



**ALBUQUERQUE  
PUBLIC SCHOOLS**

**Statistical Peers for Benchmarking 2010 Supplement  
Grade 11 Including Charter Schools  
NMSBA Performance 2010**

September 2010  
River Dunavin



# ALBUQUERQUE PUBLIC SCHOOLS

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**BACKGROUND** RDA has produced annual Statistical Peers for Benchmarking reports since 2006. The report presents traditional APS schools in groups comprised of schools with most similar proportions of students in the NCLB subgroups: free/reduced lunch, non-Anglo, ELL, non-gifted special ed., and student mobility. The resulting Statistical Peer groups are intended for multiple uses, including comparing APS schools on measures of student achievement.

New Mexico public schools, traditional and charter, are required to administer periodic assessments intended to measure student academic knowledge. For a variety of reasons, results from the mandated assessments are used to compare student academic performance across NM schools. Perhaps the most common reason is an attempt to evaluate instructional effectiveness between and within schools. In the current political and economic climate, a demand to compare chartered public and traditional public schools exists and may be growing. School administrators face pressures to make these comparisons; however the comparisons must be made cautiously and used carefully. The Statistical Peer groups are created as informal comparisons and not for high stakes accountability purposes.

**CAUTION** There are two primary reasons the reader is provided this caution: school enrollment and school context. Research has demonstrated at the secondary level, when controlling for other factors, that school enrollment can have a positive effect on student achievement, especially for non-Anglo students. The second issue, school context, is more complex. There are qualitative, school context differences between charter schools and traditional public schools that cannot be quantified. However, a body of research does substantiate the impact of some of these factors on student achievement. An example is student body composition and parent engagement.

Charter schools are demographically and contextually different from APS comprehensive high schools. Charter enrollment, even though finalized by lottery, is selective. This is not the case in traditional public schools. By virtue of the fact that parents made the effort to apply to a charter school suggests a level of parental engagement for every student that cannot be guaranteed for all students at comprehensive high schools.

Charter schools tend to have a content focus (arts, math and science, at-risk) making the student body more homogenous. Traditional high schools may have a career academy focus, but are still required to accommodate a great diversity of interest within the student body. While every effort has been made to account for factors that can be quantified, the impact of the qualitative factors isn't readily measurable. So again, the reader is cautioned to use the groups for informal comparisons, not for purposes of accountability.

**METHOD** Schools' percent proficient from the 2010 New Mexico Standards Based Assessments in were used to calculate results presented in this supplement. Schools having a minimum of 25 11<sup>th</sup> graders with NMSBA scores were included in the analyses. Ordinary least squared regression (OLS) analyses were run. School proportions of free/reduced price lunch (FRL), non-Anglo, English language learners (ELL), non-gifted special education, and student mobility were used to estimate predicted performance ranges on the math and reading assessments. Results of those analyses are presented on pages 3 and 4.

The figures below are included to aid understanding of those graphs by presenting a single variable, percent FRL to predict reading performance. In figure 1, dots represent schools' percents proficient and FRL. Curved lines are the lower and upper bounds of the predicted 95% confidence interval. Note how School B had 60% FRL and 59% proficiency in reading. Using the single variable FRL to estimate reading performance, School B was predicted to have 57% proficiency. School B exceeded predicted performance. Figure 2 shows these data as a bar graph, the hairlines are the confidence intervals. Analyses in this supplement use multiple variables to predict academic performance of schools.

