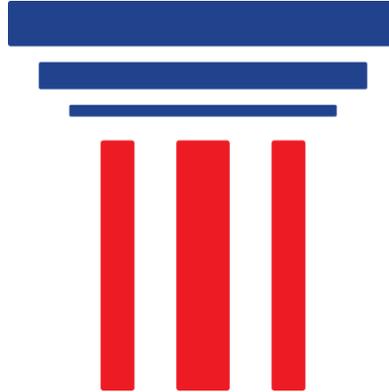


Georgia
Public Policy
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ISSUE ANALYSIS

Balancing the Books in Education

How much do taxpayers *really* spend on Georgia public schools?

How many people *really* work in our public schools?

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Executive Summary

Parents, educators, policy-makers and all other taxpayers have a right to know just how much taxpayer funding is spent on Georgia public schools, how this funding has changed over time, and how their public school dollars are being spent.

Unfortunately, official state websites have historically contained misleading information that hinders Georgians' understanding of the true resource cost of our public education system and the uses of those taxpayer funds.

Specifically, official state of Georgia websites give the impression that taxpayers spend *billions of dollars* less on K-12 public education than is actually spent. For example, according to the official spending figures on the Georgia Department of Education (GaDOE) website, Georgia public schools spent a total of \$15.665 billion in fiscal year (FY) 2016.

Yet the Governor's Office of Student Achievement (GOSA), using data provided to it by the same Georgia Department of Education, reports that Georgia public schools actually spent \$19.158 billion in FY 2016. This latter amount is consistent with data the GaDOE reports annually to the U.S. Department of Education. In other words, about \$3.5 billion in taxpayer funds are "missing" from the official GaDOE spending data on its website.

This report calls on the GaDOE and other state agencies to accurately report current and historical data on total public school spending, average teacher salaries and public school staffing, and to do so in a manner that Georgians can easily access and understand.

Based on complete data, between 1988 and 2014 Georgia public schools saw their revenues increase by 56 percent on a per-student and inflation-adjusted basis. Thus, current Georgia public school students have dramatically more taxpayer resources devoted to their education relative to students of three decades ago.

This massive increase in resources in Georgia public schools was not spent on real salary increases for teachers: Between 1988 and 2014 average teacher salaries actually fell by \$26, adjusted for inflation.

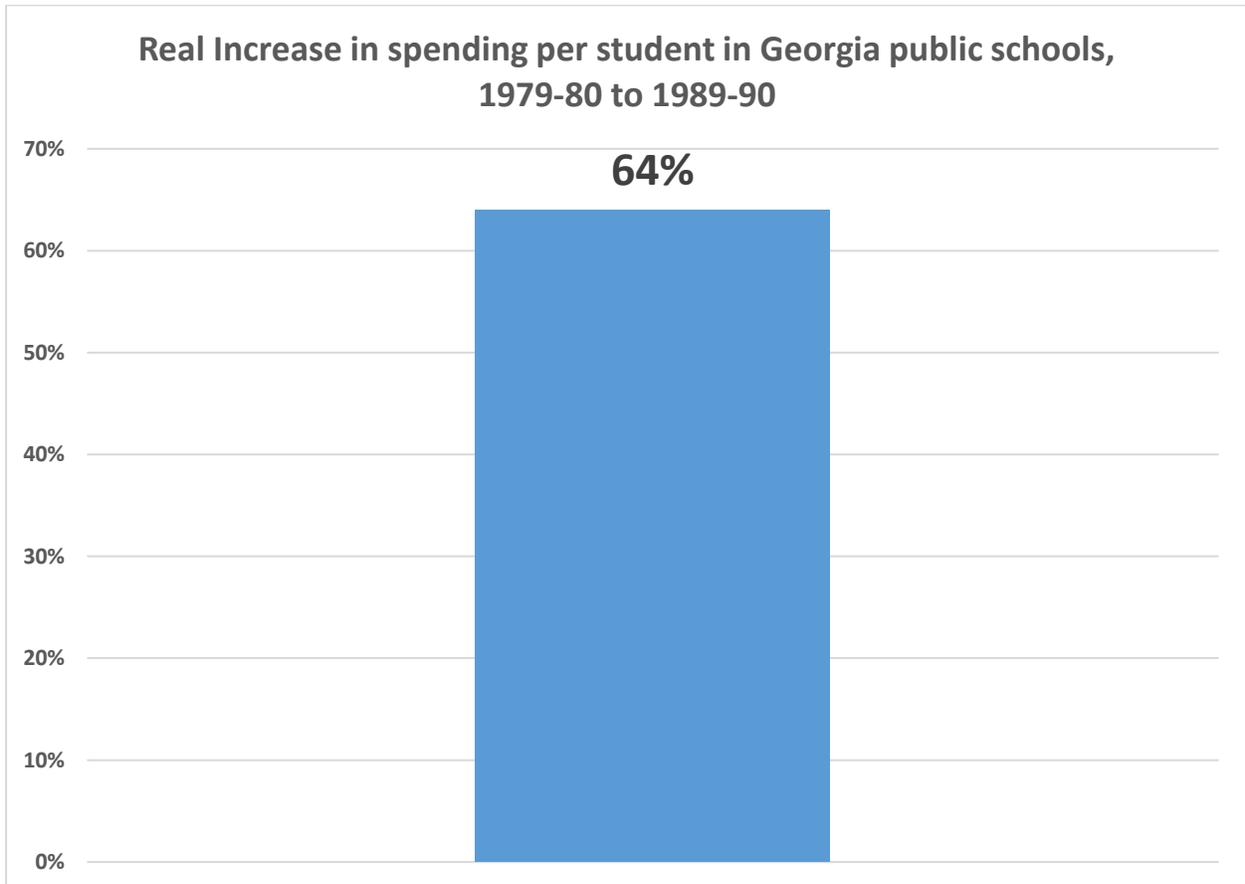
Instead, Georgia public schools embarked on a "staffing surge," increasing the number of teachers and other school personnel at rates significantly in excess of what was needed to accommodate student enrollment growth. The significant relative increase in employees means that today's Georgia students have significantly smaller class sizes and even greater access to other school personnel relative to students of three decades ago – and relative to the national average.

These staffing decisions have had a large opportunity cost. Had Georgia public schools increased the number of non-teachers at the same rate as the increase in students, Georgia public schools would have seen \$1.08 billion in annual recurring savings. These funds could have been used (among other things) to give teachers a permanent raise of almost \$10,000 per year or to give \$8,000 education savings accounts (ESAs) to the families of more than 135,000 students. ESAs would allow these families to choose the schools, tools and educational environments that best meet their children's needs.

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Introduction

In 1985 the state of Georgia adopted a new formula for funding public schools, the Quality Basic Education (QBE) formula. One purpose of this new formula was to provide more state taxpayer resources to Georgia public schools. In terms of meeting that purpose – to provide more funding to Georgia public schools – QBE was, at least initially, wildly successful. During the 1980s, real (inflation-adjusted) current spending per public school student increased by a whopping 64 percent in Georgia.



Source: Calculations from Table 236.65 of the 2016 Digest of Education Statistics and www.bls.gov.¹

Since that time, the education policy community in Georgia has routinely debated whether taxpayers – in particular, *state* taxpayers – devote enough of their money to

¹ Annual editions of the Digest of Education Statistics are compiled by the National Center for Education Statistics (NCES) at the U.S. Department of Education. Data used throughout this report come from various annual editions of the Digest of Education Statistics that can be accessed here: <https://nces.ed.gov/programs/digest/>. State departments of education report data to the NCES for inclusion in these annual editions. The inflation adjustment is based on January CPI-U figures. The CPI data comes from www.bls.gov. (1) Choose "Data Tools" (2) Choose "Top Picks" (3) Choose "CPI for All Urban Consumers (CPI-U) 1982-84=100 (Unadjusted) - CUUR000SA0".

Georgia public schools. That is, the education policy community – public school leaders and employees, state and local elected officials, think tanks, popular education reporters and knowledgeable parents – have discussed whether the state should provide even more funding to Georgia public schools.²

This study seeks to shed light on three questions important to these state-level education policy discussions:

- 1) How much do taxpayers really spend on Georgia public schools?
- 2) How much has taxpayer funding on public schools really increased over time?
- 3) Where have these increased taxpayer funds gone? In particular, how much of the increased funding has gone to pay increases for teachers, and how much has gone to adding other staff?³

How much do taxpayers really spend on Georgia public schools?

Before one can say whether he or she wants to spend more, less or the same amount of money on public schools, it would be useful to know how much is actually spent on Georgia public schools.

