### How to Access and Use CSAP Data to Assess School Performance

It cannot be easy to be a school system CEO/Superintendent or teachers union leader today, particularly if your district has enjoyed a strong measure of success in the past.

Across Colorado (and indeed the United States), public school districts are finding their traditional business model under rapidly increasing pressure from multiple directions, including rising pension costs, changing student and taxpayer demographics, the rapid accumulation of publically available data on comparable education system performance, the need to implement the Common Core's tougher standards and new curriculum, the arrival of new competitors (such as charter schools and online courses), and an explosion of new technologies and possibilities for applying them to education.

That substantial change will be needed in our approach to public education in the years ahead is undeniable; the pressures on the current business model will not stop intensifying. Whether the current leadership will be up to this challenge is uncertain, as is true of every organization in need of fundamental transformation. With few exceptions, it simply goes against most leaders' human nature to aggressively question the business model and assumptions that are at the core of their past success. At best, this usually happens only when an organization's survival is clearly threatened; unfortunately, in many cases this questioning comes too late in the game, and the company either fails or is taken over.

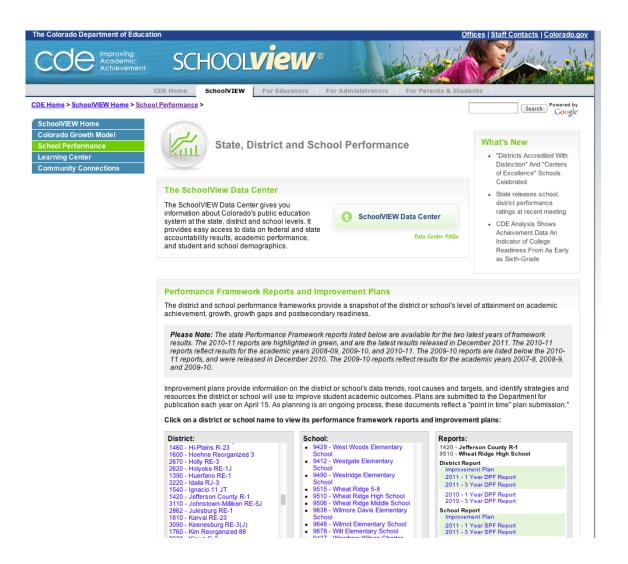
Yet there is still cause for hope. For example, I have seen administrators, union leaders, politicians and business executives work together very effectively to dramatically improve education system performance in Alberta, Canada, where we used to live. The province, which is demographically very similar to Colorado, now routinely scores at the top of the global PISA achievement test rankings. And here in the United States, there is a growing body of research that can guide our education leaders on the journey we must take (see, for example, *Achieving More for Less in U.S. Education with a Value-Based Approach*, just published by The Boston Consulting Group).

One of the most important catalysts for change in the years ahead will be the increasing availability of school performance data. Parents who work in the private sector can remember twenty years ago, when the digitization of business processes began to generate terabytes of new data that could be easily accesses and analyzed to guide substantial improvements in companies' competitive performance. Today, our public schools are beginning that journey, and experiencing some familiar problems, such as a lack of staff comfortable with data analytics and the integration of quantitative and qualitative goals to drive performance improvement. However, the schools have an advantage we lacked – they have a deep pool of parents with years of experience in these areas.

Whether school leaders choose to seek parents' help remains to be seen. However, with Senate Bill 191 having created a much more rigorous, and quantitative, system for evaluating principal and teacher performance, and with school and district "Accountability Committees" having been legislatively mandated, school staff would have to be shortsighted indeed to not seek parents' analytical support.

In order to help parents play this role, we have prepared this short guide to help them access school performance data that is available on the Colorado Department of Education (CDE) website.