Figure 1

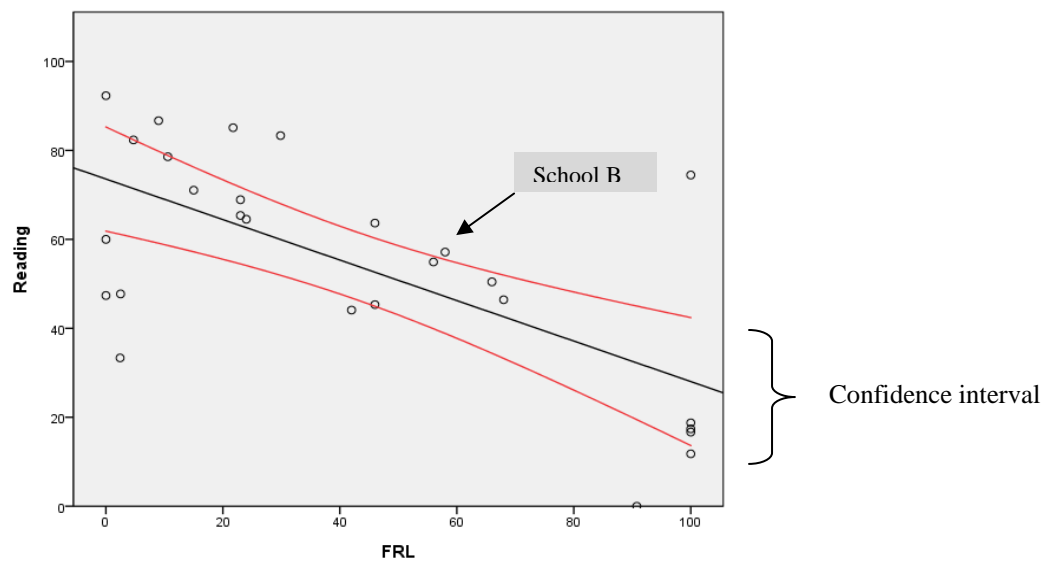
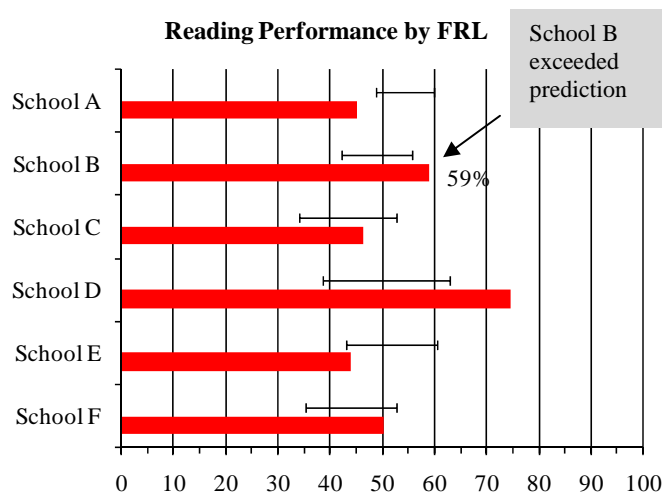
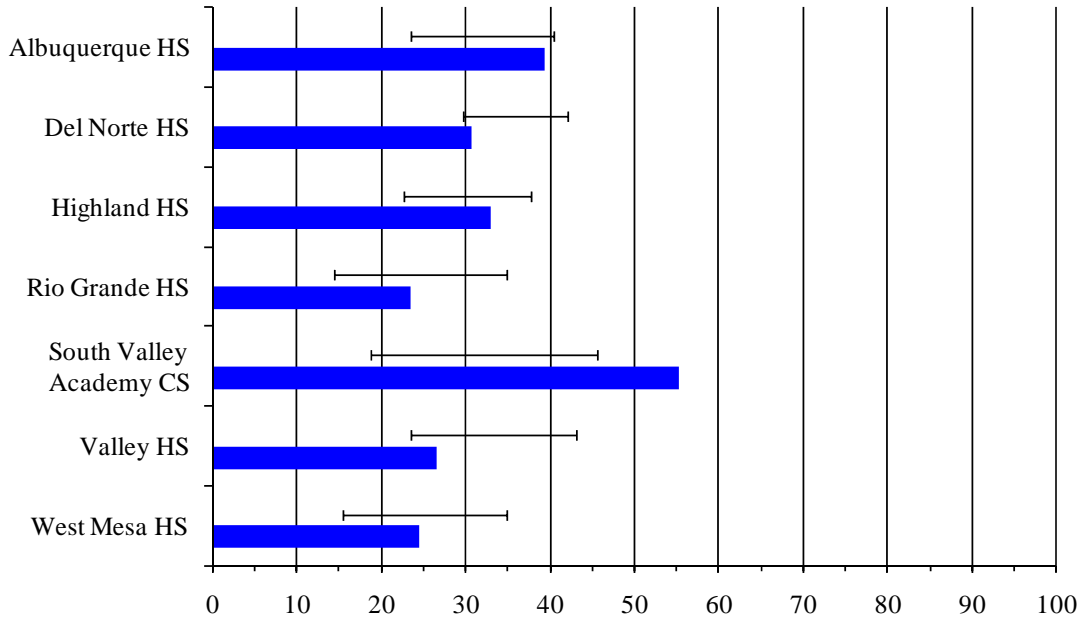


