UNDERPAID TEACHERS AND CRUMBLING SCHOOLS: HOW UNDERFUNDING PUBLIC EDUCATION SHORTCHANGES AMERICA'S STUDENTS

HEARING

BEFORE THE

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C O N T E N T S

UNDERPAID TEACHERS AND CRUMBLING SCHOOLS: HOW UNDERFUNDING PUBLIC EDUCATION SHORTCHANGES AMERICA'S STUDENTS

Tuesday, February 12, 2019
House of Representatives,
Committee on Education and Labor,
Washington, DC.

The committee met, pursuant to notice, at 10:17 a.m., in room 2175, Rayburn House Office Building, Hon. Robert C. "Bobby" Scott (chairman of the committee) presiding.

Present: Representatives Scott, Grijalva, Courtney, Fudge, Sablan, Takano, Adams, DeSaulnier, Jayapal, Morelle, Wild, Harder, McBath, Schrier, Underwood, Hayes, Shalala, Omar, Lee, Castro, Foxx, Roe, Thompson, Guthrie, Grothman, Stefanik, Allen, Banks, Walker, Comer, Cline, Fulcher, Taylor, Watkins, Wright, Meuser, Timmons, and Johnson.

Also present: Representative Horn.

Staff present: Tylease Alli, Chief Clerk; Jacque Chevalier Mosely, Director of Education Policy; Mishawn Freeman, Staff Assistant; Christian Haines, General Counsel, Education; Ariel Jona, Staff Assistant; Stephanie Lalle, Deputy Communications Director; Andre Lindsay, Staff Assistant; Richard Miller, Director of Labor Policy; Max Moore, Office Aide; Veronique Pluviose, Staff Director; Loredana Valtierra, Education Policy Fellow; Banyon Vassar, Deputy Director of Information Technology; Lakeisha Steele, Professional Staff; Cyrus Artz, Minority Parliamentarian; Marty Boughton, Minority Press Secretary; Courtney Butcher, Minority Coalitions and Members Services Coordinator; Blake Johnson, Minority Staff Assistant; Amy Raaf Jones, Minority Director of Education and Human Resources Policy; Hannah Matesic, Minority Legislative Operations Manager; Kelley McNabb, Minority Communications Director; Jake Middlebrooks, Minority Professional Staff Member; Brandon Renz, Minority Staff Director; Alex Ricci, Minority Professional Staff Member; Mandy Schaumburg, Minority Chief Counsel and Deputy Director of Education Policy; Meredith Schellin, Minority Deputy Press Secretary and Digital Advisor; and Brad Thomas, Minority Senior Education Policy Advisor.

Chairman SCOTT. Good morning. A quorum being present, the Education and Labor Committee will come to order.

I would like to welcome everyone here for this legislative hearing on Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students.

Pursuant to committee rule 7(c), opening statements are limited to the Chair and Ranking Member. This allows us to hear from our witnesses sooner and provides members an adequate time to ask questions. And I now recognize myself for the purpose of making an opening statement.

This morning, we are here to discuss how chronically underfunding public education is affecting students, parents, teachers, and communities. This is a discussion our constituents are eager for us to have and a challenge the American people were calling us to solve. In Oklahoma, West Virginia, Virginia, Arizona, Los Angeles, and many other cities and States in between, voters are demanding greater support for public education.

In a time of extreme polarization, support for public education is a rare bridge across our political and cultural divisions. A poll conducted after the 2018 midterm elections, in that poll, an overwhelming majority of Americans, both Democrats and Republicans, said increasing K–12 funding is a, quote, extremely important priority for the 116th Congress.

Widespread support for public education makes our longstanding unfortunate tradition of failing to prioritize public education both confounding and frustrating. You can look no further than Title IA of the Elementary and Secondary Education Act, the largest grant program in K–12. Title IA supports public schools with large numbers of students living in poverty. In the 2017–2018 school year, Congress gave schools less than a third of the full authorization amount for this basic grant program.

The Individuals with Disabilities Education Act, known as IDEA, is another example. IDEA protects students with disabilities in making sure they can receive a free and appropriate public education in the least restrictive environment. To help achieve this goal, it authorizes grants to offset extra costs associated with supporting students with disabilities. IDEA has not been fully funded at any point in its 44-year history. In fact, funding levels for IDEA have never reached even half of the authorized levels.

And despite the evidence linking well-resourced facilities, well-supported teachers, and healthy buildings to better economic and life outcomes, the Federal Government dedicates no money to public school infrastructure improvements. The lack of Federal support—the lack of Federal support has exacerbated the issues caused by lack of commitment to robust public education funding at the state level.

According to the Center on Budget and Policy Priorities adjusted for inflation, 29 states spent less per student in 2015 than they had in 2008 before the Great Recession. In 17 of those states—in 17 of those states, funding per pupil was cut at least 10 percent.

Today, despite the long and growing list of school buildings' failures that have endangered students and educators, 12 states contributed no money to support school facilities, and an additional 13 states cover between 1 and 9 percent of school facility costs.

A combination of chronic Federal and State underfunding in public education has left many schools at a literal breaking point. Ac-

cording to one study published in 2016, public K–12 facilities are, on average, underfunded about $46 billion dollars every year compared to building industry and best practice standards.

In 2014, the Department of Education estimated that it would cost $197 billion dollars to bring all schools into good condition. This problem is not limited to physical infrastructure. As technology becomes increasingly central to providing quality education, the lack of funding for basic school upgrades is for schools to put off needed investments in digital infrastructure.

In a 2017 Education Super Highway report, that report found that more than 19,000 schools serving nearly a quarter of public school students are without the minimum connectivity necessary for digital learning.

Now, our nation primarily funds public education using property taxes, so the erosion of Federal and State support has had a particularly harmful effect on low-income districts where revenue is lacking and where schools are, therefore, chronically underfunded. And this underfunding has consequences.

For example, in September 2018, dozens of New Jersey schools closed for weeks because of mold. Baltimore closed schools the same month during a heat wave because many schools did not have air-conditioning. And notably, in Baltimore, only 3 percent of the schools are less than 35 years old.

Five years after the discovery of lead in—lead contamination in the water, schools in Flint, Michigan, finally have a water filtration system, incredibly only because of a private donation. So 2 weeks ago, I joined Congressman Norcross and Senator Jack Reed, along with 180 Members of Congress, to introduce the Rebuild America's Schools Act. This bill would create a $70 billion grant program and a $30 billion tax credit bond program targeted at improving the fiscal and digital infrastructure at high-poverty schools. In doing so, it would create roughly $1.9 million good paying jobs. In fact, Rebuild America's Schools Act would actually create more jobs than the recent $1.9 trillion Republican tax bill at approximately 5 percent of the cost.

At the start of his Presidency and again in the State of the Union last week, President Trump called on a massive infrastructure package to rebuild America. School infrastructure must be part of that package when we consider it. And this should be a bipartisan effort. An overwhelming majority of Americans understand the correlation between consistent nationwide failure to support public schools and inequality in educational opportunity.

We can do better. The total U.S. spending on education accounts for 2 percent of the Federal budget. That is less than most other developed nations. It will take a long-term commitment to public schools in order to see the consistent results we expect. We must be willing to make that commitment.

And I want to close by recognizing the burden we continue to place on America's educators. While crumbling schools are a visible risk to students, the effect of chronic underfunding on our teachers is equally, if not more, concerning.

Accounting for inflation, teacher pay actually fell $30 a week from 1996 to 2015. Public school teachers already earn just 77 percent of what other college graduates with similar work experience

earn in weekly wages. Teachers who live at the intersection of declining salaries and undersourced schools continue to demonstrate their dedication to their students. And making matters worse, as an example of that they spend an average of $485 of their own money every year to buy classroom materials and supplies.

If we cannot attract and retain the most talented, passionate teachers in the classroom, we will fail to fulfill our promise to students of their quality education.

And so without objection, I would like to enter into the record the following documents: First, a list of organizations that endorse the Rebuild America's Schools Act and their endorsing statements, and the following reports: One by the National Conference of State Legislatures, No Time to Lose: How to Build a World-Class Education System State By State; the Learning Policy Institute, How Money Matters to Schools; by the Center on Budget and Policy Priorities, a Punishing Decade for School Funding; by the Center for American Progress, the Case for Federal Funding for School Infrastructure; one by the 21st Century School, U.S. Green Building Council, and the National Council on School Facilities, the State of our Schools: America's K–12 Facilities; and finally, Fixing Chronic Disinvestment in K–12 Schools, the Center for American Progress. I ask all those documents be placed in the record.

Without objection, so ordered.

[The information referred to follows:]

REBUILD AMERICA'S SCHOOLS
A National Coalition

SCHOOL DISTRICTS
Akron, OH
Aldine, TX
Birmingham City, AL
Birmingham Public, AL
Boston, MA
Broward County, FL
Brownsville, TX
Chicago, IL
Cincinnati, OH
Clark County, NV
Compton, CA
Corpus Christi, TX
Dayton, OH
Detroit, MI
Escambia, FL
Houston, TX
Jefferson Parish, LA
Jersey City, NJ
McAllen, TX
Memphis, TN
Miami-Dade, FL
Milwaukee, WI
Minneapolis, MN
Montgomery, AL
Nashville, TN
Newark, NJ
New Orleans, LA
New York, NY
Norfolk, VA
Oklahoma City, OK
Omaha, NE
Pharr-San Juan-Alamo, TX
Philadelphia, PA
Providence, RI
Richmond, VA
Rochester, NY
Savannah-Chatham, GA
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American Federation of Teachers ◻ Council of The Great City Schools ◻ National Parent Teacher Association
National Education Association ◻ American Association of School Administrators ◻ National School Boards Association
IUOE ◻ National Association of Elementary School Principals ◻ National Association of Secondary School Principals
NAACP ◻ National Association of Federally Impacted Schools ◻ American Institute of Architects
Organizations Concerned About Rural Education ◻ National Rural Education Association

January 2, 2019

The Honorable Bobby Scott
Chair, The Education and Labor Committee
US House of Representatives
Washington, D.C. 20515

Dear Chairman Scott:

Rebuild America's Schools looks forward to assisting you advance education as Chair of the Education and Labor Committee. We support the *Rebuild America's Schools Act* providing the long term improvement of public school facilities through grants and tax credit bonds to support the financing of public school building infrastructure.

The national need to modernize schools is extensive. A 2013 Center for Green Schools Report *State of Our Schools* estimates that schools are facing $271 billion in deferred maintenance costs. The Report estimates that the cost to bring schools into good repair and to address modernization needs is $542 billion over the next ten years. This is beyond the capacity of state and local community resources.

The *Rebuild America's Schools Act* invests in a grant program to create over 1.9 million jobs to improve health and safety conditions impacting students and staff. The bill also builds upon tax credit bonds such as the Qualified Zone Academy Bonds (QZAB) originally authorized by Congress in 1997. QZABs and tax credit bonds have been used efficiently and effectively by local school districts in your home state and in states across the nation to renovate, repair and modernize schools and classrooms to help students learn, achieve and succeed. School facility infrastructure needs in states and local communities far exceed available local resources.

The *Rebuild America's Schools Act* addresses a national need to assist local school districts to provide safe, modern, healthy, energy efficient schools for our students. Federal financial support will help repair, renovate and modernize America's schools stimulating and creating local jobs.

We look forward to working with you on The Rebuild America's Schools Act, a critical federal link in providing America's students modern, technologically and energy efficient schools and classrooms where they can develop the educational skills necessary to achieve and succeed in the 21st century workforce.

Sincerely,

Bob Canavan

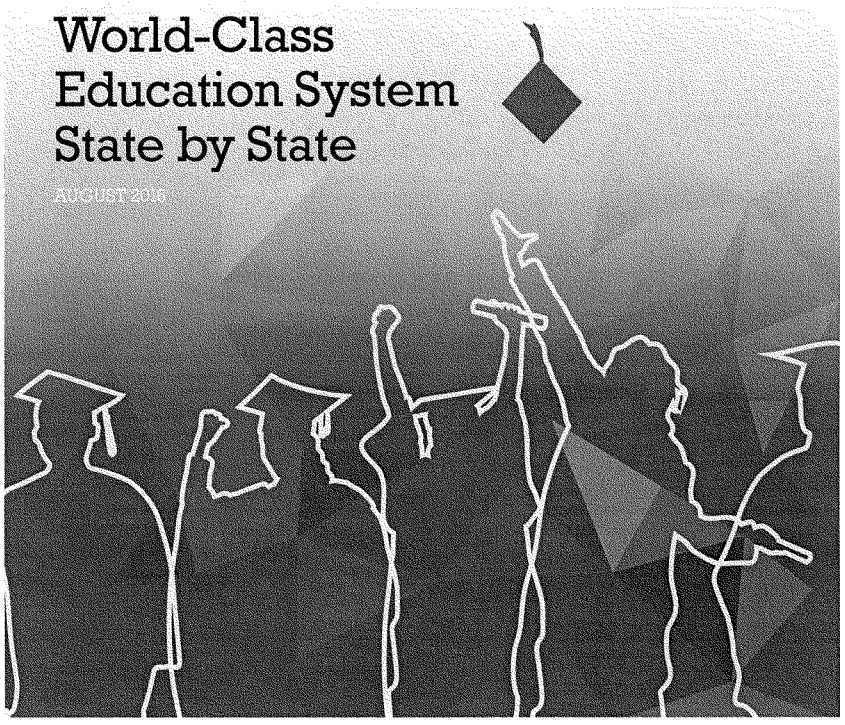
Robert P. Canavan
Chair

NCSL
NATIONAL CONFERENCE of STATE LEGISLATURES

No Time to Lose

How to Build a World-Class Education System State by State

AUGUST 2016



NCSL's Study Group on International Comparisons in Education

The National Conference of State Legislatures hosted a plenary session during its 2013 Fall Forum to discuss the results of the Organisation for Economic Co-operation and Development's (OECD) most recent survey of what 15-year-olds in industrialized countries could demonstrate about their knowledge of reading, mathematics and science. This survey is known as the Programme for International Student Assessment (PISA). Upon hearing of the disappointing performance of students in the U.S., officers of NCSL's Standing Committee on Education requested that NCSL launch a legislative study into international comparisons of high-performing education systems. They wanted to study other high-performing countries to learn which policies and practices were in place and what lessons the U.S. and individual states might learn from their success. They also wanted to learn about the consequences for our economy and quality of life if we failed to improve our standing.

A bipartisan group of 28 veteran legislators and legislative staff, along with several partners from the private sector, began an 18-month study in 2014. They focused on the highest performing countries on PISA to discover commonalities across their policies and practices. They met with education leaders from these countries, along with national and international experts who study their systems. They also visited several countries to see the differences firsthand.

This first report explains why there's no time to lose in rebuilding state education systems. However NCSL's study group still has questions—and surely the reader does too—about how to design and implement these systemic changes in the states. Where should legislators begin—teacher recruitment or preparation, standards, assessments, early learning? How should states realign their resources? Do some of these policies fit together better into an actionable package? There is still much to learn and discover.

The study group members will continue to meet through 2017 to find the answers to these and other questions by continuing to study and learn from other successful countries, as well as districts and states here in the U.S. Upon completion of our study, the study group will produce a policy roadmap that states can use to guide their reforms, as well as provide support to states ready to embark on these efforts.

EXECUTIVE SUMMARY

The bad news is most state education systems are falling dangerously behind the world in a number of international comparisons and on our own National Assessment of Educational Progress, leaving the United States overwhelmingly underprepared to succeed in the 21st century economy. The U.S. workforce, widely acknowledged to be the best educated in the world half a century ago, is now among the least well-educated in the world, according to recent studies. At this pace, we will struggle to compete economically against even developing nations, and our children will struggle to find jobs in the global economy.

States have found little success. Recent reforms have underperformed because of silver bullet strategies and piecemeal approaches. Meanwhile, high-performing countries implement policies and practices and build comprehensive systems that look drastically different from ours, leading them to the success that has eluded states. Pockets of improvement in a few districts or states is not enough to retain our country's global competitiveness.

The good news is, by studying these other high-performing systems, we are discovering what seems to work. Common elements are present in nearly every world-class education system, including a strong early education system, a reimagined and professionalized teacher workforce, robust career and technical education programs, and a comprehensive, aligned system of education. These elements are not found in the U.S. in a consistent, well-designed manner as they are found in high performers.

We have the ability to turn things around. Much higher-performing, yet less-developed countries—such as Poland and Singapore—have made significant progress developing their education systems in just a decade or two because they felt a strong sense of urgency. State policymakers, too, can get started right away to turn around our education system by taking immediate steps to:

- Build an Inclusive Team and Set Priorities.
- Study and Learn from Top Performers.
- Create a Shared Statewide Vision.

We are discovering what seems to work. Common elements are present in nearly every world-class education system, including a strong early education system, a reimagined and professionalized teacher workforce, robust career and technical education programs, and a comprehensive, aligned system of education.

- Benchmark Policies.
- Get Started on One Piece.
- Work Through "Messiness."
- Invest the Time.

We must directly face these challenges and begin immediately to reimagine and re-engineer our own education system. We must implement meaningful and comprehensive changes that will produce real results for our students.

State legislators must lead this work. Education is first and foremost a state responsibility. Each state can develop its own strategies for building a modern education system that is globally competitive, similar to the approach taken by other high-performing countries.

But we must begin now. There's no time to lose.

NCSL STUDY GROUP REPORT

We cannot ignore the reality that most state education systems are falling dangerously behind the world, leaving the United States overwhelmingly underprepared to succeed in the 21st century economy.

The U.S. workforce, widely acknowledged to be the best educated in the world half a century ago, is now among the least well-educated, according to recent studies. At this pace, we will struggle to compete economically even against developing nations, and our children will struggle to find jobs in the global economy.

Despite their efforts, states have found little success because recent reforms have underperformed. Meanwhile, high-performing countries implement policies and practices and build comprehensive systems that look drastically different from ours, leading them to the success that has eluded states. Pockets of improvement in a few districts or states are not enough to retain our country's global competitiveness.

The good news is that we have the ability to turn things around. Much higher-performing, yet less-developed countries—such as Poland and Singapore—have made significant progress developing their education systems in just a decade or two, and most of their innovations came from right here in the U.S.

But we must begin now. There's no time to lose. We must directly face these challenges and begin immediately to reimagine and re-engineer our own education system. We must implement meaningful and comprehensive changes that will produce real results for our students.

Each state can develop its own strategies for building a modern education system that is globally competitive, similar to the approach taken by other high-performing countries. These countries did not copy each other; instead they borrowed and adapted ideas, many from the U.S., and customized their approach for their own unique context.

State legislators must be at the center of this discussion. Education is first and foremost a state responsibility. State legislators represent and can bring together the diverse viewpoints at the state and local levels that must be included in setting a vision and priorities for reforms. States must work together with local entities to design efforts that are practical and appropriate for each individual state. We will not be successful by allowing the federal government to set agendas and priorities.

Building Consensus

The recent reauthorization of the Elementary and Secondary Education Act as the Every Student Succeeds Act (ESSA) moves federal education policy away from the top-down, punitive approach that has been in place since 2002. States now have more flexibility to reimagine their accountability systems, design interventions to improve instruction, and use federal resources to support students and schools in more flexible ways. At the same time, states will continue to have the data needed to monitor the performance of student subgroups, ensuring a focus on a high-quality education for all children.

ESSA provides an opportunity for states to ensure that all students have the knowledge, skills, abilities and behaviors to succeed in college and the workplace so that jobs stay in our states rather than going overseas. These changes represent both an opportunity and a challenge for states, and lessons from high-performing countries offer timely guidelines for states at this opportune time.

HERE ARE STEPS THAT STATES CAN TAKE IMMEDIATELY.

Build an Inclusive Team and Set Priorities. State legislators cannot do this work alone. They must assemble a broad and diverse group that brings state and local policymakers, teachers, principals, superintendents, unions, business, parents and students into an inclusive process to set a vision for reform and identify priorities. State legislators know that it is very difficult to achieve agreement on reimagining and building a 21st century education system. But every person or group cannot get everything they want, so we recommend a different approach to achieving a collective and realistic vision: To build consensus, every stakeholder in the discussion is expected to put on the table a proposition giving them something they never thought they could get, in exchange for giving up something they never thought they would give up. In addition, it is unrealistic to expect that every person, group or interest will be 100 percent in favor of every idea or strategy. So, it might be wise to establish a threshold for support to move forward. For example, the group might adopt a "70 percent rule": An idea or decision is approved if 70 percent of the group is in favor.

Study and Learn From Top Performers. Every state should embark on a journey similar to that of the NCSL study group—a journey to discover the policies and practices of other high-performing countries. Reconsider much of what you think you know; abandon many ideas to which you have long been committed; and embrace new ideas, many which come from other countries but also those already implemented in many of our states. Study innovations in the states. Look hard at statewide data and be unafraid to compare your own state to other states and countries.

It is unrealistic to expect that every person, group or interest will be 100 percent in favor of every idea or strategy. So, it might be wise to establish a threshold for support to move forward. For example, the group might adopt a "70 percent rule": An idea or decision is approved if 70 percent of the group is in favor.

To build consensus, every stakeholder in the discussion is expected to put on the table a proposition giving them something they never thought they could get, in exchange for giving up something they never thought they would give up.

■ FROM THE STUDY GROUP

"Many states have implemented individual education reforms but have not accomplished the results hoped for. One of the most important lessons I have learned during this study is the value of having a well thought out and widely accepted vision that includes the coordination of multiple reforms to produce a world-class education system."

— State Senator John Ford, R-Okla.

Create a Shared Statewide Vision. Developing a shared long-term vision and setting goals to guide the work will be critical to the success of the effort. The vision becomes a guide for policymaking that transcends the shifts in politics or personalities. The vision becomes the North Star that continually guides the work. The journey will not be a short one, but a good roadmap—knowing where to go and developing the way there—means that policymakers will ultimately arrive at the desired destination.

Benchmark Policies. After establishing a shared vision, the state should consider benchmarking its education policies, practices and outcomes against those of high-performing countries and high-performing states. This helps to identify specific policies and implementation strategies for necessary shifts in policy and practice. An ongoing benchmarking process also allows the state to continually monitor its results.

Get Started on One Piece. After creating a comprehensive strategic plan, states should get started right away on a priority area of reform. Building a cohesive system does not mean states should wait to implement all pieces together, but rather understand and emphasize the connectedness of policy pieces. We urge states to move forward now to design and implement priority reform strategies, such as early literacy, teacher preparation, or college and career pathways. Identify an important early success that supports the state vision and the strategic plan, and use the success as momentum for continuous improvement.

Work Through "Messiness." In both high-performing countries and in successful reform efforts here in the U.S., the process of designing system-wide reform is always difficult and messy. There is no one recipe for success. The top performers took at least one step backward for every two steps forward, but continued to keep their eye on the goal to stay the course.

Invest the Time. States embarking on this process will find that they cannot tackle everything at once and will need to prioritize their work. We urge states to define these priorities as part of an inclusive process that first identifies a statewide vision and ensures that individual strategies are all needed parts for achieving statewide goals. States will begin this process at different places and will design different pathways. Achieving system-wide change will take time and will begin and end in different places in different states.

State policymakers can take these first action steps to quickly begin to move their states from mediocrity to excellence.

But first policymakers must face and understand the facts—the unfortunate state of our current education system. Then policymakers must understand the common elements found in world-class education systems.

Facing Facts: U.S. Students and Workers Struggle

POOR SCORES ON PISA

In 2000, the Organisation for Economic Co-operation and Development (OECD) embarked on its first international comparative study of what a sample of 15-year-olds can demonstrate about their knowledge in key areas including math, reading and science. [1] This assessment is known as the Programme

After all of the national, state and district reform efforts during the decade following No Child Left Behind, the U.S. was outperformed not only by a majority of the advanced industrial nations, but by a growing number of less-developed nations as well.

U.S. RANKING ON PISA

The Programme for International Student Assessment (PISA) is a comparative study of 15-year-old students' knowledge in key areas including math, reading and science.

YEAR (COUNTRIES TESTED)	U.S. RANKING		
	READING	MATH	SCIENCE
2000 (32)	15th	19th	14th
2003 (41)	18th	28th	22nd
2006 (57)	NR	34th	28th
2009 (65)	17th	30th	22nd
2012 (65)	24th	36th	28th

SOURCE: NATIONAL CENTER ON EDUCATION AND THE ECONOMY, CENTER ON INTERNATIONAL EDUCATION BENCHMARKING, 2013

■ FROM THE STUDY GROUP

"It's easy to say that the U.S. isn't Singapore or Finland so there's not much to learn from them. Well, 30 years ago, even Finland wasn't Finland. And some of the things they did such as improving teacher preparation is clearly something we can do irrespective of culture, homogeneity, diversity and so on."

— State Representative Roy Takumi, D-Hawaii

for International Student Assessment (PISA). Research has proven that a strong education system contributes directly to a strong economy. Understanding how strong education systems in industrialized countries are designed can help us uncover how they contribute to economic success and improve their citizens' quality of life.

In the first study, 32 highly-industrialized member countries participated. The U.S. ranked a disappointing 15th in reading, 19th in mathematics and 14th in science—right about in the middle of the countries surveyed. The initial results emboldened some U.S. policymakers to call for reforms, such as more testing and accountability and minimum qualifications for teachers. At the same time, the federal No Child Left Behind (NCLB) Act was enacted.

When the fifth survey was administered in 2012, the number of countries in the survey had grown to 65, and included less-developed countries. The news was worse for the U.S., which placed 24th in reading, 36th in mathematics and 28th in science. Again, our standing was in the middle of the countries surveyed. After all of the national, state and district reform efforts during the decade following NCLB, the U.S. was outperformed not only by a majority of the advanced industrial nations, but by a growing number of less-developed nations as well. [2]

POOR SCORES ON PIAAC

The OECD also administers another survey called the Survey of Adult Skills, which is part of its Programme for the International Assessment of Adult Competencies (PIAAC). It surveys adults ages 16 to 65 in numeracy, literacy and problem-solving. The results from the most recent survey, conducted in 33 nations, were released in 2013.

The Educational Testing Service (ETS) did a special analysis of the 2013 PIAAC data on millennials—those in the workforce ranging in age from teens to early 30s. They argued that this generation "will largely determine the shape of the American economic and social landscape of the future." ETS found that only the millennials in Spain and Italy scored lower on the PIAAC survey in reading than millennials in the U.S. In numeracy, U.S. millennials tied for last with Italy and Spain. In problem-solving, U.S. millennials again came in last among the 33 nations.

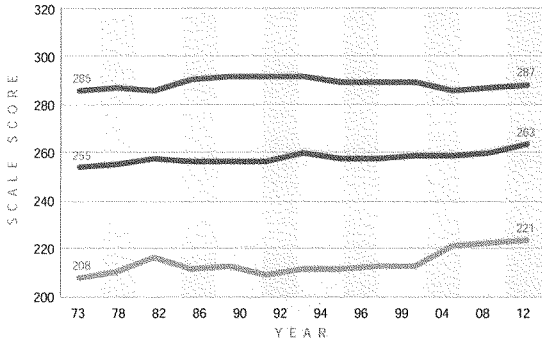
POOR PERFORMANCE ON OUR "NATION'S REPORT CARD"

Not only are U.S. students struggling to compete globally, they also struggle to meet the relatively low expectations set for students through our own "Nation's Report Card," or the National Assessment of Educational Progress (NAEP). For the four decades this assessment has been administered to students

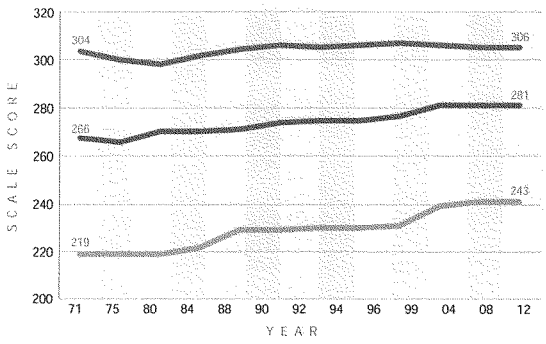
LONG-TERM NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS (NAEP) SCORES

Over the past four decades, high school students in the U.S. have made little progress according to the "Nation's Report Card," administered by the NAEP.

READING



MATHEMATICS **Ages:** 17 13 9



Source: National Center for Education Statistics (2012). Trends in Academic Progress

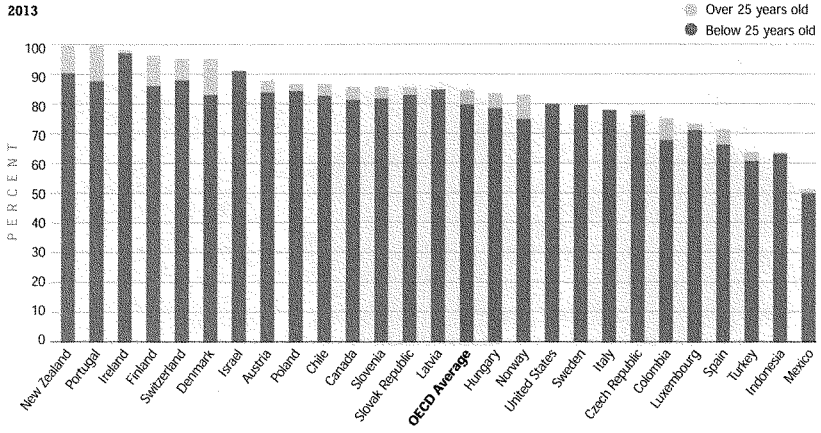
across the country, high school students have made little improvement.

INTERNATIONAL COMPARISONS ARE VALID

When these survey results were first released in the 2000s, many countries enacted sweeping changes to improve their education systems and drive economic development. They realized that they needed to turn their education systems around to compete in a global economy. Some in the U.S., however, explained away the results by criticizing the PISA and PIAAC methodology, denied that education results in other countries could be compared to those in this country, or argued that

UPPER SECONDARY GRADUATION RATES, 2013

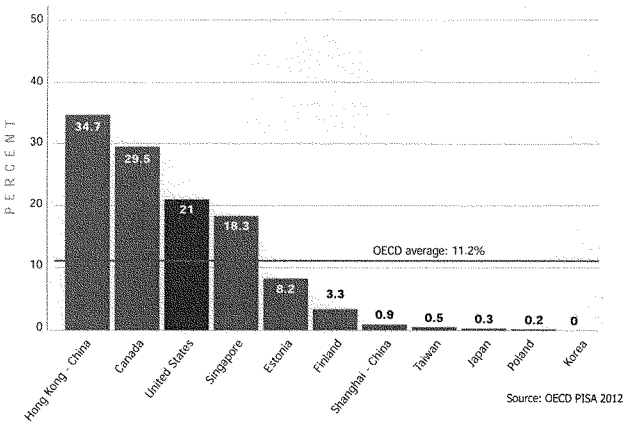
The OECD reports that the U.S. graduation rate is 80 percent, lower than most other high-performing countries. This dispels the assertion that other high-performing countries educate only their elite.



Source: OECD (2015), Education at a Glance 2015: OECD Indicators, OECD Publishing. http://dx.doi.org/10.1787/eag-2015-en, p. 48

PERCENT OF STUDENTS WHO ARE IMMIGRANTS

Europe and Asia have experienced an upsurge in immigration over the past several decades, and Asian countries have significant cultural, linguistic, ethnic and religious diversity.



Source: OECD PISA 2012

ELEMENTS OF A WORLD-CLASS EDUCATION SYSTEM

Children come to school ready to learn, and extra support is given to struggling students so that all have the opportunity to achieve high standards.

- Necessary resources ensure that all children enter the first grade with the cognitive and non-cognitive skills needed to master a first-grade curriculum set to high standards.
- Once students are in school, resources are distributed so that students who may find it harder to meet high standards will be given the extra resources—especially highly effective teachers—they need to succeed.

A world-class teaching profession supports a world-class instructional system, where every student has access to highly effective teachers and is expected to succeed.

- The highly professional teaching force is well-prepared, well-compensated and well-supported throughout their careers.
- Teachers support a well-designed instruction system that includes high standards for learning, a core curriculum created by world-class teachers, and high-quality assessments designed to measure complex skills demanded by the standards and curriculum.
- All students are expected to be ready for college and career, and all educators are expected to get them there.

A highly effective, intellectually rigorous system of career and technical education is available to those preferring an applied education.

- A powerful, hands-on applied curriculum is built, requiring strong academic skills.
- The system has no "dead ends," and pathways to university are clear and always available.
- Schools partner with employers to ensure that high standards are set for the students and provide on-the-job training and learning opportunities to enable them to reach those standards.

Individual reforms are connected and aligned as parts of a clearly planned and carefully designed comprehensive system.

- All policies and practices are developed to support the larger education system.
- The coherent system of education is designed to ensure that every student meets the same goal of college and career readiness.

international comparisons are irrelevant. This criticism continues even today as the United States falls further and further behind.

The NCSL study group's conclusions were very different. They found that U.S. students' poor performance cannot easily be explained away. For example, critics assert that the U.S. educates all students while the other high-performing countries educate only their elite. But graduation rates dispel this assertion. The OECD reports that the U.S. graduation rate is 80 percent, lower than most other high-performing countries.

Critics also assert that the U.S. is more diverse than other countries and, as a result, faces challenges that others do not. This may have been true in the past, but it is not the case today. Both Europe and Asia have experienced an upsurge in immigration over the past several decades. The same is true of Canada. A greater proportion of Canadian students was born outside Canada than the proportion of U.S. students born outside the U.S. Furthermore, Asian countries have significantly more cultural, linguistic, ethnic and religious diversity than many Americans often suppose. For example, Singapore has three main ethnic groups (Chinese, Malay and Indian), four national languages (Mandarin, Malay, Tamil and English) and a host of major religions, including Buddhism, Islam, Christianity, Hinduism, Sikhism, Taoism and Confucianism.

Facing Facts: U.S. Policymakers Struggle to Find Silver Bullet

Over the past several decades, policymakers in the U.S. have worried about flat test scores and fledgling international competitiveness. In an effort to boost achievement for all students, policymakers have tried a number of approaches and passed a number of state and federal laws. These have included increasing funding, reducing class size, enhancing school choice, improving school technology and teacher quality, more testing and tougher test-based accountability. While some policies have had marginal success in some states or districts, success has not been as widespread as policymakers had hoped.

■ FROM THE STUDY GROUP

"Every championship team, no matter what sport, knows the fundamentals of the game and practices those relentlessly. I believe we have identified the fundamentals of education that are necessary to succeed in preparing our children to be internationally competitive in today's changing economy. It is imperative that we acknowledge and adopt those fundamentals if we are to be champions in education again."

— State Senator Luther Olsen, R-Wisc.

The only policy approach developed by both U.S. states and top-performing countries is high academic standards. But all of the top-performing countries have coupled developing such standards with a curriculum framework, specific curriculum and well-aligned, high-quality, essay-based assessments in seamless instructional systems. Most states have yet to move in this direction, and implementation of rigorous standards has been haphazard at best.

In retrospect, the NCSL study group concludes that states have tried to find individual "silver bullets" without setting decisive goals and creating a thoughtful, systemic approach to building a coherent system with an appropriate timeline for implementation, as did the other high-performing countries. Examples of states' piecemeal approaches include:

- Increasing teacher pay without demanding better preparation
- Improving early education without continuing supports for struggling students in K-12
- Increasing funding without first shifting funds from unproven strategies
- Decreasing class size without first restructuring staffing and time
- Using test scores in teacher evaluations without ensuring that all teachers are receiving job-embedded, high-quality, ongoing learning

This "silver bullet" approach is not what the study group found in high-performing countries. They do not look to single policy shifts to improve student outcomes. Instead, they have created a coherent system of education within which all policies and practices are designed to lead to high performance.