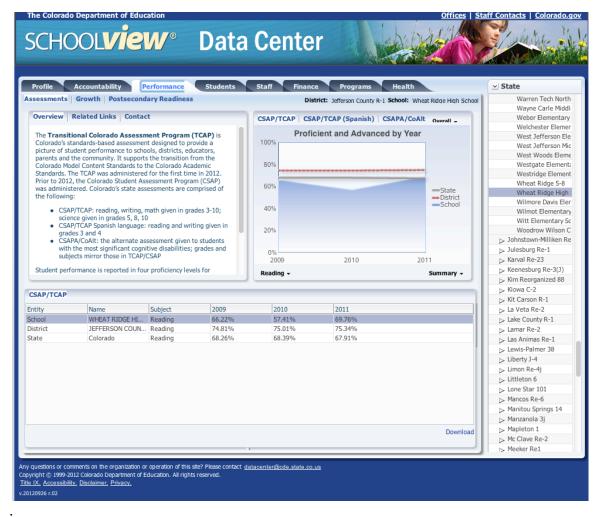
The point of access that parents are likely most familiar with is <a href="https://www.schoolview.org">www.schoolview.org</a>, the home page for which is shown in the following screenshot:



Clicking on the SchooView Data Center takes you to this page:

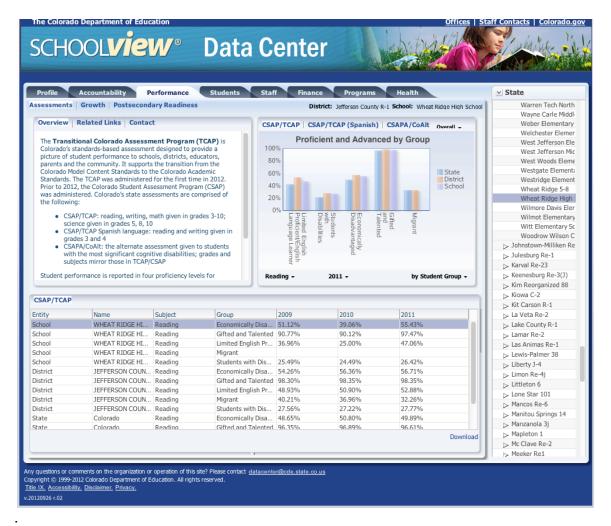


As you can see, SchoolView enables you to obtain information at various levels of aggregation (state, district, and school) and for different performance metrics, such as growth and scores on different CSAP tests. For example the following screen shot shows reading scores for Wheat Ridge High School:



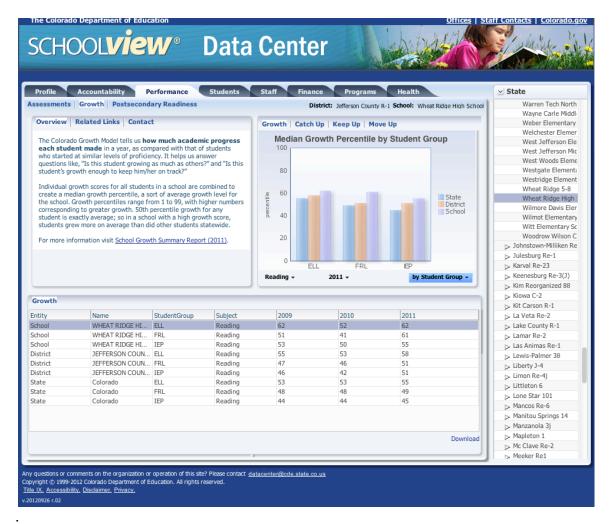
The good news is that this view allows you to see time series data, and a comparison to the overall district and state scores on the same test. The bad news is that it combines the percentage of students scoring at the Proficient and Advanced level.

To obtain scores on other tests, change the "Reading" toggle to the test you want. To obtain a more granular view of how different groups performed, you can change the "Summary" toggle, as shown below:



You can also use SchoolViews to obtain high-level Growth information about a school and subject area. While the CSAP scores tell you the percent of different groups scoring at the Proficient or Advanced level in a given year, the Growth Score tells you the extent to which the median student improved his or her CSAP score in a given subject area over the past year. Growth scores are calculated by taking the difference in CSAP scores between two years for all students, and normalizing the absolute differences on a 0 to 100 scale. The reported Growth Score is the median score on this growth scale for a given group of students. A score of 50 signifies average growth. Above 50 is better than average, and below 50 worse than average. As you have no doubt figured out by now, the combination of CSAP and Growth Scores generate a matrix, with CSAP showing current achievement level and Growth showing the rate of change.