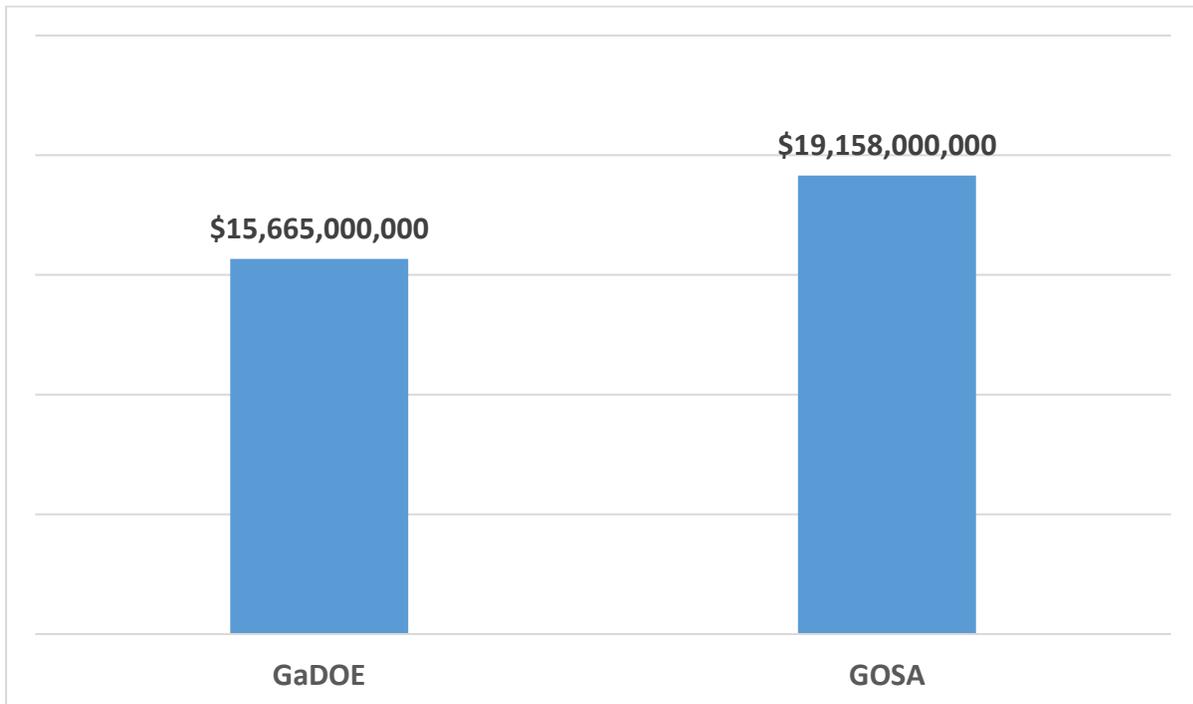
State departments of education report taxpayer spending on public schools annually to the National Center for Education Statistics at the U.S. Department of Education. They also report spending data on their official state websites. The Georgia Department of Education has also reported public school spending to the Georgia Governor's Office of Student Achievement.

In Georgia, the spending figures reported on the Georgia Department of Education (GaDOE) website are “missing” *billions* of dollars in taxpayer spending, providing a misleading, yet widely used, picture of the amount spent on Georgia public schools.

² In 1999 Governor Roy Barnes created a Funding Committee as part of his education reform effort, the Governor's Education Reform Study Committee. In 2005, Governor Sonny Perdue created the Investing in Educational Excellence (IE2, pronounced I-E-squared) Committee to analyze and propose changes to QBE. At that same time the Consortium for Adequate School Funding in Georgia (CASFG) sued the state of Georgia for more state taxpayer funding for public schools. The Consortium dropped its lawsuit in 2008. In 2015 Governor Nathan Deal convened an Education Reform Commission (ERC) that included a Funding Committee to analyze and propose changes to QBE.

³ While there appears to be perpetual consternation over *state* taxpayer funding of Georgia public schools, there are several related issues that surround the issue of state taxpayer funding of public schools: Should there be more or less federal funding of public schools? More or less local taxpayer funding? Should more funding be given only to public school systems with less means to fund public schools? Would providing education dollars directly to parents be a better investment than more funding for public schools? While the above issues are related to the question of state taxpayer funding of public schools and while the above issues are important questions, they are not part of the present study.

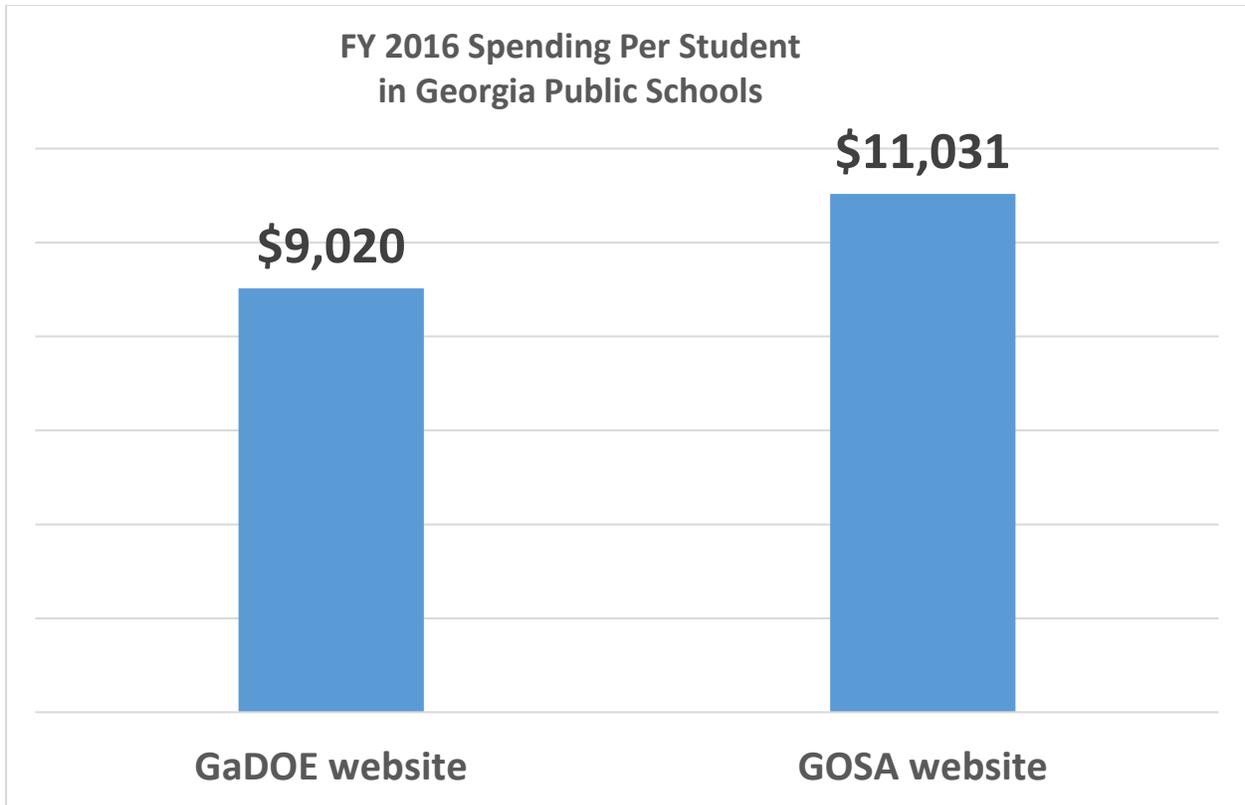
As shown in the figure below, the GaDOE website expenditure report declares that Georgia public schools spent \$15.665 billion in fiscal year (FY) 2016, the most recent data available. For that same year, the Georgia Governor's Office of Student Achievement (GOSA) reports that Georgia public schools actually spent \$19.158 billion – a difference that is just shy of \$3.5 billion.



Source: GaDOE, GOSA⁴

In terms of spending per student, the GaDOE reports that Georgia public schools spent \$9,020 per student in FY 2016. But according to the data the GaDOE provides to others, Georgia public schools actually spent \$11,031 per student – a difference of more than \$2,000 per student.

⁴ The GaDOE spending figure is available at https://app3.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.entry_form. Chose "FY 2016" and choose "Expenditure Report." The GOSA spending figure is available at <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on "Revenues & Expenditures" and then choose "detail values" under "K-12 Expenditures. All figures rounded to the nearest million dollars.



Source: GaDOE; GOSA⁵

On its official website where it reports the spending figures well below the actual levels spent on public schools, the GaDOE does acknowledge that it is “excluding” funds from its spending figures. Thus, while the GaDOE is not reporting numbers that are false, it is providing incomplete spending information, which give a misleading impression of what is the true level of spending in Georgia public schools.

This is not to cast blame on the current leadership or staff of the GaDOE for this misleading reporting; this underreporting of spending on public schools has occurred for at least the past 20 years.

In the interest of accuracy and transparency, the GaDOE should:

- Immediately cease reporting revenue and expenditure data that exclude taxpayer funds

⁵ The GaDOE spending figure is available at: https://app3.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.entry_form. At that web address choose “FY 2016” and choose “Expenditure Report”. The GOSA spending figure is available at <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on “Revenues & Expenditures” and then choose “detail values” under “K-12 Expenditures”. To compute spending per FTE student from the GOSA spending data, I used the student FTE count from the GaDOE website listed just above.

- Report total revenue and expenditure data for current and prior years.
- Provide current and historical spending data in an easily accessible, prominent and user-friendly manner.

It is self-evident that government agencies should report accurate public school spending data, make that data transparent and accessible, and allow citizens and policy-makers to have access to comparable historical information that allows them to make their own, fully informed judgments about the desirability of various taxing and spending decisions.

It is worth repeating that the GaDOE actually has the accurate expenditure and revenue data, reported to the U.S. Department of Education and others for decades. These recommendations, therefore, will save the GaDOE time and effort because it will no longer need to maintain two sets of books regarding the revenues and expenditures of Georgia public schools.

Below is the most recent example of the GaDOE reporting lower spending data on its website as compared to the spending data it reports to the National Center for Education Statistics at the U.S. Department of Education:

Georgia FY 2013 Total Expenditures		
<u>NCES*</u>	<u>GaDOE Website</u>	<u>"Missing" Expenditures</u>
\$17,433,263,000	\$14,001,586,661	\$3,431,676,339

*Expenditure data from the National Center for Education Statistics (NCES) at the U.S. Department of Education are available from:
https://nces.ed.gov/programs/digest/d15/tables/dt15_236.30.asp?current=yes

Consequences of State Underreporting

One important consequence of official state statistics “missing” billions of dollars in spending is related to school choice programs. For example, if Georgia creates a new education savings accounts (ESA) program, it is likely to offer families ESAs that contain some fraction of state spending per student in traditional public schools.