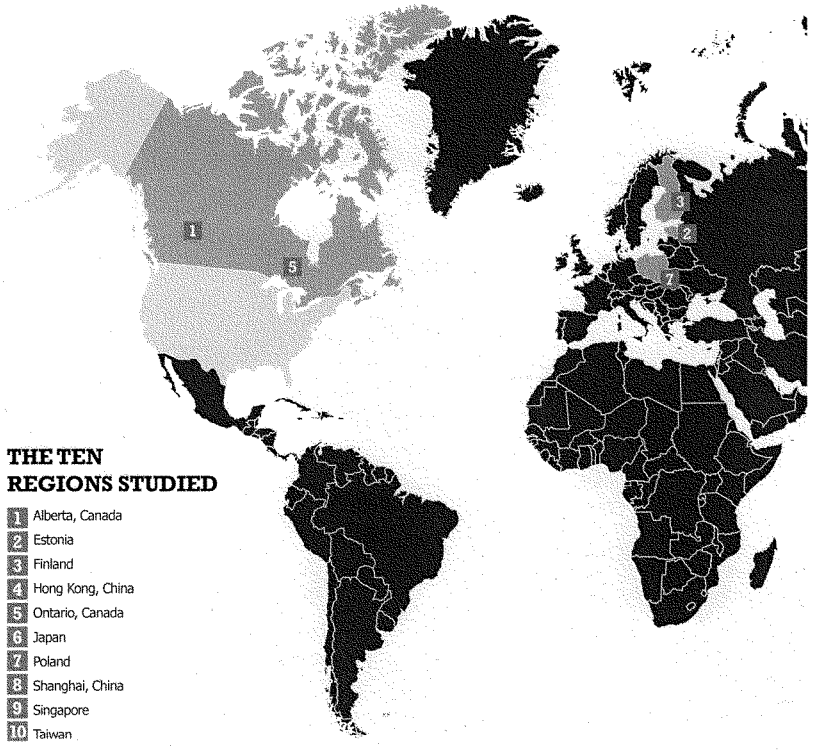
TOP PERFORMERS: HOW THEY BECAME THE BEST IN THE WORLD

As NCSL's study group talked with experts from around the world and visited several top-performing countries, they confirmed what others had found—there are common elements that make up the design of world-class education systems. These elements are widely credited for their rapid rise in student achievement.

Element #1: Children come to school ready to learn, and extra support is given to struggling students so that all have the opportunity to achieve high standards.

The top-performing countries ensure that children arrive at school ready to learn. The responsibility for this varies among the countries. For example, in high-performing countries with a large proportion of women in the workforce, the government typically provides support to families with young children. In other countries, however, the responsibility falls on families—often extended families—and the community.

Once students in top-performing countries are in school, those who struggle receive extra help ... More teachers are typically allocated to such schools, with the best teachers serving in the most challenged ones. Inversely, American students from the wealthiest communities are most likely to get the best teachers and the finest facilities.



THE TEN REGIONS STUDIED

1. Alberta, Canada
2. Estonia
3. Finland
4. Hong Kong, China
5. Ontario, Canada
6. Japan
7. Poland
8. Shanghai, China
9. Singapore
10. Taiwan

In both situations, society places a high priority on making sure that children are in good health and prepared to learn. In most cases, if the families cannot or will not provide these supports to children, then society steps in. These supports often continue after children begin school.

In the United States, children in poverty now account for about a quarter of all children in public schools. Large numbers of American children enter first grade with disadvantages that may overwhelm the school's capacity to provide an adequate education. Because high-performing countries provide supports to ensure that children are ready for school, their schools typically do not face similar challenges.[5]

Once students in top-performing countries are in school, those who struggle receive extra help to reach the same high standards other students will reach more easily. Providing additional resources to schools serving dis-

advantaged, struggling students is a priority. More teachers are typically allocated to such schools, with the best teachers serving in the most challenged ones. Resources are also reallocated within schools to reach those most in need of extra support. These countries demonstrate that, with added support, struggling students can meet high expectations. Inversely, American students from the wealthiest communities are most likely to get the best teachers and the finest facilities because of the way we structure our finance systems.

Once teachers exit a preparation program in top-performing countries, they are expected to be the best in the world and experts in their craft. American programs typically have lower standards for entrance and exit, overproduce elementary education teachers, and struggle to produce teachers in high-demand fields, such as special education and science, technology, engineering and math.

Element #2: A world-class teaching profession supports a world-class instructional system, where every student has access to highly effective teachers and is expected to succeed.

When the top performers committed to bringing all students to achievement levels formerly reached only by their elites, they also committed to providing all students with access to high-quality teachers. They raised the rigor, expectations, structure and status of the teaching profession and compensated those who were willing to meet the challenge of this reimagined career path.

These goals led the top-performing countries to adopt a different set of tightly linked policies and practices than those enacted in the U.S. While some of these approaches have been tried here, no comprehensive set of policies and practices that raise the teaching profession to the heights seen in high-performing countries has been adopted across any state.

■ **Selective Recruitment.** The top-performing countries have a rigorous set of criteria for determining a candidate's eligibility for teacher preparation, including an entrance exam that few pass. Often teacher candidates are recruited from the top quarter of high school graduates. This is not a typical practice in the U.S.

In high-performing countries, teachers are compensated more generously than American teachers, typically earning pay similar to that of senior civil servants and professionals such as engineers and accountants. They are expected to be the best in the world and are compensated accordingly.

■ **Rigorous Preparation and Licensure.** Most teacher preparation programs in top-performing countries are based in prestigious research universities that are more selective and rigorous than U.S. programs. Teaching programs know and produce the number and types of teachers needed to fill vacancies each year, so admission is quite competitive. Programs require mastery of subjects to be taught and often include clinical practice that can take significantly longer to complete than teacher induction programs in the U.S. There are no approved alternative routes to licensure like those in the states, which enable professionals to become teachers with only a few weeks or months of training.

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■ **Thorough Induction.** Either during preparation or upon entering the teaching workforce, new teachers in high-performing countries are expected to serve apprenticeships with officially designated, well-trained master teachers. During the first year of this induction, beginning teachers typically have a greatly reduced workload. Teachers must complete the induction before they receive what we would call "tenure." While induction and mentoring policies have been enacted in many states, these programs often lack quality, rigor and authenticity in implementation.

■ FROM THE STUDY GROUP

"In several of the countries studied, teaching is regarded as an honorable and respected profession, comparable to medicine and law, and not a burden on the local property tax."

— State Representative Mary Stuart Gile, D-N.H.

■ **Career Ladders or Lattices.** High-performing countries create a variety of roles for teachers in the schools so they can use their expertise to improve teaching and learning and, at the same time, offer an exciting career in education. These may include leadership roles that offer experienced teachers incentives to remain in the profession, hone and receive rewards for their unique skills, and better support students and colleagues.

■ **Professional Work Environment.** High-performing countries have redesigned their schools and the overall work environment to maximize the success of teachers and students. For example, teachers are given a lighter teaching load and more time for their own—and their colleagues'—development. In some of these countries, 30 percent to 35 percent of a teacher's time is spent teaching students, while the rest is spent on activities such as working in teams with other teachers to develop and improve lessons, observing and critiquing classes, and working with struggling students.[6] Teacher evaluation, promotion and pay takes into consideration teachers' performance in teams and their progress as they become experts in their craft.

Schools and classrooms are organized differently so that several teachers, perhaps even a group, have responsibility for a classroom. When not working directly with students, teachers are rewriting curriculum and assessments to meet the needs of their students and to meet high student performance expectations. Teachers also counsel and train each other, constantly observing, evaluating and improving their practices. Because they are trained to be experts at their craft, teachers push themselves, their colleagues and their students to be the best in the world. This highly professional work environment is uncommon in the U.S.

NCSL study group members watch students work together during a math lesson in a Shanghai elementary school.

■ **High-Quality Professional School Leaders.** In high-performing countries, the school leader is highly trained and carefully selected. In Singapore, for example, only teachers who have been trained in its highly rigorous system and have already served in a variety of school settings can become principals. Principals receive training in curriculum, instruction and school administration. School leaders interact regularly and in great depth with their teachers. In the U.S., although it is understood that great schools require great leaders, recruitment, selection and training systems that foster such leadership have not been uniformly developed.

■ **Higher Compensation.** In high-performing countries, teachers are compensated more generously than American teachers, typically earning pay similar to that of senior civil servants and professionals such as engineers and accountants. They are expected to be the best in the world and are compensated accordingly. Many nations view their teachers as "nation builders," preparing the country's next generation. Some countries have variable pay scales tied to career ladders or lattices that acknowledge the various teaching roles, leadership responsibilities and subject mastery. These countries have managed to increase pay by reallocating resources from policies and practices they found to be less effective.

■ FROM THE STUDY GROUP

"High-performing countries have consciously decided to prioritize education over testing."

— State Senator Joyce Elliott, D-Ark.

■ **World-Class Instructional Systems.** To guide and support effective teaching and learning, all of the top-performing countries have developed internationally benchmarked standards that specify what students should know and be able to do in language arts, mathematics, science and all required subjects in the curriculum. Increasingly, these include both high-level complex cognitive skills and non-cognitive skills, such as ethical behavior, framing and completing tasks, teamwork and leadership. Top performers develop curriculum frameworks based on these high standards and specify the order in which concepts should be taught, either by grade or grade span, thereby creating a clear path to student mastery. Corresponding course syl-

labi specify learning objectives, topics to be covered, materials to be used, appropriate assessments, and papers and projects to be completed. They do not include lesson plans because teachers are expected to develop them guided by the syllabi and curriculum framework. Policymakers in these countries assume that if the teachers know the desired outcomes, they are skilled enough to prepare lessons that will enable their students to master that material.

The top performers also prepare assessments that are designed to find out whether students have mastered material in the syllabi. Because the syllabi specify high-level complex skills, the assessments typically contain few multiple-choice, computer-scored prompts, since that type of assessment does not effectively measure high-level skills. These assessments are typically essay-based and scored by humans, so the high-performing countries spend more than states on assessments. They are not administered annually, however, but instead at key transition points in a student's academic career. Similar to teacher pay, these countries prioritize this investment as a small fraction of the total cost of their education system, knowing that cheaper, less effective, less rigorous assessments will not lead to world-class teaching or high student achievement.

Career and technical education (CTE) is not perceived as a route for students lacking strong academic skills, but as another approach to education, skills development and good jobs. CTE is well-funded, academically challenging and aligned with real workforce needs.

Element #3: A highly effective, intellectually rigorous system of career and technical education is available to those preferring an applied education.

Interest in career and technical education (CTE) is emerging in many top-performing countries as a strategy to boost the national economy and offer a high standard of living and attractive careers to a broader constituency. Singapore and Switzerland, in particular, have built strong systems of CTE with close ties to industry. Singapore uses a school-based model and Switzerland uses an employer-based model.[7] In these countries, CTE is not perceived as a route for students lacking strong academic skills, but as another approach to education, skills development and good jobs. CTE is well funded, academically challenging and aligned with real workforce needs. It is hands-on, attractive to students and parents, and can lead to university for students who may seek professional and managerial positions later. For other students, CTE is a pathway to good jobs, by building technical skills that can be achieved much earlier than the traditional academic experience.

On the other hand, the U.S. has experienced a steady decline in CTE over the last few decades. This has become a challenge for American employers struggling to find skilled workers and for students desiring an applied education or a streamlined entrance into the workforce. Although a number of states have impressive CTE schools or particular programs, very few have an entire CTE system that provides the kind and quality of opportunities available to students in top-performing systems. Community colleges are particularly well positioned in the states to link workforce needs to credentials and certificates.

Element #4: Individual reforms are connected and aligned as parts of a clearly planned and carefully designed comprehensive system.

Top performing countries have adopted a comprehensive, systemic approach to building world-class education systems. They understand that success is not achieved by adopting only one or two "silver bullet" policies; instead, these countries have reimagined and re-engineered their entire systems. Typically, this vision is established at the national level with the ministry of education, while states or provinces are charged with implementation. This is not dissimilar to how states can enact reform: with a clear vision at the state level, while local entities are responsible for implementation.

For example, the top-performing countries

Success is not achieved by adopting only one or two "silver bullet" policies ... Top-performing countries understand that schools will struggle without high-quality early childhood education and that high-quality early childhood education will not be a wise investment unless followed by high-quality instruction in the schools. They also understand that increasing teacher pay without rethinking the pool of teaching applicants may be unwise unless preparation programs are more rigorous. Likewise, they realize that a more rigorous program is pointless without creating a more attractive teaching profession.

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Unlike top-performing countries, states commonly take a piecemeal approach, where policymakers fail to set overarching goals for the education system and instead experiment with individual strategies that can sometimes change from year to year. States have designed and implemented many different education reform policies that are not always connected and consequently do not have the desired impact.

Clearly, a decentralized system of education governance exists and is traditionally preferred in the U.S., where state and local boards, agencies, governors and legislatures all control and often set differing priorities for their own systems. Parents, teachers and students are frustrated with reform efforts that come and go, leaving them with a system built on an ever-shifting foundation.

States are well-positioned to instead create the kind of clear vision and systemic reform that high-performing countries do. State systems more closely resemble education governance in the high-performing countries. With input from stakeholders, state legislatures, state boards of education, governors and state education agencies can agree to a clear vision for the state and allow local entities to implement specific strategies.

An Urgent Call to Action: It's Up To States

As state legislators, it is our responsibility to provide our citizens with a world-class education. We cannot let another generation settle for anything less. Our future workforce, national defense, economic vitality and democratic foundation depend on our ability and willingness to get this done.

If we assemble the best minds in policy and practice, implement what we know works, and commit ourselves to the time, effort and resources needed to make monumental changes, we can once again be among the best education systems in the world. If they can do it, so can we. But there's no time to lose.

Profiles: A Closer Look at Three High-Performing Education Systems

FINLAND

People everywhere have heard about Finland—this Scandinavian country of 5.3 million is a world leader in education. It is easy to suggest that any small country can achieve outstanding results, but the Finland story and experience are much more than that. Finland's strong system was built from the ground up in the 1970s as leaders viewed outstanding education as the ticket to a strong economy and international competitiveness.

Visitors to Finland often talk about the beautiful school buildings. Inside the classroom, you rarely find teachers lecturing to students in rows of desks. Rather, Finland prides itself on self-directed students. Students take charge of their learning activities—by consulting with teachers and developing a specific lesson plan that may involve individual work and group work. Finland's schools are devoted to being full service, meaning they offer student and family health services, counseling, transportation and meals.

The three-tiered system features early education (ages 1-7), comprehensive schools (ages 7-16) and senior secondary schools (ages 16-19). At that point students move either to the university or to vocational schools and apprenticeship training.

Schools are small with small classes (about 20 students per class). There is a national core curriculum that lays out what students are expected to learn and be able to do and the topics that should be taught at each grade level, but teachers have wide flexibility to design lessons and assessments.

The hallmark of Finland's system is its exceptional teachers. Many scholars look to the investment in teacher education as the MOST important factor in Finland's success. Only 10 percent of those who apply are admitted into teacher education. The preparation program is a five-year, combined bachelor's and master's degree program and is free with a stipend for living expenses. Students learn both teaching and research skills. There is an emphasis on using research-based, state-of-the-art practices and including clinical experiences in a school associated with a university over the five year program. All teachers hold a master's degrees in education with a minor in two content areas in which they will teach. Schools provide time for regular collaboration among teachers—at least one afternoon each week—and opportunities for ongoing professional development.

There is a national core curriculum in Finland, but no national test or other method for monitoring school performance. There is a national matriculation exam at the end of upper secondary school, but the function is to assess what the student knows, not the quality of the school. Teachers have much autonomy in their everyday work. Finnish scholar Pasi Sahlberg refers to this as "balanced centralization and decentralization." The Finns suggest that this system provides for maximum innovation and creativity at the school level and allows for teachers to be accountable for overall school performance. There is no mechanism for using student tests to measure individual school performance; however, Finland does have a schools' "inspectorate" who regularly visits schools and provides feedback to help them improve.

Over the years, Finland has become a more diverse country as immigration has increased. More than 99 percent of students successfully complete compulsory basic education and about 90 percent complete upper secondary school.

Finland prides itself on providing equity of opportunity to learn and inclusion. Resources are directed to the most high-need students and schools. Students with special needs are often mainstreamed in regular classrooms but receive significant additional support. Ninety-eight percent of the cost of education is covered by government.

ONTARIO

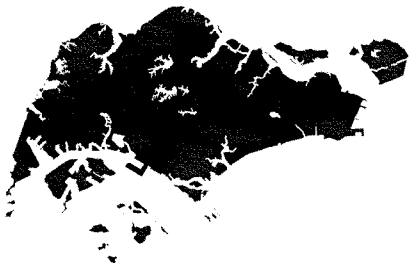
Canada has been a strong performer in the world education arena since 2000, and Ontario in particular is known for its educational gains. Ontario is Canada's second largest province—larger than France and Spain combined—with a very large system, educating about 40 percent of the country's 5 million students. Ontario has nearly 5,000 schools, with an average size of about 415 students. Average class size is 22. Ontario has a very diverse student population as Canada's immigration rate is among the highest in the world. About one-fourth of Ontario students were born outside Canada. As a result, Ontario's hallmark is its strong appreciation of the diversity of its students and devotion to and value of immigrant children. Students learn about diverse histories, cultures and perspectives in order to build tolerance.

In addition, a centerpiece of Ontario's strategy has been capacity. Regional teams of education leaders with significant experience in teaching, leadership and coaching work in partnership with schools and districts to support improvement within diverse contexts. Under-performing schools and students are constantly targeted for additional supports. There is a strategy for identifying potential dropouts early and providing them with additional support to succeed. Teams of teachers and counselors work together to provide initial support and track progress. Special attention devoted to at-risk students and specialized teachers helped raise the high school graduation rate from 68 percent to 82 percent.

Ontario also promotes parent engagement by actively seeking parents to help and advise schools. Ontario promotes healthy schools with a standard 20 minutes of moderate to vigorous physical activity each day. It also promotes safe schools. A continuum of interventions, support and consequences work to reinforce positive behavior for students to make good choices.

Ontario provides full-day kindergarten for 4-year-olds and 5-year-olds to establish a strong foundation and a smooth transition to the first grade. Students begin in grade seven to think about career development and pathways.

There is no federal education ministry. Each of the provinces (and three territorial governments) is responsible for developing curriculum and determining major education policies and initiatives. Teacher certification is governed by the Ontario College of Teachers. Teachers must have completed at least a three-year postsecondary degree in a content area and then apply to and complete one year of a teacher education program to be certified to teach. There is a culture at the school level of teachers as innovators. Ontario values teachers being risk takers to identify new and promising practices and foster creativity and responsibility. Teachers also use evidence at all levels to inform strategies and actions and participate in collaborative learning teams.



SINGAPORE

Singapore is a very young country and had the advantage of designing an education system from scratch 50 years ago. Singapore split from the United Kingdom in 1963 and became part of Malaysia, and two years later became its own sovereign city-state. Singapore's founding leaders saw people as its most important resource and understood that education was the answer to political and economic survival. Visitors to Singapore remark about its cleanliness and the beautiful gardens—all strategically planned to make people happy. Although it is a city-state with a population of 5.4 million, it is comparable in size to several of our own states.

The center of Singapore's education success is its high-quality educators. Teachers are valued at a level on par with doctors and lawyers. There is only one teacher preparation institute—the National Institute of Education (NIE)—which is housed at a research university. The NIE works closely with the Ministry of Education so that state policy and practice are tightly linked. Prospective teachers are recruited from the top 30 percent of the secondary school graduating class by panels that include current principals. The NIE receives an average of eight applications for every opening. Students accepted receive free tuition and a monthly allowance. New teachers are observed and coached and given ongoing professional development as part of a required and heavily structured induction program.

Once teachers begin their career, they are allotted 100 hours of professional development (largely school-based) per year so they can constantly improve their practice. Every school has a fund to support teacher growth that may include opportunities to study abroad to learn about various aspects of education in other countries. Peer-to-peer learning also is promoted through teacher networks and professional learning communities.

Teacher performance is appraised annually against 16 competencies, which include contribution to students' academic and character development, collaboration with parents and community groups, and contribution to colleagues and the school as a whole. After three years of teaching, they are assessed annually to see which of three career paths—master teacher, curriculum or research specialist, or school leader—would best suit them.

Schools are large, but teachers are regularly engaged with each other through classroom observations, collaborative professional development, and group lesson planning. The principal, who is always a former teacher, is actively engaged in both school management and teaching.

In addition to a Primary School Leaving Exam that must be passed before a student moves into lower secondary school, students take a high-stakes test at the end of secondary school. Students and parents are well aware of the importance of the test, which tracks students into the career/technical pathway or the university pathway. Career/technical students in Singapore are not viewed as second-class citizens; rather, the schools are highly modern and advanced with a devoted faculty and work closely with industry in designing specific high-quality programs.

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Study Group Meetings

Overview of International Education Comparisons
September 3-6, 2014 | Boston, MA

Introduction to PISA and Researching International Education Systems
October 2, 2014 | Webinar

Preliminary Findings and Reflections From Members' Own Benchmarking Research
December 12-13, 2014 | Washington, DC

Accountability Systems of High Performing Countries
February 23, 2015 | Webinar

Getting the Right Incentives: Designing a Coherent, Highly Functioning Education System
April 17-19, 2015 | Chicago, IL

Evaluating State Policies on the 9 Building Blocks of a World-Class State Education System
May 29, 2015 | Webinar

Implementing and Communicating System-Wide Reform in Top Performing Jurisdictions
July 8-9, 2015 | Park City, UT

Current State Examples of System-Wide Reform: Kentucky and Delaware
August 2-3, 2015 | Seattle, WA

A Teacher's View on International Comparisons and Communications Strategies for Study Group Recommendation
December 11-12, 2015 | Washington, D.C.

Experts Consulted

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Representative Derrick Graham, Kentucky

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Anthony Mackay, CEO, Center for Strategic Education, Melbourne, Australia

Donna Quan, Superintendent, Toronto District Schools

Mary Cathryn Riker, Executive Vice President, American Federation of Teachers (AFT)

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Pasi Sahlberg, Finnish Education Expert, Finland

Andreas Schleicher, Director for Education and Skills, Organisation for Economic Co-operation and Development (OECD), Paris

William Schmidt, University Distinguished Professor, Center for the Study of Curriculum, Michigan State University

Vivien Stewart, Vice President, Asia Society

Marc Tucker, President and CEO, National Center on Education and the Economy (NCEE)

John White, Superintendent, Louisiana Department of Education

Ali Wright, Mathematics High School Teacher, Kentucky

Minxuan Zhang, Professor and Director of Research, Institute of Comparative Education, Shanghai Normal University

Readings and Data Sources

OVERVIEW OF INTERNATIONAL COMPARISONS

- OECD (2011). *Lessons from PISA for the United States: Strong Performers and Successful Reformers in Education.* OECD Publishing, http://www.oecd.org/pisa/46623978.pdf. Combining a description of the practices and policies of the top performing countries with a quantitative analysis of PISA data, this report presents lessons for U.S. policy makers.
- Tucker, ed. (2011). *Surpassing Shanghai: An Agenda for American Education Built on the World's Leading Education Systems.* Harvard Education Press. This book explores five high-performing education systems, including Shanghai, Japan, Singapore, Canada and Hong Kong, and presents recommendations for U.S. policymakers.

CANADA

- Alberta Ministry of Education (2014). Guide to Education – ECS-Grade 12 (2014-2015). The first part of a guide released annually by the Alberta Ministry of Education, this document provides an overview of the Ministry's mission, guiding principles, key indicators that measure success, as well as a guide to key legislation, regulation and policies governing Alberta schools. This includes teacher policy, resource allocation policies, school leader policy and qualification requirements.
- *Mandate Letter from the Premier of Alberta to Minister of Education Gordon Dirks* (2014). This short mandate letter outlines the current priorities of the Albertan government for the Ministry of Education, including funding stability, curriculum reform and higher standards for student performance.
- OECD (2014). *Education at a Glance 2014– Canada Country Note.* The OECD released this brief on Canada's performance on a range of education indicators, including attainment, mobility and proficiency.
- Ontario Ministry of Education (2010). *New Teacher Induction Program: Induction Elements Manual.* This manual provides an in-depth look at policy for teacher induction, including the funding mechanisms for the teacher induction program.
- Ontario Ministry of Education (2014). *Equity and Inclusive Education in Ontario Schools: Guidelines for Policy Development and Implementation.* This policy manual lays out guiding principles for policy development and implementation and accountability systems for special education. It also includes sample policy memoranda and classroom tools.
- Ontario Ministry of Education (2014). *Achieving Excellence: A Renewed Vision for Education in Ontario.* This strategic plan presents the Ministry's proposed action steps for fostering excellence, equity, public confidence and student well-being in the education system.
- Riveros (2013). *From Teachers to Teacher Leaders – A Case Study.* This case study looks at teacher leadership development in Alberta from 1997-2007. Alberta's teacher leadership programs have been cited as among the strongest in the world.
- Task Force for Teaching Excellence (2014). *Report to the Minister of Education, Government of Alberta* (2014). This report presents the findings of a 16-member task force convened in 2013 to define Albertan expectations for teaching excellence, enable teachers to grow professionally, define the role of teacher leaders and, ultimately, ensure an excellent teacher for every child.

ESTONIA

- Archimedes (2006). *Factsheet, Vocational Education and Training, Estonia* – This factsheet briefly summarizes the vocational education and training system, and the qualifications and diplomas awarded students, in Estonia.
- Basic Schools and Upper Secondary Schools Act of 2010 – This legislation defines school governance, compulsory education, public right to education, national curriculum, accountability and evaluation, and teachers' rights and required qualifications.

- Center on International Education Benchmarking (2016). Estonia Overview. http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/estonia-overview/. This case study explores the development of the Estonian education and provides resources for policymakers interested in learning more.
- The Economist (2013). *How did Estonia become a world leader in technology?* – This article traces Estonia's booming tech industry, including its early investments in school tech.
- Ministry of Education and Research (2014). *The Estonian Lifelong Learning Strategy 2020.* This five-year strategic plan, a major current initiative of the Ministry, lays out the goals and strategies for expanding access and equity in lifelong learning. It provides a glimpse into where the Ministry's priorities currently stand.
- OECD (2014). *Education at a Glance Country Note: Estonia* – This OECD brief summarizes relevant trends in demographic, attainment, and performance indicators, using PISA 2012 data.
- OECD (2013). *TALIS Country Profile: Estonia* – This brief summarizes the results of the 2013 TALIS survey of teacher attitudes, beliefs, behaviors, and qualifications.
- Statistics Estonia (2014). The Statistical Yearbook of Estonia: Education – This chapter provides relevant statistics on demographics, skills, and attainment of Estonia's students, for those who want to understand the scope and outputs of the system.
- UNESCO (2011). *World Data on Education: Estonia* – This UNESCO brief provides an overview of the education system in Estonia, major pathways, governance, early childhood education, funding, teacher and assessment policy, and relevant legislation.

FINLAND

- Abrams (2011). "The Children Must Play": *The New Republic.* In this New Republic piece, researcher Sam Abrams compares Finnish demographics and approach to instruction to the United States, and concludes that teacher professionalization and enriching curriculum are key to Finland's success.
- Finnish National Board of Education (2011). *International Comparisons of Some Features of Finnish Education and Training* – This brief analyzes data on the system structure, attainment, employment, finance and instruction for an international audience.
- Ministry of Education (2012). *Education and Research: a Development Plan 2011-2016* – This five-year strategic plan provides an overview of the system to date, as well as a look at planned reforms. Its strategies include teacher preparation, fostering more equitable access, and reforms to vocational education.
- OECD (2007). *School Leadership for Systemic Improvement in Finland* – This OECD case study explores how Finland conceives of the role of the principal, and how other players, including teachers and students, exercise leadership within a school setting.
- OECD (2014). *Education at a Glance 2014: Country Note: Finland* – This OECD brief summarizes relevant trends in demographic, attainment, and performance indicators, using PISA 2012 data.
- Sahlberg (2014). *Finnish Lessons 2.0.* This book by Pasi Sahlberg focuses on how Finland recruits, prepares and retains its teachers and builds a system that above all values teacher professionalism.
- UNESCO (2013). *World TVET Database – Finland.* This entry summarizes the structure of Finland's vocational education and training system.

HONG KONG

- Hong Kong Department of Information Services (2014). Education Fact Sheet. This short government publication provides information on funding allocations, system structure, teacher qualification policy and vocational education, among other things.
- *Education Commission Working Group (2011). Report on the Development of Education Services in Hong Kong.* This study group report, the result of a year of focus groups, discussion forums, and research, presents 17 recommendations to the Education Bureau. These range from undertaking international education benchmarking, to rebranding the education system for an international audience, to attracting more non-local students.
- Lai (2010). *Qualifications of the Teaching Force in Hong Kong Special Administrative Region, China*: This chapter from the 2007 report A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations looks at what institutions offer teacher training, what courses and practical experiences are required, and how teachers receive ongoing professional development in Hong Kong.
- Quong (2011). *An Analysis of Educational Reform at the School Level in Hong Kong.* This paper examines how 2009-2010 curriculum reforms in Hong Kong translated into corresponding changes to teacher practice.

JAPAN

- Arani, Keisuke, and Lassegard (2010). *Lesson Study as Professional Culture in Japanese Schools* – Combining historical research with a modern case study approach, this study looks at how Japanese teachers have long used collaborative research as a form of professional development.
- Fujita, Hidenori (2007). *The Qualifications of the Teaching Force in Japan.* This chapter from the 2007 report *A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations* looks at what institutions offer teacher training,

what courses and practical experiences are required, and how teachers receive ongoing professional development in Japan.

- MEXT (2011). *The Revisions of the Course of Study for Elementary and Secondary Schools.* This short Ministry presentation outlines the major elements of curriculum reform that took place from 2008-2013.
- MEXT (2012). *White Paper: Toward Implementation of Education Rebuilding.* This white paper presents the Ministry's most recent strategic plan for education reform.
- National Institute for Education Research (2011). *Education in Japan: Past and Present* – This brief from a research program of the Ministry of Education, Culture, Science, Sports, and Technology (MEXT) succinctly traces the history of education in Japan from the 1600s to 2010.
- National Institute for Education Research (2011). *Distinctive Features of the Japanese Education System* – This NIER brief explains the most unique elements of the education system for an international audience.
- OECD (2014). *Education at a Glance 2014 – Country Note: Japan.* This short OECD brief pulls out Japanese data on a range of indicators using 2012 PISA data.
- OECD (2010). *Japan: A Story of Sustained Excellence.* This OECD report explores several causes of Japan's success on the PISA league tables: the teaching force, families supports, a well-structured academic program and systemic incentives that drive students to challenge themselves.

POLAND

- Center on International Education Benchmarking (2016). Poland Overview. http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/poland-overview/. This case study explores the development of the Polish education and provides resources for policymakers interested in learning more.
- European Centre for the Development of Vocational Training (2011). *Vocational Education and Training in Poland – Short Description.* This report focuses on the policy and legislative frameworks, teacher policies and funding formulas for a major 2010 overhaul of Poland's VET system.
- Eurydice (2012). *The System of Education in Poland.* This comprehensive report includes a wealth of information on funding, curriculum, assessment, teacher policy, and special education and equity.
- OECD (2014). *Education at a Glance 2014 – Country Note: Poland.* This short OECD brief pulls out Poland's data on a range of indicators using 2012 PISA data.
- OECD (2013). *Results from TALIS 2013 – Country Note: Poland.* This OECD brief looks at Poland's data from the 2013 Teaching and Learning International Survey, including the background, qualifications, attitudes, morale and behaviors of the nation's teachers.
- The World Bank (2010). *Knowledge Brief: Successful Education Reform: Lessons from Poland.* This World Bank brief looks at 1999 reforms to Poland's secondary school structure and curriculum, in order to explain the country's improvements on PISA league tables.

SHANGHAI, CHINA

- Gang & Meilu (2010). *Qualifications of the Teaching Force in China.* This chapter from the 2007 report A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations looks at what institutions offer teacher training, what courses and practical experiences are required, and how teachers receive ongoing professional development in China.
- OECD (2010). *Shanghai and Hong Kong: Two Distinct Examples of Education Reform in China.* This chapter from the OECD's 2010 publication Strong Performers and Successful Reformers in Education compares the education reform strategies of both Shanghai and Hong Kong. Particularly useful for its historical lens; it also deals with equity and access, teacher policy, and classroom instruction.
- *Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010-2014).* This ten-year education strategic plan lays out goals and strategies for early childhood education, compulsory education reform, equity, special education, teacher and administrator preparation and professional development, and management across China.
- The World Bank (2013). *China 2030: Building a Modern, Harmonious, and Creative Society* – Part One of this World Bank report lays out a history of the Chinese economic system and technology industry, and recommends strategies for future equitable economic growth.
- Stewart (2015). *Made in China: Challenge and Innovation in China's Vocational Education and Training System.* National Center on Education and the Economy. http://www.ncee.org/wp-content/uploads/2015/03/CHINAVETFINAL1.pdf. This report explores the progress the Chinese have made in revamping vocational education and documents their efforts to address the challenges that remain.
- Tucker, ed. (2014). *Chinese Lessons: Shanghai's Rise to the Top of the PISA League Tables.* National Center on Education and the Economy. http://www.ncee.org/wp-content/uploads/2013/10/ChineseLessonsWeb.pdf. This series of interviews with experts on Shanghai's education system explores what accounts for their high performance on international comparative assessments.
- Zhang & Jinjie (2011). *Toward China's Modern TVET System: Take Shanghai as Special Experience*: This article goes in-depth into the structure and scale of Shanghai's vocational education system, and looks at how the recent ten-year education reform plan promises to further improve this system.

SINGAPORE

- Low and Joseph (2011). *Paving the Fourth Way: The Singapore Story* – This report covers a roundtable discussion including many distinguished scholars of Singapore's education system. Professors look at the history of education policy in Singapore, current reforms and strategic planning initiatives, and especially, hone in on issues of teacher preparation.
- Ministry of Education (2014). *Education in Singapore.* This Ministry brochure provides a useful overview, including a look at curriculum requirements.
- Ministry of Education (2014). *Annual Report: The Education Endowment and Savings Scheme.* This financial report provides an overview of how Singapore provides public funding for student incentives and scholarships.
- Ministry of Education (2014). *Better Choices, Deeper Skills, Multiple Paths: Government Accepts ASPIRE Committee's Recommendations* [press release, August 25, 2014]. This recent press release announces substantial upcoming reforms to Singapore's vocational and technical education funding, policy, and structure.
- Ministry of Education (2014). *Growing our Teachers, Building our Nation* [press release, September 23, 2014] – This recent press release summarizes upcoming reforms to Singapore teacher mentoring and preparation programs, as well as to the structure of teacher career ladders.
- OECD (2011). *Singapore: Rapid Improvement Followed by Strong Performance* – This chapter from the OECD publication Strong Performers and Successful Reformers in Education presents a history of Singapore, a look at the structure of the education system, and several arguments for the country's success on PISA, including focus on mathematics and technical education, commitment to equity, and strong human resources and continuous improvement systems.
- Tan & Wong (2010). *Qualifications of the Teaching Force: Data from Singapore* - This chapter from the 2007 report A Comparative Study of Teacher Preparation and Qualifications Programs in Six Nations looks at what institutions offer teacher training, what courses and practicum are required, and how teachers receive ongoing professional development.
- *The Phoenix: Vocational Education and Training in Singapore.* National Center on Education and the Economy, 2012. http://www.ncee.org/wp-content/uploads/2014/01/The-Phoenix1-7.pdf. In this report, a team of researchers traces the evolution of Singapore's vocational education system and analyzes what accounts for its success.

