# Memorandum on Education Spending Growth Study

Date: November 6, 2018 From: Researcher Shannon Fonseca

- To: Think New Mexico
- Re: Research Methods and Findings

### Purpose

The purpose of this memo is to describe the data, methodology, and results used in determining classroom and administrative spending growth in New Mexico from 2006-2007 to 2016-2017.

#### Data

I used education spending data (Actual Expenditures by Object Code) from PED and the LFC dating from school year 2006-2007 to school year 2016-2017. CPI numbers come from the U.S. Bureau of Labor Statistics. I looked specifically at CPI-U (Consumer Price Index for All Urban Consumers) at both the National (all states) and Regional (West) levels.

### Methodology

In each year, I looked at eight different categories of spending within the "Operational Fund (11000)" of the "General Fund" (10000). Within each year of education spending data, these categories of funding have a number and a name, or in the language of the Uniform Chart of Accounts, a function and a sub-function. Function 2000 (support services), for example, has eight sub-functions (support services for students, general administration, school administration, etc.). These sub-functions are also assigned a number. I look at two main functions, 1000 (Instruction) and 2000 (Support Services). 1000 has no sub-functions, but 2000 has eight sub-functions, which I will refer to only by the name of their sub-function. For example, function 2000 (Support Services) sub-function 2100 (Support Services-Students) will be referred to as "2100."

The eight functions I looked at are as follows: 1000 (Instruction), 2100 (Support Services-Students), 2200 (Support Services-Instruction), 2300 (Support Services-General Administration), 2400 (Support Services-School Administration), 2500 (Central Services), 2600 (Operation & Maintenance of Plant), and 2900 (Other Support Services).

Based on Think New Mexico's definition, four of these categories were counted as classroom spending: 1000, 2100, 2200, and 2400. Four of the categories were counted as administrative spending: 2300, 2500, 2600, and 2900. Note that 2400 (Support Services-School Administration) was included in the category of classroom spending, since principals and other in-school administrators work closely with students on a day-to-day basis.

Once I had the data for each year and Function/Sub-Function, I compiled it according to each school district (or charter), such that a sample data line looks like the following:

Alamogordo										
Year	1000	2100	2200	2300	2400	2500	2600	2900	Total Class	Total Adm
2006-										
2007	23772759	4025497	725467.5	843596.3	2135740	1972745	5799356	0	30659464	8615697

"Total Classroom" and "Total Administration" are each a sum of the four categories of spending described above.

Once I had the data for total spending, I looked at the percentage of spending growth, represented by the formula:  $Percentage Growth = \frac{Current Year - Prior Year}{Prior Year} * 100$ Given that I had 11 years of total spending data, the formula looking at growth yielded 10 distinct growth rates for both classroom and administrative spending, which I then averaged so that for each district, I had an average growth rate for administrative spending and an average growth rate for classroom spending. I then compared these rates to the average National CPI percentage change and the average West CPI percentage change.

Note that in making comparisons with CPI, I used the CPI for the end year I was looking at. The growth percentage change for school years 2006-2007 to 2007-2008, for example, was compared with the CPI for percentage change from 2007 to 2008.

I then counted all the districts where average classroom spending growth was greater than average CPI (National and West), and where average administrative spending growth was greater than average CPI (National and West). I also counted the districts in which the difference between average classroom growth and average administrative growth was less than zero. Since the measure used Classroom minus Administrative, in any district where the number was negative, this meant that administrative spending grew faster than classroom spending, on average, over the time period.

Finally, I did an analysis on a year-by-year basis to avoid possible skewing of the data created by looking at averages. For each year, I compared the classroom and administrative growth rates to CPI (National and West) and to each other. I counted the years in which classroom growth was greater than CPI for that year, in which administrative growth was greater than CPI for that year, in which administrative growth. Due to the wide variation in available years of data for charters, I only did this analysis for districts.

## Results

## Districts

The district with the highest average classroom spending growth from 2006-2007 to 2016-2017 was Hobbs, at 4.84%. The lowest was Pecos, at -4.06%. The district with the highest average administrative spending growth was Dulce, at 5.88%. The lowest was West Las Vegas, at -2.50%.

When looking at the difference between classroom and administrative spending growth, Santa Fe had the largest difference, with 3.49% growth in classroom spending compared with -0.79% growth in administrative spending. Jemez Mountain had the largest difference the other way: -2.89% growth in classroom spending compared with 2.07% growth in administrative spending.