If spending per student is underreported, then ESA amounts offered to parents will be lower than they would otherwise be. Another example involves funding for charter schools, where Georgia provides charter schools with a funding amount that is tied to (and less than) what is given to traditional public schools. With funding for traditional public schools underreported, charter school funding is even lower than it should be.

This underreporting of public school spending is an acute issue in Georgia. State policy-makers are expected in the coming years to seriously consider proposals to offer

parents ESAs and to reform the state funding formula for public schools, including providing more equitable funding for charter schools. For both ESAs and school funding, it is crucial that education reform advocates, policy-makers and interested citizens are fully informed about how much is spent on traditional public schools. This information can form the basis for more generous ESAs and more funding for charter schools. The research will also blunt attacks on school funding reforms, where opponents typically argue – no matter how much state taxpayer funds are added to public schools – that it still is not enough.

Another area where some school spending is “missing” comes in school funding litigation. From 2006 to 2008 I served as an expert witness in school funding litigation in Georgia.⁶ I was required to use the incomplete “official” GaDOE data on public school expenditures. As mentioned above, the GaDOE reports these official spending numbers on its website, and these numbers are routinely used in committee hearings, media reports and litigation. The underreporting of such spending clearly is a benefit to groups and individuals suing for more taxpayer funding of education while alleging it is “underfunded.”

Based on my experiences in Georgia and several other states, almost all state legislators, the media and the courts believe that the “official” and (considerably) lower spending data reported by their state department of education are true and accurate. For example, in 2015 PolitiFact asked the GaDOE for spending information to compute percentages of education revenues from federal, state and local sources. But PolitiFact’s article used the GaDOE’s “official” spending data, which did not include all funds, to complete its calculations.⁷

There are also other displays of spending data, where the data are perhaps true as far as they are massaged, but these displays mislead readers as to the true resource cost of public schools. For example, the respected periodical Education Week annually publishes spending data for public schools in each state. Education Week reports that Georgia public schools spent \$9,403 per student in the 2013-14 school year.⁸ However, according to data that the GaDOE reported to the federal government, Georgia public schools spent \$10,318 per student in 2013-14.⁹ Further, Education Week states: “The finance indicators in Quality Counts 2017 are based on the most recent data available from the federal government, which are from 2014. Quality Counts does not report raw spending data. All expenditures are adjusted by factors such as regional cost differences, in order to facilitate apples-to-apples comparisons.”¹⁰ There are two items

⁶ In 2015, I also served in an expert capacity in the first in the nation case of a school district suing a local government for more taxpayer funding. The suit was withdrawn, but the plaintiff school district threatens to re-file the suit. This southern state also underreported spending in a manner similar to Georgia, and the “facts” of the case were based on these “official” spending figures, which are significantly lower than the spending figures this state reports to the National Center for Education Statistics.

⁷ <http://www.politifact.com/georgia/statements/2015/jan/20/claire-suggs/analyst-target-education-spending/>

⁸ <http://www.edweek.org/media/2016/12/29/school-finance-education-week-quality-counts-2017.pdf>.

⁹ https://nces.ed.gov/programs/digest/d16/tables/dt16_236.75.asp?current=yes.

¹⁰ <http://www.edweek.org/ew/articles/2017/01/04/nations-schools-get-middling-grade-on-quality.html?intc=EW-QC17-LFTNAV>.

to highlight from their methodology. First, in the interest of transparency, *Education Week* should report the raw total spending data along with any adjustments they wish to make – so that readers can see the *actual* cost of public schools. Second, the cost of living in Georgia is 8.6 percent *below* the national average.¹¹ Thus, that particular adjustment to spending data would inflate the \$10,318 figure – not make it go down to \$9,403. *Education Week's* spending reports are routinely covered by national, state and local media.¹²

How much has taxpayer funding on public schools *really* increased over time?

Once it's clear how much is spent on public schools in Georgia, historical information helps put current spending levels in context. Data from the 1987-88 (FY 1988) and 2013-14 (FY 2014) school years demonstrate the historical growth in public school spending. These years are the oldest and most recent data that permit an analysis of how Georgia public schools have spent their resources on pay raises and increased staffing, and these trends are analyzed in the next section.

Taxpayer revenues per student in Georgia increased by 56 percent between FY 1988 and FY 2014, where revenue data are adjusted for inflation using the Consumer Price Index for Urban Consumers that is published by the U.S. Bureau of Labor Statistics (Source: National Center for Education Statistics).¹³

According to data reported by GOSA, public school spending increased an additional \$1.3 billion between FY 2014 and 2016.¹⁴ QBE was passed into law in 1985, so the 56 percent increase in spending per student does not consider recent spending increases and the large real increase in public school revenues between 1985 and the 1987-88 school year from the initial surge in QBE spending. The 56 percent figure is therefore a significant understatement of real increases in public school spending from 1985 to the present. At the time of writing this report, neither the U.S. Department of Education nor GaDOE have publicly available data that allow an analysis of the uses of public school spending for 1984-85 or after 2013-14.

As real spending on public schools has increased over the decades, so has the underreporting of spending on the GaDOE website. The historical data on the GaDOE website go back to FY 1996. As shown in the figure below, for FY 1996 the GaDOE

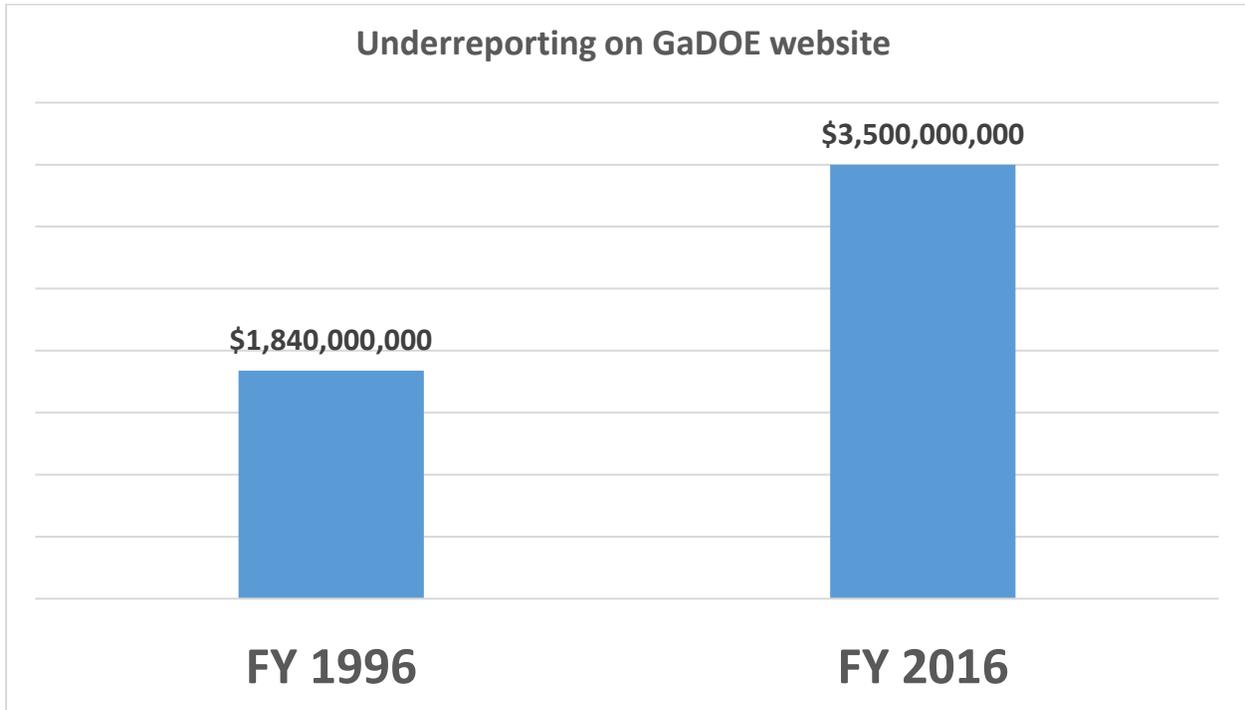
¹¹ https://www.missourieconomy.org/indicators/cost_of_living/index.stm.

¹² <http://getschooled.blog.myajc.com/2017/01/12/if-georgia-teachers-are-skeptical-of-governors-2-percent-raise-heres-why/?ref=cbTopWidget>.

¹³ Revenues per student, (1) Go to: <https://nces.ed.gov/ccd/elsi/> (2) Click on "Table Generator" (3) Choose "State" (4) Choose 1987-88 (5) Choose "General Finance" (6) Choose "Finance Per Pupil Ratios" (7) Choose "Total Revenues Per Pupil". FY 2014 revenue data can be found at <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on "Revenues & Expenditures" and then choose "detail values" under "K-12 Revenues." The CPI data comes from www.bls.gov, (1) Choose "Data Tools" (2) Choose "Top Picks" (3) Choose "CPI for All Urban Consumers (CPI-U) 1982-84=100 (Unadjusted) - CUUR0000SA0".

¹⁴ The GOSA spending figures for FY 2014, 2015 and 2016 are available at <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on "Revenues & Expenditures" and then choose "detail values" under "K-12 Expenditures".

website reports a spending figure that is over \$1.8 billion less than the total spending figure it reported to the U.S. Department of Education. By FY 2016, this underreporting had increased to \$3.5 billion.