TAIWAN

- Ministry of Education (2013). *Education in Taiwan 2013-2014.* This brochure from the Ministry provides an overview of the system structure, governance, upcoming reforms, teacher education, and vocational education and training.
- Ministry of Education (2011). *Technical and Vocational Education in Taiwan, ROC.* This brief dives into the structure, governance, curriculum, and enrollment of Taiwan's vocational education system.
- Ministry of Education (2008). *Administrative Plan – Intelligent Taiwan Manpower Cultivation Project.* This administrative plan outlines implementation of a substantial five-year allocation to education and employment initiatives, including a multimillion-dollar investment in new reading programs.
- Ministry of Education (2013). *Matters including teacher evaluation, teacher qualifications, certification exams, teacher in-service education and normal education university engineering.* This policy overview lays out recent initiatives to improve teacher preparation, recruitment, and training, including efforts to substantially increase the expectations of teacher preparation programs.
- Pan & Chen (2011). *Teacher Evaluation as a Catalyst for Organizational Learning.* This article shows how Taiwan uses teacher evaluation as a tool for continuous improvement and the basis for regular professional learning community meetings among school staff.

Notes

1 For more information about the OECD PISA exam, including who participates and how the test is administered and scored, visit www.oecd.org/pisa/aboutpisa/.

2 For OECD's summary of findings and implications for the U.S., see http://www.oecd.org/unitedstates/PISA-2012-results-US.pdf.

3 ETS Center for Research on Human Capital in Education (2015). America's Skills Challenge: Millennials and the Future. Retrieved from, p. 11.

4 Retrieved from nces.ed.gov/nationsreportcard/subject/publications/main2012/pdf/2013456.pdf, p. 1.

5 OECD (2011), *Starting Strong III: A Quality Toolbox for Early Childhood Education and Care*, OECD Publishing, Paris. Retrieved from dx.doi.org/10.1787/9789264123564-en.

6 Jensen, B., Sonnemann, J., Roberts-Hull, K., & Hunter, A. (2016). "Beyond PD: Teacher Professional Learning in High-Performing Systems." Washington, DC: National Center on Education and the Economy, p. 28. Retrieved from www.ncee.org/wp-content/uploads/2015/08/BeyondPDWeb.pdf; and Darling-Hammond, L., Chung Wei, R., Andree, A. (2010). "How High-Achieving Countries Develop Great Teachers." Stanford: Stanford Center for Opportunity Policy in Education, p. 3. Retrieved from edpolicy.stanford.edu/sites/default/files/publications/how-high-achieving-countries-develop-great-teachers.pdf

7 Gold Standard: The Swiss Vocational Education and Training System, March 2015, National Center on Education and the Economy
The Phoenix: Vocational Education and Training in Singapore, October 2012, National Center on Education and the Economy

What People are Saying

"We invested in this working group because we believe having a world view on education systems can give policy makers a clearer perspective on the central role education can and should play in civil society. This work has also proved to us something we've believed for a long time, when teaching is treated as a revered profession, great things are possible."

Daaiyah Bilal-Threats, National Education Association

"This diverse and bipartisan Study Group of state legislators discovered that top-performing countries have built their successful education system around a strong teaching profession. This includes recruitment of top students, rigorous preparation, meaningful professional development and empowerment of teachers to guide their own profession. This is THE cornerstone of their reforms and their success, and this should be a huge lesson for the states."

Linda Darling Hammond, Charles E. Ducommun Professor of Education; Stanford Graduate School of Education and President and CEO, Learning Policy Institute

"The NCSL report makes a compelling case for state legislators to act now on improving the outcomes their education system is producing today. The ability of U.S. students to compete on a global stage requires state legislators to use data as the backbone of their agenda for improving outcomes. The NCSL report provides a roadmap for addressing the key elements of a state policy agenda that are essential to ensuring every student is college and career ready."

John Engler, President, Business Roundtable

"The National Conference of State Legislature's *No Time to Lose* presents timely and valuable analyses and recommendations for transforming American education and training. The report stresses the importance of world-class learning systems for maintaining and improving economic, social, and political welfare in a much more competitive and knowledge-intensive world. Several features make *No Time to Lose* a valuable and timely report:

- It is not only based on solid academic research but, following the example of almost all successful American institutions, benchmarks international best practice.
- The report is addressed primarily to states, currently the most important level of government for transforming schools and other learning systems, though all public and private institutions have important roles to play in this important enterprise."

Ray Marshall, Professor Emeritus of the Audre and Bernard Rapoport Centennial Chair in Economics and Public Affairs at the University of Texas at Austin and former U.S. Secretary of Labor

"Our students deserve the best and we must pursue the best educational practices whether they are found in the United States or around the world. This report is chock full of the best lessons of what works from other countries. We should use this research to inform our work. In that way we can provide our students with the greatest possible chance at success."

Christianne Y. Runge, Director, Public Employees Division, American Federation of Teachers

"This hard-hitting, refreshingly honest report is a bipartisan clarion call for a very different definition of 'education reform' than the one that has dominated the American political landscape for years. The country will ignore it at its peril."

Marc Tucker, President and CEO, National Center on Education and the Economy

Acknowledgments

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NCSL staff involved in this work include Julie Davis Bell, Michelle Exstrom, Lee Posey and Madeleine Webster.

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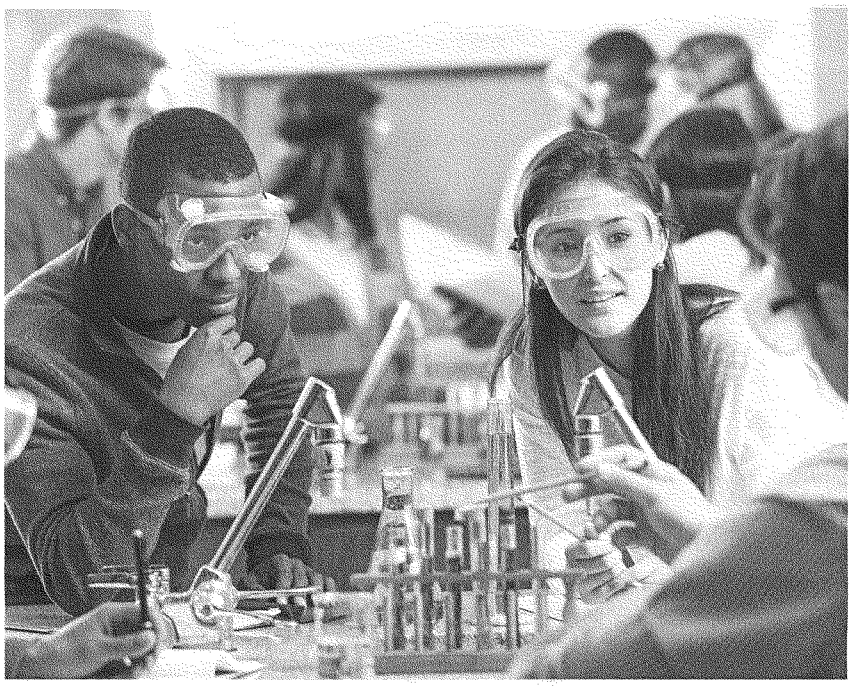

How Money Matters for Schools

Bruce D. Baker

LEARNING POLICY INSTITUTE

DECEMBER 2017

How Money Matters for Schools

Bruce D. Baker

December 2017

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With LPI, I also would like to acknowledge the generous support of the Raikes Foundation for this work and the series of reports as a whole, along with general operating support from the Ford Foundation, the William and Flora Hewlett Foundation, and the Sandler Foundation. This work does not necessarily represent the views of these funders.

External Reviewer

This report benefited from the insights and expertise of Rick Simpson, Vice Chair, California Commission on Judicial Performance, and the former Education Adviser to nine Speakers of the California Assembly. We thank him for the care and attention he gave the report. Any remaining shortcomings are my own.

The appropriate citation for this report is: Baker, B. D. (2017). *How money matters for schools.* Palo Alto, CA: Learning Policy Institute.

This report can be found online at https://learningpolicyinstitute.org/product/how-money-matters-schools.

Table of Contents

List of Tables and Figures

39

Preface

Schools in the United States are among the most inequitably funded of any in the industrialized world, with those serving the most affluent students often much better resourced than those serving the poorest. These inequities in funding create dramatically different educational opportunities for children and contribute to differences in access to key educational resources—expert teachers, personalized attention, high-quality curriculum, good educational materials, and plentiful information resources—that support learning at home and at school.

In order to remedy these disparities and make the best use of public education resources, state and district leaders need to understand the costs, benefits, and effectiveness of strategies intended to address students' learning needs. Research on school resource adequacy and equity can help inform lawmakers about the wise and efficient use of resources to ensure that all schools are equipped to advance deeper learning and student well-being.

To assist policymakers as they seek to address these educational investment issues, the Learning Policy Institute (LPI) is publishing a series of reports, written by members of LPI's School Finance Researcher Network, on topics that aim to increase policymakers' access to research and data related to equitable school resources that are wisely used.

The first of these reports is Bruce Baker's *How money matters for schools.* The report reviews a substantial body of research to answer three questions: (1) Does money matter? (2) Do schooling resources that cost money matter? and (3) Do state school finance reforms matter? The answer to all three questions is *yes.*

After a thorough examination of the research, Baker summarizes: "An increasing body of rigorous empirical evidence suggests that substantive and sustained state school finance reforms matter for improving both the level and distribution of short-term and long-term student outcomes."

As Baker points out, a society that invests in its children reaps real and lasting economic and social benefits.

In the coming months, LPI will publish additional reports on topics such as finance equity and democracy, promising practices at the state and regional levels, the cost-effectiveness and broader social benefits of equitable and adequate funding, and how states and localities can address the out-of-school factors that influence student achievement through investments in community school models.

In combination, the series will provide a strong evidence-based tool kit for policymakers and legislators and a road map for understanding that resource equity is more than an aspiration: It can become a reality, with policies based on evidence and practices informed by the best research.

Linda Darling-Hammond
September 6, 2017

40

Abstract

For decades, some politicians and pundits have argued that "money does not make a difference" for school outcomes. While it is certainly possible to spend money poorly, this viewpoint is strongly contradicted by a large body of evidence from rigorous empirical research. A thorough review of research on the role of money in determining school quality leads to the following three conclusions: (1) on balance, in direct tests of the relationship between financial resources and student outcomes, money matters; (2) schooling resources that cost money are positively associated with student outcomes; and (3) sustained improvements to the level and distribution of funding across local public school districts lead to improvements in the level and distribution of student outcomes. While money alone is not the answer to all educational ills, more equitable and adequate allocation of financial inputs to schooling provides a necessary underlying condition for improving the equity and adequacy of outcomes. This document presents a brief explanation of the goal of school finance reforms, followed by summaries of the main bodies of evidence that illustrate how equitable and adequate school funding improves student outcomes. It closes with information about how certain kinds of specific investments can help to achieve these outcomes.

41

Introduction

For decades, some politicians and pundits have argued that "money does not make a difference" for school outcomes.[1] While it is certainly possible to spend money poorly, this viewpoint is strongly contradicted by a large body of evidence from rigorous empirical research. A thorough review of research on the role of money in determining school quality leads to the following conclusions:

> **Does money matter?** Yes. On average, aggregate per-pupil spending is positively associated with improved student outcomes. The size of this effect is larger in some studies than in others, and, in some cases, additional funding appears to matter more for some students than for others—in particular students from low-income families who have access to fewer resources outside of school. Clearly, money must be spent wisely to yield benefits. But, on balance, in direct tests of the relationship between financial resources and student outcomes, money matters.

> **Do schooling resources that cost money matter?** Yes. Schooling resources that cost money are positively associated with student outcomes. These include smaller class sizes, additional instructional supports, early childhood programs,[2] and more competitive teacher compensation (permitting schools and districts to recruit and retain a higher quality teacher workforce). Again, in some cases, these resources matter more for some students and in some contexts. On the whole, however, educational resources that cost money benefit students, and there is scarce evidence that one can gain stronger outcomes without these resources.

> **Do state school finance reforms that provide more equitable and adequate funding matter?** Yes. Sustained improvements in the level and distribution of funding across local public school districts lead to improvements in the level and distribution of student outcomes. While money alone may not be the answer, more equitable and adequate allocation of financial inputs to schooling provides a necessary underlying condition for improving the equity and adequacy of outcomes. The available evidence suggests that appropriate combinations of more adequate funding with more accountability for its use may be most promising.[3]

This document presents a brief explanation of the goal of school finance reforms, followed by summaries of the main bodies of evidence that illustrate how equitable and adequate school funding improves student outcomes. It closes with information about how certain types of specific investments matter—especially when it comes to achieving these outcomes. (For a longer and more complete version of this report, see *Does money matter in education?*[4])

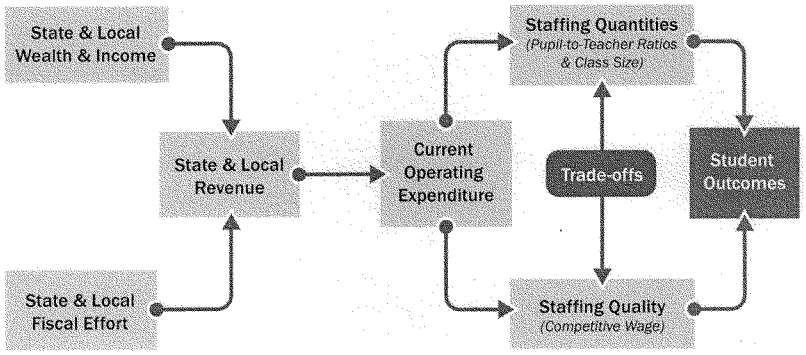
42

Linking Money to Real Resources

Figure 1 provides a simple model of the relationship of schooling resources to children's school achievement. First, the fiscal capacity of states—their wealth and income—does affect their ability to finance public education systems. But the effort put forth in state and local tax policy plays an equal role.

The amount of state and local revenue raised drives the majority of current spending by local public school districts, because federal aid constitutes such a relatively small share—only about 9%, on average. Furthermore, the amount of money a district is able to spend on current operations determines the staffing ratios, class sizes, and wages a local public school district is able to pay. Indeed, there are trade-offs to be made between staffing ratios and wage levels: If all else is equal, the more teachers are hired, the less each can be paid. Finally, a sizable body of research has illustrated the connection between staffing qualities and quantities and student outcomes.

Figure 1
Conceptual Map of the Relationship of Schooling Resources to Children's Measurable School Achievement Outcomes



The connections laid out in this model seem rather obvious. The amount a district raises dictates how much it can spend. How much you spend in a labor-intensive industry dictates how many individuals you can employ, the wage you can pay them, and in turn the quality of individuals you can recruit and retain.

The Goals of State School Finance Formulas

Modern state school finance formulas—aid distribution formulas—typically strive to achieve two simultaneous objectives:

1. Accounting for differences in the costs of achieving equal educational opportunity across schools and districts.
2. Accounting for differences in the ability of local public school districts to cover those costs.

In most cases, local district ability to raise revenues is a function of both local taxable property wealth and the incomes of local property owners, thus their ability to pay taxes on their properties. Without sufficient targeted investments from the state, then, school revenues vary by the wealth of those who live in different districts—with wealthier districts having more money to spend than poor ones. States try to offset these inequalities, although they succeed to varying degrees depending on how much money they put into the system and how they allocate it across functions (e.g., foundation aid, transportation costs, facilities) and different districts.

A typical state school finance formula implies that some basic funding level should be sufficient to produce a given level of student outcomes in an average school district. Logically, then, if one wishes to produce a higher level of outcomes, the foundation level should be increased. It costs more to achieve higher outcomes, and the foundation level in a state school finance formula is the tool used for determining the overall level of support to be provided.

As a rule of thumb, for a state school finance system to provide equal educational opportunity, that system must provide sufficiently higher resources to ensure adequacy and equity in higher need (e.g., higher poverty) settings than in lower need settings. Such a system is called *progressive*. By contrast, many state school finance systems barely achieve "flat" funding between high- and low-need settings, and still others remain regressive, spending more money on the education of more affluent students than on those who have greater needs.

To secure the same quality of education across districts, resource levels may need to be adjusted to permit districts in different parts of a state to recruit and retain teachers of comparable quality; that is, the wages paid to teachers affect who will be willing to work in any given school. In other words, teacher wages affect teacher quality, and in turn, they affect school quality and student outcomes. This is plain common sense, and this teacher wage effect operates at two levels.

1. In general, teacher wages must be sufficiently competitive with other career opportunities for similarly educated individuals. The overall competitiveness of teacher wages affects the overall academic quality of those who choose to enter teaching.
2. The relative wages for teachers across local public school districts determine the distribution of teaching quality. Districts with more favorable working conditions can pay a lower wage and attract the same teacher.

Finally, adjusting funding based on student need in state school finance formulas assumes that the additional resources can be leveraged to improve outcomes for students from low-income families or students with limited English language proficiency. First, note that some share of the additional resources is needed in higher poverty settings simply to provide for "real resource" equity—or to pay the wage premium for doing the more complicated job, under less desirable working conditions. Second, resource-intensive strategies such as reduced class sizes in the early grades, high-quality early childhood programs, intensive tutoring, and extended learning time programs may significantly improve outcomes of students from low-income families. And these strategies all come with significant additional costs.

What About the Arguments That "Money Doesn't Matter"?

There has been a long-standing debate about whether increased resources actually improve student achievement. The debate began in the 1960s with the influential Coleman report (1966), which found a strong effect of student backgrounds on student achievement. Although the report did not conclude that resources don't matter, it was widely interpreted as suggesting that resources have trivial effects on outcomes in comparison to student socioeconomic status.

After the release of the Coleman report, numerous scholars conducted studies to probe these findings further. In 1986, 20 years after Coleman, economist Eric Hanushek published a paper looking at these studies, which became one of the most widely cited sources for the claim that money doesn't matter.[5] Hanushek tallied the findings of those studies. Some found a positive relationship between spending and student outcomes, while others did not. He came to the following conclusion: "There appears to be no strong or systematic relationship between school expenditures and student performance."[6]

This finding echoed for many years through the halls of state and federal courthouses, where school funding is deliberated. However, many of the studies originally reviewed by Hanushek, published in the 1960s and 1970s, had serious methodological flaws and would no longer pass muster, given advances in data quality and statistical techniques.

The most direct rebuttal to Hanushek's conclusion came in a series of re-analyses by University of Chicago scholars Rob Greenwald, Larry Hedges, and Richard Laine,[7] who gathered the studies originally cited by Hanushek in 1986 and conducted meta-analyses of those from the U.S. that met research quality parameters such as peer review and use of proper statistical controls. They found that, among statistically significant findings, the vast majority of study findings were positive (11:1) as were most of the non-significant findings. They concluded:

> "Global resource variables such as PPE [per-pupil expenditures] show strong and consistent relations with achievement. In addition, resource variables that attempt to describe the quality of teachers (teacher ability, teacher education, and teacher experience) show very strong relations with student achievement."

Digging deeper and exploring the relationship between a variety of resource and student outcome measures, Greenwald, Hedges and Laine came to the conclusion that "a broad range of resources were positively related to student outcomes, with 'effect sizes' large enough to suggest that moderate increases in spending may be associated with significant increases in achievement."[8]

Other researchers looked with greater precision at the measures of financial inputs to schooling that are most strongly associated with variations in student outcomes. For example, Harold Wenglinsky found that "per-pupil expenditures for instruction and the administration of school districts are associated with achievement because both result in reduced class size, which raises achievement."[9] Ron Ferguson found that investments in teacher quality were particularly effective in raising achievement.[10]

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More recent studies have added improvements, such as adjusting for regional cost differences[11] and making other statistical corrections to measure inputs more precisely.[12] These studies have invariably found a positive, statistically significant relationship between student achievement gains and financial inputs.[13]

To summarize this discussion of whether resources matter, it is important to recognize that Hanushek's original conclusion from 1986 was merely a statement of "uncertainty" about whether a *consistent* relationship exists between spending and student outcomes—one that is big enough to be important. His conclusion, based on many studies with methodological flaws, was that the relationship was inconsistent. By the early 2000s, the cloud of uncertainty had largely lifted with the more rigorous studies that followed, conducted by many finance scholars using detailed datasets to examine more finely grained relationships between money and student outcomes. We review some of these studies showing how money matters.

Summing It Up

Since the Coleman report, some have said that "money doesn't matter" because of the strong effect of student backgrounds on student achievement, plus early studies with inconsistent results. However, this position is no longer well grounded because:

- Older studies were methodologically limited.
- New data analyses using advances in data quality and statistical techniques consistently show that money makes a difference.
    - National studies in the early 2000s conducted by finance scholars using detailed datasets found positive relationships between school funding reforms that increased spending on students from low-income families and student outcomes.
    - Similar findings pertain to reforms in Kansas, Massachusetts, Michigan, and Vermont (see pp. 6–10 for more details).
    - Often, moderate increases in spending are associated with significant increases in achievement and graduation rates.
    - Investments in teacher quality (teacher ability, teacher education, and teacher experience) are particularly effective in raising achievement.

46

Studies of the Outcomes of School Finance Reforms

Investments in more adequate and equitable approaches to school funding have been delayed for some time by both revenue challenges and the widely held view that "money doesn't matter" when it comes to educational outcomes. The question to be answered, however, is an empirical one: What happens when states adjust their school funding systems to take pupils' needs into greater account? We now have two kinds of studies that answer this question: large-scale, cross-state studies that look at the effects of reforms nationwide, and state-specific studies that look at changes in outcomes over time as a function of school funding reforms. Both show positive outcomes for students of more progressive school funding changes.

National Longitudinal Studies of School Finance Reforms

An increasing body of rigorous evidence, including multistate analyses over time, suggests that **substantive and sustained state school finance reforms are important for improving both the level and distribution of short-term and long-term student outcomes.** One such study found "evidence that equalization of spending levels leads to a narrowing of test score outcomes across family background groups."[14]

Access to increased longitudinal data on both local district level school finances and student outcomes has enabled a new wave of research on the topic.[15] One such analysis evaluated the long-term effects on high school graduation rates and eventual adult income of substantial infusions of funding to local public school districts through school finance reforms of the 1970s and 1980s.[16] This study linked the presence of reforms to changes in the distribution of dollars and other resources across schools and children, and the outcome effects of those changes. The researchers found that "the estimated effect of a 21.7% increase in per-pupil spending throughout all 12 school-age years for children from low-income families is large enough to eliminate the education attainment gap between children from low-income and non-poor families." This size investment led to a 20-percentage-point increase in graduation rates and, on average, an additional year of educational attainment for these children.

Even lower levels of investment made a sizable difference. The researchers found that "increasing per-pupil spending by 10% in all 12 school-age years increases the probability of high school graduation by 7 percentage points for all students, by roughly 10 percentage points for low-income children, and by 2.5 percentage points for non-poor children." They also observed positive effects on adult wages, with a 9.6% increase in adult hourly wages, and a substantial decrease in adult poverty rates resulting from this size investment.[17]

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A recent study evaluated the influence of adequacy-oriented school funding reforms during the 1990s and 2000s.[18] Using data from the National Assessment of Educational Progress, the researchers found that "reforms cause gradual increases in the relative achievement of students

in low-income school districts, consistent with the goal of improving educational opportunity for these students. The implied effect of school resources on educational achievement is large."[19]

Another national longitudinal analysis found that states with greater overall investment in education resulting in more intensive staffing per pupil tend to have higher outcomes for children from low-income families, higher performance in schools serving children from low-income families, and smaller disparities between schools serving children from low-income families and schools serving more advantaged populations.[20]

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And most recently, a study found that there is a strong relationship between state school finance reforms and graduation rates. Seven years after the reforms, the poorest districts showed an average 12% increase in per-pupil spending and increases in graduation rates of between 6 and 12 percentage points.[21]

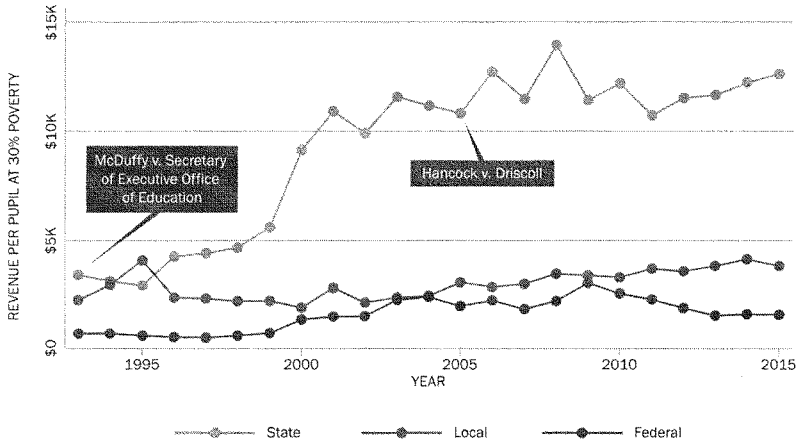
Collectively, these studies provide compelling new evidence of the large-scale achievement and economic benefits of substantive and sustained additional funding for schools serving higher-poverty student populations.

State-Level Studies of School Finance Reforms

Over the years, several state-specific studies of school finance reforms have validated the positive influence of those reforms on a variety of student outcomes. Massachusetts and Michigan reforms of the 1990s are among the most studied. Both states implemented significant reforms to their school finance systems in the early to mid-1990s, and maintained them for a decade or more, although Massachusetts reforms have waned over the past decade and Michigan reforms have largely collapsed.[22] Even the most vocal critics of school finance reform concede that Massachusetts in particular may have struck the right balance between funding and accountability reforms.[23] These reforms set standards for student learning and teacher preparation, while creating expectations and systems to support improvement in response to data about student outcomes.

In 1993, following the *McDuffy v. Secretary of Education* lawsuit,[24] Massachusetts adopted a package of far-reaching education reforms that included a new education funding formula under Chapter 70 of the state code.[25] Chapter 70 established a "foundation budget" for all districts, which calculates expenditures for each district in each of 11 functional categories (e.g., administration, teachers, pupil services, professional development, etc.), adjusted for wage costs and for the higher costs of students in poverty, English learners, and those identified for special education. It then calculated how much each district could afford to contribute (based on local revenues) and created a fund of state aid to fill gaps when local revenue proved inadequate to meet the foundation level.[26]

Figure 2
Revenue of High-Poverty Districts in Massachusetts 1995–2015

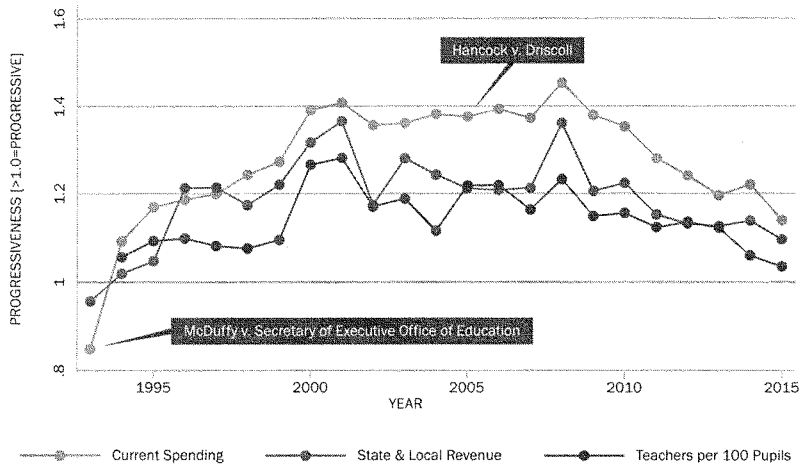


Source: Baker, B. D., Srikanth, A., & Weber, M. A. (2016). Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System. http://www.schoolfundingfairness.org/data-download.

Figure 2 shows the changes in revenue by source for high-poverty school districts in Massachusetts since then. State aid per pupil scaled up dramatically from 1995 through 2000 and then climbed more slowly through 2015. During this period, in *McDuffy*'s successor case *Hancock v. Driscoll* (2005), Massachusetts' Supreme Judicial Court held that while serious inadequacies in public education remained, the state was working to systemically address those deficiencies and the funding system did not violate Massachusetts' constitutional duty as outlined in *McDuffy*.[27]

Figure 3 shows that these reforms had significant influence on the level and progressiveness of funding and staffing for Massachusetts school districts. That is, over the period when state aid to high-poverty schools was increased significantly, high-poverty districts received 40% more state and local revenue per pupil than low-poverty districts. This raised current spending and staffing ratios. Although the state still spends more on high-poverty than low-poverty districts, the degree of progressiveness has waned since 2008, as state aid has remained flat for high-poverty districts and local spending has increased for low-poverty districts.

Figure 3
Progressiveness of Funding in Massachusetts 1995–2015



Source: Baker, B. D., Srikanth, A., & Weber, M. A. (2016). Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System. http://www.schoolfundingfairness.org/data-download.

Three studies of Massachusetts school finance reforms from the 1990s found positive effects on student performance. The earliest study found that the combination of funding and accountability reforms "has been successful in raising the achievement of students in the previously low-spending districts."[28] The second found that increases in per-pupil spending led to significant increases in mathematics, reading, science, and social studies test scores for 4th- and 8th-grade students overall.[29] The most recent of the three found that "changes in the state education aid following the education reform resulted in significantly higher student performance."[30]

Such findings have been replicated in other states, including Vermont, where studies of Act 60 school finance reforms in the late 1990s concluded the initiative "dramatically reduced dispersion in education spending ... by weakening the link between spending and property wealth." The research also found that "student performance has become more equal in the post-Act 60 period."[31]

Many other researchers have explored the effects of specific state school finance reforms over time. In the early 1990s, Michigan eliminated the property tax as a source of school tax revenue and replaced it with state funds generated through the sales tax and a new tax earmarked to schools.[32] Proposal A dramatically improved funding equity among school districts by creating a minimum per-pupil foundation allowance and by accelerating funding for the low-revenue school districts more quickly than the other school districts, reducing inequality in spending among rich and poor districts. Between 1993 and 2003, both revenues and expenditures increased by 60%, while funds were more equitably distributed.

Studies of Michigan's school finance reforms have shown positive effects on student performance. One of these studies found that "Proposal A was quite successful in reducing interdistrict spending disparities. There was also a significant positive effect on student performance in the lowest spending districts as measured in state tests."[33] Another study found significant positive effects on achievement in the previously lower performing districts.[34]

A growing body of research demonstrates that state school finance reforms can have large, positive effects on student outcomes, raising educational attainment and reducing gap.

Similarly, a study of the effects of 1992 school finance reforms in Kansas, which also involved primarily a leveling up of low-spending districts,[35] found that a 20% increase in spending was associated with a 5% increase in the likelihood of students going on to postsecondary education.[36]

To summarize, a growing body of research demonstrates that state school finance reforms can have large, positive effects on student outcomes, raising educational attainment and reducing gaps.

The Costs of Common Outcomes

A related body of studies has sought to determine the predicted cost of achieving state-mandated outcome targets, and the weights or adjustments needed for children with different backgrounds to have equal opportunity to achieve those goals. These studies find that:

- It costs more to achieve higher outcome goals—such as higher graduation rates or test scores for all children—than lower outcome goals, all else being equal.[37]
- Student characteristics make a difference for costs. In particular, as concentrated poverty increases, the costs of achieving any given level of outcomes increase significantly.[38]
- District features, especially size, also matter. The per-pupil costs of achieving a given level of outcomes are sensitive to district structural characteristics, most notably, economies of scale.[39]

As common sense would suggest, it takes more money to get a more ambitious job done, and it takes more when students have greater needs. In fact, in a school district in which 100% of the children come from low-income households, the costs of achieving common outcome goals may be double (or more) than those of a district with no children from low-income households.

51

How Money Is Used Matters

That money matters for improving school quality is grounded in the premise that having more money provides schools and districts the opportunity to improve the qualities and quantities of school- and classroom-level resources.

The primary resources involved in the production of schooling outcomes are human resources: quantities and qualities of teachers, administrators, support, and other staff in schools. Quantities of school staff are reflected in pupil-to-teacher ratios and average class sizes. Reduction of class sizes or reductions of total teaching or specialist caseloads requires additional staff, thus additional money, assuming the wages and benefits for additional staff remain constant. Qualities of school staff depend in part on the compensation available to recruit and retain the staff—specifically salaries and benefits, in addition to working conditions. Notably, working conditions may be reflected in part through measures of workload, such as average class sizes, as well as the composition of the student population.

A 2015 study explored how specific schooling resources responded to shifts in funding. The researchers found that spending increases were associated with noticeable improvements in wages, smaller pupil-teacher ratios, and longer school years.[40] These investments in schooling resources that occurred as a result of school finance reforms were likely responsible for the resultant gains in student outcomes. Such findings are consistent with studies validating the link between spending and staffing quantities.[41]

Increased funding tends to lead to reduced class size as districts hire more teachers.[42] A significant body of research points to the effectiveness of class-size reduction for improving student outcomes and reducing gaps among students, especially for younger students and those who have been previously low-achieving.[43] These reductions for young children have long-term effects on outcomes many years into the future.[44] Often studies find that the effects of class size reduction on achievement are greatest when certain smaller class thresholds (such as 15 or 18) are reached, and are most pronounced for students of color and those in schools serving concentrations of students in poverty.[45]

A 2013 study provides the most direct cost-effectiveness comparison of class size reduction policies with other options for which sufficient data on costs and outcome benefits were available, finding that "if focused on students in the poorest third of schools, then the cost-effectiveness of class size reduction is within the range of other interventions."[46]

A recent comprehensive meta-analysis of programs and strategies for improving outcomes for children from low-income households finds interventions that intensify human resources to be particularly effective when compared with alternatives.[47] Examining 101 studies from the past 15 years, the researchers found the largest effects on achievement were from interventions like tutoring, small-group instruction, and coaching or mentoring of children's teachers.

The major alternative to buying more staff is to invest more in each staff member—that is, to improve wage competitiveness in order to recruit and retain higher quality teachers and other school staff. Spending to achieve competitive wages also matters. A substantial body of literature validates the conclusion that teachers' overall wages and relative wages affect the quality of those who choose to enter the teaching profession—and whether they stay once they get in. For example,

one study found that salaries affect the decision to enter teaching and the duration of the teaching career in Michigan,[48] while others concluded that higher salaries are associated with more qualified teachers across states.[49]

And increases in teacher wages have been found in several studies to be associated with increased student achievement—presumably because more capable teachers can be recruited and retained.[50] A study that adjusted for labor market differentials showed that:

> Once we adjust for labor market factors, we estimate that raising teacher wages by 10 percent reduces high school dropout rates by 3 percent to 4 percent. Our findings suggest that previous studies have failed to produce robust estimates because they lack adequate controls for non-wage aspects of teaching and market differences in alternative occupational opportunities.[51]

Salaries also play a potentially important role in improving the *equity* of student outcomes. Although several studies have shown that higher salaries relative to labor market norms can draw higher quality candidates into teaching, the evidence also indicates that relative teacher salaries across schools and districts may influence the distribution of teaching quality. For example, a New York study found that:

> (T)eachers in districts with higher salaries relative to non-teaching salaries in the same county are less likely to leave teaching and that a teacher is less likely to change districts when he or she teaches in a district near the top of the teacher salary distribution in that county.[52]

In short, although salaries are not the only factor involved, they do affect the quality of the teaching workforce, which in turn affects student outcomes. A permanent upward shift in the competitiveness of teacher wages may substantively improve the quality of the teacher workforce and, ultimately, student outcomes.

