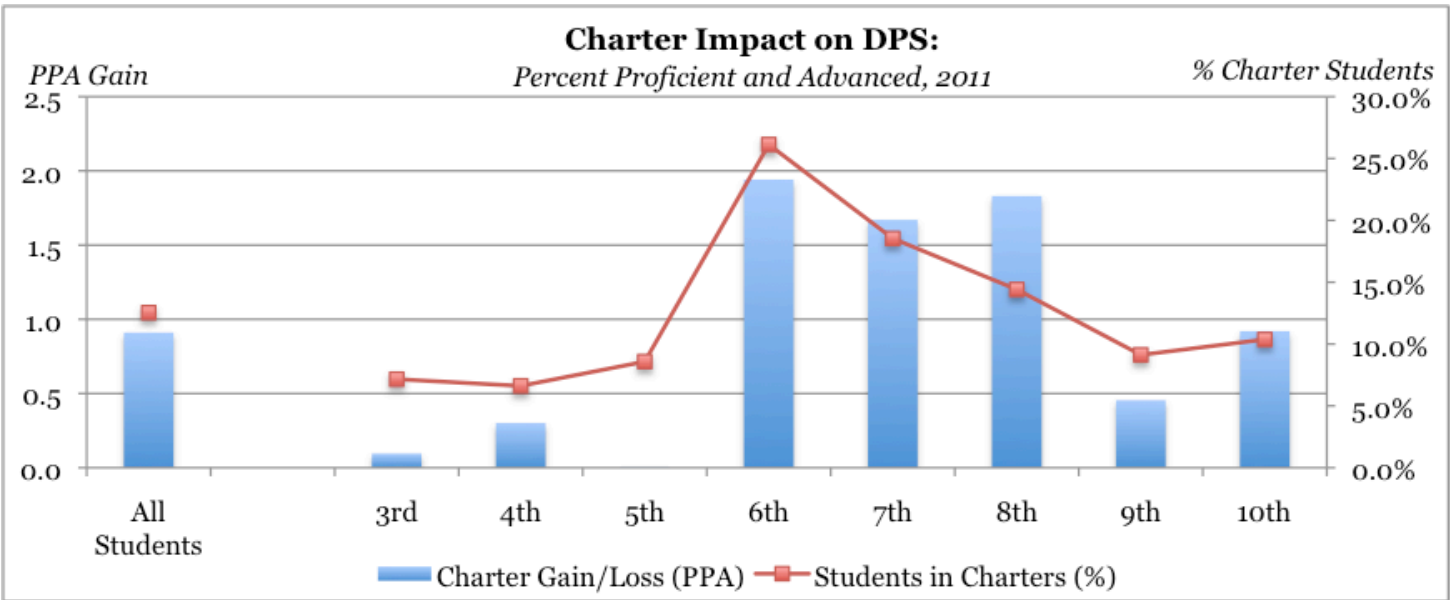
Comparing the percentage of students enrolled in charter schools with the impact on academic growth and proficiency shows a consistent overall positive trend for DPS.

On median growth percentile, charter schools comprised 13.6% of students, and raised the overall DPS score by one point, from 52.3 to 53.3. While there was a slight negative impact on growth percentiles in 4th and 5th grade (where charter enrollment is lower), there was a positive impact in all secondary school grades.

As the percentage of students in specific grades grew larger, the impact on the overall DPS score increased. For example, in 6th grade charter schools raised the overall DPS median growth percentile score by 4.7 points (from 49.0 in district operated schools alone, to 53.7 once charter schools were included).



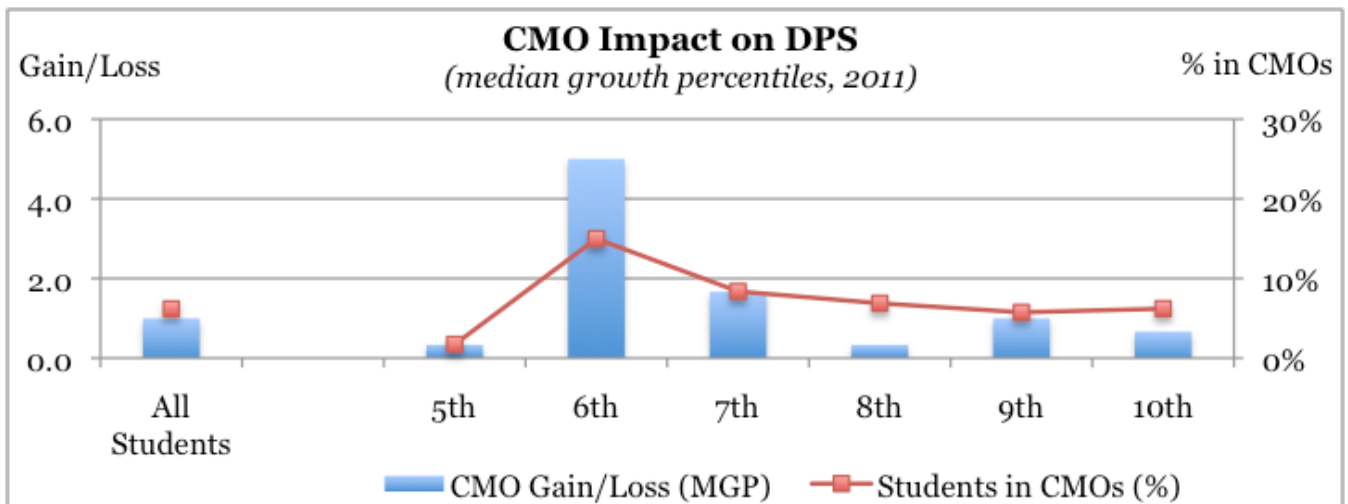
A similar pattern emerges when looking at the impact of charter schools on the percentage of DPS students at or above proficiency. Charter schools improved the overall DPS proficiency score by 0.9 percentage points (from 43.5 to 44.5), however this increase was doubled in middle school grades (where enrollment was higher), which saw an impact of from 1.7 to 1.9 percentage points.