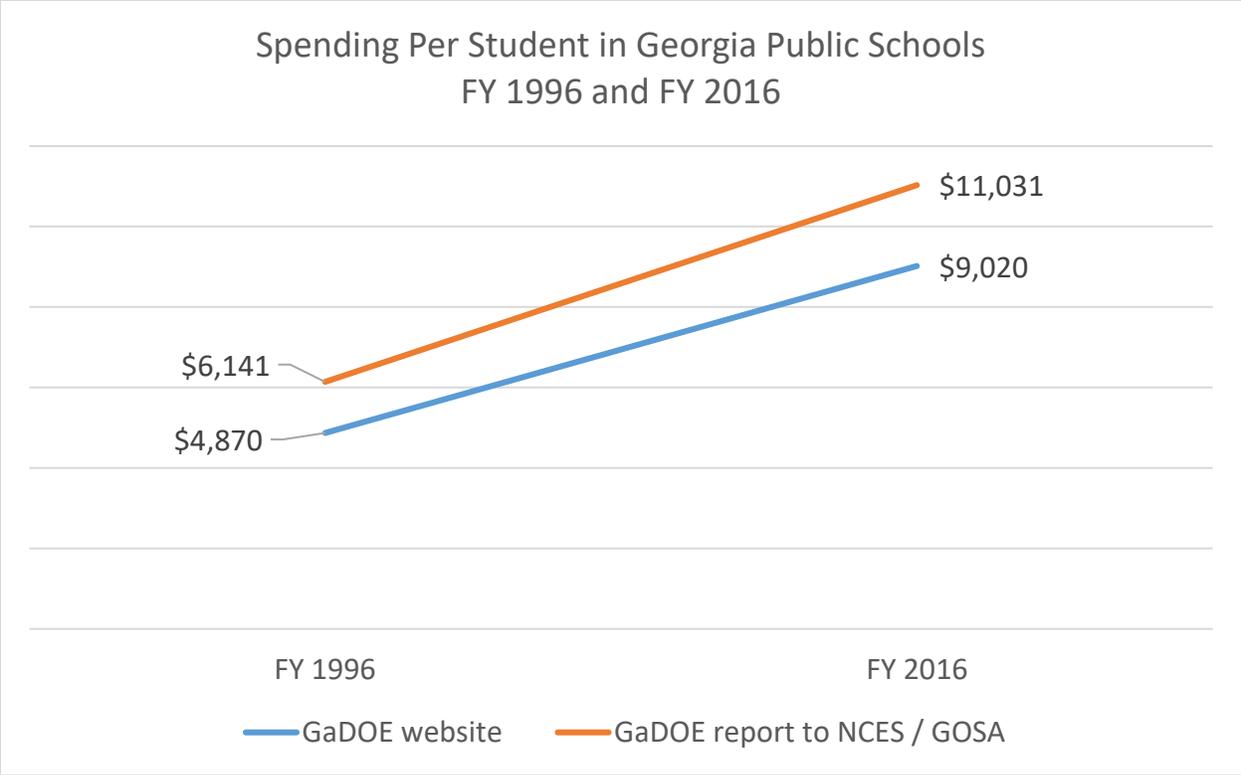


Source: GaDOE, National Center for Education Statistics, GOSA¹⁵

While public school spending was increasing rapidly in Georgia, the underreporting of per-student spending on the official GaDOE website was increasing rapidly as well.

On a per student basis, in FY 1996, the GaDOE underreported spending by \$1,271 per student. By FY 2016, this underreporting had increased to \$2,011 per student. As shown in the figure below, according to the GaDOE website, spending per student increased from \$4,870 per student in FY 1996 to \$9,020 per student in FY 2016. According to data the GaDOE reported to the U.S. Department of Education and to GOSA, spending per student actually increased from \$6,141 to \$11,031 in this period.

¹⁵ For GaDOE "official" spending data, please see: https://app3.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.entry_form, choose the appropriate FY and "Expenditure Report". For FY 1996 spending data the GaDOE reported to the U.S. Department of Education, please see: Table 166 of the 1999 Digest of Education Statistics, <http://nces.ed.gov/programs/digest/d99/d99t166.asp>. For FY 2016 spending data the GaDOE reported to GOSA, please see: <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on "Revenues & Expenditures" and then choose "detail values" under "K-12 Expenditures".



Source: GaDOE, National Center for Education Statistics, GOSA¹⁶

Clearly, Georgia public schools have experienced a dramatic increase in real taxpayer resources per student since the creation of the QBE funding formula in 1985. The subject of the next section is, where has this increased public school spending gone?

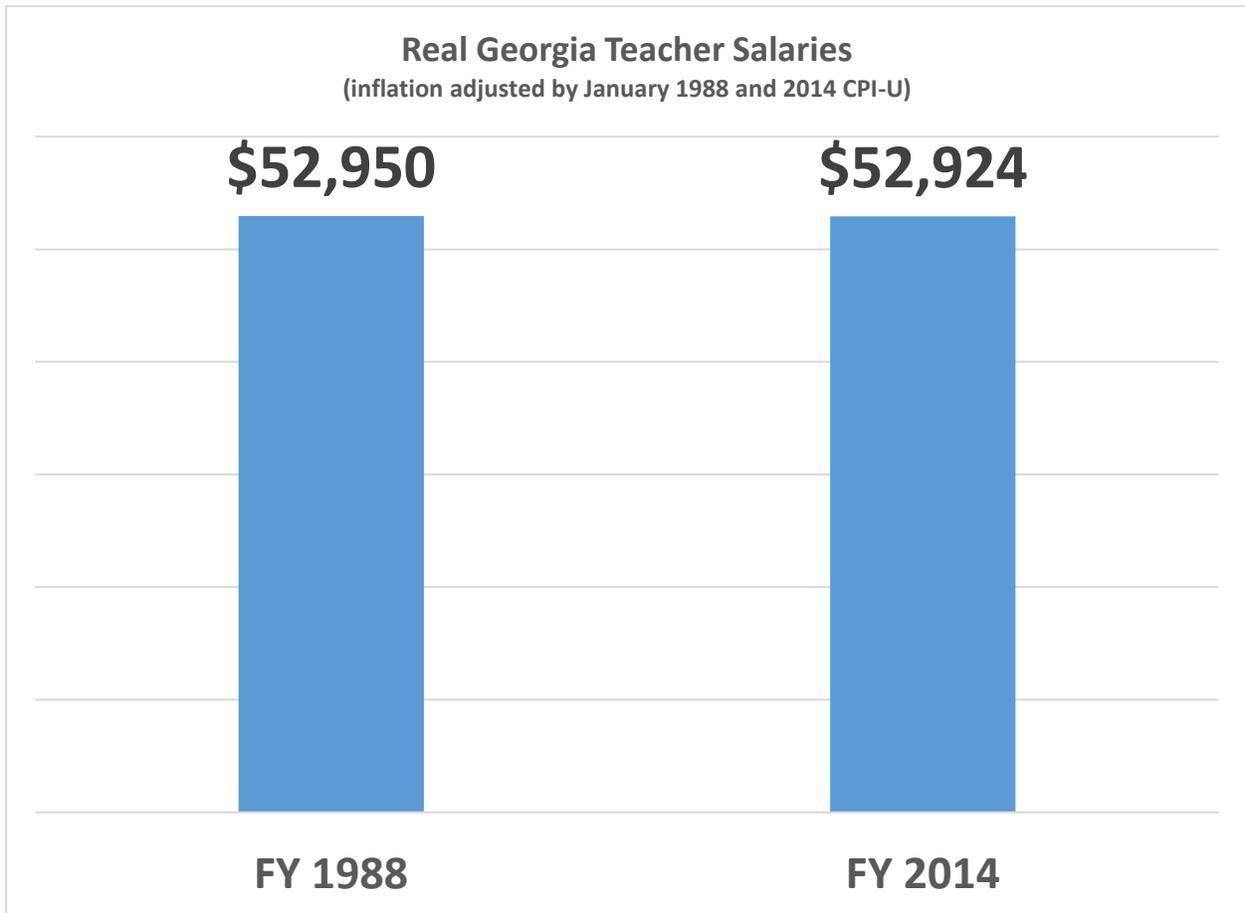
Where has this tremendous increase in taxpayer funds to Georgia public schools gone?

This section documents changes to average salaries for teachers and changes in staffing in Georgia public schools in the QBE era. (As stated previously, the only period for which all relevant data are publicly available is FY 1988 to FY 2014.)

¹⁶ For GaDOE “official” spending data, please see: https://app3.doe.k12.ga.us/ows-bin/owa/fin_pack_revenue.entry_form, choose the appropriate FY and "Expenditure Report". For FY 1996 spending data the GaDOE reported to the U.S. Department of Education, please see: Table 166 of the 1999 Digest of Education Statistics, <http://nces.ed.gov/programs/digest/d99/d99t166.asp>. For FY 2016 spending data the GaDOE reported to GOSA, please see: <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At that web address click on “Revenues & Expenditures” and then choose “detail values” under “K-12 Expenditures.” To compute spending per student for FY 2016 using the GOSA spending figure, I used the FTE student count from the GaDOE webpage listed above.

How much of the increased funding has gone to pay increases for teachers?

In constant (inflation-adjusted) dollars, Georgia public school teachers were paid \$52,950, on average, in FY 1988. By FY 2014, the average teacher salary in Georgia public schools had fallen, in real terms, to \$52,924 – a decrease of \$26 per year in real purchasing power.