At the same time, research evaluating spending constraints or reductions has revealed the potential harm to teaching quality that flows from leveling down or reducing spending. For example, a 2001 study noted that "using data from the National Center for Education Statistics, we find that tax limits systematically reduce the average quality of education majors, as well as new public school teachers in states that have passed these limits."[53] The researchers also found that tax limitations are associated with "larger student-teacher ratios and lower cost-of-living adjusted starting teacher salaries, all else equal" and with "lower student performance on mathematics, science, social studies and reading examinations, all else equal."[54]

California serves as a particularly dramatic case study of the long-run detrimental effects of strict tax and expenditure limits, following the tax cap imposed by Proposition 13 in 1979. A series of studies illustrate the negative fallout of Proposition 13 for the state's public schools. After 20 years of declining investments, analyses by the RAND Corporation and the Public Policy Institute of California confirmed that, by 2000, California students performed considerably

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worse than those in other states, even after adjusting for language backgrounds, ethnicity, and parental education.[55] The RAND Corporation report found that the growing number of underqualified teachers contributed to growing inequality in opportunities to learn. And according to an analysis by Policy Analysis for California Education (PACE), the decline in funding and the growing inequality in access to qualified teachers caused the relationship between socioeconomic measures and achievement scores to grow stronger.[56]

Because of school funding inequities, many local public school districts across the nation must serve high-need student populations with comparable or fewer financial resources than nearby districts serving less-needy student populations.[57] This can affect both teacher quality and class sizes negatively. Research has shown that school funding disparities in California and New York were associated with disparities in teacher compensation and class sizes—the less funding, the less competitive the compensation and the larger the classes.[58] Further, disparities in teacher compensation were associated with disparities in teacher qualifications, with children from low-income families and children of color often served by teachers with less training, education, and experience.

Similarly, a national analysis identified several large states—including California, Illinois, Louisiana, New York, Ohio, Pennsylvania, and Virginia—in which "district spending is positively associated with competitive salary differentials, average teacher salaries, and numbers of certificated staff per 100 pupils."[59] Further, "in each of these states, district poverty rates are negatively associated with competitive salary differentials, average teacher salaries and numbers of certified staff per 100 pupils." Where high-need districts and schools have both larger classes and less competitive wages than their neighbors, trading off one for the other simply isn't an option. Both large classes and lower quality teachers undermine educational quality for students.

To summarize:

- Reasonable class sizes matter for student achievement, especially in the early years and for students who have more educational needs or attend high-poverty schools.
- The relative salaries of teachers, with respect to other labor market opportunities in non-teaching fields, can substantively affect the quality of entrants to the teaching profession, applicants to preparation programs, and student outcomes.
- Diminishing resources for schools can constrain both the number of teachers and teacher salaries, thus reducing the quality of the labor supply.
- Salary differentials across schools and districts—typically associated with unequal school funding systems—affect how teachers sort across schools within the profession.
- And, not surprisingly, how much money is available affects the competitiveness of salaries and the reasonableness of student-teacher ratios.[60]

54

Conclusions

The preponderance of evidence shows that resources do matter—and that state school finance reforms that create more adequate and equitable funding can improve student outcomes, especially for students from low-income families.

First, improvements in the adequacy and equity of per-pupil spending are positively associated with improved student outcomes. In some studies, the size of this effect is larger than in others, and, in some cases, additional funding appears to matter more for some students than for others—typically for students with the greatest educational needs. Clearly, there are other factors that moderate the influence of funding on student outcomes, such as how that money is spent. But the association of higher spending with better student outcomes holds true, on average, even in large-scale studies across multiple contexts. On balance, in direct tests of the relationship between financial resources and student outcomes, money matters.

Second, schooling resources that cost money, including class-size reductions and increased teacher compensation, are positively associated with student outcomes, especially when they are used strategically—for example, when resources are used to create optimal class sizes for young children and those with greater needs, and when investments in salaries are used to improve teacher quality.

Third, sustained improvements to the level and distribution of funding across local public school districts have been shown to lead to improvements in the level and distribution of student outcomes, ranging from graduation rates to educational attainment and wages. While money alone may not be the answer, adequate and equitable distributions of financial inputs to schooling provide a necessary underlying condition for improving the adequacy and equity of outcomes. If the money is there, schools can use it productively; if it is not, they cannot. But proper use of funds is also important. Evidence from Massachusetts, in particular, suggests that appropriate combinations of more funding with accountability grounded in thoughtful standards for students and teachers may be most promising.

Given the preponderance of evidence that resources do matter and that state school finance reforms can effect changes in student outcomes, it seems surprising that doubt has persisted. In many cases, direct assertions are made that schools can do more with less money; that money is not a necessary underlying condition for school improvement; and, in the most extreme cases, that cuts to funding might actually stimulate improvements that past funding increases have failed to accomplish.

There is no evidence for these claims. On the contrary, there is evidence that money does matter. Schools and districts with more money clearly have a greater ability to provide higher quality, broader, and deeper educational opportunities to the children they serve. Furthermore, in the absence of adequate funding, or in the aftermath of deep cuts to existing funding, schools are unable to do many of the things necessary to develop or maintain the key elements of quality education, and achievement ultimately declines.

Resources do matter, and state school finance reforms that create more adequate and equitable funding can improve student outcomes, especially for students from low-income families.

Without adequate funding, efficiency trade-offs (like focusing on teacher quality versus teacher quantity) and innovations (like blended learning) that are broadly endorsed are impossible to consider. One cannot trade spending money on class-size reductions for an increase in teacher salaries to improve teacher quality if funding is not there for either—if class sizes are already large and teacher salaries noncompetitive. And when these conditions occur where student needs are greatest, the ability to provide the resources necessary to close learning gaps is missing.

The available evidence leaves little doubt: Sufficient financial resources, equitably distributed in relation to pupil needs, are a necessary underlying condition for providing quality education.

Endnotes

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61

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Bruce Baker is a professor in the Graduate School of Education at Rutgers in New Jersey. From 1997 to 2008, he was a professor at the University of Kansas in Lawrence. He co-authored *Financing Education Systems*, a graduate-level textbook on school finance policy, and has written a multitude of peer-reviewed research articles on state school finance policy, teacher labor markets, school leadership labor markets, and higher education finance and policy. His recent work has focused on measuring cost variations associated with schooling contexts and student population characteristics, including ways to improve state school finance policies and local district allocation formulas (including weighted student funding) to better meet the needs of students. Baker has also consulted for state legislatures, boards of education, and other organizations on education policy and school finance issues.

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A Punishing Decade for School Funding

By Michael Leachman, Kathleen Masterson, and Eric Figueroa

Public investment in K-12 schools — crucial for communities to thrive and the U.S. economy to offer broad opportunity — has declined dramatically in a number of states over the last decade. Worse, some of the deepest-cutting states have also cut income tax rates, weakening their main revenue source for supporting schools.

Most states cut school funding after the recession hit, and it took years for states to restore their funding to pre-recession levels. In 2015, the latest year for which comprehensive spending data are available from the U.S. Census Bureau, 29 states were still providing less total school funding per student than they were in 2008.

In most states, school funding has gradually improved since 2015, but some states that cut very deeply after the recession hit are still providing much less support. As of the current 2017-18 school year, at least 12 states have cut "general" or "formula" funding — the primary form of state support for elementary and secondary schools — by 7 percent or more per student over the last decade, according to a survey we conducted using state budget documents. (See Appendix.) Seven of those 12 — Arizona, Idaho, Kansas, Michigan, Mississippi, North Carolina, and Oklahoma — enacted income tax rate cuts costing tens or hundreds of millions of dollars each year rather than restore education funding. One of these — Kansas — repealed some of the tax cuts earlier this year and increased school funding, but not enough to restore previous funding levels or satisfy the state's Supreme Court, which recently ruled that the funding is unconstitutionally inadequate.[1]

Our country's future depends heavily on the quality of its schools. Increasing financial support can help K-12 schools implement proven reforms such as hiring and retaining excellent teachers, reducing class sizes, and expanding the availability of high-quality early education. So it's problematic that some states have headed sharply in the opposite direction over the last decade. These cuts risk undermining schools' capacity to develop the intelligence and creativity of the next generation of workers and entrepreneurs.

Our analysis of the most recent Census data available on state and local funding for schools also indicates that, after adjusting for inflation:

[1] Hunter Woodall and Katy Bergen, "Kansas Supreme Court rules new school finance formula is unconstitutional," *Kansas City Star*, October 2, 2017, http://www.kansascity.com/news/politics-government/article176606731.html.

- Twenty-nine states provided less *overall* state funding per student in the 2015 school year (the most recent year available) than in the 2008 school year, before the recession took hold.
- In 19 states, local government funding per student fell over the same period, adding to the damage from state funding cuts. In states where local funding rose, those increases usually did not make up for cuts in state support.

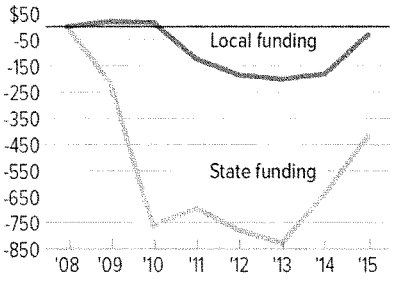
As common sense suggests — and academic research confirms — money matters for educational outcomes. For instance, poor children who attend better-funded schools are more likely to complete high school and have higher earnings and lower poverty rates in adulthood.[2]

States cut K-12 funding — and a range of other areas, including higher education, health care, and human services — as a result of the 2007-09 recession, which sharply reduced state revenue. Emergency fiscal aid from the federal government prevented even deeper cuts but ran out before the economy recovered, and states chose to address their budget shortfalls disproportionately through spending cuts rather than a more balanced mix of service cuts and revenue increases. Some states have worsened their revenue shortfalls by cutting taxes.

FIGURE 1

K-12 Funding Fell Sharply After Recession Hit

Change in funding per pupil compared to 2008, inflation adjusted



Note: Excludes Hawaii and Indiana due to lack of data.

Source: CBPP analysis of U.S. Census Bureau, "Public Education Finances: 2015."

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Restoring school funding should be an urgent priority. Steep state-level K-12 spending cuts have serious consequences:

- **Weakening a key funding source for school districts.** Some 47 percent of K-12 spending nationally comes from state funds (the share varies by state).[3] Cuts at the state level force local school districts to scale back educational services, raise more local revenue to cover the gap, or both. And because property values fell sharply after the recession hit, it was particularly difficult for local school districts to raise significant additional revenue through local property taxes without raising tax rates, a politically challenging task even in good times. (See Figure 1.)
- **Slowing the economy's recovery from the recession.** School districts began cutting teachers and other employees in mid-2008 when the first round of budget cuts took effect, federal employment data show. By mid-2012, local school districts had cut 351,000 jobs.

[2] C. Kirabo Jackson, Rucker C. Johnson, and Claudia Persico, "The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reforms," *Quarterly Journal of Economics*, October 1, 2015. See also Bruce Baker, "Does Money Matter in Education?" second edition, Albert Shanker Institute, 2016, http://www.shankerinstitute.org/resource/does-money-matter-second-edition.

[3] U.S. Census Bureau, Public Elementary-Secondary Education Finance Data.

Since then some of the jobs have been restored, but the number is still down 135,000 jobs compared with 2008.[4] These job losses reduced the purchasing power of workers' families, weakening overall economic consumption and thus slowing the recovery.

- **Impeding reforms widely acknowledged to boost student achievement.** Many states and school districts have identified as a priority reforms to prepare children better for the future, such as improving teacher quality, reducing class sizes, and increasing student learning time. Deep funding cuts hamper states' and districts' ability to implement many of these reforms. For example, while the number of public K-12 teachers and other school workers has fallen by 135,000 since 2008, the number of students has *risen* by 1,419,000. At a time when producing workers with high-level technical and analytical skills is increasingly important to a country's prosperity, large cuts in funding for basic education could cause lasting harm.

These trends are very concerning to the country's future prospects. The health of the nation's economy and our quality of life will depend crucially on the creativity and intellectual capacity of our people. If we neglect our schools, we diminish our future.

State Funding Fell Sharply, and Local Funding Didn't Make Up the Difference

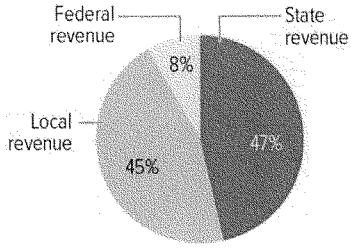
K-12 schools in every state rely heavily on state aid. On average, 47 percent of school revenues in the United States come from state funds. Local governments provide another 45 percent; the rest comes from the federal government. (See Figure 2.)

States typically distribute most of their funding through a formula that allocates money to school districts. Each state uses its own formula. Many states, for instance, target at least some funds to districts with greater student need (e.g., more students from low-income families) and less ability to raise funds from property taxes and other local revenues. However, this targeting often doesn't fully equalize educational spending across wealthy and poor school districts.[5]

FIGURE 2

States Provide Nearly Half of School Funding

Share of total K-12 education funding, 2015



Source: Census Bureau, "Public Elementary-Secondary Education Finance Report, 2015 Data," June 2017.

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In addition to this "general" or "formula" funding, states typically provide revenue for other, more specific purposes, such as bus transportation, contributions to school employee pension plans,

[4] CBPP analysis of Bureau of Labor Statistics data.

[5] See Bruce Baker, David Sciarra, and Danielle Farrie, "Is School Funding Fair? A National Report Card," sixth edition, Education Law Center, January 2017, https://drive.google.com/file/d/0BxtYmwryVI00VDhjRGlDQUh3VE0/view; Richard Coley and Bruce Baker, "Poverty and Education: Finding the Way Forward," ETS Center for Research on Human Capital and Education, July 2013, pp. 36-37, http://www.ets.org/s/research/pdf/poverty_and_education_report.pdf.

and teacher training. States vary in what they include in their general funding formula and what they fund outside the formula.

Because schools rely so heavily on state aid, cuts to state funding (especially formula funding) generally force local school districts to scale back educational services, raise more revenue to cover the gap, or both.

When the Great Recession hit, however, property values fell sharply, making it hard for school districts to raise local property taxes — schools' primary local funding source — without raising rates, which is politically challenging even in good times. Raising rates was particularly difficult during a severe recession with steep declines in housing values in many areas.

As a result, local funding for schools fell after the recession took hold, exacerbating the even steeper fall in state funding. Local funding still hadn't fully recovered in 2015, leaving total state and local K-12 funding per student still well below pre-recession levels as of that school year, the latest for which these data are available in most states. Our analysis of the latest Census data (which includes data from 48 states[6]) finds that, after adjusting for inflation:

- In 29 states, total state funding per student was lower in the 2015 school year than in the 2008 school year, before the recession took hold. (See Figure 3.)
- In 17 states, the cut was 10 percent or more.[7]
- In 19 states, *local* funding per student fell over the same period. In the other 29 states for which we have data, local funding rose, but those increases usually did not make up for cuts in state support.
- In 29 states, total state and local funding *combined* fell between the 2008 and 2015 school years. (See Figure 8 in the Appendix for state-by-state figures.)

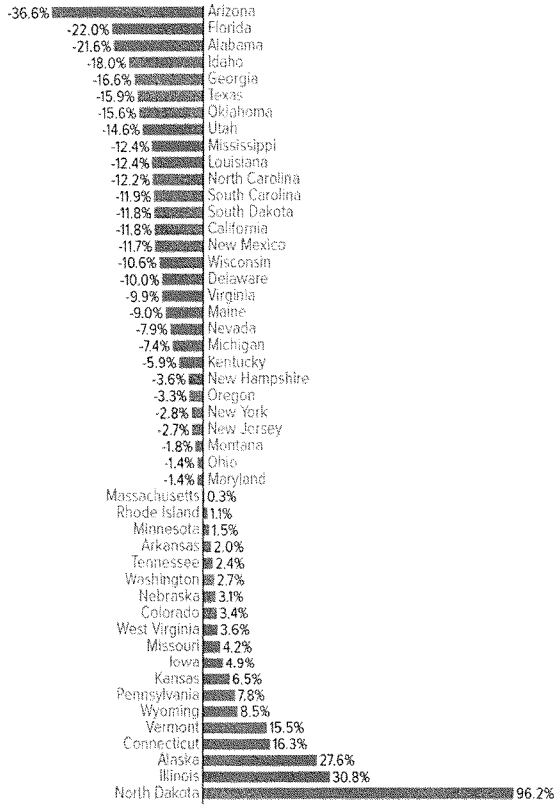
[6] Hawaii and Indiana are excluded. Hawaii does not distinguish between state and local funding, as it contains just one school district. Indiana shifted a large share of school funding in 2009 from local governments to the state; that shift is the primary reason why it's not possible to accurately compare state funding in 2008 to funding in recent years.

[7] Count includes Delaware, where the cut equaled 9.95 percent.

FIGURE 3

Total State K-12 Funding Below 2008 Levels in Most States

Percent change in total state funding per student, inflation adjusted, fiscal years 2008-2015



Note: Hawaii and Indiana are excluded because the data necessary to make a valid comparison are not available. Iowa and Wisconsin shifted funds from the local to the state level during the 2008-2015 period. We counted these funds as state funds in 2008 for an apples-to-apples comparison across the period.

Source: CBPP analysis of Census Bureau's Public Elementary-Secondary Education 2015 Data and National Center for Education Statistics enrollment estimates.

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Current-Year Data Show General Formula Funding Still Way Down in Most of the Deepest-Cutting States

Data on total state and local school funding aren't yet available for the current (2018) school year in most states. However, the necessary data are available to compare *general formula funding* — the primary state funding source for schools — this year with funding before the recession took hold.[8] We reviewed these data for 12 states that our research last year showed had cut formula funding most deeply.[9]

This survey found that, after adjusting for inflation:

- Each of the 12 states is still providing at least 7 percent less general aid per student this year than in 2008 (see Figure 4).
- In eight of those 12 states, the cuts are 10 percent or more, and Kansas' cut is only slightly smaller, at 9.9 percent.

Almost half of these states raised per-pupil general formula funding in the last year (see Figure 5), but those increases weren't enough to offset earlier cuts.

- Five of the 12 states raised general funding per student in 2018, after adjusting for inflation.
- None of those states raised funding enough in the last year to make up for cuts in earlier years. For example, Oklahoma's $2-per-pupil increase this year was far from enough to offset the state's $1,058-per-pupil cut over the previous nine years.
- Seven of the 12 states — Alabama, Arizona, Kentucky, Michigan, Mississippi, Texas, and West Virginia — *cut* per-student funding even further this year.

[8] Hawaii and Wyoming were omitted due to insufficient data. Indiana was excluded because changes in its education formulas between fiscal years 2008 and 2017 prevent meaningful comparisons across years.

[9] This analysis examines the 12 states with the deepest cuts in "formula" or general K-12 education funding as identified in CBPP's 2016 paper "After a Nearly a Decade, School Investments Still Way Down in Some States." These states are Alabama, Arizona, Idaho, Kansas, Kentucky, Michigan, Mississippi, North Carolina, Oklahoma, Texas, Utah, and West Virginia. While Wisconsin appeared among the 12 deepest-cutting states in our 2016 paper, that state has been providing school districts with an increasingly large amount of general funding outside of the state formula. Including this non-formula general aid, Wisconsin's cuts since 2007-08 are not in the top 12.

FIGURE 4

State General Funding Per Student Still Far Below 2008 in at Least 12 States

Percent change in state formula funding* per student, inflation adjusted, fiscal years 2008-2018

*General or formula funding is the primary form of state K-12 funding. States also typically provide revenue for other, more specific purposes, such as bus transportation and contributions to school employees and pension plans.

Source: CBPP budget and enrollment analysis.

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Why Have States Cut Funding So Deeply?

States' large K-12 cuts reflect a combination of outside factors, such as weak revenues and rising education costs, and state policy choices, such as relying on spending cuts to close budget shortfalls and enacting recent tax cuts.

- **States relied heavily on spending cuts after the recession hit.** States disproportionately relied on spending cuts to close their large budget shortfalls after the recession hit, rather than a more balanced mix of spending cuts and revenue increases. Between fiscal years 2008 and 2012, states closed 45 percent of their budget gaps through spending cuts and only 16 percent through taxes and fees. (They closed the rest with federal aid, reserves, and various other measures.)[10]
- **State revenues have been hurt this year and last by a variety of factors,** including falling oil prices, delayed sales of capital, and sluggish sales tax growth. Oklahoma, Texas, and West Virginia, for example, have been hurt by declines in prices for oil and other natural resources. In addition, some states have seen weaker-than-projected growth in income tax revenue as investors held off on selling capital in anticipation of a federal capital gains tax cut. And sales

[10] CBPP calculations based on our survey of state budget documents, in-state experts, and other materials. See Elizabeth McNichol, "Out of Balance: Cuts in Services Have Been States' Primary Response to Budget Gaps, Harming the Nation's Economy," Center on Budget and Policy Priorities, April 18, 2012, http://www.cbpp.org/research/out-of-balance.

tax growth has been slow, as well, as consumers have remained cautious long after the end of the Great Recession and untaxed Internet sales have continued to grow.[11]

- **Some states cut taxes deeply.** Not only did many states avoid raising new revenue after the recession hit, but some enacted large tax *cuts,* further reducing revenues. Seven of the 12 states with the biggest cuts in general school funding since 2008 — Arizona, Idaho, Kansas, Michigan, Mississippi, North Carolina, and Oklahoma — have also cut income tax rates in recent years.[12] (See Figure 6.)
- **Costs are rising.** Costs of state-funded services have risen since the recession due to inflation, demographic changes, and rising needs. For example, there are about 1.4 million more K-12 students and 1.3 million more public college and university students now than in 2008, the U.S. Department of Education estimates.[13]
- **Federal funding for most forms of state and local aid has fallen.** Federal policymakers have cut ongoing federal funding for states and localities — outside of Medicaid — in recent years, thereby worsening state fiscal conditions. The part of the federal budget that includes most forms of funding for states and localities outside of Medicaid, known as non-defense "discretionary" funding (that is, funding that is annually appropriated by Congress), is near record lows as a share of the economy.[14] Federal spending for Title I — the major federal assistance program for high-poverty schools — is down 6.2 percent since 2008, after adjusting for inflation.[15]

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[11] Elizabeth McNichol and Samantha Waxman, "States Faced Revenue Shortfalls in 2017 Despite Growing Economy," Center on Budget and Policy Priorities, October 4, 2017, https://www.cbpp.org/research/state-budget-and-tax/states-faced-revenue-shortfalls-in-2017-despite-growing-economy.

[12] Mississippi's rate cuts will first take effect in 2018.

[13] National Center for Education Statistics, Table 6; and *Digest of Education Statistics: 2016*, Tables 203.20 and 303.10.

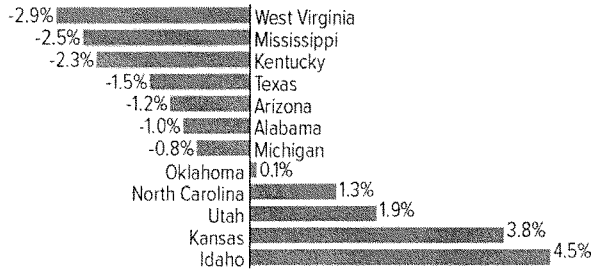
[14] Richard Kogan, "House Budget Would Cut Non-Defense Programs to Historic Lows," Center on Budget and Policy Priorities, July 19, 2017, https://www.cbpp.org/blog/house-budget-would-cut-non-defense-programs-to-historic-lows.

[15] CBPP analysis of data from the Office of Management and Budget. These cuts include the automatic, across-the-board cuts known as sequestration, as well as other cuts also resulting from the 2011 Budget Control Act.

FIGURE 5

Seven of the Deepest-Cutting States in the Last Decade Also Cut General Funding Per Student This Year

Percent change in state formula funding* per student, inflation adjusted, fiscal years 2017-2018



*General or formula funding is the primary form of state K-12 funding. States also typically provide revenue for other, more specific purposes, such as bus transportation and contributions to school employees and pension plans.

Source: CBPP budget and enrollment analysis

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K-12 Cuts Have Serious Consequences

Local school districts typically struggle to make up for major state funding cuts on their own, so the cuts have led to job losses, which deepened the recession and slowed the economy's recovery. They also have impeded important state education reform initiatives at a time when producing workers with high-level technical and analytical skills is increasingly important to the country's prosperity.

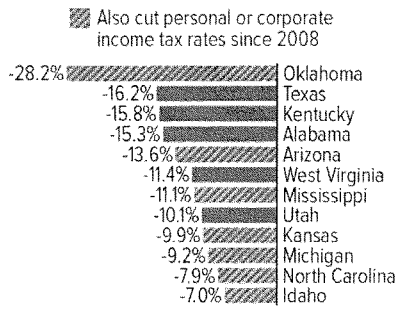
A study on the impact of school financing reforms beginning in the 1970s highlighted the importance of adequate funding for the success of children — especially *low-income* children — in school and later in the workplace. Examining data on more than 15,000 children born between 1955 and 1985, the study found that poor children whose schools received an estimated 10 percent increase in per-pupil spending (adjusted for inflation) before they began public school, and maintained that increase over their 12 years of school, were 10 percentage points more likely to complete high school than other poor children. They also had 10 percent higher earnings as adults and were 6 percentage points less likely as adults to be poor.[16]

[16] Jackson, Johnson, and Persico.

FIGURE 6

Seven of Twelve States With Deepest K-12 Cuts Also Cut Income Taxes

States with deepest formula funding cuts,* 2008-2018



*General or formual funding is the primary form of state K-12 funding. States also typically provide revenue for other, more specific purposes, such as bus transportation and contributions to school employees and pension plans.

Note: Mississippi's tax cut first takes effect in calendar year 2018.

Source: CBPP budget and enrollment analysis

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Local School Districts Hard Pressed to Replace Lost State Funding

Property values fell sharply after the recession hit, making it difficult for local school districts to raise significant additional revenue through the property tax to make up for state funding cuts. Property values later improved, but the impact on property tax revenues was delayed. (There's generally a significant time lag between when home prices rise and when property tax assessments register the increase.)[17] Local school districts can seek to raise property tax *rates*, but those increases are usually politically difficult and sometimes legally restricted.

For these reasons, property tax revenue growth nationwide has been modest over the last decade. While revenues initially surged as property taxes caught up with the rapid growth in home prices associated with the pre-recession housing bubble, they fell sharply once home prices plummeted, and then rose only slowly. The overall result: after the recession hit at the end of 2007, property tax

[17] Recent research suggests it generally takes about three years for property tax revenues to reflect increased property values. See Byron F. Lutz, "The Connection Between House Price Appreciation and Property Tax Revenues," Federal Reserve Board of Governors, September 12, 2008, http://www.federalreserve.gov/pubs/feds/2008/200848/200848pap.pdf.

revenue growth nationally averaged only about 1.7 percent above inflation annually through 2016 — far from enough to make up for declining state support and rising student enrollment.[18]

Beyond raising local revenues, school districts have few options for preserving investments in education. Some localities could divert funds from other services to shore up school budgets, but this could impair other critical services, like police and fire protection.

Capital Spending to Build and Renovate Schools Also Down

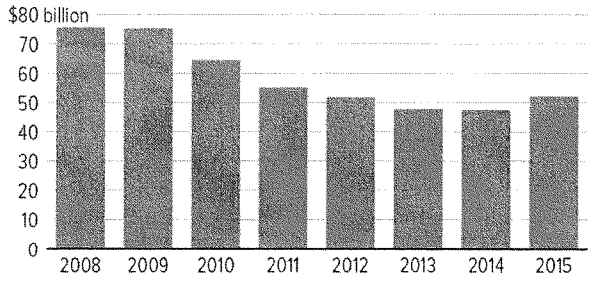
States and localities use capital spending to build new schools, renovate and expand facilities, and equip schools with more modern technologies. In most states, capital spending fell sharply after the recession hit, as did the non-capital school funding discussed in this paper.

Elementary and high schools nationally cut capital spending by $23 billion or 31 percent between fiscal years 2008 and 2015 (the latest year available), after adjusting for inflation. (See chart.)

Thirty-seven states cut capital spending relative to inflation over this period, in many cases drastically. Six states cut capital spending by more than half. Nevada, the state with the sharpest reductions, cut capital spending by 82 percent.

Capital Spending for K-12 Schools Well Below 2008 Levels

Total capital spending, public school systems, inflation adjusted



Note: Capital spending covers costs such as building and renovating schools and upgrading school technology.

Source: CBPP analysis of U.S. Census Bureau "Annual Survey of School System Finance" data, August 2017.

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[18] CBPP analysis of data from the U.S. Census Bureau's Quarterly Summary of State and Local Taxes, extracted on August 15, 2016.

Cuts Undermine Education Reforms

Many states have undertaken education reforms such as supporting professional development to improve teacher quality, improving interventions for young children to heighten school readiness, and turning around the lowest-achieving schools. Deep cuts in state K-12 spending can undermine those reforms by limiting the funds generally available to improve schools and by terminating or undercutting specific reform initiatives. Reforms endangered by funding cuts include:

- **Improving teacher quality.** Research suggests that teacher quality is the most important school-based determinant of student success.[19] Recruiting, developing, and retaining high-quality teachers are therefore essential to improving student achievement. School budget cuts make these tasks far more difficult. Teacher salaries make up a large share of public education spending, so funding cuts inevitably restrict districts' ability to expand teaching staffs and supplement wages. In 39 states, the average teacher's salary declined relative to inflation between the 2010 and 2016 school years (the latest year with comparable data for all states).[20] And low teacher pay is a key factor behind shortages of qualified teachers in many schools.[21]
- **Trimming class size.** Evidence suggests that smaller class sizes can boost achievement, especially in the early grades and for low-income students.[22] Yet small class sizes are difficult to sustain when schools cut spending and enrollment rises. In Nevada, for example, the student-to-teacher ratio rose from 18.3 to 21.2 between the 2008 and 2015 school years.[23] The United States as a whole has about 1,419,000 more K-12 students this school year than in 2008 but 135,000 fewer teachers and other school workers.[24]
- **Expanding learning time.** Many experts believe that more student learning time can improve achievement.[25] Budget cuts make it more difficult to extend instructional opportunities because extending learning time generally adds costs. Some states have even *cut* student learning time due to budget cuts. When Arizona eliminated funding for full-day kindergarten, for example, some school districts responded by offering only a half-day

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[19] See for example, "Empowering Effective Teachers: Readiness for Reform," Bill and Melinda Gates Foundation Research Brief, February 2010, http://www.gatesfoundation.org/united-states/Documents/empowering-effective-teachers-readiness-for-reform.pdf.

[20] National Center for Education Statistics, "Estimated average annual salary of teachers in public elementary schools, by state: Selected years, 1969-70 through 2015-16," Table 211.60, https://nces.ed.gov/programs/digest/d16/tables/dt16_211.60.asp.

[21] See Linda Darling-Hammond, "Where Have All the Teachers Gone?" Learning Policy Institute, September 20, 2017, https://learningpolicyinstitute.org/blog/where-have-all-teachers-gone.

[22] See Diane Whitmore Schanzenbach, "Does Class Size Matter?" National Education Policy Center, February 2014, http://nepc.colorado.edu/publication/does-class-size-matter. See also Matthew M. Chingos and Grover J. "Russ" Whitehurst, "What Research Says and What it Means for State Policy," Brookings Institution, May 11, 2011, http://www.brookings.edu/research/papers/2011/05/11-class-size-whitehurst-chingos.

[23] National Center for Education Statistics data, "Public elementary and secondary teachers, enrollment, and pupil/teacher ratios, by state or jurisdiction," Table 208.40, 2016, https://nces.ed.gov/programs/digest/d16/tables/dt16_208.40.asp.

[24] National Center for Education Statistics and Bureau of Labor Statistics data.

[25] See for example, Center for American Progress, "Expanded Learning Time By the Numbers," April 22, 2010, http://cdn.americanprogress.org/wp-content/uploads/issues/2010/04/pdf/elt_by_the_numbers.pdf.

program or by requiring parents to pay a fee for a full-day program, likely reducing the number of children who can attend.[26]

- **Providing high-quality early education.** A number of studies conclude that pre-kindergarten or preschool programs can improve cognitive skills, especially for disadvantaged children,[27] but many states cut funding for those programs after the recession hit. By 2016, the average state had restored preschool funding per enrolled child, but some states were still providing significantly less. For example, between 2008 and 2016, Nevada reduced per-pupil state funding for pre-K by 39.5 percent or $1,448 after adjusting for inflation.[28]

Cuts Slowed the Economy and Can Inhibit Long-Term Growth

State K-12 cuts slowed the economic recovery by reducing overall economic activity after the recession officially ended in mid-2009. They forced school districts to lay off teachers and other employees, reduce pay for the remaining workers, and cancel contracts with suppliers and other businesses. These steps removed consumer demand from the economy, which in turn discouraged businesses from making new investments and hiring.

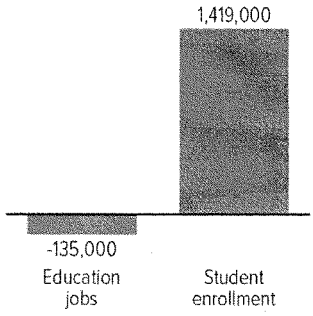
Federal employment data show that school districts began cutting teachers and other employees in mid-2008, when the first round of budget cuts began taking effect. By 2012, local school districts had cut about 351,000 jobs. They've since added back some of the jobs, but the number is still down 135,000 compared with 2008.[29] (See Figure 7.)

In addition, education spending cuts have cost an unknown but likely significant number of private-sector jobs as school districts canceled or scaled back purchases and contracts (for instance, buying fewer textbooks). These job losses shrink the purchasing power of workers' families, which in turn affects local businesses and slows recovery.

FIGURE 7

K-12 Education Jobs Have Fallen as Enrollment Has Grown

Change, fall 2008 to fall 2017



Source: CBPP analysis of data from Bureau of Labor Statistics and National Center for Education Statistics

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[26] See for example, Paul Rhoden, "Local School Districts Return to Fee-Based, All-Day Kindergarten," *Daily Courier*, April 3, 2010, http://www.dcourier.com/news/2010/apr/03/local-school-districts-return-to-fee-based-all-da/.

[27] Julia Isaacs, "Research Brief #1: State Pre-Kindergarten," Brookings Institution, September 2008, https://www.brookings.edu/wp-content/uploads/2016/07/09_early_programs_brief1.pdf.

[28] W. S. Barnett *et al.*, "The state of preschool 2016: State preschool yearbook," National Institute for Early Education Research, 2017, p. 7.

[29] Bureau of Labor Statistics data.

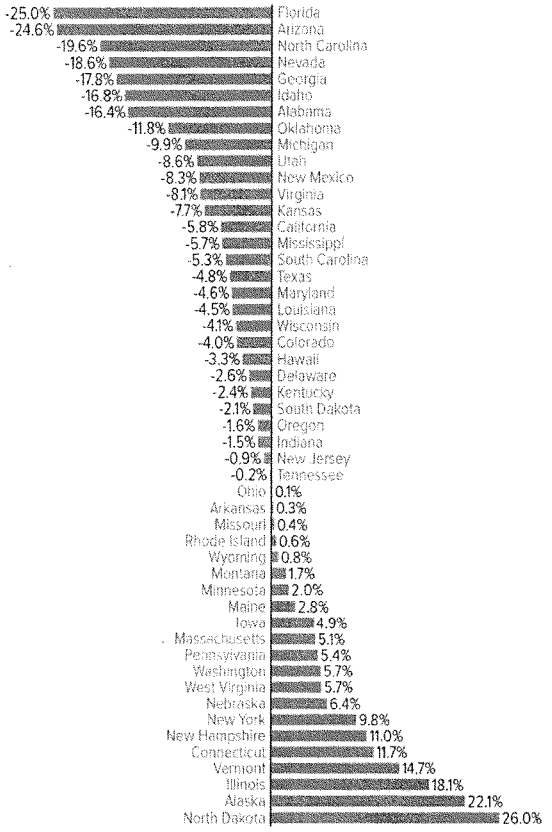
In the long term, the budgetary savings from recent K-12 funding cuts may cost states much more in diminished economic growth. To prosper, businesses require a well-educated workforce. Deep education funding cuts weaken that future workforce by diminishing the quality of elementary and high schools. At a time when the nation is trying to produce workers with the skills to master new technologies and adapt to the complexities of a global economy, large cuts in funding for basic education undermine a crucial building block for future prosperity.