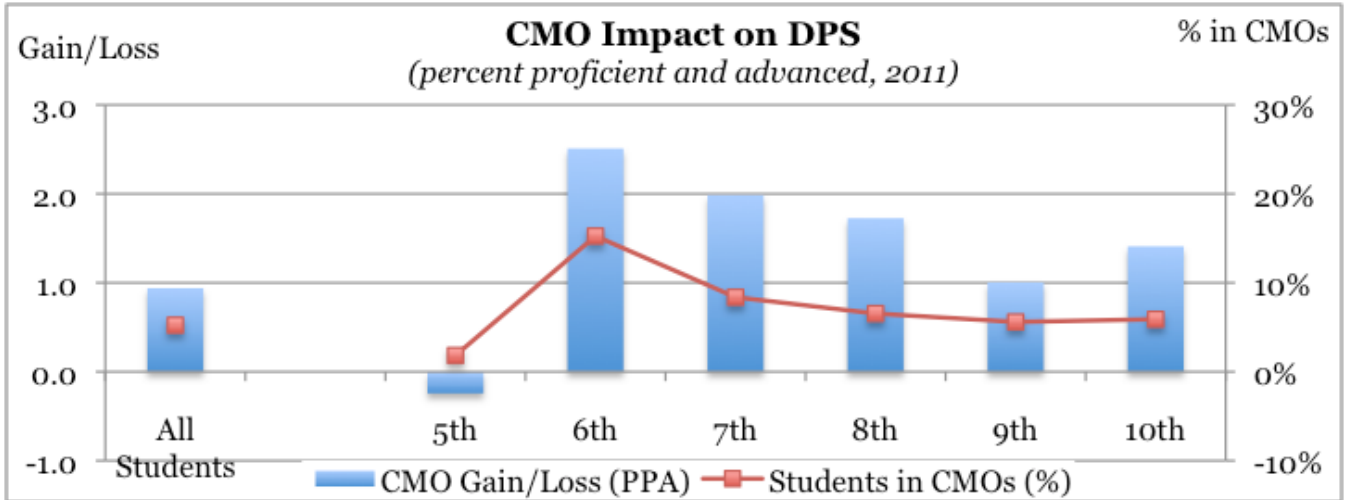


Impact of CMOs

Three Denver CMOs – DSST, KIPP, and WDP – are the primary source of the impact of charter schools on DPS. These organizations (and their combined eight schools) accounted for virtually the entire premium in overall DPS scores from the impact of charter schools. While there are several single-school charters that are performing well, most of these are either small or still growing their enrollment, and on aggregate their impact is negated by the lower performance of other single-school charters.

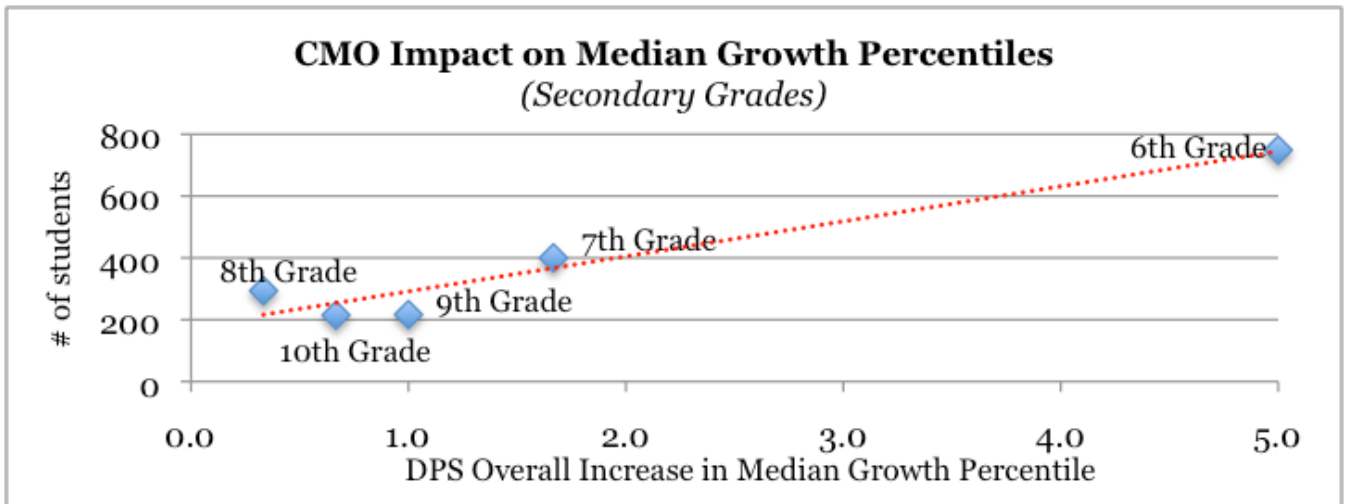
When they comprise a significant proportion of students, the impact of CMOs is significant. For example, in 2011 all three CMOs served 6th grade, with total enrollment of about 750 students (roughly 15% of the entire DPS 6th grade population). The benefit to DPS was a 5.0 increase in median growth percentile (from 48.7 to 53.7), and a 2.5 point increase in proficiency (from 47.5 to 50.0).