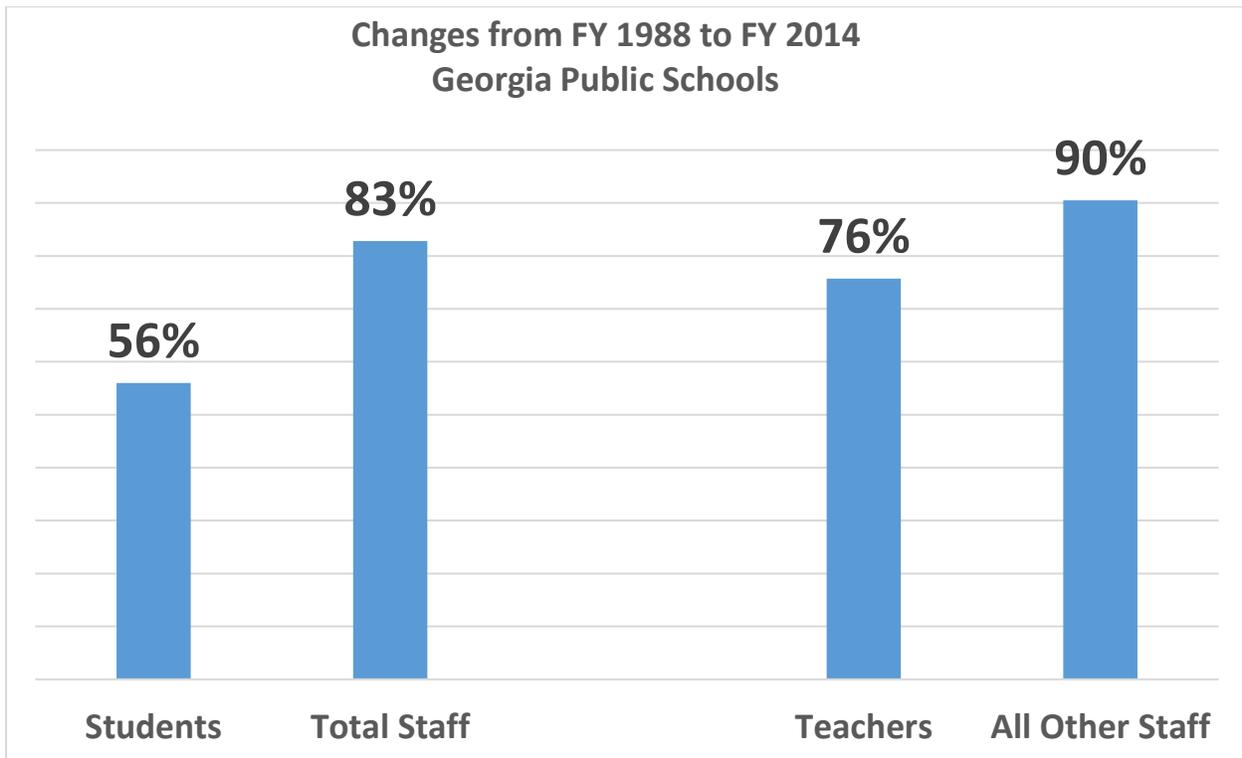
Source: National Center for Education Statistics¹⁷

The previous section showed, however, that there was a 56 percent real increase in taxpayer spending per student in Georgia public schools. Clearly, that significant increase in funding did not go into salary increases for Georgia teachers. Then, where did these additional funds go?

¹⁷ Table 72 of the 1990 Digest of Education Statistics and table 211.60 of the 2015 Digest of Education Statistics. The CPI data comes from www.bls.gov, (1) Choose "Data Tools" (2) Choose "Top Picks" (3) Choose "CPI for All Urban Consumers (CPI-U) 1982-84=100 (Unadjusted) - CUUR0000SA0".

How much funding has gone to adding staff?

One place the large increase in funding went was to a tremendous increase in public school staffing. As shown in the chart below, Georgia public schools experienced a 56 percent increase in the full-time equivalent (FTE) student population from FY 1988 to FY 2014. Over that same period, Georgia public schools increased their FTE staffing by 83 percent.



Source: National Center for Education Statistics¹⁸

Who were these additional staff? I separate all public school employees into two categories: lead teachers (the primary teacher in a classroom or setting) and everybody else. Thus, teacher aides or paraprofessionals are not considered “lead” teachers.

Over the 1988 to 2014 time period, the number of these primary teachers grew 76 percent, enough for a significant reduction in class sizes during this period. In addition, the increase in “all other staff,” personnel who are not primary teachers, increased by 90 percent – far in excess of staffing needed to accommodate the growth in the FTE student population.

Thus, in the QBE era public schools in Georgia used their large increase in taxpayer resources to increase staff, while average salaries for teachers experienced a slight decrease.

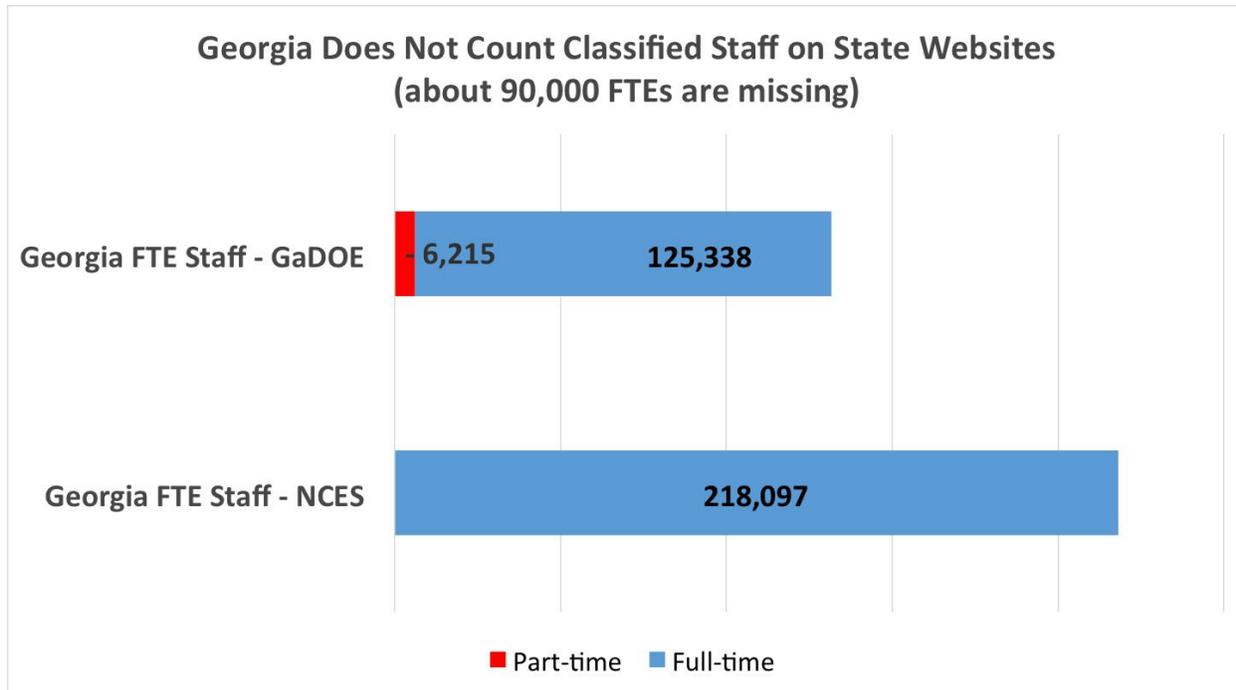
¹⁸ National Center for Education Statistics Tables 79 and 80, 1990 Digest of Education Statistics, and Tables 203.40 and 213.20, 2015 Digest of Education Statistics.

Are the number of people working in our public schools reported accurately on state of Georgia websites?

State departments of education annually report the number of personnel working in public schools to the U.S. Department of Education – and they report personnel counts on their official state websites. For Georgia, these latter figures are “missing” tens of thousands of personnel and provide a misleading, yet widely used, picture of the true amount of staffing in Georgia public schools.

In Georgia, GOSA reports only the number of “certified” personnel. Certified personnel are those who hold a certificate from the Georgia Professional Standards Commission. Examples of public school employees who hold these educator certificates include teachers, counselors, social workers and therapists. However, Georgia public schools also employ “classified” personnel, such as janitors, bus drivers, cafeteria workers, etc.

As shown in the figure below, the state of Georgia reports that Georgia public schools employ 6,215 part-time staff and 125,338 full-time staff. However, these are only certified staff. According to data the GaDOE reports to the National Center for Education Statistics at the U.S. Department of Education, Georgia public schools employed 218,097 FTE employees in FY 2014, the most recent year for which comparable data are publicly available. That’s a 74 percent increase in the number of FTE employees reported.