Appendix: Total State and Local Funding

FIGURE 8

Combined State and Local School Funding Per Student Below 2008 Levels in Most States

Percent change, inflation adjusted, fiscal years 2008-2015



Source: CBPP analysis of Census Bureau's Public Elementary-Secondary Education 2015 Data and National Center for Education Statistics enrollment estimates.

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Appendix: Methodology

The data in this paper on state "formula" funding for K-12 education through the current school year come from a review of state budget documents CBPP conducted in the summer of 2017. An education funding expert in each state, often a budget expert with the state's education department, reviewed our figures and edited them when necessary.

The figures on both total state and local education funding reflect all state and local revenues dedicated to K-12 education, as reported by the U.S. Census Bureau. The enrollment figures used to analyze total state and total local education funding were taken from the National Center for Education Statistics. Additional adjustments were made to reflect the following state-specific policies or data limitations:

- **Hawaii** and **Indiana** were excluded from the total state funding analysis because the necessary data to make a valid comparison are not available.
- In **Illinois**, payments made by the state government into the state's public school retirement systems on behalf of Illinois school districts are included in state total funding.
- In **Iowa,** a 1-cent local option sales tax for school infrastructure, known as the Secure and Advanced Vision for Education (SAVE) tax, became a statewide sales tax in 2009. We included the SAVE tax as a state revenue source in 2008 for an accurate comparison across years.
- In **Wisconsin** in 2013, the Census Bureau began treating revenue from Wisconsin's School Levy Tax Credit property tax relief program as revenue from state sources rather than as local property taxes. To create an apples-to-apples comparison across years, we included the School Levy Tax Credit as a state revenue source in years prior to fiscal year 2013.

When possible, the enrollment figures used to calculate general formula funding were collected directly from state agencies. The general education funding totals reflect the funding distributed through states' major education funding formulas. The figures do not include local property tax revenue or any other source of local funding. Figures for the current fiscal year are based on the amounts states budgeted for the 2017-18 fiscal year when they wrote their budgets earlier this year. Additional adjustments were made to reflect the following state-specific policies or data limitations:

- **Arizona** voters approved a plan to settle a lawsuit regarding inflation adjustments for K-12 education in May 2016. The plan increased the distribution of state land trust funds over a ten-year period beginning with fiscal year 2016. The result is an increase of approximately $173 million per year through fiscal year 2025. These appropriations are included in Arizona's funding analysis.
- In **Idaho**, funds for Idaho Educational Services for the Deaf and Blind were removed from recent appropriations to make general formula education allocations comparable across years.
- In **Kansas**, a block grant replaced the previous K-12 funding formula starting in fiscal year 2015 and ending in fiscal year 2017. For this reason, certain K-12 funding categories were excluded from the formula funding analysis in fiscal year 2008 and fiscal year 2018 to ensure a valid comparison across years.

- **Kentucky** had $10.38 million in unexpected funds from its Support Education Excellence in Kentucky program in fiscal year 2017, which was carried forward into fiscal year 2018 to be used for pupil transportation. Kentucky's end-of-year state financial report was not available at the time of publication, but the Center on Budget and Policy Priorities confirmed these amounts with officials in the state Department of Education.
- In order to accurately compare past and current education spending, **North Carolina**'s numbers do not include funding for one-time bonuses and increases for salaries and benefits for education personnel.

Center for American Progress

The Case for Federal Funding for School Infrastructure

By Laura Jimenez February 12, 2019

America's infrastructure is falling apart. The American Society of Civil Engineers (ASCE) recently estimated that it would take a $4.5 trillion investment to upgrade the country's roads; buildings; transportation, water, and energy systems; and other essential underpinnings. The ASCE has graded the country's infrastructure as an overall D+.[1] Infrastructure is the backbone of the U.S. economy, and the lack of investment in transportation infrastructure alone will cost the country $340 billion in lost business revenues from 2017 to 2023.[2] While most infrastructure discussions consider transportation, energy, and more, they too often ignore K-12 public schools, which welcome more than 50 million children and adults every day. K-12 public schools represent the nation's second-largest infrastructure sector.[3]

Considering the size of the K-12 sector, its exclusion from larger infrastructure analyses, including the aforementioned ASCE report and President Donald Trump's $200 billion infrastructure proposal, is puzzling.[4] Schools are economic drivers, as well-prepared students will earn $1 million more over their lifetimes than their less educated peers.[5] The condition of school buildings provides a crucial foundation for classroom learning that affects students and the American economy.

America's crumbling schools

The state of the nation's K-12 public schools is well-documented. For example, a 2016 report on the condition of school facilities that are funded and operated by the federal Bureau of Indian Education (BIE) shows that 5 of the 13 schools visited for the report are in condemned buildings, meaning that the extent of their disrepair is so great that they cannot be occupied.[6] Schools in Baltimore and Detroit have made headlines for their dilapidated conditions—from having no heat in the winter to being plagued with roaches, rats, and mold.[7] Puerto Rico's schools will likely take years to recover from recent hurricane devastation before being habitable.[8] A 2013 survey confirms data originally collected in 1996: that about half of America's public school buildings are in similar states of disrepair and insufferable condition.[9] As there has been little federal investment in school infrastructure since then, these conditions are likely worse today.[10]

The state of the schools in the BIE, Baltimore, Detroit, and Puerto Rico—as well as many other towns and cities across the country—make clear that any infrastructure bill must include funding to fix America's school buildings. Importantly, school infrastructure investment should not just address the extreme cases. Plenty of schools that are not yet crumbling must be repaired and upgraded so that they are not only modern and efficient but also equipped to meet students' broader needs.

A federal fix for schools

Fortunately, in the current Congress there appears to be a renewed appetite to seriously tackle America's infrastructure challenges. Immediately after the 2018 midterm elections, current House Speaker Nancy Pelosi (D-CA) announced that infrastructure would be one of the House's top priorities moving forward. More recently, Rep. Bobby Scott (D-VA), chair of the House Education and Labor Committee, made a significant effort to move forward the Rebuild America's Schools Act, which would invest $100 billion in school infrastructure.[11]

As Congress gears up to potentially take on the major issue of infrastructure investment, it is imperative that any infrastructure package include funding to repair and modernize public school buildings. In particular, Congress and the administration should address the following priorities.

Fix all crumbling and unsafe schools

Congress should dedicate most school infrastructure funds to address all schools in poor condition. This funding would address critical building systems that affect basic building operations, such as roofing, insulation, and plumbing, as well as heating, ventilation, and air conditioning.

This priority alone will cost a significant amount of money: Reports estimate that bringing all U.S. schools into good overall condition will cost approximately $200 billion.[12] Just fixing the public schools in Detroit that are deemed in urgent need of repair, for example, would cost at least $223 million; it would cost up to $500 million to bring all Detroit public schools to a state of good repair.[13] In Baltimore, it could cost up to $2.8 billion to address the city's backlog of school maintenance issues.[14]

Congress should allocate a portion of infrastructure funds for states to conduct an audit of school districts that lack official estimates of the cost to address deferred maintenance issues. This audit would also provide cost estimates for new construction in cases where school building conditions are so dire that they are beyond the scope of repair.

Modernize schools to meet the needs of the 21st century

"Modernizing schools" refers to fully renovating systems, building interior finishes, and updating technology.[15] While all students deserve schools that are modernized and capable of supporting the latest in education programming, elevating all schools to this state will take time and continued funding from the federal government.

Importantly, modernizing schools would improve quality of life for students and teachers.[16] Examples of these projects include bringing broadband to all schools; providing functioning computers to every classroom; and ensuring that furniture, fixtures, and school spaces facilitate teaching and learning for students with various needs—including students with disabilities. In addition, these renovations must support students' health and well-being by providing adequate space for meals, health facilities, after-school care, and extracurricular programming.

As part of these funding provisions, Congress should mandate that states and districts identify how to spend modernization funds so that they are equitably distributed across school districts. For example, District of Columbia Public Schools (DCPS) provides information on its website about its own capital improvement plan, known as the DCPS School Modernization process.[17] This process uses four considerations, in descending order of importance: equity; student demand; neighborhood population; and building condition.[18] Equity in particular assesses the percentage of schools in the neighborhood that have been modernized, as well as the percentage of enrolled students who are at-risk, have disabilities, or are English language learners.

Finally, modernization should also ensure that transportation pathways to and from schools are safe. The Safe Routes to Schools (SRTS) program, a $180 million annual grant competition run by the U.S. Department of Transportation, currently supports this particular priority but is severely underfunded given the need.[19] Projects funded by SRTS dollars improve the ability of students to walk and ride bicycles to school, including by improving sidewalk conditions and traffic patterns, reducing vehicle speed, and establishing bicycle lanes. These are vital projects: Each year, about 6,000 pedestrians and bicyclists are killed by traffic-related accidents.[20] While these data do not disaggregate the fatalities for students in particular, other data show that about 300 of the pedestrians and bicyclists killed every year are students, while another 15,000 of those injured are students.[21]

Make schools environmentally sustainable

Modernizing schools should also include making them green so that their energy consumption and carbon footprints are reduced, as well as improving the health of building occupants.

The U.S. Department of Education, through its Green Ribbon Schools award program, defines a "green school" as one that meets three criteria: 1) it reduces environmental impacts such as waste, water, and energy consumption; 2) it improves health and wellness by promoting a healthy physical environment, including by improving air and water quality; and 3) it provides effective environmental and sustainability education.[22]

Moreover, evidence shows that alterations to make schools green also reduce operating costs. For example, Thurgood Marshall Elementary School in Philadelphia has a "superior" rating on Energy Star, which means that it performs better than 75 percent of other buildings on energy savings.[23] This rating amounts to 28 percent savings on energy costs when compared with school buildings nationwide.[24] Most of the school's efforts were specific to operations and maintenance; however, students pitched in as monitors to supervise the classroom's green practices, energy savings, and recycling.

Provide professional development support to facilities managers and staff so that they can operate and maintain upgraded systems

Modern building systems are often technology-based, and their maintenance can require specific technical knowledge, training, and certification or licensure.[25] Facilities staff typically engage in general administration and building management—which often includes budgeting—and operations and maintenance, which addresses the daily and long-term care of the building and its systems. Staff also are responsible for energy, utility, and environmental stewardship—which includes electricity and plumbing—as well as planning, design, and construction of repairs or modernizations.[26]

To effectively serve in these capacities, school facilities staff need frequent and up-to-date professional development. School infrastructure legislation should earmark a portion of funds to provide regular training and development for school facilities professionals to ensure that their knowledge and skills are a match for the systems they must maintain.

Establish an ongoing role for the federal government to invest in school infrastructure

The federal government provides approximately 10 percent of all funding for K-12 education but nearly no money for school operations, even though public schools are the second-largest facilities sector.[27] While the federal government spent about $170 billion on highways and $110 billion on waterways in 2017, it generally only supports 0.2 percent of capital costs for schools, with states providing 18 percent of the share and local governments providing 82 percent.[28] Since most local school funding is driven by property taxes, the ability of a school district to pay for capital improvements and investments is directly tied to the wealth of its surrounding community. When some of the lowest-income communities in the country struggle the most with crumbling schools, it is clear that a federal role in school infrastructure is a matter of equity.

The federal government should also play a greater role in making sure that there is up-to-date information on the condition of K-12 school buildings, eliminating the need for expensive, ad hoc audits on this topic. Federal surveys of K-12 school infrastructure conditions first occurred in 1999 and were most recently updated in 2013.[29] These reports provide limited data on school staffs' perception of building conditions. As part of its research and information collection role, the U.S. Department of Education should regularly publish a report on school conditions that describes the current state of affairs and investments needed to ensure that all schools are in good condition.

Conclusion

Just as transportation and energy infrastructure are holding the country back from economic growth that would benefit all Americans, the conditions of K-12 public schools are a drag on its ambition to once again be a leader in educational attainment worldwide. As leaders at the federal level debate how to best address the country's substantial infrastructure needs, it is imperative that improving and modernizing K-12 schools is part of any new infrastructure investment—and is an ongoing priority.

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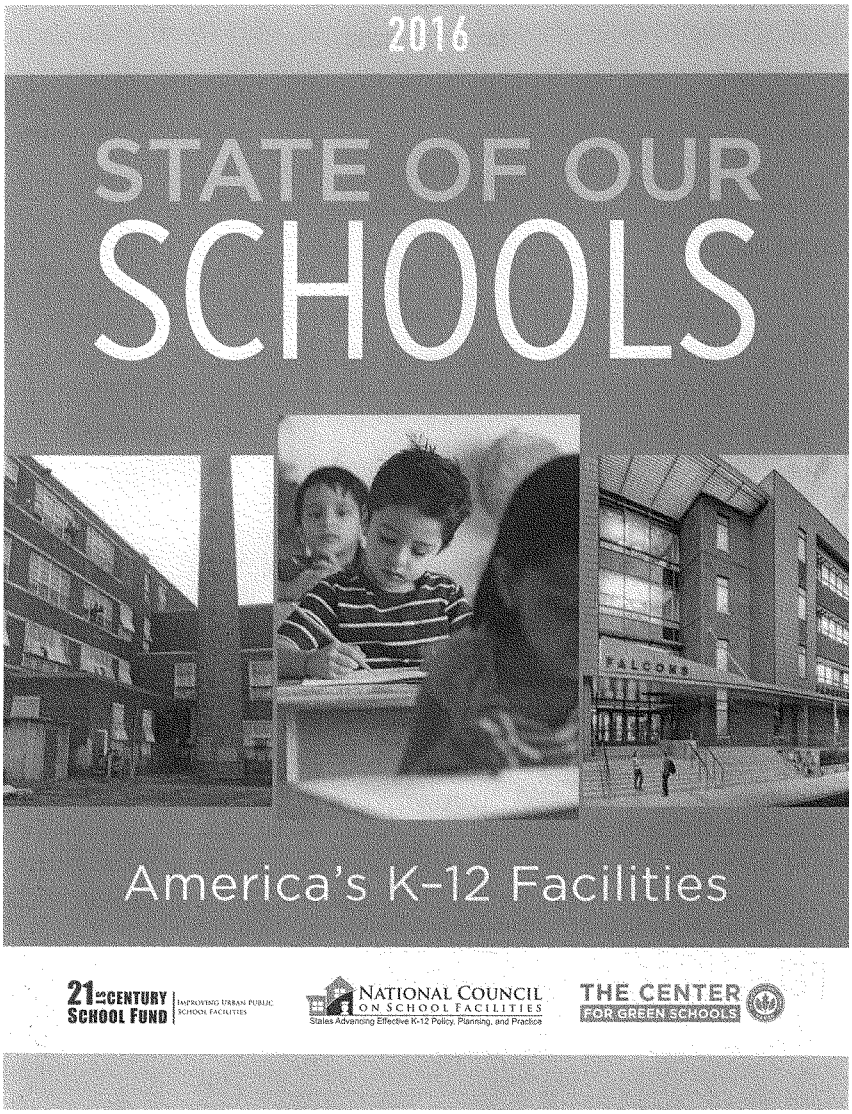
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STATE OF OUR
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America's K-12 Facilities
21st CENTURY SCHOOL FUND
IMPROVING URBAN PUBLIC SCHOOL FACILITIES
NATIONAL COUNCIL ON SCHOOL FACILITIES
States Advancing Effective K-12 Policy, Planning, and Practice
THE CENTER FOR GREEN SCHOOLS

Data Sources and Methods

To complete the analysis contained in this report, the authors used a data- and standards-based framework to analyze 20 years of publicly available national and state data on public facilities spending for fiscal years 1994 through 2013.[1] We used the data reported by U.S. K–12 school districts on the U.S. Census of Governments F-33 Fiscal Surveys and published by the National Center for Education Statistics (NCES) as our primary data source. These data include local school district enrollments and annual revenues and expenditures, including those for capital outlay and for maintenance and operations of plant. A compilation of selected key data is provided in the profile for each state (available at stateofourschools.org) and in Appendix A. Additional data used in this analysis are available at stateofourschools.org/data. Note that, due to rounding, some figures cited in the report and profiles may vary slightly from the data cited in the appendices and posted online.

To check the accuracy of this district-level data, we compared them to capital outlay data reported by the states on the U.S. Census of Governments F-13 Fiscal Surveys of State and Local Governments. To further validate that both of these data sets were accurate, we compared the school construction capital outlay on the F-33 to the total statewide construction contract start costs collected and reported by state and year by Dodge Data & Analytics (formerly McGraw-Hill Construction).

The comparison of the state data sets indicate that the capital construction investment data in 18 states may be underreported by school districts on their F-33 surveys either for reasons of classification of the types of capital outlay, or because districts were not reporting spending on their facilities when it was provided by independent state agencies. We provide our comparison data in Appendix B and note these states in the tables, as well in the online profiles. We also adjusted the state share of capital outlay provided to districts based on input from state officials, as documented in Appendix C.

The state-by-state analysis and profiles incorporate the unique history of facilities spending and investment in each state, as well as other factors that vary by state: enrollment projections, the cost of construction, and the amount of school district space in the state. The National Council on School Facilities (NCSF) surveyed states on building and site inventory sizes and the cost of new construction. State offices that oversee and/or report on school facilities in each state were given the opportunity to review the data and offer input and corrections through NCSF; many directors provided valuable insight to both the national picture and the state profiles.

State of Our Schools: America's K–12 Facilities is a joint publication of the 21st Century School Fund, Inc., U.S. Green Building Council, Inc., and the National Council on School Facilities.

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Contents

Preface

In 1995 the U.S. Government Accounting Office published *School Facilities: Condition of America's Schools* — the last truly comprehensive federal review of our nation's school infrastructure. The report found that half of all schools had problems linked to indoor air quality and an unacceptable 15,000 schools were circulating air deemed unfit to breathe. In the 20 years since the release of this report, states and districts have invested nearly $2 trillion in school infrastructure, but the critical question remains: where do we stand today on our commitment to provide all students a quality education in a healthy and safe environment? At its heart, school facility quality is a matter of equity, and responsible planning for the future requires that we have better information about the condition of our nation's schools.

School facilities represent the second largest sector of public infrastructure spending, after highways, and yet we have no comprehensive national data source on K-12 public school infrastructure. Even at the state level, school facilities information is often scant. The dearth of official data and standards for our nation's public school infrastructure has left communities and states working largely on their own to plan for and provide high-quality facilities.

These realities inspired our three organizations to assemble the best available state-by-state data and propose a standards-based framework by which we can benchmark the nation's investment. We set out to create a common fact base to understand three critical points:

1. the scale of elementary and secondary public school infrastructure;
2. the significant effort that communities are making to provide safe, healthy, and adequate public school facilities; and
3. the future investment needed to ensure adequate and equitable public school facilities for all students, including those in low-wealth communities.

A 2015 national independent poll commissioned by the U.S. Green Building Council found that 92 percent of Americans believe that the quality of public school buildings should be improved. As a nation, we have the will, but we must find the way. We invite problem-solvers from communities, government, industry and academia to use the framework and data in this report to develop creative solutions for improving our K-12 infrastructure. Together, let us secure new revenue streams and leverage public and private resources to provide the best educational opportunities for our nation's students — all of them.

Mary Filardo
Executive Director
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Rachel Gutter
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Mike Rowland
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Georgia Department of Education

2016 President
National Council on School Facilities

Executive Summary

A large and growing body of evidence demonstrates that school facilities have a direct impact on student learning, student and staff health, and school finances. But too many students attend school facilities that fall short of providing 21st century learning environments because essential maintenance and capital improvements are underfunded. This report compiles and analyzes the best available school district data about U.S. K–12 public school facilities funding into a national and state-level summary. In addition, 50 individual state profiles are available at stateofourschools.org. Together, these documents create a common fact base from which to address three key questions:

1. Do states and districts have adequate operating funds for cleaning, maintenance, and repairs to ensure buildings and grounds are healthy and safe?
2. Are districts and states investing the capital funds necessary to ensure that their public schools are educationally appropriate, energy efficient, and environmentally responsible?
3. Are states and the federal government doing enough to ensure equity in education, so that all students have access to healthy and safe school facilities that support learning?

K–12 School Facilities Matter

The scale of U.S. public K–12 school facilities is staggering: every school day, nearly 50 million students and 6 million adults are in close to 100,000 buildings, encompassing an estimated 7.5 billion gross square feet and 2 million acres of land. In fact, state and local governments invest more capital in K–12 public school facilities than in any other infrastructure sector outside of highways. Research shows that high-quality facilities help improve student achievement, reduce truancy and suspensions, improve staff satisfaction and retention, and raise property values. They also are integral to ensuring equity in educational offerings and opportunities for students. Even so, no comprehensive information about school building conditions or funding is available at the national level, nor in the majority of states, despite the importance of this infrastructure and the enormous investments made by U.S. taxpayers.

K–12 Facilities Spending & Investments Averaged $99 Billion Per Year

School districts worked hard from 1994 through 2013 to operate, maintain, modernize, and meet the enrollment growth of the nation's K–12 public schools. In the span of these 20 years, school facilities changed more rapidly than at any time in recent memory, fueled by improved health and safety standards, stronger accessibility requirements, increased use of technology, and expanded programming within schools. Nationally, states and districts spent a total of $925 billion in 2014 dollars on *maintenance and operations (M&O)*: daily cleaning, grounds keeping, maintenance, utilities, and security of facilities. This amount equaled an annual average of nearly $46 billion per year for M&O over these 20 years. From 2011–2013, spending increased to an average of $50 billion a year.

In addition to M&O spending, states and districts invested $973 billion in 2014 dollars (an average of $49 billion per year), from their *capital budgets* for new school construction and capital projects to improve existing schools. Over the past three years (2011-13), the combined spending and investment totaled nearly $99 billion per year.

Capital Investment Impacted Communities Inequitably

The structure of K–12 school facilities funding in the U.S. is inherently and persistently inequitable. States and the federal government contribute funds towards school districts' annual operating

costs, paying — on average — 45 percent and 10 percent, respectively. Facilities M&O, as part of the operating budget, benefits from state and federal assistance. However, in making the capital investments needed to build and improve school facilities, local school districts bear the heaviest burden. This is the case despite communities' widely disparate levels of wealth and capacity to finance all that their schools need. While five states pay for nearly all their districts' capital costs, 12 states provide no direct support to districts for capital construction responsibilities. In the remaining 33 states, the levels of state support vary greatly. The federal government contributes almost nothing to capital construction to help alleviate disparities.

$145 Billion Per Year Needed for 21st Century Facilities for All Children

Using industry standards adapted to K–12 public school facilities, we estimate that the nation should be spending about $145 billion per year to maintain, operate, and renew facilities so that they provide healthy and safe 21st century learning environments for all children. Applying a 3 percent of current replacement value (CRV) standard for M&O, districts need to spend $58 billion annually to maintain and operate the 2014 inventory of public school facilities so they are clean and in good working order. On the capital side, the nation should be spending an estimated $77 billion per year (4 percent of CRV) to regularly upgrade existing facilities' systems, components, fixtures, equipment, and finishes as they reach the end of their anticipated life expectancy; systematically reduce the backlog of deferred maintenance that has accumulated; and alter existing facilities to respond to changing educational requirements. In addition, projections suggest at least another $10 billion per year is needed for new construction to accommodate growing enrollments over the coming decade. That brings the total annual facilities requirements to $145 billion per year.

The Nation Underinvests in Public School Facilities

		Historic Spending	Modern Standards	Projected Annual Gap
K–12 FACILITIES	Maintenance & Operations	$50 billion	$58 billion	$8 billion
	Capital Construction	$49 billion	$77 billion	$28 billion
	New Facilities		$10 billion	$10 billion
	TOTAL	**$99 billion**	**$145 billion**	**$46 billion**

$46 Billion Per Year Gap in K–12 Facilities Spending & Investment

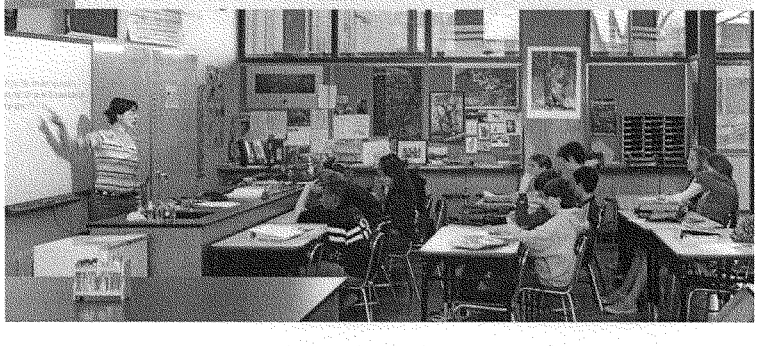
The nation's current system of facilities funding leaves school districts unprepared to provide adequate and equitable school facilities. Comparing historic spending against building industry and best-practice standards for responsible facilities stewardship, we estimate that national spending falls short by about $8 billion for M&O and $38 billion for capital construction. In total, the nation is underspending on school facilities by $46 billion — an annual shortfall of 32 percent. Gaps vary by state and local district, depending on investments by local communities and the structure of school facilities funding at the state level. Nevertheless, investment levels in all states but three will not meet the standards.

A Call to Action

The American public supports high-quality school facilities. When communities have the means to build and maintain high-quality facilities, they do. This report identifies four key strategies for addressing the structural deficits in the K–12 public education infrastructure. First, understand current facilities conditions. Second, engage communities in planning for adequate and equitable 21st century facilities. Third, find and pilot new innovative sources of public funding. Finally, leverage public and private resources in new ways to assist states and districts in providing healthy, safe, educationally appropriate, and environmentally responsible facilities for their communities.

CHAPTER 1

School Facilities Matter



The U.S. K–12 public school system is intended to give students in all communities the education they need to rise to their greatest potential. The U.S. K–12 public education system serves nearly 50 million students and employs 6 million adults — mostly teachers — in more than 100,000 public elementary and secondary schools in about 14,000 school districts.[2] In every state, each of these students has the right to a public education, no matter his or her family income, race, religion, gender, disability, country of origin, immigration status, or remote residence.

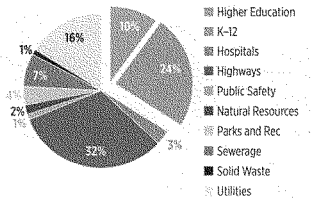
To support this educational mission, K–12 public school districts operate more than 7.5 billion gross square feet of building area, which includes warehouses, bus lots, administrative offices, maintenance facilities, and even teacher housing in some remote rural districts.Public school facilities include an estimated 2 million acres of land.[3] Districts also provide their schools and communities with extensive outdoor spaces that include areas such as playgrounds, outdoor classrooms, athletic fields, tracks, and landscaped and undeveloped green spaces. The square footage of public school district facilities equals almost half the area of all U.S. commercial office space. Next to highways, K–12 public school facilities are the nation's largest public building sector, accounting for about one-quarter of all state and local infrastructure capital projects for 1995 to 2012.[4]

When K–12 and public higher education are combined, public education captures the largest share of state and local capital investments.[5]

With more than one-sixth of the entire U.S. population inside K–12 public school buildings each weekday, school facilities have a major impact on the health and performance of

K–12 Facilities Account for About One-Quarter of State and Local Infrastructure Investments

Percent of total state and local capital outlay, 1995–2012



Source: U.S. Census of Governments, State and Local Government F-13 Fiscal Survey, FY 1995–2012, omitting 1997, 2001, 2003

students and staff alike. They send a tangible signal of a community's willingness and ability to provide an excellent and equitable education to all its students. Our extensive public education infrastructure also impacts the social and natural environment of their communities.

School Facilities Affect Health and Performance

The importance of facilities to health and performance is well established. In a literature review examining ventilation rates and respiratory illness, for example, researchers at Lawrence Berkeley Labs noted an increase of 50 percent to 370 percent in the incidence of respiratory illness in spaces with low ventilation rates, as are commonly found in schools, compared to spaces meeting industry-accepted standards.[6] Breathing fresh air is not only critical for keeping students healthy but also for keeping them alert. Several studies have linked recirculating air and low ventilation rates in classrooms with lower average daily attendance and slower speed in completing tasks.[7] Studies also have found that poor facilities are strongly associated with student truancy and higher rates of suspensions.[8]

Several studies have linked recirculating air and low ventilation rates in classrooms with lower average daily attendance and slower speed in completing tasks.

Additional research shows that adequate lighting and good acoustics also help students remain alert and ready to learn. Research has examined the connection between daylight and students' ability to focus, retain information, and maintain alertness. These studies found that students without access to daylight had disruptions in their production of hormones essential to learning.[9] At least six major studies have concluded that students' ability to hear their teacher clearly has a substantial impact on their short-term memory and academic performance.[10]

School Facilities Impact the Environment

The location, design, and operation of school district facilities significantly impact communities and the environment. With 2 million acres of land and half the square footage of the entire commercial building sector, school districts play an important role in managing facilities to reduce the use of natural resources, support local ecology and resilience, and protect human health. School districts can save energy and water while reducing utility costs by using integrated teams for designing new buildings, upgrading buildings systems and equipment, and taking advantage of renewable energy generation opportunities. Reusing and adapting existing facilities reduces landfill waste and avoids the energy and cost of extracting or harvesting new natural resources.

The massive scale of school district infrastructure has a major impact on overall municipal infrastructure. One green roof installed on an existing school in New York City, for example, resulted in a reduction in storm water runoff of 450,000 gallons a year, both protecting the city's water treatment systems and promoting wildlife habitats.[11] Districts also have removed hardscape — like asphalt — and used native plants in landscaping, which helps mitigate a community's vulnerabilities from drought and flooding. Locating schools near the homes of students can enhance a community's resilience by providing ready shelter and safety in the event of natural disasters. And it can simultaneously reduce vehicle miles traveled by parents and buses, contributing to healthier air and reduced fuel consumption.

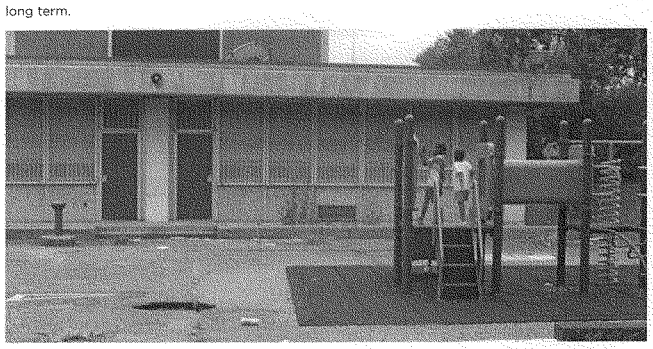
School Facilities Are Integral to Equity

The quality of public school buildings and grounds is a health, educational, and environmental equity issue for families and communities. A growing number of states have established by law the importance of facilities as a factor in equal opportunity in education.[12] The U.S. Department of Education has advised school districts to take "proactive steps" to ensure that educational

resources, including facilities, are allocated fairly.[13] However, a study of more than 146,559 school facilities improvement projects from 1995 to 2004 found that the projects in schools located in high-wealth zip code areas had more than three times more capital investment than the schools in the lowest-wealth zip code areas.[14] Some students attend school in bright, comfortable, and healthy facilities, while others are assigned to dilapidated, obsolete, and unhealthy facilities that pose substantial obstacles to learning and overall well-being. Some communities have modern, high-quality public infrastructure in their neighborhoods and communities. Others do not.

Projects in schools located in high-wealth zip code areas had more than three times more capital investment than schools in the lowest-wealth zip code areas.

A 2015 study of California school districts found that low-wealth districts spent a higher proportion of their total education spending on the daily upkeep, operation, and repair of their facilities than high-wealth districts. But low-wealth districts also spent far less on capital investments for building system renewals such as roof or mechanical system replacements and building alterations such as modernizing science labs.[15] Because it is more difficult for low-wealth districts to borrow the necessary capital to invest in the long-term stability of their facilities, these districts end up making necessary and emergency short-term repairs using their operating budgets — the same funds they need to pay teachers, purchase instructional equipment, and pay for other day-to-day educational necessities. As such, low-wealth districts often get trapped in a vicious cycle; underspending on routine and preventive maintenance in the short term leads to much higher building costs in the long term.

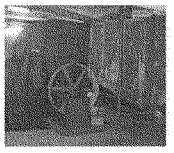


It is not just students who are affected by the quality of the school facilities. Studies also have shown that investing in public school infrastructure increases the value of property beyond the amounts borrowed, boosts enrollments, and helps rebuild confidence in a formerly struggling district or school.[16] But because the vast majority of capital construction is funded by *local taxpayers*, the ability of school districts to pay for major facilities renewals or new construction is tied to the wealth of the community. That reality embeds inequity into a state's school facility conditions, except in the small number of states that have reformed their educational facilities finance policies and practices.

Communities understand. According to a 2015 national poll commissioned by the U.S. Green Building Council, two-thirds of Americans believe it is "very important" to improve public school buildings.[17] When communities can afford to maintain and invest in their public schools, they do.

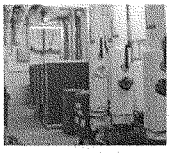
CHAPTER 2

A Generation of Facilities Change



Over the past 20 years, educational environments have undergone enormous change, driven by shifting expectations and requirements from educators, parents, communities, and regulators. As educational demands and building standards have changed, many of the more than 100,000 public school facilities that were once considered to be adequate for teaching and learning now are considered to be woefully inadequate and even unsafe.

These changes have affected every area of school districts' responsibility for their buildings and grounds, including maintenance and operations (M&O) and capital construction.



Ensuring Healthy and Safe School Environments: Maintenance and Operations

To provide learning environments that are safe, healthy, and comfortable for students and staff, a school district must devote substantial funds to maintain and operate its facilities. Proper maintenance also extends the operational efficiency and expected lifespan of facilities and ensures that the school district obtains the maximum possible return on its capital investments. The maintenance and operation of school facilities is labor intensive. Building engineers, custodians, grounds keepers, and repair workers tend to daily maintenance and operations, such as patching roofs and cleaning gutters; changing filters in mechanical systems; refinishing floors; replacing lamps and filters; replacing failed equipment components such as motors, pumps, and switches; monitoring programming controls and settings on equipment; and responding to calls for emergency and non-emergency repairs to furniture, fixtures, doors, and windows. These maintenance activities have become more complex — and expensive — as new technologies are introduced into building systems and components. The amount of space used in education also has increased, giving districts more space to maintain and operate — sometimes with no new funding with which to do so.[18]

Maintenance activities have become more complex — and expensive — as new technologies are introduced into building systems and components.

Ensuring Adequate and Equitable School Facilities: Capital Construction

A school district is responsible for several aspects of a capital construction program to provide adequate and equitable teaching and learning environments. The district must acquire and build facilities and grounds, renew or replace building systems and components over time, alter facilities to support evolving educational requirements, and manage deferred maintenance backlogs.

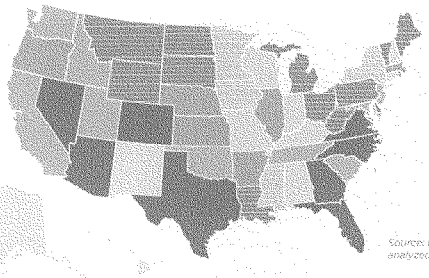
New School Construction

FACILITIES ACQUISITION: Activities that result in a facility or asset becoming available in a new or like-new condition to a school district for use as a school or other district facility.