Figure 2

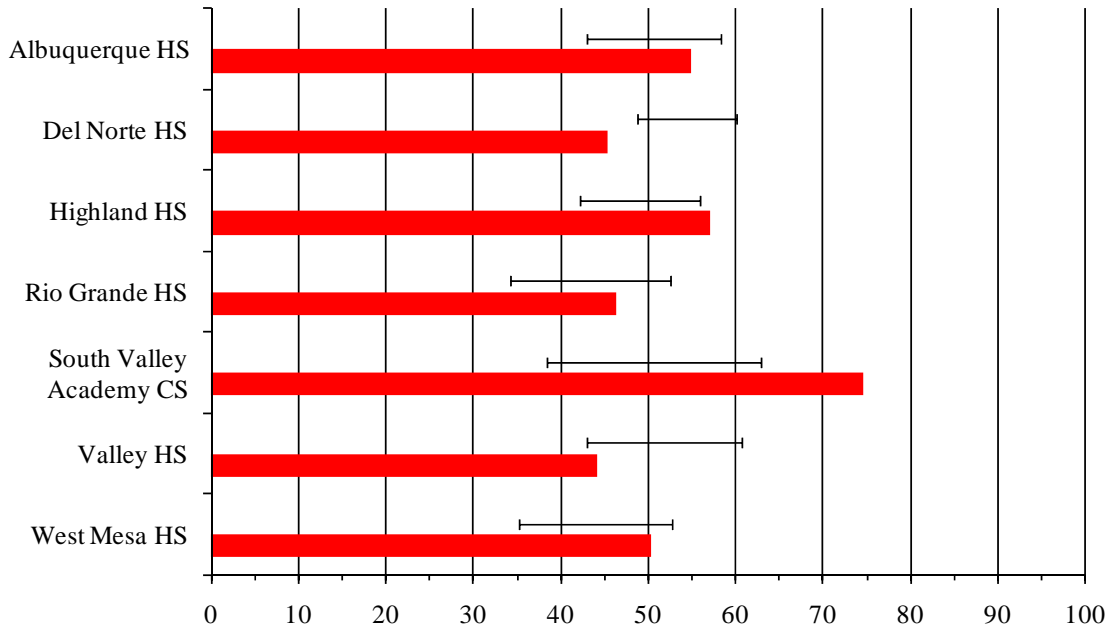


# NMSBA Performance and OLS Predicted Confidence Intervals

## Math Percent Proficient 2010

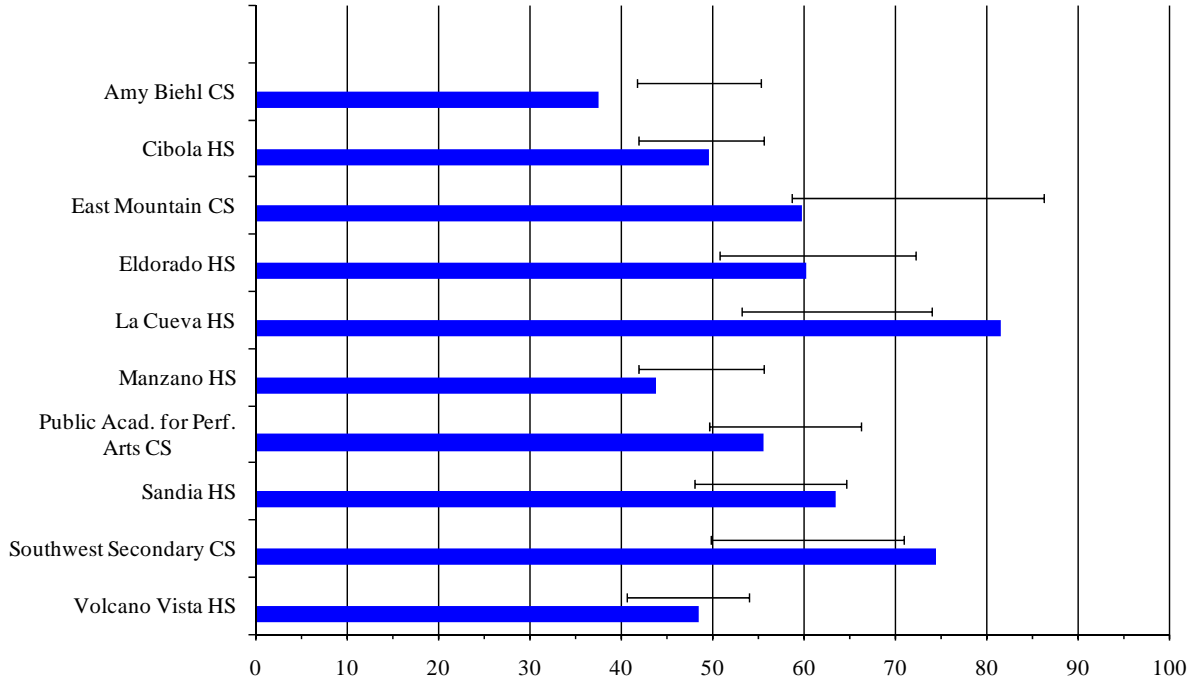


## Reading Percent Proficient 2010



# NMSBA Performance and OLS Predicted Confidence Intervals

## Math Percent Proficient 2010



## Reading Percent Proficient 2010

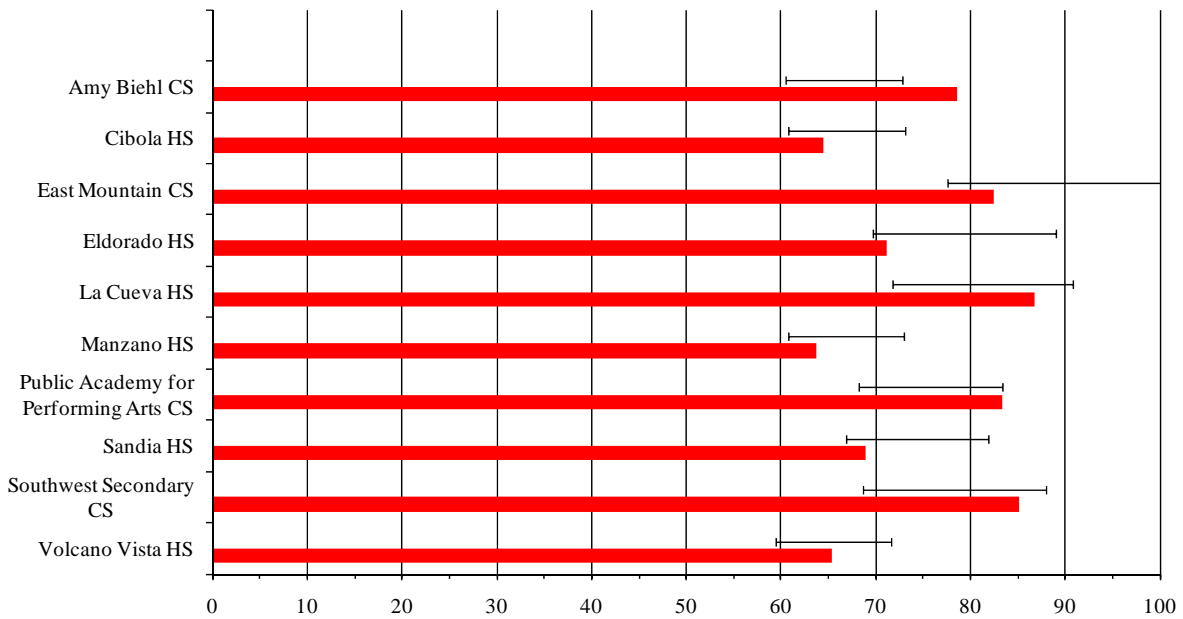


Table 1. Demographic Data by Proportion of Total Student Enrollment 2009-2010

| School                                      | Total Student Count | FRL <sup>1</sup> percent | ELL <sup>2</sup> percent | non-Anglo <sup>3</sup> percent | Special Education <sup>4</sup> percent | Mobility <sup>5</sup> percent |
|---|---------------------|--------------------------|--------------------------|--------------------------------|--|-------------------------------|
| Academy of Trades & Technology CS           | 222                 | 100                      | 6.8                      | 90.1                           | 18.5                                   | 93.0                          |
| Albuquerque HS                              | 1,702               | 56.0                     | 15.0                     | 83.0                           | 13.0                                   | 26.6                          |
| Albuquerque Institute for Math & Science CS | 222                 | 0.0                      | 0.9                      | 53.2                           | 2.3                                    | 8.2                           |
| Amy Biehl CS                                | 293                 | 10.6                     | 0.0                      | 58.4                           | 12.3                                   | 19.4                          |
| Atrisco Heritage Academy HS                 | 1,144               | 81.0                     | 16.0                     | 92.0                           | 12.0                                   | 23.4                          |
| Bataan Military Academy CS                  | 118                 | 0.0                      | 0.0                      | 56.8                           | 14.4                                   | 66.7                          |
| Career Academic & Technical Academy CS      | 124                 | 2.4                      | 0.0                      | 56.5                           | 14.5                                   | 92.4                          |