Source: GOSA, National Center for Education Statistics¹⁹

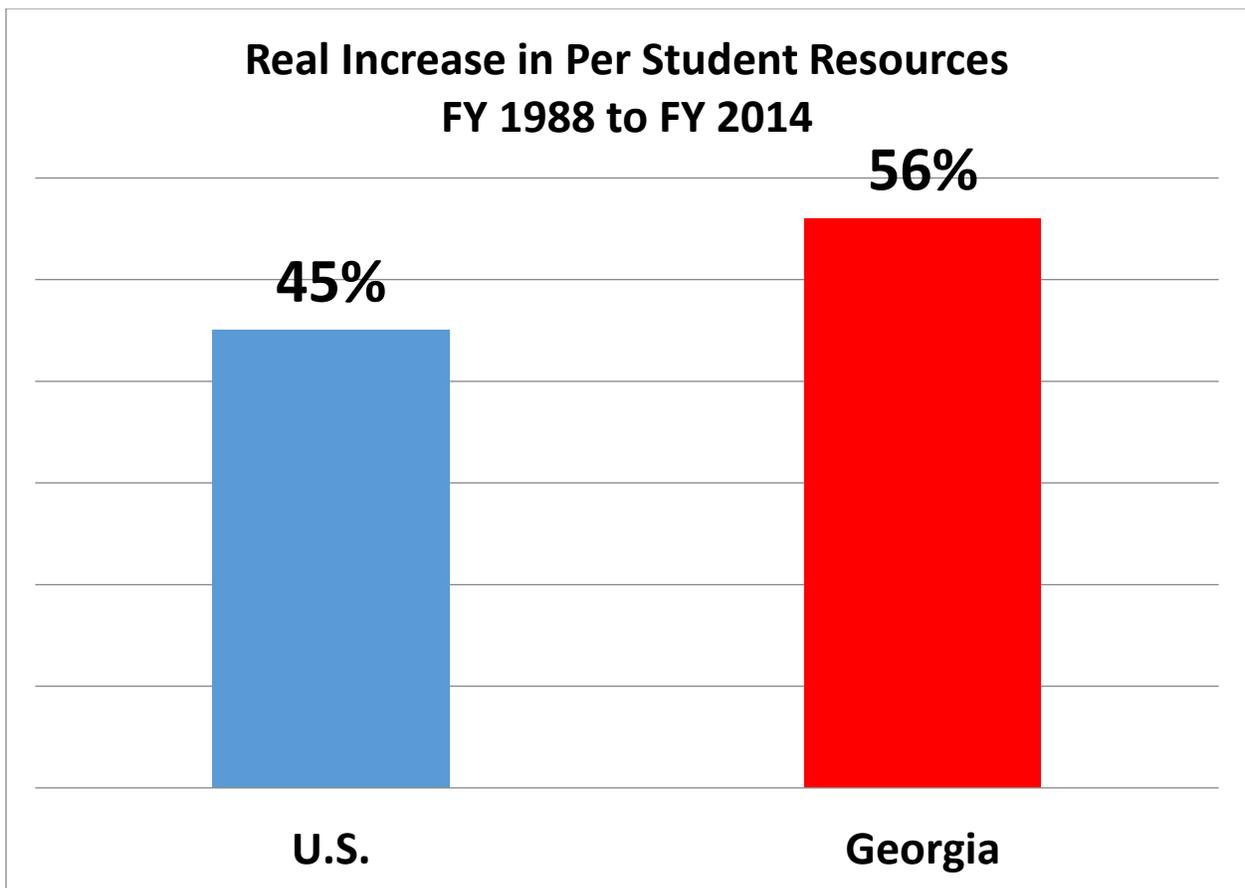
¹⁹ <https://gosa.georgia.gov/downloadable-data> and Table 213.20, 2015 Digest of Education Statistics.

The GaDOE and GOSA should report, in a clearly accessible format on their websites, historical and trend information on the number of FTE personnel, the number of FTE teachers, and the number of FTE non-teachers, and compare those figures to historical and trend information on FTE students. This could be as simple as a bar graph like the one on page 14 – that would be updated annually.

Does the trend in public school spending in Georgia differ from national trends?

For further context, this section compares public school spending in Georgia to public school spending nationally.

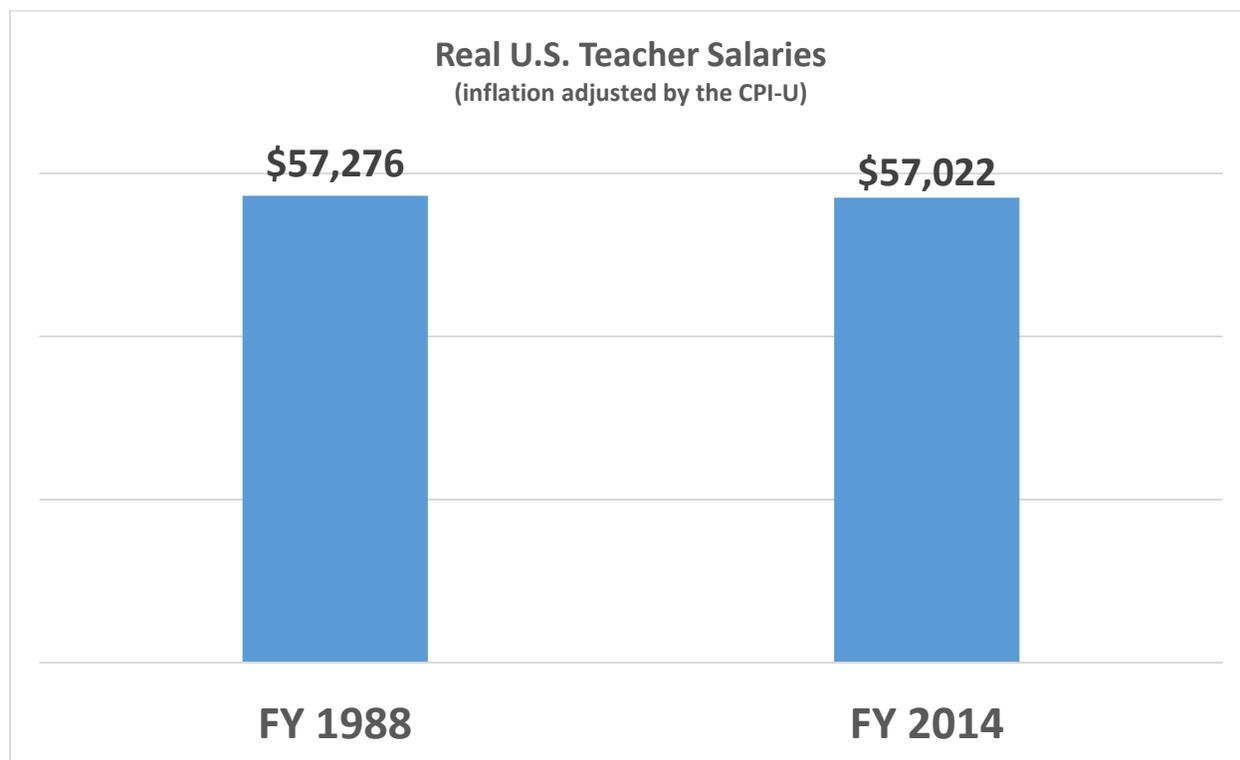
From FY 1998 to FY 2014, real spending per student increased by 45 percent in American public schools. Thus, public school spending increased at a faster rate in Georgia during this period.



Source: National Center for Education Statistics²⁰

²⁰ Revenues per student, (1) Go to: <https://nces.ed.gov/ccd/elsi/> (2) Click on "Table Generator" (3) Choose "State" (4) Choose 1987-88 (5) Choose "General Finance" (6) Choose "Finance Per Pupil Ratios" (7) Choose "Total Revenues Per Pupil". FY 2014 revenue data can be found at <https://gaawards.gosa.ga.gov/analytics/saw.dll?dashboard>. At

Where did this increase in real resources for American public schools go? As was the case in Georgia, the significant increase in resources for public schools did not go into increases in teacher salaries. As shown in the next graph, real U.S. teacher salaries declined by \$254 between FY 1988 and FY 2014, a decline larger than the decrease in real teacher salaries in Georgia (\$26 decrease).



Source: National Center for Education Statistics²¹

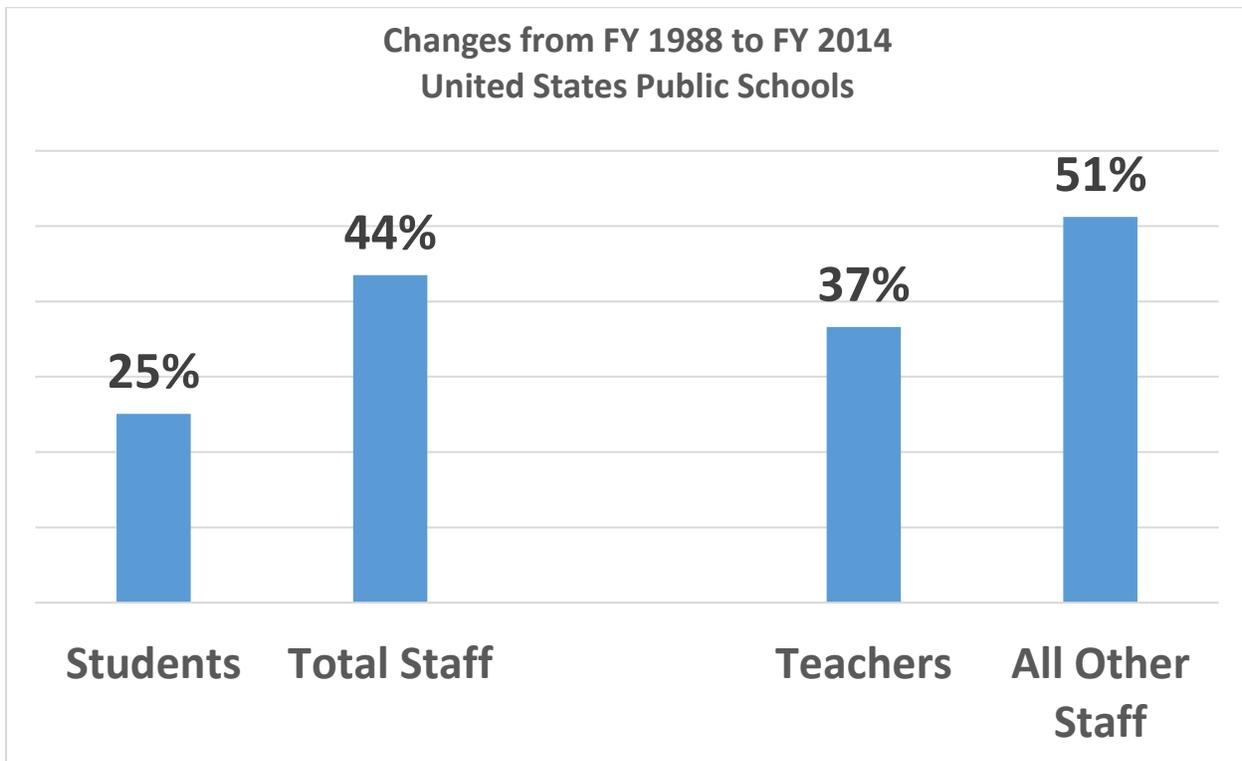
Like Georgia, public schools nationally spent a significant portion of their increased resources on additional staff – additional staff above and beyond what was needed to accommodate enrollment growth.