CMO Growth

The relationship between the number of students in CMOs and the impact on the DPS median growth percentile can be clearly seen on the graph below. In grades that served fewer than 300 students, the impact is less than a point on the overall DPS median growth percentile. However, sixth grade CMO enrollment in 2011 totaled about 750 kids, and the impact on the overall DPS median growth percentile score is a full five-point improvement.



All three CMOs have additional charters approved by the Denver Board of Education, and all are still building enrollment at their current schools. DSST has two 6-12 schools included in the 2011 results, and has three additional 6-12 schools approved.⁶ KIPP operates a middle school and a high school, and has conditional approval to add an elementary school. WDP operates four middle schools, and has approval for two additional middle schools and a high school. Not all of the current CMO schools are at full enrollment as they build out one or two grades each year to grow over time.

⁶ DSST's 6-12 campuses are counted as a single school.

Based on current enrollment trends the table below provides a rough estimate of future enrollment in secondary grades for the three CMOs. Due to both existing capacity and new schools, the percentage of students enrolled at these CMOs in grades 6-10 is projected to increase by over 170% by 2015.

If DPS enrollment were to hold constant, by 2015 roughly one in every five students in grades 6-10 will attend a CMO school. If these CMOs can maintain their high level of academic performance, the impact on DPS in the secondary school grades is likely to be considerable.

| | 2011 | 2012 | 2013 | 2014 | 2015 |
|---|---------------|--------------|------------------|--------------|--------------|
| | <i>actual</i> | | <i>estimated</i> | | |
| <i>Number of CMO Secondary schools:</i> | 8 | 9 | 12 | 13 | 13 |
| Grade 6 | 749 | 920 | 1,270 | 1,400 | 1,400 |
| Grade 7 | 400 | 740 | 870 | 1,210 | 1,340 |
| Grade 8 | 294 | 390 | 710 | 840 | 1,160 |
| Grade 9 | 217 | 340 | 580 | 700 | 820 |
| Grade 10 | 215 | 215 | 315 | 525 | 625 |
| TOTAL Students | 1,965 | 2,605 | 3,745 | 4,675 | 5,345 |

Charter Student Demographics

It was an intent of this analysis to include the impact of charter schools on low-income students. However, due to a reporting error by a vendor, CDE has incorrect data in their system for the number of free and reduced lunch students at several charter schools in Denver, including two of the three CMOs. Both CDE and DPS are aware of this error, and the hope is for the data to be corrected to allow for a determination of the impact of charter schools on closing the achievement gap in DPS.

However, although a direct comparison is not possible, in aggregate all charters and the three CMOs reported free and reduced lunch populations on the 2011 DPS School Performance Framework of 72% – equal to the overall DPS average. This lends some credence to an expectation that the impact of charter schools on low-income students is likely to be similar to the impact on all students.

Methodology

We started with the 137 schools in the 2011 DPS School Performance Framework and reconciled them to their equivalent CDE listings. A full list of the schools by CDE listing, and their respective designations as a single-school charter (SSC) or part of a charter management organization (CMO) can be found as Exhibit C following the report.

We used the CDE data lab (publicly available at <http://elm.cde.state.co.us/datalabreport.htm>) to first calculate the academic performance of all 137 schools, and then disaggregate the 116 district-operated schools and the 21 charters, and then of the 13 single-school charters and the eight CMO schools. We were thus able to both isolate the performance of individual school groups, and measure the impact on overall DPS scores.

Additionally, in Exhibits A and B following this report you will find two of the comparative data charts that were used. To download the full spreadsheet of data used in this report go to the A + Denver website here: www.aplusdenver.org/reports.