| Cibola HS                                   | 1,990               | 24.0                     | 2.0                      | 54.0                           | 13.0                                   | 23.9                          |
| Del Norte HS                                | 1,370               | 46.0                     | 10.0                     | 71.0                           | 14.0                                   | 32.0                          |
| Digital Arts & Technology Academy CS        | 319                 | 2.5                      | 0.0                      | 63.6                           | 11.3                                   | 34.3                          |
| East Mountain CS                            | 340                 | 4.7                      | 0.0                      | 20.0                           | 9.4                                    | 11.7                          |
| Eldorado HS                                 | 1,950               | 15.0                     | 2.0                      | 33.0                           | 11.0                                   | 20.4                          |
| Highland HS                                 | 1,661               | 58.0                     | 23.0                     | 81.0                           | 16.0                                   | 32.5                          |
| La Academia de Esperanza CS                 | 259                 | 100                      | 0.0                      | 79.9                           | 36.7                                   | 73.7                          |
| La Cueva HS                                 | 2,135               | 9.0                      | 1.0                      | 34.0                           | 7.0                                    | 14.8                          |
| Los Puentes CS                              | 153                 | 100                      | 7.2                      | 88.2                           | 24.8                                   | 147.6                         |
| Manzano HS                                  | 1,942               | 46.0                     | 5.0                      | 55.0                           | 17.0                                   | 22.7                          |
| Nuestros Valores CS                         | 123                 | 100                      | 27.6                     | 98.4                           | 8.9                                    | 51.2                          |