Between 1994 and 2013, U.S. K–12 public school enrollment grew by 4.8 million students, although student population increases were not uniform across states. Eighteen states had double-digit percentage point increases in enrollment. Seventeen states had increases of between 0 percent and 9 percent, and 15 states had declining enrollments.[19]

K–12 Enrollment Grew 4.8 Million Overall, but Declined in 16 States

Percentage gains/declines in enrollment, FY 1994–2013



Source: National Center for Education Statistics, analyzed by 21st Century School Fund

As a result, in that same time period, school districts reported a net total of about 13,000 additional K–12 schools.[20] From 1995 to 2013, new construction accounted for nearly 45 percent of all K–12 public school district capital construction, according to data captured by Dodge Data & Analytics.[21] During this period, school districts in many states had to respond to year-over-year enrollment increases while also catching up on pent-up demand from gains over previous decades.

Not all new schools or construction were driven by growth. Some of the new schools were created within other schools as part of the small schools movement. In some states, new construction was driven by enrollment *declines*. In West Virginia, for example, enrollment decreased 10 percent from 1994 to 2013, and the number of schools declined by 152. At the same time, however, new construction accounted for 55 percent of capital spending — well above the national average — as the state forced low-enrollment schools to close and consolidated new schools to replace the old.

School districts in many states had to respond to year-over-year enrollment increases while also catching up on pent-up demand from gains over previous decades.

In Ohio, a desire to consolidate and replace deteriorated and obsolete facilities with educationally and environmentally modern facilities also fueled the high level of new construction. Ohio's enrollment declined by nearly 11 percent between 1994 and 2013, and the total number of schools declined by 133, but new construction still accounted for 60 percent of the state's capital investments. That is because Ohio undertook a major statewide modernization program to overcome years of deterioration in its school facilities.

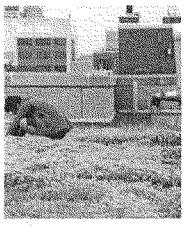
Renewing Systems and Components

RENEWAL: Major repair, alteration, and replacement of building systems, equipment, and components that will sustain or extend the useful life of the entire facility.

Even with proper routine maintenance, buildings and grounds deteriorate. In 2012–13, the average age of the main building of a public school was 44 years old.[22] Most building systems, components, equipment, and finishes do not last this long. The foundation and structure of a school will outlast finishes for ceilings, walls, and floors, as well as most building equipment and fixtures. As a result, during a building's life, districts have to replace all of these components: roofs, windows, and doors; boilers, chillers, and ventilation systems; and plumbing and electrical systems.

New Health and Safety Standards

Renewing facilities helps districts meet new standards for health and safety. Most schools built before the 1980s contained building materials now known to be hazardous to human health, such as lead in plumbing and paint; asbestos in plaster, insulation, and flooring; and PCBs in caulking and lighting. Fresh air standards for ventilation have changed. Heating, ventilation, and air-conditioning systems and their controls have been improved significantly over the decades.[23] In response both to expanded knowledge and increasingly stringent health regulations, many districts have abated and remediated facilities to eliminate health hazards in their schools. In some cases, they have replaced entire schools to eliminate the major health and safety problems with the original design and construction.



Increased Environmental Responsibility

Districts have made major investments in school facilities to save energy, curb operating costs, and reduce the impact of facilities on the environment. For example, in 2001 New York City replaced the last of its coal-fired boilers with cleaner, safer, and more efficient gas heating systems. Other school districts have upgraded roof systems to allow for heat-reflective materials, green roofs, and solar arrays. Nationally, a growing awareness of the impact of lighting, ventilation, and noise controls on occupant health and learning outcomes also has begun to alter district construction and renovation standards. Solutions have included better lighting; larger and better-insulated windows and skylights; computerized controls for heating, cooling, and ventilation; and improved building insulation.

Altering Existing Schools

ALTERATIONS: The design, construction, furniture, fixture, and equipment improvements that are made to a fully operating facility to add capacity and make the facility more suitable for education or other district purposes.

In the past two decades, school districts have made complex alterations to existing facilities to meet new code and educational program requirements, as well as to satisfy community concerns and priorities. Alteration projects involved adding space to existing schools and changing the design and relationship of spaces in schools, as well as upgrading the furniture, fixtures, and equipment. Significant drivers for facilities alterations included new requirements for special education and physical accessibility; expansion of early childhood education; integration of technology for instruction and administration; class-size reduction; and heightened safety and security concerns.

Support for Education Reforms

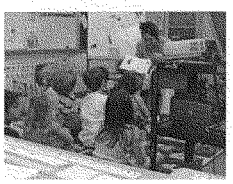
Since the 1960s, changing parent expectations and a better understanding of student needs have driven districts to add classroom space and build additions to reduce class size. Many school systems have redesigned classrooms to support new teaching models and student-directed learning. In the 1950s and 1960s, classes routinely had more than 30 students. Now, the average elementary class in public schools has 21 students, and the average secondary class has 27 students.[24] In response to higher academic standards and developments in the sciences and career technology fields, many districts have modernized labs to support sophisticated and specialized science and technology instruction so that students can pursue studies in fields such as robotics and biotechnology.

In the 1950s and 1960s, classes routinely had more than 30 students. Now, the average elementary class in public schools has 21 students, and the average secondary class has 27 students.

To reduce barriers to students' academic success, districts also have assigned additional administrators and student-support personnel, such as social workers and academic counselors. And they have expanded after-school care and other school-based services and support for families through partnerships with community-based organizations.[25] These added functions require additional space.

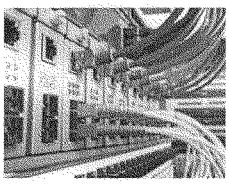
Serving Special Needs Students and the Physically Disabled

Since passage of the Americans with Disabilities Act in 1990, districts have modified buildings and grounds so they are fully accessible to children, teachers, parents, and visitors with physical disabilities. Educating students with a wide variety of special needs in the least-restrictive environment possible — required by the federal Individuals with Disabilities Education Act — has meant that school districts have expanded their K–12 facilities to support therapeutic services, small class sizes for autistic and emotionally disturbed students, and other programmatic changes.



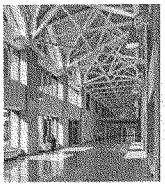
Expanded Early Education

When most of the nation's current public school buildings were built, kindergarten was an innovation and rarely more than a half-day program. Now, full-day kindergarten is the norm. And an increased emphasis on early childhood education has further expanded elementary schools and required changes to the design, furniture, and fixtures in classrooms, bathrooms, and outdoor play areas.



Increased Technology

Instructional and administrative technology has had a dramatic impact on school facilities. Increasingly, technology is viewed as integral to learning, teaching, assessment, and management. As a result, districts have needed to pay for new technology and equipment — as well as upgrades to their electrical and other building infrastructure, such as cooling and dehumidification — to support the use of technology in schools.



Increased Safety and Security

In recent years, school districts have invested more in school safety and security in the face of both natural and manmade threats to students, staff, and visitors. Upgrades to better prepare for natural disasters have included building safe rooms for tornados, installing hurricane-resistant windows, and modifying structures to withstand movement from earthquakes. In many cases, school buildings are designated public shelters during catastrophic events, and the facility must be ready to support the needs of the community. Some school districts also have modified entrances and hardware on doors to better control access and enable schools to lock down in case of a threat.

School Grounds as a Community Asset

The land surrounding schools is an important local asset, and school districts have partnered with local communities and municipalities to take advantage of available educational, environmental, and community benefits. Teachers and school leaders have advocated for healthier outdoor places for children to play and learn, and some districts support gardens and farms for use in food service and for health and environmental education. School districts have removed paving to reduce storm water run-off and sedimentation. They have increased native vegetation to reduce maintenance and improve wildlife habitats. Districts have altered outdoor play and athletic facilities to provide both students and community members healthy places to play and to support athletics and physical activity from childhood through adulthood.

Addressing Deferred Maintenance

DEFERRED MAINTENANCE: Maintenance, system upgrades, or repairs that were deferred to a future budget cycle or postponed until funding was available.

Due to a history of national underinvestment in school facilities, school districts have struggled to keep up with basic maintenance and repairs, renewals, and alterations. The delay of these important responsibilities has led to a backlog of critical projects in many districts, which can trigger emergency repairs and higher expenses. Nationally, the lack of data about the condition of school facilities makes it difficult to assess how far behind school districts may have fallen, but recent estimates indicate enormous need. The U.S. General Accountability Office (GAO) last completed a comprehensive survey and study of the condition of K–12 public schools in 1995, when it found that 15,000 schools had indoor air that the EPA classified as "unfit to breathe" and school districts were carrying $113 billion in deferred repairs and maintenance. In the absence of a more recent survey of school facility conditions, the *2013 State of Our Schools* report cited analysis of available 2008 school district M&O spending and capital investment data. It estimated that districts were carrying at least $271 billion in deferred maintenance and repairs. When including requirements for alterations and scheduled renewals of existing facilities, the estimated pricetag doubled to $542 billion.

CHAPTER 3 K-12 Public Education Facilities Spending, 1994–2013

States' and public K-12 school districts' responsibilities for school facilities fall into two main categories: daily maintenance and operations (M&O) and capital construction. School districts pay for M&O activities out of their annual *operating budget* and for capital management activities, such as capital projects and new construction, out of their *capital budget.* The capital accounts hold funds for purchasing multi-year assets, and they are often borrowed (financed by bonds).

Maintenance and Operations: An Average of $46 Billion Per Year

From 1994 through 2013, U.S. K-12 school districts collectively spent $925 billion (in 2014 dollars) on M&O — an average of $46 billion each year. This spending was for utilities (electricity and energy for heating and cooling, water, telecommunications, refuse, and recycling services); building security; and labor, material, and contract services for custodial, grounds keeping, and maintenance.

Between 1994 and 2013, total spending on M&O increased by 29 percent, from $38 billion to $49 billion; the high-water mark was $55 billion in 2009, before the Great Recession.[26] However, in the three years from 2011 to 2013, districts reported spending an annual average of $50 billion a year — nearly 32 percent more, adjusted for inflation, than in 1994. M&O spending is a major cost for school districts; nationally it averaged 10 percent of their annual operating budgets between 1994 and 2013.

The states with the lowest shares of M&O spending were Georgia (7.6 percent), Minnesota (7.7 percent), and North Carolina (8.1 percent). Those with the highest shares were Oklahoma (11.1 percent), Arizona (12.1 percent), and Alaska (12.9 percent). (Appendix A includes detailed state-by-state data.)

ABOUT THE DATA

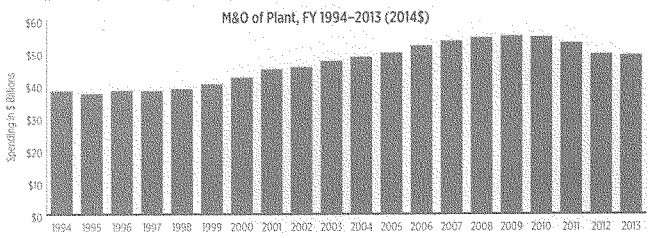
School districts annually report their expenditures for facilities' maintenance and operations (M&O) and capital construction to the U.S. Census of Governments on an annual fiscal survey. The National Center for Education Statistics (NCES) compiles the responses into data tables that are available to the public. These data are the primary source for our analysis.

M&O of Plant: M&O expenditures described in this report include the annual costs for routine and preventive maintenance, minor repairs, cleaning, grounds keeping, utilities, and security, in accordance with the definition used by NCES for "Operation and Maintenance of Plant."

Total Capital Outlay: Capital investments as defined by NCES include all capital costs for school construction, land, buildings, facilities improvements, and equipment.

Capital Construction as defined by NCES includes the direct cost for construction contracts (the "hard" costs) and "soft" costs for architects, engineers, bond counsel, and other fees and administrative costs required to manage building improvements, whether done in-house or contracted out. It does not include the costs for land and existing structures or instructional and other equipment.

$925 Billion in M&O Spending Since 1994



Source: National Center for Education Statistics, analyzed by 21st Century School Fund

Over these 20 years, inflation-adjusted M&O spending increased in every state except Michigan. Average annual M&O spending varied greatly by state, as measured by spending per student and per gross square foot. The states that spent the most for M&O per student were Alaska ($2,096), New Jersey ($1,923), and New York ($1,759). At the other end of the range were Utah ($614), Idaho ($639), and North Carolina ($733). The spending per student and spending per square foot are affected by the labor and material costs in a state and the level of building utilization. For example, the average M&O spending per student in California — where schools are still crowded and labor costs are high — was $806 per student and $8.08 per gross square foot. During this same period, North Dakota school districts reported spending nearly the same amount per student ($862) but only $3.55 per gross square foot.

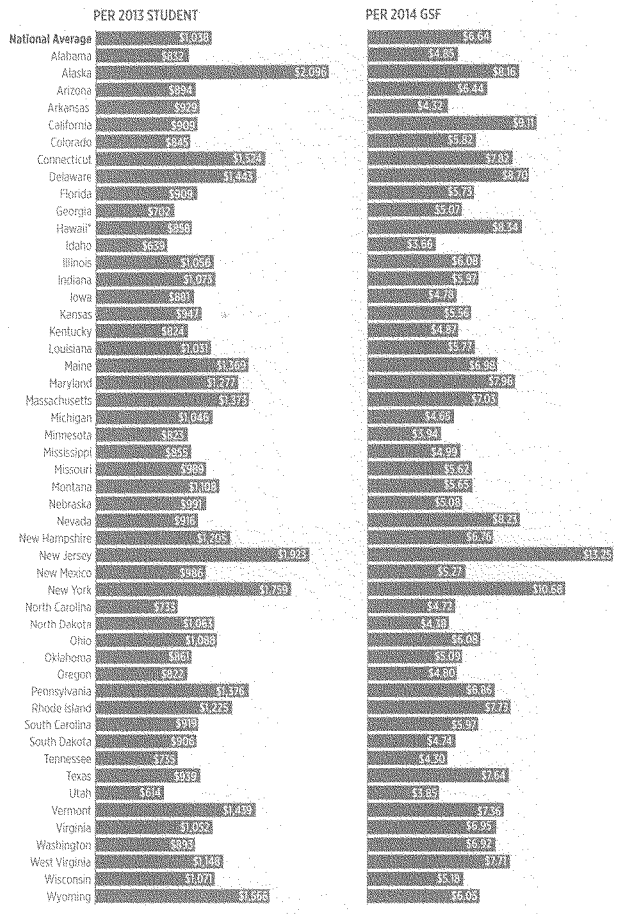
Because the M&O data from NCES include the combined costs for cleaning, routine maintenance, utilities, minor repairs, and security, it is impossible to know which element of the total is driving changes in M&O spending. Expenditures for M&O definitely increased due to expanding square footage for maintenance and operations. But costs could be compounded by a lack of capital investment, which leads to more (and expensive) emergency repairs.

HOW MUCH OF MAINTENANCE AND OPERATIONS IS SPENT ON UTILITIES AND SECURITY?

Because no national data set exists and very few states collect information about the components of M&O spending, we surveyed sample states and districts to estimate that *utilities costs* account for about 30–35 percent of a districts' total reported maintenance and operations (M&O) spending and that *security costs* account for slightly less than 5 percent of the total M&O spending. Utilities costs vary depending on the efficiency of the facilities, the cost of utilities in a given state, and the local climate. Security costs also vary depending on the population density of the districts and the stresses in the student population.

Statewide M&O Spending Varies Greatly from State to State

Average annual M&O spending, FY 2011–13 (2014$)*

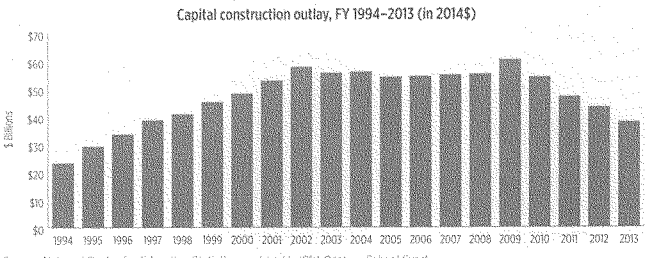


*Statewide spending data can be found in Appendix A and online at Stateofourschools.org.
Source: National Center for Education Statistics, analyzed by 21st Century School Fund

Capital Construction: An Average of $49 Billion Per Year

From 1994 through 2013, school districts spent a total of $973 billion on capital construction — an average of $49 billion per year. Total capital investments amounted to $1.26 trillion, an average of about $63 billion per year, which included capital construction, purchase of instructional and other equipment, and acquisition of land and existing structures. Of total capital outlay during these 20 years, 77 percent was for construction to renew, alter, acquire, and build school facilities; 17 percent was for purchasing instructional and other equipment; and 6 percent was for purchasing land and existing structures.

$973 Billion in Total Capital Construction Investments Since 1994



Source: National Center for Education Statistics, analyzed by 21st Century School Fund

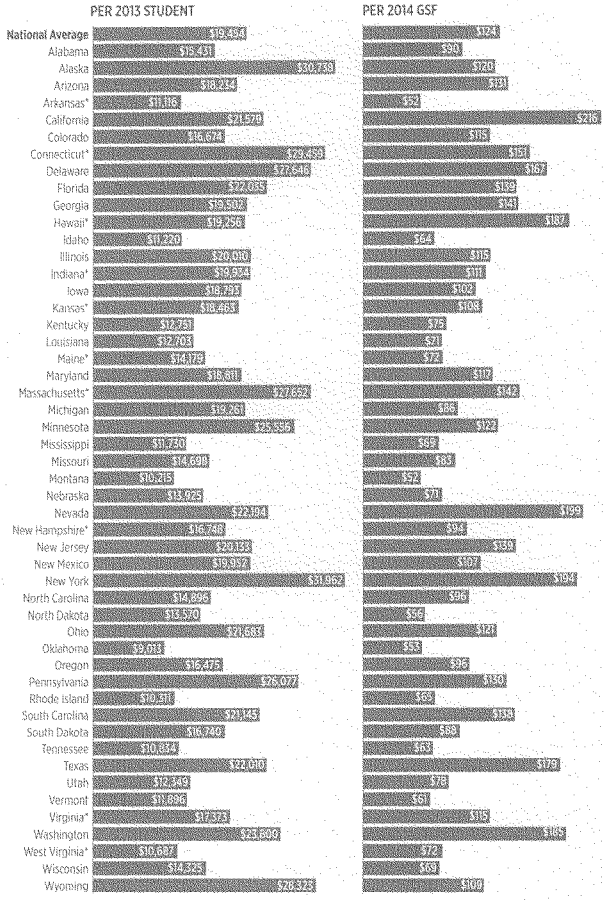
Annual capital construction spending nationally increased from $26 billion in 1994 to a high of $60 billion in 2009. After a relatively stable period from 2003 through 2009, capital construction spending declined by almost 40 percent from 2009 to 2013 as a result of the Great Recession of 2008. Because capital construction is largely financed by local school districts, the poor lending climate and reluctance to burden taxpayers after the recession had a striking impact on spending. This drastic decline in school construction is greater than the decrease in overall education spending since the recession.[22]

Because capital construction is largely financed by local school districts, the poor lending climate and reluctance to burden taxpayers after the recession had a striking impact on spending.

Funding for school district capital construction varied significantly by state over the 20 years analyzed. The lowest-spending states, measured by the total amount of capital construction spending per gross square feet of space, were Arkansas ($38), Maine ($43), and Montana ($52), and the highest-spending states were California ($216), Nevada ($199), and New York ($194). School construction spending per student is another way to measure investment. However, in states with less population density — such as Alaska and Wyoming — and in states that have seen dramatic declines in enrollment — such as Pennsylvania and New York — measuring spending on a per-student basis can overstate how the spending correlates to actual conditions in the schools.

Total Statewide Capital Investments Vary Greatly from State to State

Total school-construction capital outlay, FY 1994–2013 (2014$)

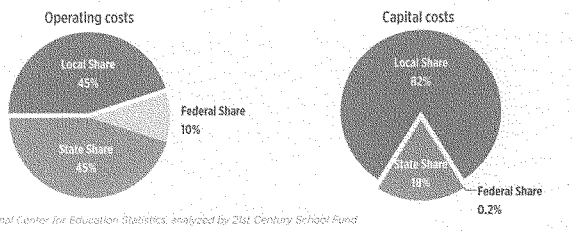


*District data may be underreported, see Appendix A.
Source: National Center for Education Statistics, analyzed by 21st Century School Fund

Paying for K–12 Public Education Infrastructure: An Inequitable System

With the nation's 14,000 public school districts ranging from small rural districts of fewer than 100 students to mega-urban districts of more than 1 million students, the U.S. system of public education has a strong emphasis on local control. This is especially true for funding school construction. Localities and states each contribute, on average, 45 percent of the annual operating budget,[28] which includes the annual costs for the maintenance and operation of facilities. The federal government contributes the remaining 10 percent toward the annual operating budget of the districts.[29] However, of the $1.26 trillion in K–12 total capital outlays between 1994 and 2013, about 81 percent came from local sources, and 19 percent came from the states. Districts reported almost no federal revenue for capital construction.

Local Communities Support the Majority of Costs for School Facilities



Source: National Center for Education Statistics, analyzed by 21st Century School Fund

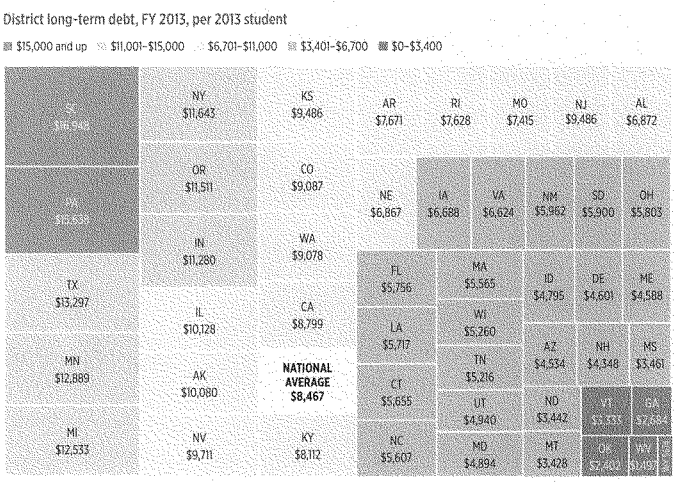
Because the large majority of capital construction is funded by local taxpayers, the ability of school districts to pay for major renewals or new construction is tied to the wealth of their community, perpetuating inequity in school facility conditions. Additionally, while funding to support facilities M&O combines local, state, and federal sources, M&O competes with other essential aspects of school district operations, such as salaries and instructional equipment, which also need to be paid for through the same general operating budget. Therefore, school districts, especially those low-wealth districts that have not been able to spend needed capital construction funds to make major repairs to their buildings, are put in a position where they must stretch their general operating funds to try to make up the difference.

Local Districts Carry the Load

Because capital projects are big-ticket items and are needed periodically, local districts usually finance them, rather than pay for them with annual operating funds. Voters make these financing decisions through bond referenda, or, in fiscally dependent school districts, county or city representatives vote on funding measures as part of their municipal capital budgets. Financing the costs for school construction is considered good practice because the costs of facilities improvements are shared across the generations of those who will use them.

At the end of 2013, districts reported that they were carrying $409 billion in long-term debt, largely from capital spending on facilities. The national average debt per student was $8,465. During 2013, school districts reported paying $17 billion in interest on their long-term debt. States that help fund districts' capital investments also often borrow to finance their contributions. However, state debt dedicated for K–12 capital outlays is not differentiated from other state debt in the U.S. Census of Government State Fiscal Survey.

Average Long-Term Debt Per Student Ranges From $700 to $17,600 by State

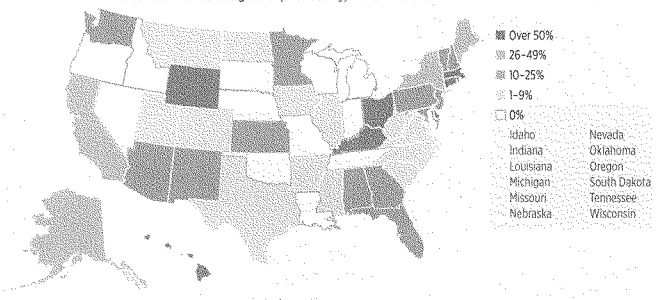


Source: National Center for Education Statistics, analyzed by 21st Century School Fund

The average amount of local district facilities long-term debt also varies greatly by state and district. The states with the lowest amount of local district debt per student are Wyoming ($674), West Virginia ($1,497), and Oklahoma ($2,402). The states with the highest amount of debt per student are South Carolina ($16,948), Pennsylvania ($15,638), and Texas ($13,297). In general, states in which local debt is highest are the ones that did not have a state program to help local districts pay for their facilities capital investments. High-wealth districts have the capacity to borrow what they need, and the state averages mask the fact that very wealthy communities can and do borrow at high levels, whereas many low-wealth districts (particularly small, rural districts) cannot borrow at all.

12 States Pay Nothing Toward District Capital Construction

State share of funding for capital outlay, FY 1994–2013



Source: National Center for Education Statistics, analyzed by 21st Century School Fund

State Funding Support Varies

State funding roles and responsibilities for facility adequacy and equity vary widely. Nationally, states covered an average of 19 percent of K–12 public school facilities capital investments over the last 19 years. But in 2015, 12 states provided *no* direct funding or reimbursements to school districts for capital spending. At the other extreme is Hawaii, a unique state-level education district, which pays for all capital improvements using state funds. In addition, Wyoming has paid for 63 percent of its construction capital costs with state funding as a consequence of a series of state Supreme Court decisions and action on the part of the state legislature.[30] Connecticut (57 percent), Delaware (57 percent), Massachusetts (67 percent), and Rhode Island (78 percent) also have assumed the responsibility for most capital investments. Among the other states, the state contribution for capital investments ranges from 1 percent to 37 percent.

The share of state revenue for public school construction has increased over the past two decades. For example, the average state share rose from a low of 11 percent in 1999 to 20 percent in 2013. These increases in funding from the states were largely the result of legal challenges to the equity of states' funding systems, which tie public school funding to the wealth of the local school districts.[31]

Almost No Federal Support for School Facilities

The federal government helped build the country's public education infrastructure with funding through the Works Progress Administration in the 1930s and then again in the post–World War II era with funding from the National Defense Education Act. But during the two decades studied in this report — except for a $1.2 billion emergency school repair initiative in the 2001 federal budget directed to high-need districts and public schools with high concentrations of Native American students — the federal government provided virtually no support for states' and districts' capital responsibilities for public K–12 school facilities.[32]

In a study of the federal role in school facilities, researchers found that between 2004 and 2010, the federal government provided less than .02 percent of U.S. school districts' total capital spending in direct grants for school facilities, mostly awarded through the Federal Emergency Management Agency for schools affected by natural disasters.[33] By contrast, in 2014, the federal government funded a full 38 percent of the nation's capital investment in wastewater and transportation infrastructure.[34]

CHAPTER 4 What It Will Take to Meet Educational Facilities Standards

There are no national standards for K–12 public school facilities conditions, spending, and investment. Rather, communities use annual school district operating budgets, educational facilities master plans, bond referenda, and capital budgets to determine what they need for their public school facilities, and then they set priorities based on what they can afford. These are important and critical local processes. However, without standards it is impossible to measure the adequacy of facilities spending and investments.

Industry Facilities Spending and Standards

Building science professionals use maintenance and capital renewal standards to guide facilities managers in keeping facilities in good repair.[35] These standards are derived by estimating the lifespan of the facility and the cost to build a new one, referred to as the Current Replacement Value (CRV), and then calculating the annual depreciation of the facility as a percentage of the CRV.

The CRV is derived by multiplying new construction costs per gross square foot (GSF) by the total gross square footage of the facilities.

The CRV of the nation's total K–12 public school inventory was $1.937 trillion in 2014, based on an average new construction cost of $256 per GSF and 7.5 billion GSF of public school district facilities.

The expected lifespan of facilities is derived by averaging the life of a building structure, systems, components, furniture, fixtures, and equipment — all of which depend on the original design, construction, location, usage, and preventive maintenance of the facility.

A building expected to be maintained in good repair for 50 years depreciates at 2 percent per year. The number of years a facility is expected to fully support programs and services will vary, depending on the quality of the design, materials, and construction. Given all of this possible variation, actual requirements for spending will necessarily vary from the standards.

Current Replacement Value of U.S. K–12 Public Schools

Note: For state-level current replacement value, we multiplied the average regional cost for new-school construction (or average state cost, when state officials provided data for their states) by the total gross square footage of school buildings in their state, either reported by the state or estimated based on comparable states.

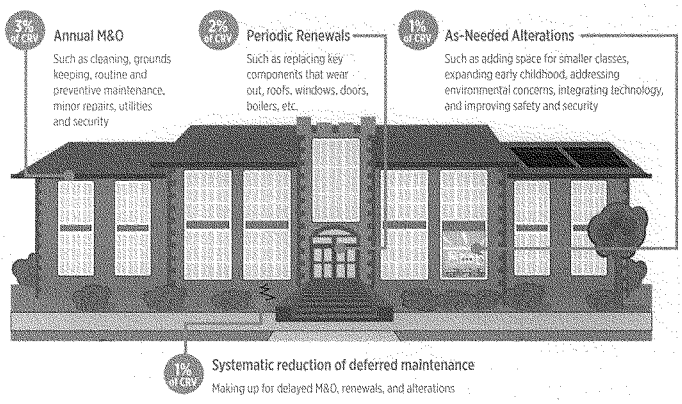
Setting School Facilities Spending and Investment Standards: A New Stewardship Framework

To apply building industry standards to educational facilities necessitates going beyond general industry practice, which applies only to basic maintenance and renewals. Good practice calls for enhancing these basic building standards so they also extend to the responsibilities of states and districts to reduce the accumulation of deferred maintenance in school buildings and deliver facilities that support changing instructional methods, technologies, and community needs. States and districts can incorporate their unique local costs, conditions, and inventories into the following framework, using the educational facilities spending and investment standards included, to evaluate their current and future spending.

It is important to note that investments in one area can have a major impact elsewhere. For example, if a district does not undertake the cleaning or the required routine and preventive maintenance, then major building systems and components will not last as long as designed. If school districts do not renew their building systems and components on a timely schedule, then deferred maintenance will accumulate, costs for annual maintenance and repairs will rise, and poor basic building conditions will compromise the benefits of alterations for program or capacity adjustments.

Modern Standards for Maintaining and Upgrading Current K–12 Public School Facilities

The following proposed national standards for school facilities are based on building industry best practice. The percentages refer to the percentage of facilities' current replacement value that should be invested annually to maintain school buildings in good condition. Local conditions will vary. For example, school facilities in very poor condition will need more than 1 percent a year toward their deferred maintenance. But in general, if communities have stable funding at these levels, they should be able to deliver healthy, safe, educationally appropriate, and environmentally sustainable school facilities.



Annual Maintenance and Operations Spending Needs

A general industry standard for facility M&O (all facilities, not just schools) indicates that building owners should expect to spend a minimum of 2 percent of the CRV annually. This covers routine and preventive facilities maintenance, minor repairs, custodial services, and grounds keeping. Expenditures for these services are closely dependent on many factors, including the current square footage of school buildings. This 2 percent industry standard for M&O *does not* include costs for utilities and security. However, because these utilities and security costs average 35–40 percent of a school district's reported spending on M&O, the 2 percent industry standard is too low for schools. Instead, 3 percent of CRV is a better standard for school facilities' M&O budgets, so the additional costs of utilities and security are covered. **Meeting this standard requires spending $58 billion annually.**

Annual Capital Construction Investment Needs

Many factors affect capital budget needs, including the quality of routine and preventive maintenance, the amount of deferred maintenance that has already accumulated, and projected changes in enrollment. To improve accountability and plan for future spending, states and districts need to fully understand what is currently being spent on renewals, alterations, and acquisitions separately. However, school districts are asked to combine capital construction expenditures together when reporting spending data, so our understanding of the specific areas of underspending is incomplete. Nevertheless, the combined figures point to substantial and consistent underinvestment in capital construction.

Capital Renewals

School district facilities managers typically expect to maintain facilities already in good condition by spending 2 percent of CRV annually on building and grounds systems, components, finishes, furniture, and equipment replacements, upgrades, and major repairs. **Meeting this standard requires spending $39 billion annually.**

Alterations

Even if school districts address routine facilities renewals and take care of their deferred maintenance, they also can expect regular flux in popular school design trends, changing educational models, and new classroom requirements. Investments in alterations to accommodate and support these changes can be costly and difficult to predict. Although the specific alterations themselves will not be fully predictable, that there will be necessary alterations is certain. Again, an additional 1 percent of CRV annually is modest but realistic. **Meeting this standard requires spending $19 billion annually.**

Deferred Maintenance

Given historic underinvestment in school buildings, standards for this sector need to include a systematic approach for reducing deferred maintenance and altering facilities to meet changing educational and community requirements. With a 2008 backlog of deferred maintenance estimated conservatively at $271 billion and as high as $542 billion, many public school buildings will have to make up a deficit before they can be considered in "good condition."[36] To systematically reduce the accumulation of deferred maintenance, states and districts will have to spend at least an additional 1 percent of CRV on

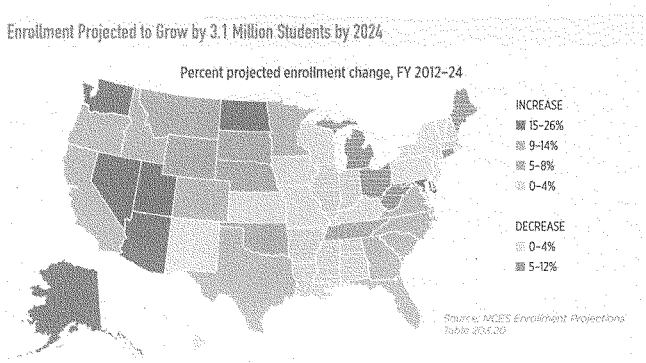
With a 2008 backlog of deferred maintenance estimated conservatively at $271 billion and as high as $542 billion, many public school buildings will have to make up a deficit before they can be considered in "good condition."

deferred maintenance annually over the next 10 years in the highest-need schools. **Meeting this standard requires spending at least $19 billion annually.** At the end of 10 years, this steady level of spending, coupled with adequate capital renewals, would reduce the estimated deferred maintenance burden from $271 billion to $81 billion. In order to fully resolve the backlog of deferred maintenance, further investment beyond 1 percent of CRV annually will be required.