24 districts had higher average classroom spending growth than the National CPI percentage average over the same period of time (1.69%). 45 Districts had higher average administrative spending growth than 1.69%. West CPI percentage average for the same period of time was

1.85%, meaning that 21 districts had higher average classroom spending growth, and 42 higher administrative growth. 61 districts had greater average administrative spending growth than average classroom spending growth over the time period.

In 27 districts, administrative spending growth was greater than average CPI percentage change in at least 6 out of 10 years. In 30 districts, classroom spending growth was greater than average CPI percentage change in at least 6 out of 10 years (National CPI). Administrative spending growth was greater than classroom spending growth in at least 6 out of 10 years in 33 districts.

### Charters

Charters that ended before 2016-2017, or charters that had less than four years of total spending data available were eliminated. Furthermore, the difference in number of available years meant that I could not use a single average CPI for comparison. Instead, I averaged the CPI for each charter and then compared their average classroom and administrative growth to that CPI.

Some charters had very high rates of spending growth in their first year, so I did one analysis where the first year is excluded from average calculations.

### First Year Included

The charter with the highest average classroom spending growth was William W. & Josephine Dorn Charter Community School, at 83.15%. The lowest was El Camino Real Academy, at -5.02%. The charter with the highest average administrative spending growth was William W. & Josephine Dorn Charter Community School at 344.82%. The lowest was El Camino Real Academy, at -6.61%.

When looking at the difference between classroom and administrative spending growth, New Mexico Connections Academy had the largest difference, with 60.37% growth in classroom spending compared with 6.26% growth in administrative spending. William W. had the largest difference the other way: 75.77% growth in classroom spending compared with 344.82% growth in administrative spending.

78 charters had higher average classroom spending growth than the National CPI percentage change average over the same period of time. 77 Districts had higher average administrative spending growth than National CPI percentage change average. The numbers were the same for West CPI comparisons. 47 charters had greater average administrative spending growth than average classroom spending growth over the time period.

#### First Year Not Included

Without the first year included in average calculations, New Mexico Connections Academy had the highest classroom growth at 43.98%, and El Camino Real Academy had the lowest at -6.07%. The highest administrative growth was Health Leadership High School at 43.98% and the lowest Estancia Valley Classical Academy at -6.96%.

In terms of differences, New Mexico Connections Academy had the largest, with 43.98% in classroom and 14.77% in administration. Health Leadership High School, meanwhile, had 12.51% average classroom spending growth compared with 50.16% administrative spending.

69 charters had classroom spending greater than the National CPI percentage change average, and 72 had higher administrative spending. Compared to West CPI, 66 had higher classroom spending and 71 had higher administrative spending. 50 charters had higher average administrative spending growth than average classroom spending growth.

### Analysis

The districts with the highest and lowest growth rates are not necessarily telling, given that my analysis does not take into account changes in student population size in each of those districts (or charters) It also does not take into account virtual charters, which will naturally have lower administrative spending costs.

Districts with particularly high differences between administrative spending and classroom spending, however, are more indicative of a problem of high administrative spending. This point becomes particularly salient when one notes that 61 out of 89 districts, more than two thirds, had higher average administrative spending growth than average classroom spending growth.

The problem of high administrative spending again becomes clear in comparisons with CPI. Although even classroom spending growth was higher than CPI in a number of districts (24), nearly twice as many districts had higher administrative spending growth than CPI (45), and because National CPI and West CPI are fairly similar, the numbers do not change that much from one comparison to the other. Even without using averages, administrative spending growth was greater than classroom spending growth in a majority of years in 33 districts. I used 6 years as a cut off, but had I included 5 or more years, this number would rise to 59.

The analysis is more complicated with charters, given that some charters had limited years of data available, and that there was a huge variation in spending growth between them. Nevertheless, the evidence points in the same direction as the districts.

Almost all of the charters outpaced National CPI growth in both classroom and administrative spending (78 out of 88 and 77 out of 88, respectively). 47 out of 88 had higher average administrative spending than average classroom spending. The numbers change somewhat without the first year, but this leads 50 out of 89 charters to have higher administrative spending than classroom spending, and still a majority outpace CPI growth in both classroom and administrative spending.

Given these facts, that administrative spending has outpaced classroom spending, and that it has done so while also outpacing CPI, is difficult to refute.