| Public Academy for Performing Arts CS       | 345                 | 29.9                     | 0.0                      | 50.7                           | 9.9                                    | 8.0                           |
| Rio Grande HS                               | 1,744               | 68.0                     | 23.0                     | 93.0                           | 15.0                                   | 31.1                          |
| Robert F. Kennedy CS                        | 276                 | 100                      | 13.0                     | 95.7                           | 10.1                                   | 88.1                          |
| Sandia HS                                   | 2,156               | 23.0                     | 2.0                      | 45.0                           | 13.0                                   | 17.7                          |
| School for Integrated Academics & Tech. CS  | 271                 | 90.8                     | 0.0                      | 84.5                           | 12.9                                   | 48.0                          |
| South Valley Academy CS                     | 240                 | 100                      | 0.0                      | 96.7                           | 5.8                                    | 10.8                          |
| Southwest Secondary CS                      | 276                 | 21.7                     | 0.0                      | 33.3                           | 2.9                                    | 22.4                          |
| The Learning Community CS                   | 179                 | 0.0                      | 12.3                     | 68.7                           | 11.2                                   | 34.9                          |
| Valley HS                                   | 1,615               | 42.0                     | 8.0                      | 86.0                           | 14.0                                   | 20.5                          |
| Volcano Vista HS                            | 1,838               | 23.0                     | 2.0                      | 60.0                           | 12.0                                   | 20.0                          |
| West Mesa HS                                | 1,963               | 66.0                     | 18.0                     | 91.0                           | 13.0                                   | 32.2                          |