Conclusion

As stated in the opening letter, this report is in response to some questions raised after exploring the trends seen from our comprehensive study, "Start with the Facts: Strengthening the Denver Public Schools Pipeline." A+ Denver and our partners will continue to produce briefs that analyze the available data on school and student performance in DPS to examine what may or may not be working to improve outcomes. Our goal is to examine the data from a variety of angles and produce briefs that will help drive community conversations and fact-based policy making about the future of Denver Public Schools.

Exhibit A: Data Chart - DPS All vs. DPS Less Charter Schools

| Academic Year | Subject Name | Grade | DPS ALLSCHOOLS (137 SCHOOLS TOTAL) | | | | DPS LESS 21 CHARTER SCHOOLS (116 TOTAL) | | | |
|---------------|--------------|----------|------------------------------------|-----------------------------|----------------|--------------------------|---|-----------------------------|----------------|--------------------------|
| | | | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
| 2011 | Math | Grade 3 | 5,971 | 52.1 | N<20 | - | 5,570 | 52.0 | N<20 | - |
| 2011 | Reading | Grade 3 | 5,443 | 56.2 | N<20 | - | 5,041 | 55.8 | N<20 | - |
| 2011 | Writing | Grade 3 | 5,401 | 36.7 | N<20 | - | 5,000 | 36.9 | N<20 | - |
| | AVE | | 5,605 | 48.3 | | | 5,204 | 48.2 | | |
| 2011 | Math | Grade 4 | 5,848 | 54.0 | 5,624 | 50.0 | 5,461 | 53.7 | 5,256 | 51.0 |
| 2011 | Reading | Grade 4 | 5,818 | 44.2 | 5,022 | 47.0 | 5,433 | 43.9 | 4,656 | 48.0 |
| 2011 | Writing | Grade 4 | 5,818 | 38.6 | 5,025 | 47.0 | 5,433 | 38.3 | 4,660 | 47.0 |
| | AVE | | 5,828 | 45.6 | 5,224 | 48.0 | 5,442 | 45.3 | 4,857 | 48.7 |
| 2011 | Math | Grade 5 | 5,522 | 51.3 | 5,308 | 56.0 | 5,048 | 51.3 | 4,857 | 56.0 |
| 2011 | Reading | Grade 5 | 5,524 | 49.7 | 5,285 | 51.0 | 5,050 | 49.7 | 4,831 | 51.0 |
| 2011 | Writing | Grade 5 | 5,525 | 46.2 | 5,267 | 55.0 | 5,051 | 46.1 | 4,814 | 56.0 |
| | AVE | | 5,524 | 49.0 | 5,287 | 54.0 | 5,050 | 49.0 | 4,834 | 54.3 |
| 2011 | Math | Grade 6 | 5,277 | 52.0 | 5,007 | 58.0 | 3,898 | 49.5 | 3,713 | 52.0 |
| 2011 | Reading | Grade 6 | 5,278 | 50.8 | 5,006 | 48.0 | 3,899 | 49.8 | 3,713 | 44.0 |
| 2011 | Writing | Grade 6 | 5,278 | 47.3 | 4,976 | 55.0 | 3,899 | 45.0 | 3,692 | 51.0 |
| | AVE | | 5,278 | 50.0 | 4,996 | 53.7 | 3,899 | 48.1 | 3,706 | 49.0 |
| 2011 | Math | Grade 7 | 5,031 | 39.2 | 4,777 | 54.0 | 4,098 | 37.5 | 3,889 | 52.0 |
| 2011 | Reading | Grade 7 | 5,030 | 50.0 | 4,779 | 55.0 | 4,098 | 48.8 | 3,891 | 54.0 |
| 2011 | Writing | Grade 7 | 5,030 | 44.3 | 4,784 | 54.0 | 4,098 | 42.2 | 3,896 | 51.0 |
| | AVE | | 5,030 | 44.5 | 4,780 | 54.3 | 4,098 | 42.8 | 3,892 | 52.3 |
| 2011 | Math | Grade 8 | 4,510 | 37.3 | 4,288 | 54.0 | 3,860 | 35.2 | 3,659 | 54.0 |
| 2011 | Reading | Grade 8 | 4,509 | 52.4 | 4,258 | 58.0 | 3,859 | 50.7 | 3,628 | 58.0 |
| 2011 | Writing | Grade 8 | 4,511 | 37.7 | 4,255 | 56.0 | 3,861 | 36.0 | 3,625 | 55.0 |
| | AVE | | 4,510 | 42.5 | 4,267 | 56.0 | 3,860 | 40.6 | 3,637 | 55.7 |
| 2011 | Math | Grade 9 | 4,530 | 24.0 | 3,784 | 51.0 | 4,116 | 23.3 | 3,459 | 49.0 |
| 2011 | Reading | Grade 9 | 4,540 | 48.3 | 3,749 | 56.0 | 4,126 | 47.8 | 3,425 | 55.0 |
| 2011 | Writing | Grade 9 | 4,541 | 33.9 | 3,777 | 54.0 | 4,127 | 33.8 | 3,453 | 53.0 |
| | AVE | | 4,537 | 35.4 | 3,770 | 53.7 | 4,123 | 35.0 | 3,446 | 52.3 |
| 2011 | Math | Grade 10 | 3,844 | 20.9 | 3,466 | 56.0 | 3,446 | 19.9 | 3,106 | 55.0 |
| 2011 | Reading | Grade 10 | 3,844 | 52.4 | 3,463 | 56.0 | 3,445 | 51.5 | 3,102 | 55.0 |
| 2011 | Writing | Grade 10 | 3,845 | 33.0 | 3,457 | 54.0 | 3,446 | 32.1 | 3,102 | 54.0 |
| | AVE | | 3,844 | 35.4 | 3,462 | 55.3 | 3,446 | 34.5 | 3,103 | 54.7 |