The following screenshot shows Growth Scores for Reading at a given school:

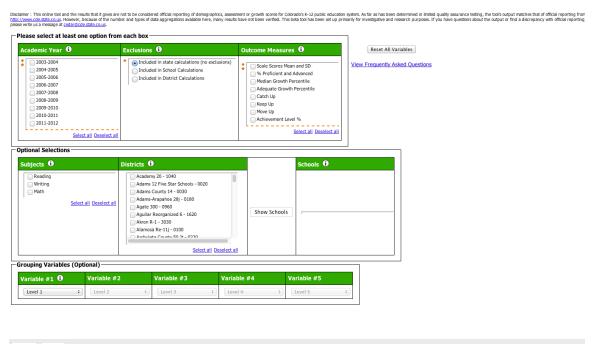


At this point, if you are like me, you are probably saying that SchoolView is adequate, but really doesn't give you the information you'd like to have for your next meeting with your child's teachers or principal. For example, rather than the relatively high-level information provided by the SchoolView website, wouldn't you really like to have more disaggregated data – for example, that showed the CSAP writing performance over the past three years for gifted women who are no eligible for free and reduced lunch? Coming from the private sector, that is probably the level of disaggregation you are used to at work, and so you're asking, "where can I get that on SchoolView?"

The short answer to your question is that it is there, but CDE doesn't make it easy for parents to get it. Let me start with a screen shot of the page you are looking for:



### SCHOOLView® Data Lab Report



The good news is that, as you can see, this is where you can really obtain the data cuts that are useful for driving performance improvement. The bad news is that the url for this page on the CDE site keeps changing (not sure why, but one can imagine...). The most reliable way I know to find it is to google or bing the following search terms: "SchooView Data Lab Cognos Viewer". That always finds its latest address.

As you can see, on this page you can obtain multiple years of CSAP scores, and various outcome measures. The Median Growth Percentile will get you the Growth number as on SchoolView; however, the "Achievement Level %" will get you breakouts as to the number and percentage of students scoring at different levels of proficiency – including a separate category for Advanced.

By checking different districts, you can compare outcomes for them. More powerfully, the "Show Schools" button lets you compare either schools withing a district or across districts (e.g., I regularly compare high school results for Boulder Valley, Cherry Creek, Douglas County, and Jeffco).

Finally, and most critically, the "Grouping Variables" pulldown menus at the bottom allow you to cut your data in different ways. The following screen shot shows how I obtained CSAP and Growth data broken down by Gifted/NonGT, Male/Female, and Eligible/NonEligible for Free and Reduced Lunch.



Cancel Finish

### SCHOOLview° Data Lab Report

Please select at least one option from each box Reset All Variables Included in state calculations (no exclusions) 2003-2004 Scale Scores Mean and SD View Frequently Asked Questions ☐ Included in District Calculations 2006-2007 Adequate Growth Percentile 2007-2008 Catch Up 2008-2009 2009-2010 2010-2011 2011-2012 Select all Deselect al Optional Selections ubjects 🙃 Reading
Writing
Math Adams Elementary School - 0030 Adolescent Day Treatment Program - 0013 Adams 12 Five Star S Adams County 14 - 0030 Alameda High School - 0108 Adams-Arapahoe 28i - 0180 Allendale Elementary School - 0148 Select all Deselect all Arvada High School - 0370
Arvada K-8 - 0109
Arvada Middle School - 0366 Agate 300 - 0960 Show Schools Alamosa Re-11j - 0100 Arvada West High School - 0378 Select all De Grouping Variables (Optional) Variable #1 🙃 Free and Reduced ‡

The output from this query to the CDE database is reported back as an HTML table, that can also be downloaded in Excel2007 format, which enables you to further analyze it. If there are less than 20 students in a category (the CDE's threshold for statistical significance and privacy protection), then no data is provided.

Attached to this memo are two examples of data extracted from the CDE database. The first shows a state level performance breakdown for the most recent set of CSAP scores that are available on the CDE site. The second shows an example of how I used Excel to further analyze school level data in advance of a meeting with a teacher.

As I said at the outset, one of the most important drivers of the private sector's transformation over the past twenty years has been a dramatic increase in the availability of performance data, and a sharp improvement in employees' ability to analyze it and translate it into specific performance improvement objectives and metrics. The good news is that our public school systems are finally making data available that can drive the substantial performance improvements we need in their effectiveness, efficiency and adaptability. However, these gains won't be realized unless more and more parents start using the data themselves, and helping administrators, principals and teachers to also use it more effectively. Here in Colorado, we have what we need to accelerate this process. It is up to us to seize the opportunity.