New Construction

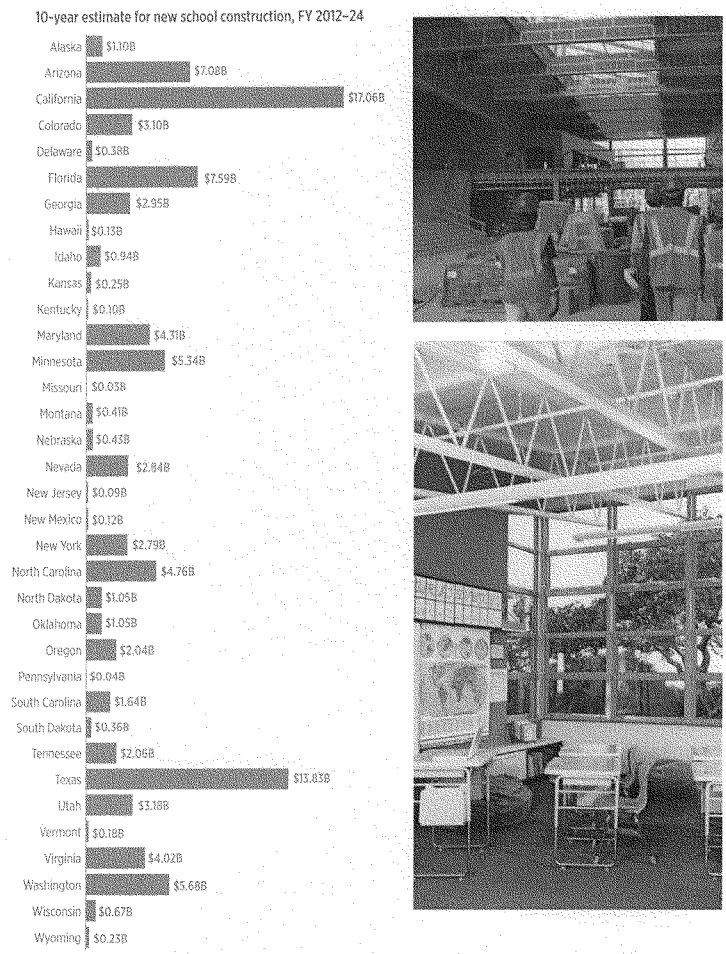
In addition to taking care of the facilities already in their inventory, states and districts have to plan for building new schools to handle enrollment growth. Nationally, enrollment is projected to increase by 3.1 million students between 2014 and 2024.[37]

States will first work to absorb enrollment growth into existing facilities, whether through portable classrooms or by better utilizing space. However, considering that there were nearly 600,000 portable classrooms in use in U.S. schools in 2011[38] — many well past their healthy lifespans — many districts will need to build new schools. The estimate assumes that only states with enrollment increases will add space for new enrollments and that each growth state will absorb 20 percent of its projected enrollment into existing facilities. Assuming that new facilities will be built at the state's average GSF per student and at the state's average new construction cost per square foot, **states and districts will need to spend nearly $10 billion (2014$) on capital construction annually over the next 10 years.**



While this estimate uses nationally available data from NCES for enrollment growth projections, NCES projections will vary widely from state or local projections. For example, both the Maryland Department of Planning and NCES project enrollment increases for Maryland; however, the state projects an 8 percent increase, whereas NCES puts it at 15 percent, which would have a dramatic impact on capital construction estimates.

Some States Are Projected To Have Significant Future Costs for New Construction



Note: This chart includes only the states with projected enrollment increases between FY 2012 and 2024.
Source: 21st Century School Fund calculations based on U.S. Department of Education, National Center for Education Statistics, 2014 Digest of Education Statistics, Table 203.20.

Gaps in Delivering Adequate K–12 Facilities

A thorough analysis of 20 years of M&O spending and capital investment reveals that most states and districts do not have what they need to take care of the facilities they already have — or to build new facilities. According to the stewardship framework and standards described above, districts will fall short by $46 billion a year. Despite the average $99 billion annual investment over the past 20 years, the nation needs *an additional $8 billion a year for M&O and an additional $38 billion a year for capital construction* to catch up on deferred maintenance, to renew and alter existing facilities to address changing educational requirements, and to cover new construction based on NCES projections for rising student enrollments.

Breaking Down the Estimated Gaps

	Responsibilities	Modern Standards	Historic Spending	% of Standard	Projected Annual Gap
EXISTING K–12 FACILITIES	Maintenance & Operations at 3% CRV	$58 billion	$50 billion[1]	86%	$8 billion
	Capital Construction at 4% CRV	$77 billion	$49 billion[2]	63%	$28 billion
	TOTAL at 7% CRV	$135 billion	$99 billion	73%	$36 billion

	New Seats[3]	GSF for New Seats	Cost per GSF	10-Year Estimate	Annual Estimate
NEW K–12 FACILITIES	2.7 million	393 million	$254	$100 billion	$10 billion

		Modern Standards	Historic Spending	Projected Annual Gap
TOTAL K–12 FACILITIES	Maintenance & Operations	$58 billion	$50 billion	$8 billion
	Capital Construction	$77 billion	$49 billion	$28 billion
	New Facilities	$10 billion		$10 billion
	TOTAL	$145 billion	$99 billion	$46 billion

CRV (current replacement value) of $3.937 trillion for all U.S. public schools.
(1) FY2011-13 average; (2) 20-year (1994–2013)average includes NEW construction; (3) Seats for 80% of the projected enrollment

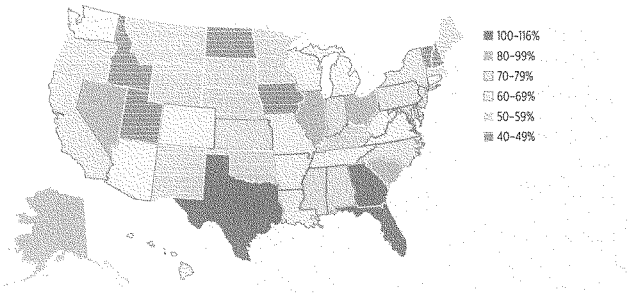
To fully meet the best practice M&O standard, school districts should be spending at least $58 billion per year for M&O to ensure healthy, safe, and efficient facilities. This equals an annual average of about $1,200 per student and nearly $8 per gross square feet for cleaning, maintenance, utilities, and security. Over the past three fiscal years, however, states and districts together spent an annual average of $50 billion, or only 86 percent of the M&O standard. Continuing to spend at this level for the current facilities inventory will result in a gap of $8 billion per year.

According to the stewardship framework and standards described above, districts will fall short by $46 billion a year.

Across fiscal years 2011–13, seven states met or exceeded the minimum spending standard for *M&O* of their facilities. The highest-spending states were Texas (125 percent), New Jersey (117 percent), and Alaska (114 percent). The states with the largest gap between M&O spending and the standard were Minnesota (48 percent), Idaho (51 percent), and Utah (55 percent). In some cases, high spending on M&O is driven by under-investment in capital construction and higher-than-average costs associated with utilities, security, custodial and maintenance services. Alternatively, low spending may reflect efficiencies and not necessarily neglect of the maintenance and operations of schools.

Three States Exceed the Standard, Six Are Below 50 Percent

Percentage of standard met by historic M&O spending and capital construction investment, FY 2015



To fully meet the best practice standard for capital construction, school districts should be spending at least $77 billion per year to ensure healthy, safe, and efficient facilities. And they will need to spend an additional $10 billion a year to meet 80 percent of the projected enrollment growth.

Across fiscal years 1994–2013, three states met or exceeded the minimum spending standard for *capital construction* investments. The three states with the highest investment in capital construction compared with the standard were Texas (110 percent), Georgia (103 percent), and Florida (101 percent). States with the lowest capital construction spending compared with the standard were Vermont (21 percent), Rhode Island (23 percent), and Montana (28 percent). In most cases, states with high capital construction spending compared to the standard reach or exceed the standard because they build new schools to respond to enrollment growth. However, these states will need to continue to spend at the same levels to take care of what they have built.

When historic M&O spending and capital investments are combined and compared to standards, only three states' average spending levels met or exceeded the combined standards for M&O and capital investment: Texas, Florida, and Georgia.

CHAPTER 5 Strategies to Meet Modern Standards

Providing healthy, safe, educationally appropriate, and environmentally sustainable facilities for our nation's students is a complex and challenging responsibility. As the world changes and understanding of health, safety, education, and the environment grows, teaching and learning environments necessarily evolve. Although many states and school districts have made significant improvements and investments in their public education infrastructure, the nation overall is not prepared to deliver on its responsibility to provide all students access to an excellent education. As a nation, we need to close the gap between what has been spent for public school facilities and what is needed going forward to fulfill this promise.

Most troubling is the inequity of K–12 public school facilities from community to community. Some children learn in state-of-the art school buildings, with the most modern labs, classrooms, and computer centers available. But too many students suffer in buildings that were out of date decades ago and are an embarrassment in the world's richest country. Because local wealth is the primary source of capital construction funds, underinvestment disproportionately affects children from low-income families. The results affect both students' well-being and their educational opportunities.

Effectively addressing the shortfalls and inequities will require disrupting traditional approaches to planning, managing, and funding public school facilities. Encouragingly, a number of states and communities already have begun this work. Instances of innovation and inspiration abound — within the K–12 sector and beyond. They point to a rich landscape of opportunities, if communities can harness their will to address these common challenges.

While this report provides a national overview of the issues, challenges, and opportunities, decisions about school facilities are ultimately local. We encourage communities across the country to use the information contained in this report (and the state-level supplemental online data) to do their own analyses and host their own conversations. The goal: ensure that every student in every community has the opportunity to attend K–12 public schools that provide a quality education in facilities that are healthy, safe, and conducive to learning. Below are four ideas to help prompt constructive discussions.

1. Understand Your Community's Public School Facilities

Addressing the nationwide funding gap requires that the American public and policymakers better understand the conditions in their own schools and how these facilities impact student and teacher health and performance, the environment, the local economy, and overall community vitality. A key requirement is to have better data on public school infrastructure. The data need to be up-to-date, comprehensive, accurate, and accessible to citizens and officials. The lack of common definitions and inconsistent spending and investment data nationally and in most states present challenges. Appendix A offers a state-by-state table showing the data discrepancies that raise questions about data accuracy, classification, and reporting. Communities must insist on getting access to accurate data on their schol facilities.

2. Engage in Education Facilities Planning

Ultimately, the power to decide whether and how to deliver quality public educational facilities rests with taxpayers and voters. Education leaders need to better understand the power of facilities in advancing education quality and equity and must clearly and consistently communicate to the general public the value of safer and healthier environments for learning. The solutions to fixing poor facilities conditions and inequities should be planned systematically. Gaps cannot be closed overnight. Priorities must be established. Learning from best practices across the country, local communities can develop creative and practical plans to improve their public school facilities. In our democratic society, community members and school-based personnel both need to be a part of this integrated planning process.

3. Support New Public Funding

Adequate public funding is required to make it possible to meet the country's responsibilities to the generation of students currently in schools and the generations to come. If we as a nation continue to rely primarily on the local property tax, we cannot expect better results.

States are critical partners to their local districts. In the 12 states that provided no capital construction funding to districts, along with the 13 other states that provided less than 10 percent, a critical step is to identify state-level solutions to ensure equitable educational opportunities for all. Many states have been working to find dedicated revenue to support facilities in their local districts. New Mexico uses revenues from oil and gas reserves and Wyoming uses revenues from coal lease bonuses for their school facilities. Ohio dedicated its tobacco settlement revenue to pay for its statewide school construction program. The Georgia Legislature enabled its counties to pass a special option sales tax that can be dedicated to school construction. Iowa and Massachusetts have dedicated a portion of their state sales taxes for school construction. South Carolina recently established a statewide property tax to ensure adequate and equitable schools, including facilities.

However, even the most creative state and local partnerships leave some districts behind. It is time to explore how the federal government can help eliminate extreme inequities in school facilities conditions. It is time for a non-partisan dialogue on the appropriate federal role for helping states and districts meet our collective responsibilities.

4. Leverage Public and Private Resources

Innovative solutions will be necessary to sustain the scale of investment required to provide the schools that every student in every community deserves. To more fully leverage public facilities investment, a new generation of structures, funding streams, and partnerships will be needed. Leveraging these investments means finding ways to use land and building assets to raise and save funds, such as public-private and public-public development partnerships, revolving loan funds, social impact investing, and other scalable and sustainable financing solutions.

Private sector partners have an important role to play in identifying and maximizing opportunities. With private support, school districts can leverage staff and contractors toward their highest possible value, using proper controls, transparency, and oversight of decisions. Whether implementing financing solutions, structuring joint use of buildings and grounds, or locating improvements to maximize building efficiency, school districts and their state-level partners need technical and regulatory support in solving their investment shortfalls.

A Call to Action

Federal, state, and local stakeholders — from senators to state legislators to superintendents, community leaders to impact investors — must collaborate to create, pilot, and scale new solutions and document successful strategies. Community and investment partners must come to the table.

Five states already have created separate agencies dedicated to school facilities. Some are focused primarily on state allocation of capital funds. Others are engaged in planning and project management and construction itself. One — New Mexico Public School Authority — is involved in the continuum of facilities from M&O to design and construction. However, the current reality is that most districts in most states must deliver 21st century school facilities on their own.

Thought leaders from education, government, industry, and communities are invited to use and improve on the data and standards framework presented in this report to brainstorm, share, and pilot creative new solutions to these common facilities challenges. Successful strategies that emerge from these pilots must be documented, refined, and adapted for scale. The result: school facilities that meet the needs of today's students, in every community, and for generations to come.

APPENDIX A State Data Tables

	ENROLLMENT FY 2015			SCHOOLS FY 2015		20-YEAR M&O TOTALS (FY 1996–2015 CONST.)				20-YEAR CAPITAL OUTLAY TOTALS (FY 1996–2015 CONST.)						
	Enrollment SY 1993–94	Enrollment SY 2014–15	Enrollment change	Schools	Area of district bldgs in millions of GSF	Total education operating expend ($ billions)	Total M&O expend ($ billions)	M&O as % of total educ. operating expend	Avg ann M&O expend ($ millions)	Capital outlay ($ billions)	School-construction cap outlay ($ billions)	School-construction cap outlay per 2015 student	School-construction cap outlay per GSF	New construction as % of all construction starts	Total district cap outlay revenue from the state ($ billions)	State share of total cap outlay
Alabama	734,288	744,548	1.4%	1,637	127.7	$122	$11	8.9%	$541	$14.0	$11.5	$15,431	$90	58%	$3.06	22%
Alaska	125,948	131,091	3.9%	509	33.7	$37	$5	12.9%	$240	$5.3	$4.0	$30,738	$120	39%	$1.96	37%
Arizona	709,453	941,726	24.7%	2,267	130.7	$141	$17	12.1%	$849	$24.0	$17.2	$18,234	$131	59%	$4.94	21%
Arkansas[1]	444,271	477,716	7.0%	1,102	102.7	$78	$7	9.2%	$360	$9.8	$5.3	$11,116	$52	54%	$1.12	12%
California	5,327,231	6,208,733	14.2%	10,315	620.0	$1,124	$100	8.9%	$5,007	$166.0	$134.0	$21,579	$216	47%	$46.67	28%
Colorado	625,062	851,063	26.6%	1,825	123.6	$134	$13	9.6%	$643	$20.3	$14.2	$16,674	$115	53%	$0.69	3%
Connecticut[1]	496,298	517,812	4.2%	1,148	100.9	$154	$14	9.3%	$714	$17.8	$15.3	$29,459	$151	31%	$10.13	57%
Delaware	105,547	129,026	18.2%	224	19.7	$29	$3	10.0%	$144	$3.7	$3.3	$25,430	$167	42%	$2.11	57%
Florida	2,040,763	2,680,074	23.9%	4,269	425.4	$431	$47	10.9%	$2,345	$78.4	$59.1	$22,035	$139	56%	$11.74	15%
Georgia	1,235,304	1,682,620	26.6%	2,387	233.2	$284	$22	7.6%	$1,078	$41.4	$32.8	$19,502	$141	59%	$4.84	12%
Hawaii[1,2]	180,410	184,760	2.4%	286	19.0	$39	$3	8.1%	$160	$4.1	$3.6	$19,256	$187	37%	$4.99	100%
Idaho	236,774	272,070	13.0%	719	47.5	$37	$3	9.3%	$172	$3.9	$3.1	$11,220	$64	70%	$0.00	0%
Illinois	1,893,078	2,069,823	8.5%	4,266	359.5	$434	$43	9.8%	$2,125	$53.8	$41.4	$20,010	$115	36%	$2.14	4%
Indiana[1]	965,633	1,002,772	3.7%	1,925	180.1	$196	$22	11.0%	$1,085	$30.2	$20.0	$19,934	$111	34%	$0.00	0%
Iowa	498,519	499,489	0.2%	1,390	92.0	$94	$8	8.7%	$408	$12.8	$9.4	$18,793	$102	35%	$4.48	35%
Kansas[1]	457,614	488,590	6.3%	1,351	83.3	$88	$9	10.4%	$460	$13.7	$9.0	$18,463	$108	44%	$1.10	8%
Kentucky	655,265	685,009	4.3%	1,568	115.8	$116	$10	8.9%	$515	$12.4	$8.7	$12,751	$75	42%	$4.13	33%
Louisiana	800,560	671,156	-19.3%	1,407	119.8	$131	$12	9.3%	$605	$12.2	$8.5	$12,703	$71	40%	$0.00	0%
Maine[1]	216,995	184,682	-17.5%	617	36.2	$47	$5	10.0%	$233	$4.0	$2.6	$14,179	$72	48%	$1.15	28%
Maryland	772,638	859,252	10.1%	1,449	137.9	$204	$19	9.4%	$957	$21.1	$16.2	$18,811	$117	40%	$5.47	26%
Massachusetts[1]	877,726	922,848	4.9%	1,854	180.3	$251	$23	9.3%	$1,165	$22.2	$25.5	$27,652	$142	45%	$14.79	67%
Michigan	1,599,377	1,381,167	-15.8%	3,550	310.8	$364	$38	10.4%	$1,885	$41.7	$26.6	$19,261	$86	33%	$0.02	0%
Minnesota	810,233	802,454	-1.0%	2,403	167.6	$174	$13	7.7%	$673	$26.1	$20.5	$25,556	$122	37%	$5.84	22%
Mississippi	505,907	492,847	-2.6%	1,063	84.4	$74	$7	9.7%	$362	$8.6	$5.8	$11,730	$69	48%	$0.20	2%
Missouri	866,378	897,224	3.4%	2,406	158.0	$165	$16	9.8%	$813	$19.6	$13.2	$14,698	$83	39%	$0.00	0%
Montana	163,009	142,797	-14.2%	824	28.0	$29	$3	10.3%	$148	$2.1	$1.5	$10,215	$52	36%	$0.03	1%
Nebraska	285,097	303,242	6.0%	1,090	59.1	$58	$5	9.0%	$259	$7.8	$4.2	$13,925	$71	35%	$0.00	0%
Nevada	235,800	431,776	45.4%	664	48.1	$61	$6	10.2%	$309	$12.3	$9.6	$22,194	$199	71%	$0.00	0%
New Hampshire[1]	185,360	187,703	1.2%	481	33.5	$44	$4	8.7%	$191	$4.4	$3.1	$16,748	$94	38%	$0.83	19%
New Jersey	1,151,307	1,338,657	14.0%	2,598	194.3	$435	$45	10.3%	$2,230	$34.1	$27.0	$20,133	$139	28%	$10.89	32%
New Mexico	322,292	327,209	1.5%	877	61.3	$56	$6	10.4%	$294	$10.1	$6.5	$19,952	$107	41%	$2.02	20%
New York	2,733,813	2,629,805	-4.0%	4,822	433.0	$923	$79	8.5%	$3,936	$98.2	$84.1	$31,962	$194	17%	$34.95	36%
North Carolina	1,133,231	1,468,228	22.8%	2,557	228.1	$227	$18	8.1%	$923	$27.5	$21.9	$14,896	$96	57%	$2.07	8%
North Dakota	119,127	101,025	-17.9%	517	24.5	$20	$2	8.8%	$87	$2.3	$1.4	$13,570	$56	50%	$0.04	2%
Ohio	1,807,319	1,613,718	-12.0%	3,685	288.8	$384	$36	9.3%	$1,779	$46.4	$35.0	$21,683	$121	60%	$12.67	27%
Oklahoma	604,076	671,445	10.0%	1,784	113.5	$100	$11	11.1%	$554	$9.7	$6.1	$9,013	$53	35%	$0.03	0%
Oregon	516,611	564,006	8.4%	1,251	96.5	$109	$9	8.7%	$470	$11.2	$9.3	$16,475	$96	45%	$0.00	0%
Pennsylvania	1,744,082	1,623,694	-7.4%	3,127	325.7	$436	$43	9.9%	$2,156	$48.9	$42.3	$26,077	$130	30%	$7.20	15%
Rhode Island	145,676	136,401	-6.8%	304	21.6	$39	$3	8.2%	$162	$1.4	$1.4	$10,311	$65	39%	$1.12	78%
South Carolina	643,696	722,249	10.9%	1,239	111.0	$122	$11	9.1%	$559	$21.2	$15.3	$21,145	$138	57%	$1.74	8%
South Dakota	142,825	130,296	-9.6%	697	24.9	$21	$2	10.0%	$107	$3.1	$2.2	$16,740	$88	41%	$0.00	0%
Tennessee	866,557	992,461	12.7%	1,817	169.8	$145	$13	9.1%	$661	$15.7	$10.8	$10,834	$63	57%	$0.00	0%
Texas	3,608,262	4,897,523	26.3%	8,731	602.0	$744	$82	11.0%	$4,093	$131.2	$107.8	$22,010	$179	57%	$12.21	9%
Utah	471,365	562,315	16.2%	995	89.6	$64	$6	9.2%	$293	$12.8	$6.9	$12,349	$78	65%	$0.80	6%
Vermont	102,755	89,426	-14.9%	318	17.5	$26	$2	8.2%	$108	$1.6	$1.1	$11,896	$61	11%	$0.31	19%
Virginia[1]	1,045,471	1,264,880	17.3%	2,182	191.4	$241	$24	9.8%	$1,182	$33.0	$22.0	$17,373	$115	52%	$1.67	5%
Washington	915,952	1,050,901	12.8%	2,370	135.6	$189	$17	9.2%	$872	$32.3	$25.0	$23,800	$185	47%	$4.50	14%
West Virginia[1]	314,383	282,310	-11.4%	755	42.1	$60	$6	10.0%	$303	$5.2	$3.0	$10,687	$72	55%	$0.44	9%
Wisconsin	844,001	863,737	2.3%	2,238	178.4	$195	$18	9.3%	$906	$18.2	$12.4	$14,325	$69	35%	$0.00	0%
Wyoming	100,899	91,533	-10.2%	364	23.7	$22	$2	10.4%	$116	$3.8	$2.6	$28,323	$109	67%	$2.39	63%
TOTALS	43,384,238	48,265,889		98,224	7,551	$9,699	$925		$46,236	$1,261	$973	$20,157	$129		$227.46	18%

	20-YEAR ANNUAL AVERAGES FY1994–2013 (2014$)					DEBT END OF FY2013		CURRENT REPLACEMENT VALUE, FY 2014			FY2011–13 (2014$)	
	School-construction cap outlay ($ millions)	School-construction cap outlay per 2013 student	School-construction cap outlay per GSF	M&O expend per 2013 student	Avg ann M&O expend per GSF	District long-term debt, end of FY 2013 ($ billions)	District long-term debt, end of FY 2013 per 2013 student	GSF of district bldgs (millions)	Avg cost per GSF for new construction	Current replacement value of district facilities ($ billions)	Avg ann M&O expend per 2013 student	Avg ann M&O expend per GSF
Alabama	$574	$772	$4.50	$727	$4.24	$5.12	$6,872	127.7	$171	$21.8	$832	$4.85
Alaska	$201	$1,537	$5.98	$1,833	$7.13	$1.32	$10,080	33.7	$239	$8.0	$2,096	$8.16
Arizona	$859	$912	$6.57	$902	$6.50	$4.27	$4,534	130.7	$276	$36.1	$894	$6.44
Arkansas[1]	$266	$556	$2.59	$753	$3.50	$3.66	$7,671	102.7	$150	$15.4	$929	$4.32
California	$6,699	$1,079	$10.80	$806	$8.08	$54.63	$8,799	620.0	$400	$248.0	$909	$9.11
Colorado	$710	$834	$5.74	$755	$5.20	$7.73	$9,087	123.6	$273	$33.7	$845	$5.82
Connecticut[1]	$763	$1,473	$7.56	$1,379	$7.08	$2.93	$5,655	100.9	$360	$36.3	$1,524	$7.82
Delaware	$164	$1,271	$8.33	$1,117	$7.32	$0.55	$4,601	19.7	$338	$6.6	$1,443	$8.70
Florida	$2,953	$1,102	$6.94	$875	$5.51	$15.43	$5,756	425.4	$171	$72.9	$909	$5.73
Georgia	$1,641	$975	$7.04	$640	$4.62	$4.52	$2,684	233.2	$171	$40.0	$702	$5.07
Hawaii[1,2]	$178	$963	$9.36	$865	$8.41	$0.00	$0	19.0	$350	$6.7	$858	$8.34
Idaho	$153	$561	$3.22	$632	$3.62	$1.30	$4,795	47.5	$239	$11.3	$639	$3.66
Illinois	$2,071	$1,001	$5.76	$1,027	$5.91	$20.96	$10,128	359.5	$204	$73.3	$1,056	$6.08
Indiana[1]	$999	$997	$5.55	$1,082	$6.02	$11.31	$11,280	180.1	$211	$37.9	$1,073	$5.97
Iowa	$469	$940	$5.10	$816	$4.43	$3.34	$6,688	92.0	$263	$24.2	$881	$4.78
Kansas[1]	$451	$923	$5.42	$942	$5.52	$4.63	$9,486	83.3	$213	$17.7	$947	$5.56
Kentucky	$437	$638	$3.77	$751	$4.45	$5.56	$8,112	115.8	$192	$22.3	$824	$4.87
Louisiana	$426	$635	$3.56	$901	$5.05	$3.84	$5,717	119.8	$204	$24.5	$1,031	$5.77
Maine[1]	$131	$709	$3.61	$1,262	$6.44	$0.85	$4,588	36.2	$300	$10.9	$1,369	$6.98
Maryland	$808	$941	$5.86	$1,114	$6.94	$4.20	$4,894	137.9	$258	$35.6	$1,277	$7.96
Massachusetts[1]	$1,276	$1,383	$7.08	$1,263	$6.46	$5.14	$5,565	180.3	$369	$66.5	$1,373	$7.03
Michigan	$1,330	$963	$4.28	$1,365	$6.07	$17.31	$12,533	310.8	$211	$65.5	$1,046	$4.65
Minnesota	$1,025	$1,278	$6.12	$838	$4.01	$10.34	$12,889	167.6	$275	$46.1	$823	$3.94
Mississippi	$289	$586	$3.43	$734	$4.29	$1.71	$3,461	84.4	$171	$14.5	$855	$4.99
Missouri	$659	$735	$4.17	$906	$5.14	$6.65	$7,415	158.0	$213	$33.6	$989	$5.62
Montana	$73	$511	$2.60	$1,039	$5.30	$0.49	$3,428	28.0	$235	$6.6	$1,108	$5.65
Nebraska	$211	$696	$3.57	$855	$4.39	$2.08	$6,867	59.1	$213	$12.6	$991	$5.08
Nevada	$479	$1,110	$9.97	$716	$6.43	$4.19	$9,711	48.1	$276	$13.3	$916	$8.23
New Hampshire[1]	$157	$837	$4.70	$1,020	$5.72	$0.82	$4,348	33.5	$360	$12.0	$1,205	$6.76
New Jersey	$1,348	$1,007	$6.94	$1,666	$11.48	$9.30	$6,950	194.3	$377	$73.3	$1,923	$13.25
New Mexico	$326	$998	$5.33	$899	$4.80	$1.95	$5,962	61.3	$299	$18.3	$986	$5.27
New York	$4,203	$1,598	$9.71	$1,497	$9.09	$30.62	$11,643	433.0	$411	$177.9	$1,759	$10.68
North Carolina	$1,094	$745	$4.80	$628	$4.05	$8.23	$5,607	228.1	$192	$43.8	$733	$4.72
North Dakota	$69	$679	$2.80	$862	$3.55	$0.35	$3,442	24.5	$235	$5.8	$1,063	$4.38
Ohio	$1,750	$1,084	$6.06	$1,102	$6.16	$9.36	$5,803	288.8	$211	$60.8	$1,088	$6.08
Oklahoma	$303	$451	$2.67	$825	$4.88	$1.61	$2,402	113.5	$204	$23.2	$861	$5.09
Oregon	$465	$824	$4.82	$834	$4.88	$6.49	$11,511	96.5	$239	$23.0	$822	$4.80
Pennsylvania	$2,117	$1,304	$6.50	$1,328	$6.62	$25.39	$15,638	325.7	$271	$88.3	$1,376	$6.86
Rhode Island	$70	$516	$3.25	$1,189	$7.50	$1.04	$7,628	21.6	$360	$7.8	$1,225	$7.73
South Carolina	$764	$1,057	$6.88	$774	$5.03	$12.24	$16,948	111.0	$192	$21.4	$919	$5.97
South Dakota	$109	$837	$4.38	$818	$4.28	$0.77	$5,900	24.9	$235	$5.9	$906	$4.74
Tennessee	$538	$542	$3.17	$666	$3.89	$5.18	$5,216	169.8	$192	$32.7	$735	$4.30
Texas	$5,390	$1,101	$8.95	$836	$6.80	$65.12	$13,297	602.0	$204	$123.0	$939	$7.64
Utah	$347	$617	$3.88	$522	$3.28	$2.78	$4,940	89.6	$235	$21.1	$614	$3.85
Vermont	$53	$595	$3.04	$1,207	$6.18	$0.30	$3,333	17.5	$360	$6.3	$1,439	$7.36
Virginia[3]	$1,099	$869	$5.74	$935	$6.18	$8.38	$6,624	191.4	$271	$51.8	$1,052	$6.95
Washington	$1,251	$1,190	$9.23	$829	$6.43	$9.54	$9,078	135.6	$333	$45.2	$893	$6.92
West Virginia[3]	$151	$534	$3.59	$1,072	$7.19	$0.42	$1,497	42.1	$247	$10.4	$1,148	$7.71
Wisconsin	$619	$716	$3.47	$1,049	$5.08	$4.54	$5,260	178.4	$204	$36.4	$1,071	$5.18
Wyoming	$130	$1,416	$5.47	$1,270	$4.91	$0.06	$674	23.7	$295	$7.0	$1,566	$6.05
TOTALS	$48,644	$1,008	$6.44			$409		7,551		$1,937		

		M&O GAP PROJECTION ANALYSIS					CAPITAL CONSTRUCTION GAP PROJECTION ANALYSIS					
	3% standard for ann M&O spending ($ millions)	M&O expend in millions FY 2011-13 (2014$)	M&O expend as % of 3% standard	Projected M&O expend gap in millions[1]	M&O expend gap per 2015 student	M&O gap per GSF	4% standard for cap investment in existing facilities ($ millions)	Cap construction expend gap ($ millions)	Cap construction as % of 4% standard	Cap construction expend gap per GSF	Cap construction expend gap per student	4% standard for cap investment in existing facilities per GSF
Alabama	$655	$620	95%	$35	$47	$0.28	$873	$299	66%	$2.34	$401	$6.84
Alaska	$241	$275	114%	-$34	-$259	-$1.00	$322	$121	63%	$3.58	$919	$9.56
Arizona	$1,084	$842	78%	$242	$257	$1.85	$1,446	$587	59%	$4.49	$624	$11.06
Arkansas[1]	$462	$444	96%	$18	$38	$0.18	$616	$350	43%	$3.41	$734	$6.00
California	$7,440	$5,646	76%	$1,794	$289	$2.89	$9,920	$3,221	68%	$5.20	$519	$16.00
Colorado	$1,012	$719	71%	$293	$344	$2.37	$1,350	$640	53%	$5.18	$753	$10.92
Connecticut[1]	$1,089	$789	72%	$300	$579	$2.97	$1,452	$689	53%	$6.83	$1,331	$14.39
Delaware	$199	$171	86%	$28	$217	$1.41	$266	$102	62%	$5.18	$790	$13.51
Florida	$2,187	$2,437	111%	-$250	-$93	-$0.59	$2,917	-$36	101%	-$0.08	-$13	$6.86
Georgia	$1,199	$1,182	99%	$17	$10	$0.07	$1,599	-$42	103%	-$0.18	-$25	$6.86
Hawaii[1,2]	$200	$159	79%	$42	$222	$2.18	$266	$88	67%	$4.64	$477	$14.00
Idaho	$340	$174	51%	$166	$610	$3.50	$454	$301	34%	$6.35	$1,108	$9.57
Illinois	$2,199	$2,186	99%	$13	$6	$0.04	$2,933	$862	71%	$2.40	$417	$8.16
Indiana[1]	$1,138	$1,076	95%	$62	$62	$0.35	$1,517	$518	66%	$2.87	$516	$8.42
Iowa	$726	$440	61%	$286	$573	$3.11	$968	$499	48%	$5.42	$998	$10.52
Kansas[1]	$531	$463	87%	$68	$139	$0.82	$708	$257	64%	$3.09	$526	$8.50
Kentucky	$668	$564	85%	$104	$152	$0.90	$890	$453	49%	$3.92	$662	$7.69
Louisiana	$734	$692	94%	$42	$63	$0.35	$979	$553	44%	$4.61	$824	$8.17
Maine[1]	$326	$253	78%	$73	$395	$2.02	$435	$304	30%	$8.40	$1,646	$12.01
Maryland	$1,067	$1,097	103%	-$30	-$35	-$0.22	$1,423	$615	57%	$4.46	$716	$10.32
Massachusetts[1]	$1,996	$1,267	63%	$729	$790	$4.04	$2,661	$1,385	48%	$7.68	$1,501	$14.76
Michigan	$1,964	$1,445	74%	$519	$376	$1.67	$2,618	$1,288	51%	$4.14	$932	$8.42
Minnesota	$1,383	$660	48%	$723	$901	$4.31	$1,843	$818	56%	$4.88	$1,019	$11.00
Mississippi	$434	$421	97%	$13	$26	$0.15	$578	$289	50%	$3.42	$586	$6.85
Missouri	$1,008	$888	88%	$120	$134	$0.76	$1,344	$685	49%	$4.33	$763	$8.51
Montana	$198	$158	80%	$40	$280	$1.42	$264	$191	28%	$6.82	$1,338	$9.42
Nebraska	$377	$300	80%	$77	$254	$1.30	$503	$292	42%	$4.94	$963	$8.51
Nevada	$399	$396	99%	$3	$7	$0.07	$531	$52	90%	$1.08	$120	$11.05
New Hampshire[1]	$361	$226	63%	$135	$719	$4.03	$481	$324	33%	$9.68	$1,725	$14.38
New Jersey	$2,198	$2,574	117%	-$376	-$281	-$1.94	$2,930	$1,582	46%	$8.14	$1,182	$15.08
New Mexico	$550	$323	59%	$227	$694	$3.71	$733	$407	45%	$6.64	$1,243	$11.96
New York	$5,336	$4,625	87%	$711	$270	$1.64	$7,115	$2,912	59%	$6.73	$1,107	$16.43
North Carolina	$1,315	$1,076	82%	$239	$163	$1.05	$1,754	$660	62%	$2.90	$450	$7.69
North Dakota	$173	$107	62%	$66	$653	$2.68	$231	$162	30%	$6.63	$1,608	$9.42
Ohio	$1,825	$1,756	96%	$69	$43	$0.24	$2,433	$683	72%	$2.37	$424	$8.42
Oklahoma	$695	$578	83%	$117	$174	$1.03	$927	$624	33%	$5.50	$930	$8.17
Oregon	$691	$464	67%	$227	$402	$2.36	$922	$457	50%	$4.74	$811	$9.56
Pennsylvania	$2,649	$2,234	84%	$419	$256	$1.27	$3,532	$1,415	60%	$4.34	$871	$10.85
Rhode Island	$233	$167	72%	$66	$484	$3.05	$311	$241	23%	$11.13	$1,765	$14.38
South Carolina	$641	$664	104%	-$23	-$32	-$0.20	$854	$90	89%	$0.81	$125	$7.69
South Dakota	$176	$118	67%	$58	$445	$2.33	$234	$125	47%	$5.02	$959	$9.40
Tennessee	$980	$729	74%	$251	$253	$1.48	$1,306	$768	41%	$4.52	$774	$7.69
Texas	$3,689	$4,598	125%	-$909	-$186	-$1.51	$4,918	-$472	110%	-$0.78	-$96	$8.17
Utah	$632	$345	55%	$287	$510	$3.20	$843	$496	41%	$5.53	$882	$9.41
Vermont	$188	$129	68%	$59	$660	$3.40	$251	$198	21%	$11.32	$2,212	$14.37
Virginia[1]	$1,554	$1,331	86%	$223	$176	$1.17	$2,072	$973	53%	$5.08	$769	$10.82
Washington	$1,355	$938	69%	$417	$397	$3.08	$1,807	$556	69%	$4.10	$529	$13.33
West Virginia[1]	$312	$324	104%	-$12	-$43	-$0.29	$416	$265	36%	$6.30	$939	$9.89
Wisconsin	$1,092	$925	85%	$167	$193	$0.94	$1,455	$836	43%	$4.69	$968	$8.16
Wyoming	$210	$143	68%	$67	$732	$2.81	$279	$149	46%	$6.31	$1,632	$11.78
TOTALS	$58,111	$50,138		$7,973			$77,480	$28,836				