<sup>1</sup> FRL: student eligibility for free or reduced priced lunch, a proxy measure for economic challenge

<sup>2</sup> ELL: English language learners

<sup>3</sup> non-Anglo: cultural/ethnic Hispanic/Latino, Native American, African American, Asian American

<sup>4</sup> Special Education: eligible students excluding Gifted Education

<sup>5</sup> Mobility: number of students who either enrolled or withdrew divided by total school enrollment

Table 2. NMSBA Performance & Predicted Proficiency Range – 2010  
(OLS Regression 95% Confidence Interval)

|                                       |                      | Math               |                             |                             | Reading            |                             |                             |
|---------------------------------------|----------------------|--------------------|-----------------------------|-----------------------------|--------------------|-----------------------------|-----------------------------|
| School                                | Grade 11 NMSBA Count | Percent Proficient | Predicted Range Lower Limit | Predicted Range Upper Limit | Percent Proficient | Predicted Range Lower Limit | Predicted Range Upper Limit |
| Albuquerque HS                        | 326                  | 39.3               | 23.5                        | 40.4                        | 54.9               | 42.9                        | 58.3                        |
| Amy Biehl CS                          | 56                   | 37.5               | 41.7                        | 55.3                        | 78.6               | 60.5                        | 72.8                        |
| Cibola HS                             | 340                  | 49.6               | 41.8                        | 55.5                        | 64.5               | 60.7                        | 73.1                        |
| Del Norte HS                          | 214                  | 30.8               | 29.6                        | 42.0                        | 45.3               | 48.8                        | 60.0                        |
| East Mountain CS                      | 68                   | 59.7               | 58.7                        | 86.2                        | 82.4               | 77.6                        | 102.5                       |
| Eldorado HS                           | 378                  | 60.3               | 50.8                        | 72.1                        | 71.1               | 69.7                        | 89.0                        |
| Highland HS                           | 232                  | 32.9               | 22.7                        | 37.8                        | 57.1               | 42.1                        | 55.8                        |
| La Cueva HS                           | 495                  | 81.5               | 53.1                        | 74.0                        | 86.7               | 71.8                        | 90.8                        |
| Manzano HS                            | 321                  | 43.8               | 41.9                        | 55.5                        | 63.7               | 60.7                        | 73.0                        |
| Public Academy for Performing Arts CS | 36                   | 55.6               | 49.6                        | 66.2                        | 83.3               | 68.2                        | 83.3                        |
| Rio Grande HS                         | 251                  | 23.4               | 14.3                        | 34.8                        | 46.4               | 34.1                        | 52.6                        |
| Sandia HS                             | 386                  | 63.5               | 48.0                        | 64.6                        | 68.9               | 66.8                        | 81.9                        |
| South Valley Academy CS               | 47                   | 55.3               | 18.7                        | 45.6                        | 74.5               | 38.4                        | 62.8                        |
| Southwest Secondary CS                | 47                   | 74.5               | 49.7                        | 70.9                        | 85.1               | 68.6                        | 87.9                        |
| Valley HS                             | 288                  | 26.6               | 23.5                        | 43.0                        | 44.1               | 43.0                        | 60.6                        |
| Volcano Vista HS                      | 361                  | 48.5               | 40.6                        | 54.0                        | 65.4               | 59.4                        | 71.6                        |
| West Mesa HS                          | 338                  | 24.5               | 15.4                        | 34.8                        | 50.4               | 35.2                        | 52.7                        |

Proficient and Advanced of Total Students group identified FAY (full academic year) by NM Public Education Department Significant predictors from percents of FRL, ELL, Special Education, Mobility were used in the OLS regression that produced the 95% confidence intervals of predicted performance.

Included schools had a minimum of 25 students with scores on the NMSBA.