# CSAP Scores for Colorado

Ac Yr	Subject	E/M/H	GT?	Gender	FARM	Median Growth Percentile	Pct Unsat	Pct Partial	Pct Proficient	Pct Adv	N Count Total
2012	Math	E	Gifted Talented Status	Female	FARM Eligible	53	0.7	5.6	35.1	58.6	1,765
2012	Math	E	Gifted Talented Status	Female	Not FARM Eligible	63	0.0	0.8	13.0	86.0	6,131
2012	Math	E	Gifted Talented Status	Male	FARM Eligible	56	0.7	3.9	29.7	65.5	2,007
2012	Math	E	Gifted Talented Status	Male	Not FARM Eligible	65	0.0	0.8	10.6	88.4	6,759
2012	Math	E	Not GT Status	Female	FARM Eligible	47	14.8	34.3	39.2	11.4	42,048
2012	Math	E	Not GT Status	Female	Not FARM Eligible	52	3.7	16.7	45.1	34.3	49,643
2012	Math	E	Not GT Status	Male	FARM Eligible	46	16.1	32.0	38.2	13.3	43,411
2012	Math	E	Not GT Status	Male	Not FARM Eligible	52	4.4	15.5	42.1	37.7	51,026
2012	Math	Н	Gifted Talented Status	Female	FARM Eligible	43	7.6	29.0	45.3	17.0	1,154
2012	Math	Н	Gifted Talented Status	Female	Not FARM Eligible	51	1.0	10.3	43.8	43.3	5,172
2012	Math	Н	Gifted Talented Status	Male	FARM Eligible	49	8.9	21.8	42.9	24.8	1,439
2012	Math	Н	Gifted Talented Status	Male	Not FARM Eligible	56	1.1	7.9	36.7	53.1	5,664
2012	Math	Н	Not GT Status	Female	FARM Eligible	45	49.3	35.0	12.0	1.7	19,150
2012	Math	Н	Not GT Status	Female	Not FARM Eligible	51	22.1	39.1	29.7	7.1	31,753
2012	Math	Н	Not GT Status	Male	FARM Eligible	49	48.5	34.2	12.7	2.2	20,110
2012	Math	Н	Not GT Status	Male	Not FARM Eligible	53	23.5	35.9	29.2	9.4	32,100
2012	Math	M	Gifted Talented Status	Female	FARM Eligible	50	1.5	11.5	37.0	49.6	2,312
2012	Math	М	Gifted Talented Status	Female	Not FARM Eligible	55	0.1	2.3	16.8	80.5	7,453
2012	Math	М	Gifted Talented Status	Male	FARM Eligible	51	2.2	10.1	34.2	53.2	2,500
2012	Math	М	Gifted Talented Status	Male	Not FARM Eligible	58	0.3	2.1	14.2	83.0	8,138
2012	Math	М	Not GT Status	Female	FARM Eligible	47	27.1	40.2	25.5	6.5	33,457
2012	Math	М	Not GT Status	Female	Not FARM Eligible	52	9.2	27.3	38.4	24.4	40,772
2012	Math	М	Not GT Status	Male	FARM Eligible	45	30.9	36.0	24.7	7.4	35,130
2012	Math	М	Not GT Status	Male	Not FARM Eligible	50	11.3	25.9	36.0	26.2	41,908
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Ac Yr	Subject	E/M/H	GT?	Gender	FARM	Median Growth Percentile	Pct Unsat	Pct Partial	Pct Proficient	Pct Adv	N Count Total
2012	Reading	E	Gifted Talented Status	Female	FARM Eligible	61	0.6	4.5	76.0	18.8	1,755
2012	Reading	E	Gifted Talented Status	Female	Not FARM Eligible	66	0.0	0.4	53.2	46.2	6,134
2012	Reading	E	Gifted Talented Status	Male	FARM Eligible	58	1.2	6.8	79.9	11.8	2,002
2012	Reading	E	Gifted Talented Status	Male	Not FARM Eligible	60	0.1	1.0	67.6	31.1	6,760
2012	Reading	E	Not GT Status	Female	FARM Eligible	48	13.7	28.6	55.1	2.0	41,504
2012	Reading	E	Not GT Status	Female	Not FARM Eligible	54	3.2	11.0	75.7	9.7	49,588
2012	Reading	E	Not GT Status	Male	FARM Eligible	44	21.3	30.1	46.8	1.1	42,789
2012	Reading	E	Not GT Status	Male	Not FARM Eligible	50	6.0	15.2	72.9	5.4	50,971
2012	Reading	Н	Gifted Talented Status	Female	FARM Eligible	56	0.6	6.1	76.8	15.2	1,155
2012	Reading	Н	Gifted Talented Status	Female	Not FARM Eligible	56	0.1	1.1	58.6	39.1	5,167
2012	Reading	Н	Gifted Talented Status	Male	FARM Eligible	46	2.0	11.1	79.9	5.3	1,438
2012	Reading	Н	Gifted Talented Status	Male	Not FARM Eligible	48	0.4	2.8	77.2	18.9	5,668
2012	Reading	Н	Not GT Status	Female	FARM Eligible	51	9.7	33.8	52.6	1.5	19,138
2012	Reading	Н	Not GT Status	Female	Not FARM Eligible	54	2.4	15.1	73.6	7.2	31,755
2012	Reading	Н	Not GT Status	Male	FARM Eligible	47	16.7	39.1	40.9	0.5	20,116
2012	Reading	Н	Not GT Status	Male	Not FARM Eligible	47	6.2	23.4	66.0	2.5	32,100
2012	Reading	M	Gifted Talented Status	Female	FARM Eligible	54	0.6	5.2	72.1	21.9	2,309
2012	Reading	М	Gifted Talented Status	Female	Not FARM Eligible	57	0.1	0.4	45.7	53.6	7,449
2012	Reading	М	Gifted Talented Status	Male	FARM Eligible	50	2.0	8.9	76.4	12.2	2,495
2012	Reading	М	Gifted Talented Status	Male	Not FARM Eligible	50	0.2	1.1	63.5	34.9	8,135
2012	Reading	М	Not GT Status	Female	FARM Eligible	49	15.1	30.6	51.6	2.2	33,468
2012	Reading	М	Not GT Status	Female	Not FARM Eligible	54	3.3	12.7	72.6	11.0	40,765
2012	Reading	М	Not GT Status	Male	FARM Eligible	45	23.9	32.3	41.7	1.1	35,133
2012	Reading	М	Not GT Status	Male	Not FARM Eligible	47	7.5	18.5	67.7	5.6	41,901