| Academic Year | Subject Name | E/M/H | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
|---------------|--------------|-------|---------------------|-----------------------------|----------------|--------------------------|---------------------|-----------------------------|----------------|--------------------------|
| 2011 | Math | E | 17,597 | 52.5 | 11,176 | 53.0 | 16,204 | 52.4 | 10,233 | 54.0 |
| 2011 | Reading | E | 17,041 | 49.8 | 10,551 | 50.0 | 15,649 | 49.7 | 9,607 | 50.0 |
| 2011 | Writing | E | 17,000 | 40.6 | 10,534 | 51.0 | 15,609 | 40.5 | 9,592 | 52.0 |
| | AVE | | 17,213 | 47.6 | 10,754 | 51.3 | 15,821 | 47.5 | 9,811 | 52.0 |
| 2011 | Math | M | 14,562 | 43.0 | 13,828 | 55.0 | 11,731 | 40.6 | 11,141 | 53.0 |
| 2011 | Reading | M | 14,561 | 51.1 | 13,799 | 53.0 | 11,731 | 49.7 | 11,112 | 52.0 |
| 2011 | Writing | M | 14,563 | 43.3 | 13,773 | 54.0 | 11,733 | 41.0 | 11,095 | 52.0 |
| | AVE | | 14,562 | 45.8 | 13,800 | 54.0 | 11,732 | 43.8 | 11,116 | 52.3 |
| 2011 | Math | H | 8,374 | 22.6 | 7,250 | 53.0 | 7,562 | 21.8 | 6,565 | 52.0 |
| 2011 | Reading | H | 8,384 | 50.2 | 7,212 | 56.0 | 7,571 | 49.5 | 6,527 | 55.0 |
| 2011 | Writing | H | 8,386 | 33.5 | 7,234 | 54.0 | 7,573 | 33.0 | 6,555 | 54.0 |
| | AVE | | 8,381 | 35.4 | 7,232 | 54.3 | 7,569 | 34.8 | 6,549 | 53.7 |

| Academic Year | Subject Name | District | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
|---------------|--------------|----------|---------------------|-----------------------------|----------------|--------------------------|---------------------|-----------------------------|----------------|--------------------------|
| 2011 | Math | Denver | 40,533 | 42.9 | 32,254 | 54.0 | 35,497 | 42.0 | 27,939 | 53.0 |
| 2011 | Reading | Denver | 39,986 | 50.4 | 31,562 | 53.0 | 34,951 | 49.6 | 27,246 | 52.0 |
| 2011 | Writing | Denver | 39,949 | 40.1 | 31,541 | 53.0 | 34,915 | 39.0 | 27,242 | 52.0 |
| | AVE | | 40,156 | 44.5 | 31,786 | 53.3 | 35,121 | 43.5 | 27,476 | 52.3 |