Between FY 1988 and FY 2014, American public schools experienced a 25 percent increase in FTE student enrollments. During that time, public school staffing increased by 44 percent. The number of FTE lead teachers increased by 37 percent, while the

that web address click on "Revenues & Expenditures" and then choose "detail values" under "K-12 Revenues. The CPI data comes from www.bls.gov, (1) Choose "Data Tools" (2) Choose "Top Picks" (3) Choose "CPI for All Urban Consumers (CPI-U) 1982-84=100 (Unadjusted) - CUUR0000SA0". CPI-U for January 1988 and 2014; table 235.20 of the 2016 Digest of Education Statistics; table 203.10 of the 2015 Digest of Education Statistics; and tables 39 and 154 of the 1995 Digest of Education Statistics.

²¹ National Center for Education Statistics, Table 76 of the 1995 Digest of Education Statistics and table 211.60 of the 2015 Digest of Education Statistics. The CPI data comes from www.bls.gov, (1) Choose "Data Tools" (2) Choose "Top Picks" (3) Choose "CPI for All Urban Consumers (CPI-U) 1982-84=100 (Unadjusted) - CUUR0000SA0".

number of “all other staff” (personnel who had any job other than that of a lead teacher) increased 51 percent – more than twice as fast as the increase in students.



Source: National Center for Education Statistics²²

Opportunity costs of increases in staffing

Public schools in Georgia and nationally have increased staffing at rates much greater than their increases in students. These tremendous increases in staffing have imposed significant opportunity costs on the K-12 education system. To quantify these opportunity costs, consider the following thought experiment: What if the increase in “all other staff” matched the increase in the student population? That is, let’s keep the increase in teachers and the resulting reductions in class sizes. What would have been the savings to the education system if the increases in non-lead teachers had merely kept pace with the increase in the student population?

Calculating of the opportunity cost of increasing the staffing of non-lead teachers requires an estimate of the average total employment cost of non-lead teachers. This includes salary, health and retirement benefits, unemployment insurance, employer social security taxes, and hiring and training expenses. To be cautious, I assume that

²² National Center for Education Statistics, Tables 79 and 80, 1990 Digest of Education Statistics, and Tables 203.40 and 213.20, 2015 Digest of Education Statistics.

total employment costs average \$55,000 per non-lead teacher. For an aide, cafeteria worker, or bus driver, \$55,000 in total employment costs is a bit of an overestimate. For a curriculum director, assistant principal, area superintendent or counselor, \$55,000 is a gross underestimate.

For Georgia, from 1988 to 2014, the growth in the student population was 56 percent, while the growth in “all other staff” was 90 percent. Using this thought experiment, what if this increase in non-lead teachers had merely been 56 percent – to match enrollment growth?

If the growth in non-lead teachers had matched the growth in enrollment, Georgia public schools would have saved \$1.08 billion in annual recurring savings:

19,682 “extra” other staff above enrollment growth	x	\$55,000 total employment costs	=	\$1.08 billion opportunity cost
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What could the Georgia public schools have done with that \$1.08 billion instead of hiring extra staff? For one, they could have given every public school teacher in Georgia a salary increase of \$9,891 per year.

Alternatively, the \$1.08 billion could provide 135,315 students with \$8,000 education savings accounts (ESAs) to be used to cover their education expenses.

The corresponding figures nationally are:

- Public schools hired 531,505 “other staff” (non-lead teachers) over and above what was necessary to accommodate enrollment growth.
- At \$55,000 per FTE in total employment costs, these additional staff have imposed a \$29.3 billion opportunity cost on the public education system nationally.

What could American public schools do with \$29.3 billion in annual recurring savings? They could give teachers a \$9,388 salary increase or provide 3.65 million students with ESAs.

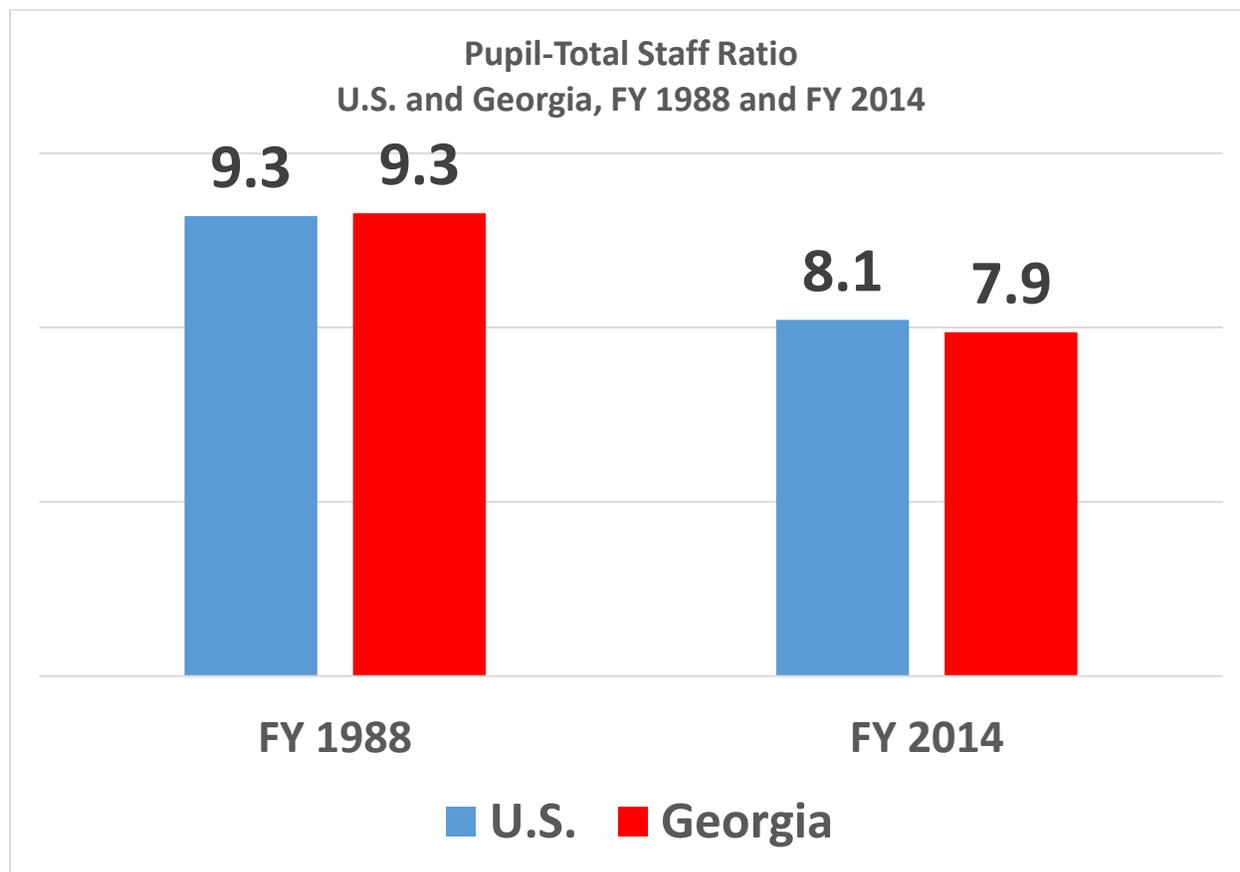
Staffing ratios in the United States and Georgia

This staffing surge in public schools from FY 1988 to FY 2014 has led to large reductions in staffing ratios – fewer students per employee. In 1988, Georgia public schools had approximately the same overall staffing ratio as the national average: 9.3 students per public school employee. (All measures in this subsection are in FTEs, so 9.3 means 9.3 FTE students per FTE public school employee.)

By 2014, the national average was down to 8.1 students per employee, a substantial increase in staffing in America’s public schools. The increase in staffing in Georgia public schools was even larger, as the ratio of students to employees fell to 7.9 by 2014.

Thus, public school students in Georgia have access to more staff relative to the average public school student nationwide.

Given the large increases in funding for Georgia public schools since 2014, this ratio is likely even lower today – which means that Georgia students today have even more staffing relative to students in prior decades.