# CSAP Scores for Colorado

Ac Yr	Subject	E/M/H	GT?	Gender	FARM	Median Growth Percentile	Pct Unsat	Pct Partial	Pct Proficient	Pct Adv	N Count Total
2012	Writing	E	Gifted Talented Status	Female	FARM Eligible	63	0.2	10.4	64.5	24.9	1,757
2012	Writing	E	Gifted Talented Status	Female	Not FARM Eligible	69	0.0	2.2	44.4	53.0	6,131
2012	Writing	E	Gifted Talented Status	Male	FARM Eligible	56	0.4	18.3	68.4	12.6	2,002
2012	Writing	E	Gifted Talented Status	Male	Not FARM Eligible	62	0.1	6.2	61.0	32.5	6,757
2012	Writing	E	Not GT Status	Female	FARM Eligible	50	7.1	51.0	38.4	3.0	41,486
2012	Writing	E	Not GT Status	Female	Not FARM Eligible	55	1.6	26.2	59.0	13.0	49,602
2012	Writing	E	Not GT Status	Male	FARM Eligible	43	14.3	57.8	26.0	1.3	42,799
2012	Writing	E	Not GT Status	Male	Not FARM Eligible	49	4.2	38.7	50.6	6.1	50,994
2012	Writing	Н	Gifted Talented Status	Female	FARM Eligible	55	0.3	16.5	66.2	15.7	1,155
2012	Writing	Н	Gifted Talented Status	Female	Not FARM Eligible	56		2.8	56.0		5,167
2012	Writing	Н	Gifted Talented Status	Male	FARM Eligible	53		26.7	62.4	6.9	1,438
2012	Writing	Н	Gifted Talented Status	Male	Not FARM Eligible	52	0.3	9.5	68.5	20.5	5,668
2012	Writing	Н	Not GT Status	Female	FARM Eligible	51	5.0	58.6	32.4	1.7	19,146
2012	Writing	Н	Not GT Status	Female	Not FARM Eligible	52	1.3	31.8	56.9	8.0	31,761
2012	Writing	Н	Not GT Status	Male	FARM Eligible	47	13.5	63.3	19.9	0.6	20,124
2012	Writing	Н	Not GT Status	Male	Not FARM Eligible	48	5.1	46.7	43.5	2.7	32,105
2012	Writing	M	Gifted Talented Status	Female	FARM Eligible	60	0.0	8.7	62.9	28.2	2,309
2012	Writing	M	Gifted Talented Status	Female	Not FARM Eligible	61	0.0	1.0	37.7	61.1	7,449
2012	Writing	M	Gifted Talented Status	Male	FARM Eligible	54		18.0		13.4	
2012	Writing	М	Gifted Talented Status	Male	Not FARM Eligible	53	0.1	4.5	60.0		8,135
2012	Writing	М	Not GT Status	Female	FARM Eligible	51	3.6	51.8	40.6	3.4	33,470
2012	Writing	М	Not GT Status	Female	Not FARM Eligible	54	0.7	23.9	59.1	15.8	40,772
2012	Writing	М	Not GT Status	Male	FARM Eligible	44		61.1	26.2	1.1	35,139
2012	Writing	М	Not GT Status	Male	Not FARM Eligible	46		39.3	50.8	5.9	41,905