A + D e n v e r R e p o r t

Exhibit B: Data Chart - DPS All vs. DPS Less CMO Schools

| Academic Year | Subject Name | Grade | DPS ALLSCHOOLS (137 SCHOOLS TOTAL) | | | | DPS LESS 8 CMO SCHOOLS (129 TOTAL) | | | |
|---------------|--------------|----------|------------------------------------|-----------------------------|----------------|--------------------------|------------------------------------|-----------------------------|----------------|--------------------------|
| | | | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
| 2011 | Math | Grade 3 | 5,971 | 52.1 | N<20 | - | 5,971 | 52.1 | N<20 | - |
| 2011 | Reading | Grade 3 | 5,443 | 56.2 | N<20 | - | 5,443 | 56.2 | N<20 | - |
| 2011 | Writing | Grade 3 | 5,401 | 36.7 | N<20 | - | 5,401 | 36.7 | N<20 | - |
| | AVE | | 5,605 | 48.3 | | | 5,605 | 48.3 | 0 | 0.0 |
| 2011 | Math | Grade 4 | 5,848 | 54.0 | 5,624 | 50.0 | 5,848 | 54.0 | 5,624 | 50.0 |
| 2011 | Reading | Grade 4 | 5,818 | 44.2 | 5,022 | 47.0 | 5,818 | 44.2 | 5,022 | 47.0 |
| 2011 | Writing | Grade 4 | 5,818 | 38.6 | 5,025 | 47.0 | 5,818 | 38.6 | 5,025 | 47.0 |
| | AVE | | 5,828 | 45.6 | 5,224 | 48.0 | 5,828 | 45.6 | 5,224 | 48.0 |
| 2011 | Math | Grade 5 | 5,522 | 51.3 | 5,308 | 56.0 | 5,421 | 51.4 | 5,217 | 55.0 |
| 2011 | Reading | Grade 5 | 5,524 | 49.7 | 5,285 | 51.0 | 5,423 | 50.0 | 5,194 | 51.0 |
| 2011 | Writing | Grade 5 | 5,525 | 46.2 | 5,267 | 55.0 | 5,424 | 46.5 | 5,176 | 55.0 |
| | AVE | | 5,524 | 49.0 | 5,287 | 54.0 | 5,423 | 49.3 | 5,196 | 53.7 |
| 2011 | Math | Grade 6 | 5,277 | 52.0 | 5,007 | 58.0 | 4,472 | 48.4 | 4,256 | 52.0 |
| 2011 | Reading | Grade 6 | 5,278 | 50.8 | 5,006 | 48.0 | 4,473 | 49.5 | 4,255 | 44.0 |
| 2011 | Writing | Grade 6 | 5,278 | 47.3 | 4,976 | 55.0 | 4,473 | 44.7 | 4,231 | 50.0 |
| | AVE | | 5,278 | 50.0 | 4,996 | 53.7 | 4,473 | 47.5 | 4,247 | 48.7 |
| 2011 | Math | Grade 7 | 5,031 | 39.2 | 4,777 | 54.0 | 4,609 | 36.7 | 4,377 | 52.0 |
| 2011 | Reading | Grade 7 | 5,030 | 50.0 | 4,779 | 55.0 | 4,609 | 48.5 | 4,379 | 54.0 |
| 2011 | Writing | Grade 7 | 5,030 | 44.3 | 4,784 | 54.0 | 4,609 | 42.4 | 4,384 | 52.0 |
| | AVE | | 5,030 | 44.5 | 4,780 | 54.3 | 4,609 | 42.5 | 4,380 | 52.7 |
| 2011 | Math | Grade 8 | 4,510 | 37.3 | 4,288 | 54.0 | 4,215 | 35.2 | 3,995 | 54.0 |
| 2011 | Reading | Grade 8 | 4,509 | 52.4 | 4,258 | 58.0 | 4,214 | 50.9 | 3,964 | 58.0 |
| 2011 | Writing | Grade 8 | 4,511 | 37.7 | 4,255 | 56.0 | 4,216 | 36.1 | 3,961 | 55.0 |
| | AVE | | 4,510 | 42.5 | 4,267 | 56.0 | 4,215 | 40.7 | 3,973 | 55.7 |
| 2011 | Math | Grade 9 | 4,530 | 24.0 | 3,784 | 51.0 | 4,276 | 22.8 | 3,566 | 50.0 |
| 2011 | Reading | Grade 9 | 4,540 | 48.3 | 3,749 | 56.0 | 4,286 | 47.3 | 3,533 | 55.0 |
| 2011 | Writing | Grade 9 | 4,541 | 33.9 | 3,777 | 54.0 | 4,287 | 33.1 | 3,561 | 53.0 |
| | AVE | | 4,537 | 35.4 | 3,770 | 53.7 | 4,283 | 34.4 | 3,553 | 52.7 |
| 2011 | Math | Grade 10 | 3,844 | 20.9 | 3,466 | 56.0 | 3,618 | 19.4 | 3,252 | 55.0 |
| 2011 | Reading | Grade 10 | 3,844 | 52.4 | 3,463 | 56.0 | 3,617 | 51.0 | 3,248 | 55.0 |
| 2011 | Writing | Grade 10 | 3,845 | 33.0 | 3,457 | 54.0 | 3,618 | 31.7 | 3,242 | 54.0 |
| | AVE | | 3,844 | 35.4 | 3,462 | 55.3 | 3,618 | 34.0 | 3,247 | 54.7 |

| Academic Year | Subject Name | E/M/H | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
|---------------|--------------|-------|---------------------|-----------------------------|----------------|--------------------------|---------------------|-----------------------------|----------------|--------------------------|
| 2011 | Math | E | 17,597 | 52.5 | 11,176 | 53.0 | 17,398 | 52.5 | 10,993 | 53.0 |
| 2011 | Reading | E | 17,041 | 49.8 | 10,551 | 50.0 | 16,842 | 50.0 | 10,368 | 50.0 |
| 2011 | Writing | E | 17,000 | 40.6 | 10,534 | 51.0 | 16,801 | 40.6 | 10,351 | 51.0 |
| | AVE | | 17,213 | 47.6 | 10,754 | 51.3 | 17,014 | 47.7 | 10,571 | 51.3 |
| 2011 | Math | M | 14,562 | 43.0 | 13,828 | 55.0 | 13,138 | 40.0 | 12,476 | 52.0 |
| 2011 | Reading | M | 14,561 | 51.1 | 13,799 | 53.0 | 13,138 | 49.6 | 12,446 | 52.0 |
| 2011 | Writing | M | 14,563 | 43.3 | 13,773 | 54.0 | 13,140 | 41.1 | 12,426 | 52.0 |
| | AVE | | 14,562 | 45.8 | 13,800 | 54.0 | 13,139 | 43.6 | 12,449 | 52.0 |
| 2011 | Math | H | 8,374 | 22.6 | 7,250 | 53.0 | 7,894 | 21.3 | 6,818 | 52.0 |
| 2011 | Reading | H | 8,384 | 50.2 | 7,212 | 56.0 | 7,903 | 49.0 | 6,781 | 55.0 |
| 2011 | Writing | H | 8,386 | 33.5 | 7,234 | 54.0 | 7,905 | 32.5 | 6,803 | 53.0 |
| | AVE | | 8,381 | 35.4 | 7,232 | 54.3 | 7,901 | 34.2 | 6,801 | 53.3 |