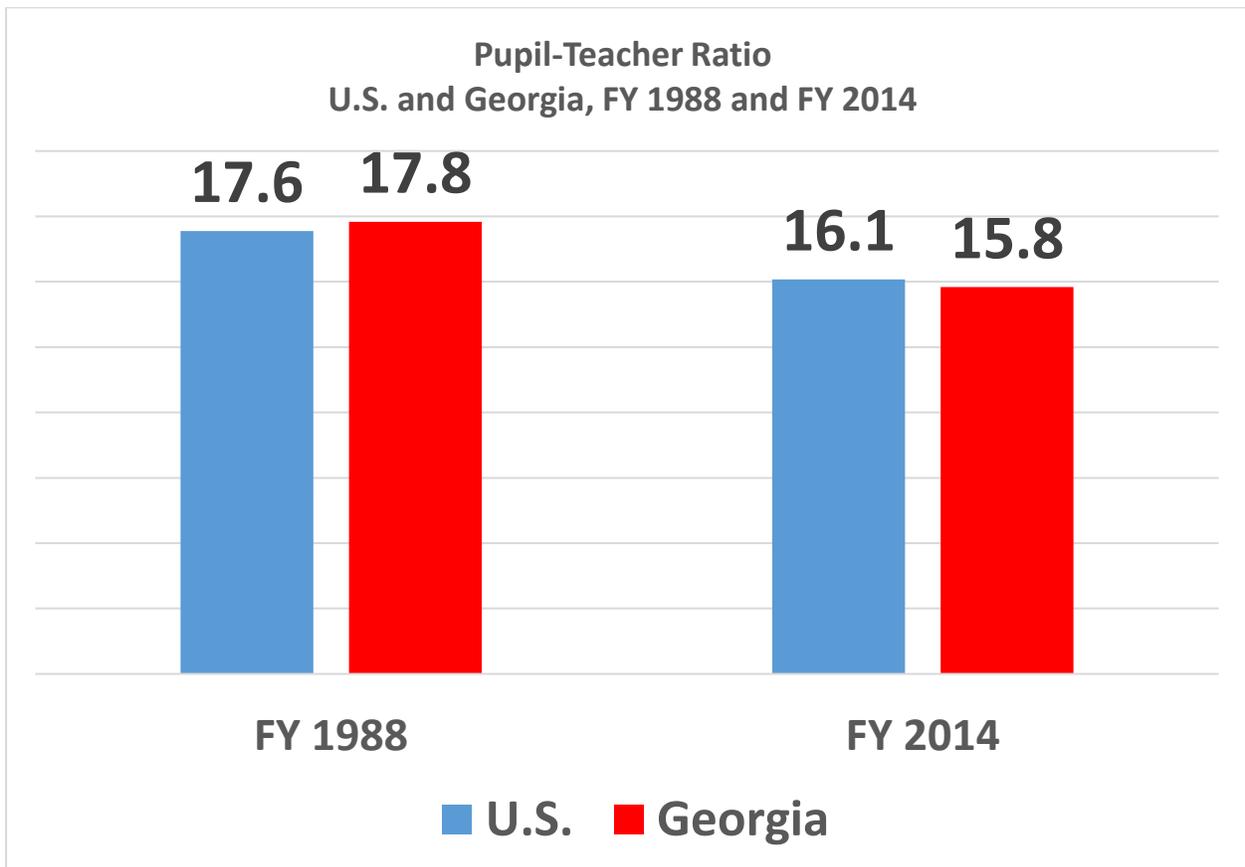
Source: National Center for Education Statistics²³

In 1988, Georgia students had pupil-teacher ratios that were slightly larger than the national average – 17.8 students per teacher in Georgia, as compared to a national public school average of 17.6 students per teacher. However, public schools nationally and in Georgia experienced large decreases in pupil-teacher ratios between 1988 and 2014. By 2014, the average pupil-teacher ratio nationwide was 16.1 students per teacher, and in Georgia the pupil-teacher ratio had fallen to 15.8.

²³ National Center for Education Statistics, Tables 79 and 80, 1990 Digest of Education Statistics and Tables 203.40 and 213.20, 2015 Digest of Education Statistics.

Thus, while nationally, American students experienced an 8.5 percent increase in access to teachers, Georgia’s public school students experienced an 11.2 percent increase.

Contemporary Georgia public school students have access to significantly smaller class sizes relative to Georgia students of prior generations and smaller class sizes relative to the average American public school student.



Source: National Center for Education Statistics²⁴

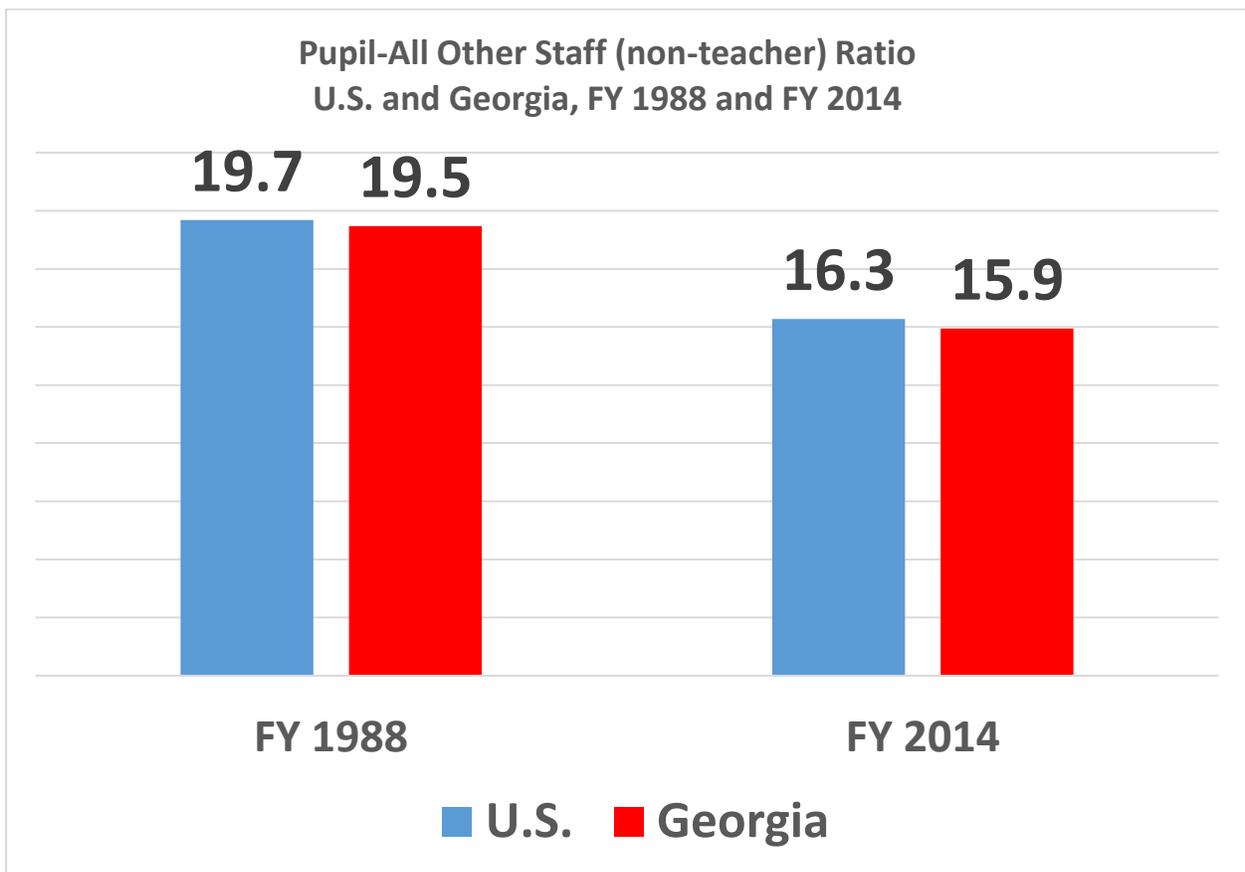
The largest declines in staffing ratios for students were in the ratio of students to “all other staff” (the ratio of students to non-lead teachers). Between 1988 and 2014, the average pupil-all other staff ratio in the United States fell from 19.7 to 16.3 students per non-lead teacher. Thus, American students in 2014 had far greater access to non-lead teachers in their public schools relative to the students of 1988.

²⁴ National Center for Education Statistics, Tables 79 and 80, 1990 Digest of Education Statistics and Tables 203.40 and 213.20, 2015 Digest of Education Statistics.

The increase in “all other staff” in Georgia was even larger. From 1988 to 2014, the pupil-all other staff ratio fell from 19.5 to 15.9 students per non-lead teacher.

Thus, American public school students experienced a 17.3 percent increase in this staffing, while Georgia public school students experienced an 18.5 percent increase in access to non-lead teachers.

In both 1988 and 2014, Georgia students had a bit more access to non-lead teachers relative to the average American public school student, and this relatively higher access for Georgia students increased only slightly during this period.



Source: National Center for Education Statistics²⁵

²⁵ National Center for Education Statistics Tables 79 and 80, 1990 Digest of Education Statistics and Tables 203.40 and 213.20, 2015 Digest of Education Statistics.

Conclusion

This report sought to address three questions:

- 1) How much do taxpayers really spend on Georgia public schools?
- 2) How much has taxpayer funding on public schools really increased over time?
- 3) Where have these increased taxpayer funds gone? In particular, how much of the increased funding has gone to pay increases for teachers, and how much has gone to adding additional staff?

The report found that Georgia public schools spent \$19.158 billion in FY 2016, not \$15.665 billion, as reported on the Georgia Department of Education's website. Additionally, this discrepancy between what the GaDOE reports on its own website and what the GaDOE reports to other governmental agencies about the true rate of public school spending has been growing significantly over time.

As for how much the funding has grown, between 1988 and 2014 inflation-adjusted spending per student in Georgia public schools increased by 56 percent. Thus, current public school students have significantly more resources devoted to their public schools relative to Georgia students of three decades ago. This 56 percent figure understates the true increase in public school resources since the creation of Georgia's QBE funding formula in 1985 for two reasons. First, I could not locate publicly available data that showed the dramatic increase in public school spending that occurred in the first years of QBE, between 1985 and 1988. Second, Georgia public schools have increased spending by a total of \$1.3 billion between FY 2014 and 2016 – with additional large increases in FY 2017 and Governor Deal's proposed FY 2018 budget.

This very large increase in real resources for Georgia public schools since the creation of QBE in 1985 did not lead to a real increase in average salaries for Georgia teachers. Instead, these funding increases went to hiring additional staff, above and beyond the increases necessary to accommodate growth in student enrollments. Consequently, current Georgia public school students have significantly more access to teachers and other staff relative to public school students of decades ago and a bit more access to staff as compared to the national public school average.

About the Georgia Public Policy Foundation: Established in 1991, the Foundation is an independent, state-focused think tank that proposes market-oriented approaches to public policy to improve the lives of Georgians.

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