# **CSAP Writing Scores**

Set = BV, CC, Jeffco HS with N>20

Year	2009	2010	2011
GT Female Non-F&R			
Average Advanced Pct for Comparison Set	49.2%	49.1%	40.1%
School Advanced Pct	34.6%	29.0%	22.7%
School Pct Adv Normalized Score (# STDs vs Mean)	-1.3	-1.7	-1.2
School Pct Adv Rank	22/24	22/24	20/24
School Growth Score	42	54	48
School Growth Rank	22/24	14/24	16/24
GT Male Non-F&R			
Average Advanced Pct	28.9%	27.0%	23.9%
School Advanced Pct	12.5%	25.0%	25.5%
School Pct Adv Normalized Score (# STDs vs Mean)	-1.4	-0.2	0.2
School Pct Adv Rank	24/24	12/24	11/24
School Growth Score	58	57	51
School Growth Rank	11/24	6/24	12/24
School Female Adv - School Male Adv	22.1%	4.0%	-2.8%
Comparison Set Avg F Adv - Avg M Adv	20.3%	22.1%	16.2%
School F Adv - Comparison Set Avg F Adv	-14.6%	-20.1%	-17.4%
School M Adv - Comparison Set Avg M Adv	-16.4%	-2.0%	1.6%

Comparison Set	
Boulder Valley Re 2 - 0480	Boulder High School - 0924
Boulder Valley Re 2 - 0480	Broomfield High School - 1070
Boulder Valley Re 2 - 0480	Centaurus High School - 1380
Boulder Valley Re 2 - 0480	Fairview High School - 2892
Boulder Valley Re 2 - 0480	Monarch High School - 5999
Cherry Creek 5 - 0130	Cherry Creek High School - 1570
Cherry Creek 5 - 0130	Eaglecrest High School - 2357
Cherry Creek 5 - 0130	Grandview High School - 3589
Cherry Creek 5 - 0130	Smoky Hill High School - 8020
Jefferson County R-1 - 1420	Arvada West High School - 0378
Jefferson County R-1 - 1420	Bear Creek High School - 0664
Jefferson County R-1 - 1420	Chatfield High School - 1522
Jefferson County R-1 - 1420	Columbine High School - 1864
Jefferson County R-1 - 1420	Conifer Senior High School - 1886
Jefferson County R-1 - 1420	D'Evelyn Junior/Senior High School - 2120
Jefferson County R-1 - 1420	Dakota Ridge Senior High School - 2093
Jefferson County R-1 - 1420	Evergreen High School - 2836
Jefferson County R-1 - 1420	Golden High School - 3502
Jefferson County R-1 - 1420	Green Mountain High School - 3628
Jefferson County R-1 - 1420	Lakewood High School - 4942
Jefferson County R-1 - 1420	Pomona High School - 7114
Jefferson County R-1 - 1420	Ralston Valley Senior High School - 7239
Jefferson County R-1 - 1420	Standley Lake High School - 8209
Jefferson County R-1 - 1420	Wheat Ridge High School - 9510

2011 - 2009

2011 - 2009 -5.0% 13.0%

> -24.9% -4.1%

-9.1% -11.9%