| Academic Year | Subject Name | District | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile | N Count Proficiency | Percent Proficient Advanced | Growth N Count | Median Growth Percentile |
|---------------|--------------|----------|---------------------|-----------------------------|----------------|--------------------------|---------------------|-----------------------------|----------------|--------------------------|
| 2011 | Math | Denver | 40,533 | 42.9 | 32,254 | 54.0 | 38,430 | 41.8 | 30,287 | 53.0 |
| 2011 | Reading | Denver | 39,986 | 50.4 | 31,562 | 53.0 | 37,883 | 49.6 | 29,595 | 52.0 |
| 2011 | Writing | Denver | 39,949 | 40.1 | 31,541 | 53.0 | 37,846 | 39.1 | 29,580 | 52.0 |
| | AVE | | 40,156 | 44.5 | 31,786 | 53.3 | 38,053 | 43.5 | 29,821 | 52.3 |

Exhibit C: List of Schools

| | | |
|----|-----|---|
| 1 | | Abraham Lincoln High School - 0010 |
| 2 | | Academia Ana Marie Sandoval - 6397 |
| 3 | | Amesse Elementary School - 0220 |
| 4 | | Archuleta Elementary School - 3340 |
| 5 | | Asbury Elementary School - 0388 |
| 6 | | Ashley Elementary School - 0418 |
| 7 | | Barnum Elementary School - 0520 |
| 8 | | Barrett Elementary School - 0540 |
| 9 | | Beach Court Elementary School - 0650 |
| 10 | | Bradley Elementary School - 0964 |
| 11 | | Bromwell Elementary School - 1056 |
| 12 | | Brown Elementary School - 1076 |
| 13 | | Bruce Randolph School - 6350 |
| 14 | | Bryant Webster K-8 School - 1106 |
| 15 | | Carson Elementary School - 1324 |
| 16 | | Castro Elementary School - 9496 |
| 17 | | Centennial K-8 School - 1400 |
| 18 | SSC | Cesar Chavez Academy Denver - 1345 |
| 19 | | Charles M. Schenck (Cms) Community School - 7694 |
| 20 | | Cheltenham Elementary School - 1528 |
| 21 | | Cole Arts And Science Academy - 1785 |
| 22 | | Colfax Elementary School - 1774 |
| 23 | | College View Elementary School - 1788 |
| 24 | | Columbian Elementary School - 1816 |
| 25 | | Columbine Elementary School - 1846 |
| 26 | | Cory Elementary School - 1908 |
| 27 | | Cowell Elementary School - 1928 |
| 28 | | Denison Montessori School - 2174 |
| 29 | | Denver Center For International Studies - 2183 |
| 30 | | Denver Green School - 2125 |
| 31 | CMO | Denver School Of Science And Technology - 2185 |
| 32 | CMO | Denver School Of Science And Technology: Gvr - 2145 |
| 33 | | Denver School Of The Arts - 2184 |
| 34 | | Doull Elementary School - 2258 |
| 35 | | Eagleton Elementary School - 2364 |
| 36 | | East High School - 2398 |
| 37 | | Edison Elementary School - 2506 |
| 38 | | Ellis Elementary School - 2652 |
| 39 | SSC | Escuela Tlatelolco School - 2789 |
| 40 | | Fairmont K-8 School - 2856 |
| 41 | | Fairview Elementary School - 2880 |
| 42 | | Force Elementary School - 3032 |
| 43 | | Ford Elementary School - 3038 |
| 44 | | Fred N Thomas Career Education Center - 1319 |
| 45 | | Garden Place Elementary School - 3296 |

A + D e n v e r R e p o r t

| | | |
|----|-----|---|
| 46 | | George Washington High School - 3378 |
| 47 | | Gilpin Elementary School - 3426 |
| 48 | SSC | Girls Athletic Leadership School - 3639 |
| 49 | | Godsman Elementary School - 3478 |
| 50 | | Goldrick Elementary School - 3512 |
| 51 | | Grant Middle School - 3600 |
| 52 | | Grant Ranch K-8 School - 3605 |
| 53 | | Green Valley Elementary School - 3641 |
| 54 | | Greenlee Elementary School - 3655 |
| 55 | | Greenwood Elementary School - 3647 |
| 56 | | Gust Elementary School - 3704 |
| 57 | | Hallett Fundamental Academy - 4782 |
| 58 | | Hamilton Middle School - 3746 |
| 59 | | Harrington Elementary School - 3778 |
| 60 | | Henry World School Grades 6-8 - 8054 |
| 61 | SSC | Highline Academy Charter School - 3987 |
| 62 | | Hill Campus Of Arts And Sciences - 3990 |
| 63 | | Holm Elementary School - 4074 |
| 64 | | Howell K-8 School - 4140 |
| 65 | | John F Kennedy High School - 4444 |
| 66 | | Johnson Elementary School - 4450 |
| 67 | | Kaiser Elementary School - 4498 |
| 68 | | Kepner Middle School - 4656 |
| 69 | CMO | Kipp Denver Collegiate High School - 4730 |
| 70 | CMO | Kipp Sunshine Peak Academy - 4732 |
| 71 | | Knapp Elementary School - 4762 |
| 72 | | Kunsmiller Creative Arts Academy - 4795 |
| 73 | | Lake International School - 5255 |
| 74 | | Lake Middle School - 4910 |
| 75 | | Lincoln Elementary School - 5158 |
| 76 | | Lowry Elementary School - 5342 |
| 77 | SSC | Manny Martinez Middle School - 5430 |
| 78 | | Manual High School - 5448 |
| 79 | | Marrama Elementary School - 5578 |
| 80 | | Martin Luther King Middle College - 5605 |
| 81 | | Maxwell Elementary School - 5644 |
| 82 | | Mc Glone Elementary School - 5685 |
| 83 | | Mc Kinley-Thatcher Elementary School - 5702 |
| 84 | | Mc Meen Elementary School - 5716 |
| 85 | | Merrill Middle School - 5826 |
| 86 | | Montbello High School - 5995 |
| 87 | | Montclair Elementary School - 6002 |
| 88 | | Moore K-8 School - 6088 |
| 89 | | Morey Middle School - 6098 |
| 90 | | Munroe Elementary School - 6188 |
| 91 | | Newlon Elementary School - 6254 |
| 92 | | Noel Middle School - 6784 |

A + D e n v e r R e p o r t

| | | |
|-----|-----|---|
| 93 | | North High School - 6314 |
| 94 | SSC | Northeast Academy Charter School - 6394 |
| 95 | | Oakland Elementary School - 5998 |
| 96 | SSC | Odyssey Charter Elementary School - 6479 |
| 97 | SSC | Omar D Blair Charter School - 6508 |
| 98 | | Online High School - 6509 |
| 99 | SSC | P.S.1 Charter School - 7199 |
| 100 | | Palmer Elementary School - 6676 |
| 101 | | Park Hill School - 6754 |
| 102 | SSC | Pioneer Charter School - 6957 |
| 103 | | Pitt-Waller K-8 School - 6970 |
| 104 | | Place Bridge Academy - 7045 |
| 105 | | Polaris At Ebert Elementary School - 2027 |
| 106 | | Rishel Middle School - 7370 |
| 107 | | Sabin World School - 7554 |
| 108 | | Samuels Elementary School - 7578 |
| 109 | | Schmitt Elementary School - 7698 |
| 110 | | Skinner Middle School - 7942 |
| 111 | | Slavens K-8 School - 7972 |
| 112 | | Smiley Middle School - 7992 |
| 113 | | Smith Elementary School - 8006 |
| 114 | | South High School - 8086 |
| 115 | | Southmoor Elementary School - 8138 |
| 116 | SSC | Southwest Early College Charter School - 8132 |
| 117 | | Steck Elementary School - 8222 |
| 118 | | Stedman Elementary School - 8232 |
| 119 | | Steele Elementary School - 8242 |
| 120 | | Swansea Elementary School - 8422 |
| 121 | | Teller Elementary School - 8776 |
| 122 | | Thomas Jefferson High School - 8822 |
| 123 | | Traylor Elementary School - 8888 |
| 124 | | Trevista Ece-8 At Horace Mann - 8909 |
| 125 | | University Park Elementary School - 8970 |
| 126 | | Valdez Elementary School - 0408 |
| 127 | | Valverde Elementary School - 9050 |
| 128 | SSC | Venture Prep - 2755 |
| 129 | CMO | West Denver Prep - Highland Campus - 9336 |
| 130 | CMO | West Denver Prep - Lake Campus - 9390 |
| 131 | CMO | West Denver Prep: Federal Campus - 8085 |
| 132 | CMO | West Denver Prep: Harvey Park Campus - 9389 |
| 133 | | West High School - 9408 |
| 134 | | Westerly Creek Elementary - 9425 |
| 135 | | Whittier K-8 School - 9548 |
| 136 | | William (Bill) Roberts K-8 School - 9623 |
| 137 | SSC | Wyatt-Edison Charter Elementary School - 9739 |