	COMBINED GAO PROJECTION ANALYSIS			NCES CONSTRUCTION PROJECTIONS FY 2015–2024						
	Combined share of 7% standard ($ billions)	Total Annual Avg. Facilities Spending (M&O + cap const) ($ billions)	% of 7% standard	% Enrollment Change 2012–24	Projected enrollment change	New seats to serve 80% of projected growth	Avg cost of new construction per GSF in 2014	Avg GSF per student	GSF required to serve 80% of projected growth	Est total cost of new construction required for growth
Alabama	$1.5	$1,195	78%	-2.8	(20,737)			171		$0
Alaska	$0.6	$476	85%	17.0	22,311	17,849	$239	257	4,586,615	$1,095,650,612
Arizona	$2.5	$1,701	67%	21.2	230,616	184,493	$276	139	25,609,147	$7,080,416,960
Arkansas[1]	$1.1	$710	66%	-0.7	(3,357)			215		$0
California	$17.4	$12,345	71%	8.5	533,749	426,999	$400	100	42,639,860	$17,055,943,878
Colorado	$2.4	$1,429	61%	11.3	97,639	78,111	$273	145	11,343,010	$3,096,641,832
Connecticut[1]	$2.5	$1,552	61%	-4.8	(26,554)			195		$0
Delaware	$0.5	$335	72%	7.2	9,274	7,419	$339	153	1,132,174	$382,108,675
Florida	$5.1	$5,390	106%	13.0	348,738	278,990	$171	159	44,287,108	$7,590,219,743
Georgia	$2.8	$2,823	101%	9.1	154,968	123,974	$171	139	17,183,516	$2,945,025,552
Hawaii[1,2]	$0.5	$337	72%	2.5	4,540	3,632	$350	103	373,501	$130,725,265
Idaho	$0.8	$327	41%	9.9	28,166	22,533	$239	174	3,931,012	$939,040,141
Illinois	$5.1	$4,257	83%	-1.7	(35,880)			174		$0
Indiana[1]	$2.7	$2,075	78%	-1.1	(11,569)			180		$0
Iowa	$1.7	$909	54%	1.3	6,575	5,260	$263	184	968,830	$254,802,328
Kansas[1]	$1.2	$914	74%	2.2	10,757	8,606	$213	170	1,466,640	$311,866,265
Kentucky	$1.6	$1,001	64%	0.6	4,033	3,226	$192	169	545,287	$104,838,615
Louisiana	$1.7	$1,118	65%	-0.5	(3,503)			179		$0
Maine[1]	$0.8	$384	50%	-6.8	(12,639)			196		$0
Maryland	$2.5	$1,905	77%	15.1	130,162	104,130	$258	160	16,707,935	$4,310,647,305
Massachusetts[1]	$4.7	$2,543	55%	-1.1	(10,773)			195		$0
Michigan	$4.6	$2,775	61%	-5.2	(80,770)			225		$0
Minnesota	$3.2	$1,685	52%	13.7	116,196	92,957	$275	209	19,413,244	$5,338,642,172
Mississippi	$1.0	$710	70%	-3.0	(14,750)			171		$0
Missouri	$2.4	$1,547	66%	0.1	1,100	880	$213	176	154,983	$32,955,649
Montana	$0.5	$231	50%	7.8	11,192	8,954	$235	196	1,757,033	$413,330,404
Nebraska	$0.9	$511	58%	4.2	12,895	10,316	$213	195	2,010,465	$427,505,347
Nevada	$0.9	$875	94%	25.8	115,193	92,154	$276	111	10,256,946	$2,835,840,521
New Hampshire[1]	$0.8	$383	45%	-2.1	(3,974)			178		$0
New Jersey	$5.1	$3,922	76%	0.1	1,997	1,598	$377	145	231,885	$87,420,825
New Mexico	$1.3	$649	51%	0.8	2,580	2,064	$299	187	386,445	$115,547,192
New York	$12.5	$8,828	71%	1.9	51,597	41,278	$411	165	6,796,398	$2,791,947,435
North Carolina	$3.1	$2,170	71%	13.1	199,435	159,548	$192	155	24,782,220	$4,764,712,274
North Dakota	$0.4	$176	44%	22.9	23,089	18,471	$235	243	4,483,190	$1,054,640,640
Ohio	$4.3	$3,506	82%	-4.5	(78,016)			179		$0
Oklahoma	$1.6	$881	54%	5.6	38,017	30,414	$204	169	5,139,698	$1,049,766,140
Oregon	$1.6	$929	58%	10.6	62,336	49,869	$239	171	8,530,851	$2,037,849,766
Pennsylvania	$6.2	$4,351	70%	0.1	1,023	818	$271	201	164,145	$44,483,422
Rhode Island	$0.5	$237	44%	-3.3	(4,681)			159		$0
South Carolina	$1.5	$1,428	96%	9.4	69,402	55,522	$192	154	8,536,711	$1,641,296,587
South Dakota	$0.4	$227	55%	7.8	10,129	8,103	$235	191	1,547,926	$364,139,215
Tennessee	$2.3	$1,267	55%	7.9	78,404	62,723	$192	171	10,733,615	$2,063,680,550
Texas	$8.6	$9,988	116%	13.6	688,641	550,913	$204	123	67,715,674	$13,830,700,760
Utah	$1.5	$692	47%	17.3	106,121	84,897	$235	159	13,525,605	$3,181,808,291
Vermont	$0.4	$182	41%	3.6	3,276	2,621	$360	195	512,042	$184,137,173
Virginia[1]	$3.6	$2,430	67%	9.7	122,681	98,145	$271	151	14,854,772	$4,020,097,381
Washington	$3.2	$2,189	69%	15.7	165,206	132,165	$333	129	17,048,748	$5,680,301,891
West Virginia[1]	$0.7	$475	65%	-11.4	(32,344)			149		$0
Wisconsin	$2.5	$1,544	61%	2.3	19,864	15,891	$204	207	3,282,495	$669,432,127
Wyoming	$0.5	$273	56%	4.1	3,767	3,014	$295	259	779,767	$230,031,382
TOTALS	$133	$98,787			3,146,122	2,788,535			393,419,496	$98,358,194,313

1. Where a comparison with data on hard-cost construction-contract starts provided by Dodge Data & Analytics showed the district-reported figures for school-construction capital outlay to have been underreported (see Appendix B), we adjusted those figures.
2. Where additional data from state officials showed the district-reported figures for maintenance and operations expenditures to have been underreported, we adjusted those figures accordingly.

APPENDIX B K-12 Capital Outlay and Construction FY 1995–2011* (2014$)

	State-Reported K-12 Total Capital Outlay (F-15)	District-Reported Total Capital Outlay (F-33)	F-33 Total Cap. Outlay as % of F-15 Total K-12 Cap. Outlay	District-Reported K-12 School Construction Outlay (F-33)	School Construction Outlay (F-33) as % of District-Reported Total Cap. Outlay	Dodge-Reported K-12 Public School Construction Contract Costs	Dodge Reported Construction Contract Costs as % of School Construction Outlay	Adjusted K-12 School Construction Outlay
National Average			**100%**		**74%**		**71%**	
Alabama	$12,970,544,848	$12,268,245,357	95%	$10,131,862,068	83%	$7,480,227,682	74%	
Alaska	$4,867,298,569	$4,695,964,963	96%	$3,648,116,583	78%	$2,876,525,652	79%	
Arizona	$21,528,125,663	$21,446,835,821	100%	$15,637,553,181	73%	$9,778,487,250	63%	
Arkansas[2,3]	$7,202,616,805	$8,647,572,335	120%	$3,038,728,574	35%	$3,732,642,090	123%	$4,479,170,508
California	$149,721,433,097	$148,759,434,000	99%	$118,162,491,453	79%	$57,910,284,392	49%	
Colorado	$18,744,368,557	$18,273,633,415	97%	$13,162,229,537	72%	$8,024,147,643	61%	
Connecticut[1]	$10,182,835,951	$15,076,176,839	148%	$8,000,559,868	53%	$10,342,545,703	129%	$12,411,054,844
Delaware	$3,250,578,798	$3,244,176,002	100%	$2,903,083,571	89%	$2,166,512,386	75%	
Florida	$72,754,670,016	$71,781,768,073	99%	$54,519,475,706	76%	$30,699,647,261	56%	
Georgia	$37,431,596,750	$36,779,861,259	98%	$29,159,879,069	79%	$20,359,080,116	70%	
Hawaii[2,3]	$3,404,961,851	$3,489,973,452	102%	$1,552,482,000	44%	$2,665,559,151	172%	$3,198,670,981
Idaho	$3,606,910,599	$3,573,352,031	99%	$2,878,553,209	81%	$2,132,619,665	74%	
Illinois	$50,768,183,046	$48,674,693,200	96%	$37,414,499,340	77%	$25,571,395,170	68%	
Indiana[2,3]	$20,562,747,494	$26,888,191,312	131%	$10,470,271,172	39%	$15,220,203,070	145%	$18,264,243,684
Iowa	$10,752,502,629	$10,712,987,917	100%	$7,820,100,593	73%	$5,742,796,256	73%	
Kansas[2,3]	$8,677,629,106	$11,494,063,385	132%	$4,300,876,696	37%	$6,361,368,630	148%	$7,633,642,356
Kentucky	$10,967,976,011	$10,584,071,604	96%	$7,390,889,104	70%	$7,018,857,034	95%	
Louisiana	$10,405,508,418	$10,312,360,583	99%	$6,988,055,907	68%	$5,625,619,592	81%	
Maine[2,3]	$2,729,969,228	$3,723,581,912	136%	$1,331,642,418	36%	$1,987,837,513	149%	$2,385,405,016
Maryland	$18,866,386,470	$18,150,589,962	96%	$13,901,497,395	77%	$9,701,460,862	70%	
Massachusetts[2,3]	$15,942,961,253	$18,275,574,362	115%	$9,256,570,389	51%	$17,187,516,440	186%	$20,625,019,728
Michigan	$38,262,466,968	$38,003,887,872	99%	$24,907,519,828	66%	$18,921,837,283	76%	
Minnesota	$22,900,285,168	$22,881,215,071	100%	$17,888,922,186	78%	$9,519,584,419	53%	
Mississippi	$7,917,048,021	$7,681,590,871	97%	$5,320,419,180	69%	$3,961,476,188	74%	
Missouri	$17,578,888,152	$17,043,857,212	97%	$11,501,126,731	67%	$7,993,207,536	69%	
Montana	$1,841,145,771	$1,809,470,544	98%	$1,217,724,370	67%	$789,057,469	65%	
Nebraska[2]	$7,074,416,440	$6,823,162,184	96%	$3,640,547,023	53%	$3,146,382,764	86%	
Nevada	$11,458,259,596	$11,398,410,130	99%	$8,846,248,698	78%	$5,832,526,939	66%	
New Hampshire[1]	$3,533,622,013	$4,018,515,705	114%	$2,317,686,426	58%	$2,448,398,092	106%	$2,938,077,710
New Jersey[1]	$37,824,132,926	$31,518,597,544	83%	$24,622,003,568	78%	$19,365,102,124	79%	
New Mexico	$8,759,252,214	$8,638,839,015	99%	$5,616,981,340	65%	$4,664,805,501	83%	
New York	$88,073,848,986	$86,717,953,647	98%	$75,429,748,122	87%	$46,397,296,110	62%	
North Carolina	$25,500,053,498	$25,175,107,047	99%	$20,180,544,374	80%	$15,913,544,247	79%	
North Dakota[2]	$1,807,013,275	$1,761,778,348	97%	$1,030,108,654	58%	$801,659,662	78%	

*The data set analyzed did not include hard-cost construction contract data for FY 1994 or state-reported total capital outlay data for FY 2012–2013.

	State-Reported K-12 Total Capital Outlay (F-13)	District-Reported Total Capital Outlay (F-33)	F-33 Total Cap. Outlay as % of F-13 Total K-12 Cap. Outlay	District-Reported K-12 School Construction Outlay (F-33)	School Construction Outlay (F-33) as % of District-Reported Total Cap. Outlay	Dodge-Reported K-12 Public School Construction Contract Costs	Dodge Reported Construction Contract Costs as % of School Construction Outlay	Adjusted K-12 School Construction Outlay
Ohio	$41,831,416,336	$40,573,902,929	97%	$30,411,212,874	75%	$23,890,164,384	79%	
Oklahoma	$8,500,710,026	$8,304,397,347	98%	$5,164,146,725	62%	$4,522,465,829	88%	
Oregon	$10,037,646,759	$9,910,516,812	99%	$8,281,327,486	84%	$5,417,391,684	65%	
Pennsylvania	$44,210,005,960	$43,728,205,630	99%	$37,871,484,390	87%	$26,146,648,230	69%	
Rhode Island[1]	$873,567,909	$1,347,145,702	154%	$1,347,145,702	100%	$1,204,338,493	89%	
South Carolina	$19,267,928,237	$18,928,879,958	98%	$13,864,109,815	73%	$10,584,459,432	76%	
South Dakota	$2,675,123,862	$2,638,153,736	99%	$1,859,367,406	70%	$1,216,256,612	65%	
Tennessee	$15,384,028,518	$13,970,218,178	91%	$9,670,963,675	69%	$8,961,234,912	93%	
Texas	$116,776,988,300	$116,393,977,498	100%	$95,825,342,911	82%	$65,347,354,854	68%	
Utah[2]	$10,694,856,128	$10,983,521,924	103%	$5,957,954,140	54%	$5,163,280,365	87%	
Vermont[1]	$1,433,846,001	$1,417,843,732	99%	$934,832,615	66%	$813,613,642	87%	
Virginia[2,3]	$24,703,530,667	$28,521,682,684	115%	$14,156,713,624	50%	$15,315,298,441	108%	$18,378,358,129
Washington	$30,018,147,985	$27,566,330,805	92%	$21,302,451,410	77%	$13,631,982,872	64%	
West Virginia[2,3]	$3,908,373,222	$4,475,652,822	115%	$1,900,148,543	42%	$1,915,672,096	101%	$2,298,806,515
Wisconsin	$16,805,680,750	$16,240,913,224	97%	$11,275,229,183	69%	$7,924,929,373	70%	
Wyoming	$3,305,028,645	$3,261,369,963	99%	$2,257,216,340	69%	$1,505,889,355	67%	

In order to identify potential data-accuracy issues regarding the data reported by states and school districts on the U.S. Census of Governments Fiscal (F-13 and F-33) Surveys, we calculated the annual averages for each state on four key data points for test years FY 1995–2011 and compared them to the national averages or, in the case of total capital outlay, an expected figure of 100%. This process identified the outliers against the national averages and raised the following concerns about the accuracy of the publicly available data sets:

1 In states where district-reported and state-reported figures for total capital outlay differ by more than 10%, district-reported capital construction data may be misreported.

2 In states where school-construction outlay was less than 60% of the district-reported total capital outlay versus the national average of 75%, some districts may have misclassified some school construction outlay and therefore underreported it.

3 In states where hard-cost construction-contract amounts reported by Dodge Data Analytics are more than 85% of the district-reported figures for school-construction outlay (which include hard and soft costs), school-construction outlay figures may be underreported, however, adjustments were only made for states where hard cost school construction contract amounts exceeded 100% of district reported capital construction outlay.

Sources: National Center for Education Statistics, U.S. Census of Governments, Dodge Analytics

APPENDIX C

Adjustments to State Share of Funding for Capital Outlay FY 1994–2013

(Data Field C11 of F-33 Fiscal Survey)

	Data as Reported (C11)		Adjusted	
	Total Capital Outlay ($ billions)	Revenue from the State for Capital Outlay ($ billions)	Adjusted Revenue from the State for Capital Outlay ($ billions)	State Share of Total Capital Outlay
United States	**$1,261**	**$177.26**	**$227.46**	**18%**
Alabama	$14	$3.05	$3.06	22%
Alaska	$5	$1.87	$1.96	37%
Arizona	$24	$4.94	$4.94	21%
Arkansas	$10	$0.52	$1.12	12%
California	$166	$45.07	$46.67	28%
Colorado	$20	$0.69	$0.69	3%
Connecticut	$18	$9.87	$10.13	57%
Delaware	$4	$2.06	$2.11	57%
Florida	$78	$10.61	$11.74	15%
Georgia	$41	$4.51	$4.84	12%
Hawaii	$4	$4.87	$4.99	122%
Idaho	$4	$0.00	$0.00	0%
Illinois	$54	$2.14	$2.14	4%
Indiana	$30	$0.00	$0.00	0%
Iowa	$13	$0.50	$4.48	35%
Kansas	$14	$1.09	$1.10	8%
Kentucky	$12	$4.05	$4.13	33%
Louisiana	$12	$0.00	$0.00	0%
Maine	$4	$1.04	$1.15	28%
Maryland	$21	$5.22	$5.47	26%
Massachusetts	$22	$11.96	$14.79	67%
Michigan	$42	$0.00	$0.02	0%
Minnesota	$26	$5.38	$5.84	22%
Mississippi	$9	$0.18	$0.20	2%
Missouri	$20	$0.00	$0.00	0%
Montana	$2	$0.03	$0.03	1%
Nebraska	$8	$0.00	$0.00	0%
Nevada	$12	$0.00	$0.00	0%
New Hampshire	$4	$0.80	$0.83	19%
New Jersey	$34	$8.41	$10.89	32%
New Mexico	$10	$1.47	$2.02	20%
New York	$98	$0.41	$34.95	36%
North Carolina	$28	$2.07	$2.07	8%
North Dakota	$2	$0.04	$0.04	2%

	DISTRICT-REPORTED (2013)		ADJUSTED	
	Total Capital Outlay ($ billions)	Revenue from the State for Capital Outlay ($ billions)	Adjusted Revenue from the State for Capital Outlay ($ billions)	State Share of Total Capital Outlay
Ohio	$46	$12.75	$12.67	27%
Oklahoma	$10	$0.03	$0.05	0%
Oregon	$11	$0.00	$0.00	0%
Pennsylvania	$49	$6.86	$7.20	15%
Rhode Island	$1	$1.09	$1.12	78%
South Carolina	$21	$1.72	$1.74	8%
South Dakota	$3	$0.00	$0.00	0%
Tennessee	$16	$0.00	$0.00	0%
Texas	$131	$12.21	$12.21	9%
Utah	$13	$0.77	$0.80	6%
Vermont	$2	$0.29	$0.31	19%
Virginia	$33	$1.65	$1.67	5%
Washington	$32	$4.19	$4.50	14%
West Virginia	$5	$0.44	$0.44	9%
Wisconsin	$18	$0.00	$0.00	0%
Wyoming	$4	$2.36	$2.39	63%

District-reported figures in yellow were adjusted with input provided by state officials.

Source: National Center for Education Statistics, F-33 Fiscal Surveys FY 1994–2013.

Endnotes

1. Primary sources:

   (1) The U.S. Census of Governments F-33 Fiscal Surveys as published by the National Center on Education Statistics (NCES). These data include annual revenues and expenditures of local school districts, including those for capital outlay and for maintenance and operations of plant.

   (2) The U.S. Census of Governments F-13 Fiscal Surveys as published by NCES. These data include figures for capital outlays by state and local governments on public elementary and secondary school facilities.

   (3) Proprietary data from Dodge Data & Analytics on the costs at contract start of public school districts' school construction projects by project type and state and year. Dodge Data & Analytics (formerly McGraw-Hill Construction) is a private company that collects information as a service to industry subcontractors and suppliers.

   (4) Inventory data from state-level school facilities offices and agencies that are members of the National Council on School Facilities.

2. U.S. Department of Education, National Center for Education Statistics. Digest of Education Statistics, Tables 216.20 (2015); 213.10 (2014); 216.10 (2014); and 214.30 (2014).

3. Because no national data source for this information exists, the National Council on School Facilities collected school facilities inventory information from state facilities officials and other state organizations. It obtained data for 26 states and 21st Century School Fund estimated the inventories for the remaining states based on the square-footage-per-student figures reported by comparable states.

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20. 21st Century School Fund calculation from U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Tables 95 (1995) and 216.70 (2014).
21. Proprietary data licensed from Dodge Data & Analytics. This figure is consistent with survey data from the National Center for Education Statistics, which found in 2012 that 59 percent of all "main instructional buildings" were less than 15 years old. See U.S. Department of Education, National Center for Education Statistics, Digest of Education Statistics, Table 217.10 (2014).
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We also would like to recognize the millions of parents, volunteers, facilities professionals, teachers, and administrators who support students every day by ensuring healthy, safe, inspiring school environments in their communities. In addition, we acknowledge and thank the brave people who have spoken out about school facilities conditions and called attention to the issue of equity in our education system – sometimes at great expense to their own careers.

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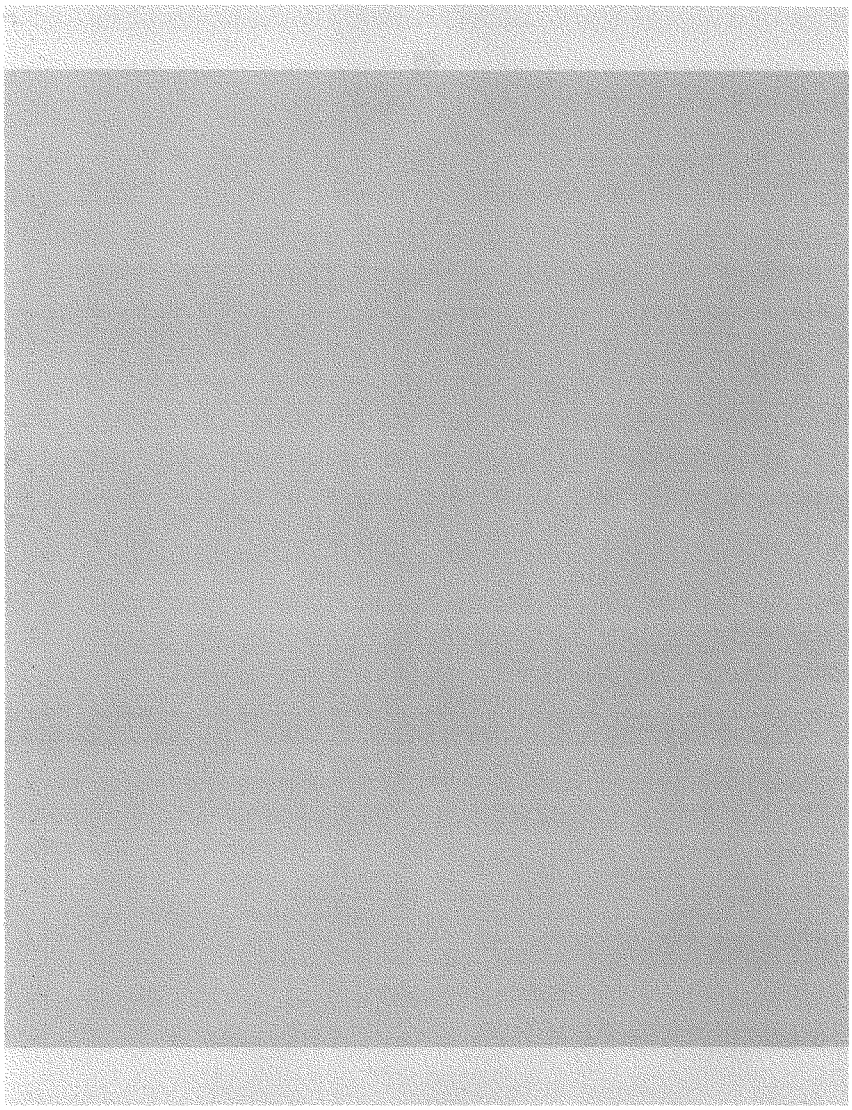

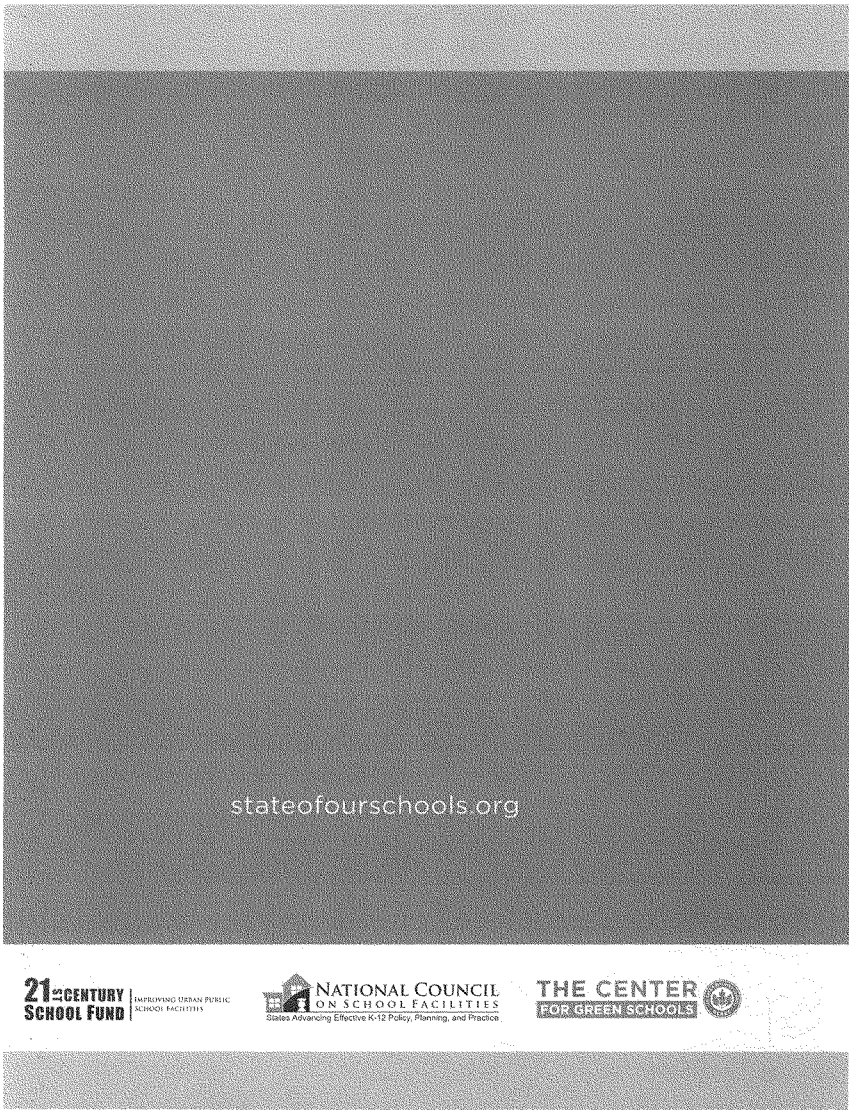
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Fixing Chronic Disinvestment in K-12 Schools

By Lisette Partelow, Sarah Shapiro, Abel McDaniels, and Catherine Brown
September 20, 2018

This year, teacher walkouts and protests in seven states highlighted the chronic disinvestment in U.S. K-12 classrooms. Accompanied by a successful social media campaign, these protests had Americans all over the country asking why public school teachers are not paid enough to support their families, why students are using dilapidated textbooks, and why students are attending crumbling schools.[1]

The answer to these questions is that, on the whole, far too many states have systematically disinvested in K-12 funding in the wake of the 2008 Great Recession. These cuts affect school inputs, from teacher salaries to student resources; they also have significant impacts on critical outcomes such as student achievement. In the decade-long recovery that has followed the recession, only a handful of states have returned to pre-recession levels of spending. The majority continue to spend less on education than they did 10 years ago. Some states have even chosen to cut taxes during the recovery rather than invest in education by raising spending back to 2008 levels.[2]

This issue brief first presents data on the chronic underinvestment in schools since the Great Recession. It then explores research demonstrating that investment in K-12 education benefits students, as well as research on the impact that underinvestment is having on schools' most important resources—teachers and students. Finally, the brief discusses how state and federal policymakers can prioritize this issue.

States have made deep cuts to K-12 education since the recession

As mentioned above, due to dramatic revenue losses, state funding for K-12 education fell sharply after the Great Recession, and despite experiencing one of the longest recoveries on record, most states have funding levels that continue to lag behind. In fact, most states are still spending less per pupil than they were in 2008.[3]

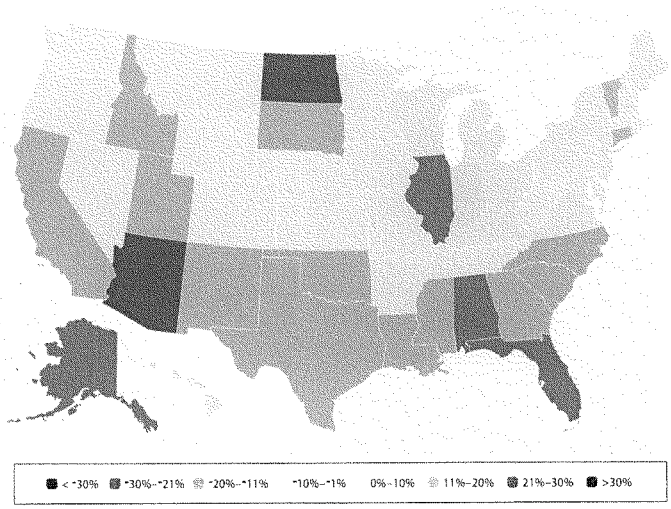
On average, 47 percent of K-12 education funding comes from state revenue, while local government provides 45 percent, and the federal government provides the remaining 8 percent.[4] Because schools depend on state funding for about half of their

revenue, they must drastically cut spending when states provide less—especially when local districts cannot cover the gap. Over the past decade, states with the steepest funding declines have seen one-fifth of state education funding vanish.

FIGURE 1

In many states, education funding has not recovered since the 2008 recession

Percent change in state per-student funding, fiscal years 2008–2015



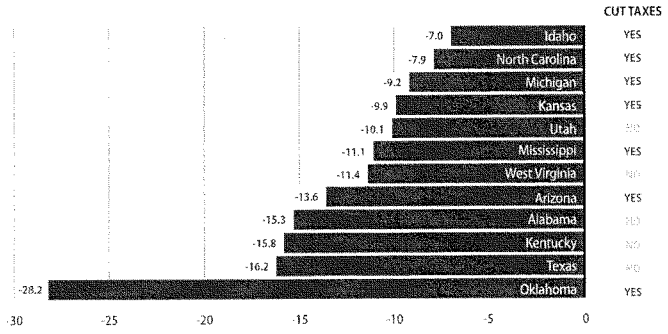
Note: Change in state funding is adjusted for inflation. According to the Center on Budget and Policy Priorities, which conducted the analysis: "Hawaii and Indiana are excluded because the data necessary to make a valid comparison are not available. Iowa and Wisconsin shifted funds from the local to the state level during the 2008-2015 period. We counted these funds as state funds in 2008 for an apples-to-apples comparison across the period."

Source: Center on Budget and Policy Priorities analysis of U.S. Census Bureau's public elementary and secondary education 2015 data as well as National Center for Education Statistics enrollment estimates. See Michael Leachman, Kathleen Masterson, and Eric Figueroa, "A Punishing Decade for School Funding" (Washington: Center on Budget and Policy Priorities, 2017), available at https://www.cbpp.org/research/state-budget-and-tax-/a-punishing-decade-for-school-funding.

FIGURE 2

Several states that made the deepest education cuts also cut taxes

State formula funding cuts for selected states, fiscal years 2008–2018



Source: Michael Leachman, Kathleen Masterson, and Eric Figueroa, "A Punishing Decade for School Funding" (Washington: Center on Budget and Policy Priorities, 2017), available at https://www.cbpp.org/research/state-budget-and-tax/a-punishing-decade-for-school-funding.

Some of these cuts, particularly those made immediately following the recession, were a result of economic forces outside of states' control. Once revenue began to rebound, however, many states enacted massive tax cuts that deprived state governments of revenue needed to increase education spending. In recent years, seven of the 12 states that have made the deepest funding cuts since 2008 chose to cut taxes rather than reinvest in education: Arizona, Idaho, Kansas, Michigan, Mississippi, North Carolina, and Oklahoma.[5] Notably, in spring 2018, three of these seven states—Arizona, Oklahoma, and North Carolina—experienced teacher walkouts in protest of insufficient education funding and low teacher salaries. The first state to have a walkout, West Virginia, had not made tax cuts but still had some of the deepest funding cuts in the nation.

Although the federal investment in education has always provided a small proportion of overall funding compared with state and local investments, the Trump administration has nonetheless sought to disinvest in education. In its budget requests for fiscal years 2018 and 2019, the Trump administration attempted to decrease federal spending for K-12 education.[6] In the FY 2019 budget request—and just after enacting significant tax cuts for the wealthy—the administration suggested slashing funding for teachers and after-school programs, essentially requesting that teachers and students foot the bill for the tax cuts in the form of increased class sizes and canceled extracurricular and enrichment programming.[7]

Money matters in education

For years, some policymakers and conservative education advocates have argued that spending more money on education does not necessarily improve results—and they have used this claim as an excuse to cut funding.[8] Recently, however, more and more

evidence is casting serious doubt on this position. Indeed, money matters a great deal, particularly for students from low-income families.

Historical increases in education spending—especially during the 1990s, when many states changed their school finance formulas—are associated with improved educational outcomes. A study on the effect of court-ordered increases on per-pupil spending, for example, found a positive correlation with student graduation rates.[9] Court-mandated reforms tended to increase spending in higher-poverty districts and allocate more resources to districts based on observable indicators of student need, such as free lunch eligibility and the enrollment of students of color.

Similarly, research indicates that greater state spending on low-income students leads to improvements in student learning in reading and math.[10] One 2018 study connected state funding reforms to National Assessment of Educational Progress (NAEP) data in low-income school districts between 1990 and 2011. It found that the NAEP test score gap decreased in states that passed school finance reforms to make funding more equitable but remained the same in states that did not.

Another 2018 analysis indicates a correlation between cumulative per-pupil spending and NAEP scores.[11] The analysis also found that states with larger recessionary budget cuts experienced a decline in testing and student achievement. A 10 percent school spending cut, for example, reduced NAEP test scores by 7.8 percent of a standard deviation and reduced graduation rates by 2.6 percentage points.[12]

There are large differences among states in educational spending and quality, with the highest-performing states tending to have high spending. The states ranked highest on *Education Week's* 2017 Quality Counts K-12 achievement index have per-pupil spending well above the national average of $11,454. Even when accounting for cost of living, most of these states are still spending far above the national average—with the exception of Maryland, where the high cost of living means that spending is still above, but closer to, the national average.[13] Although high spending does not always translate into high performance or vice versa, spending tends to be much lower among the lowest-performing states on the Quality Counts index.[14]

TABLE 1

States with the highest academic outcomes tend to have above-average spending

Per-pupil spending of states with highest scores on Quality Counts' K-12 achievement index

State	Grade	Per-pupil spending
Massachusetts	85.2	$16,566
New Jersey	81.0	$18,838
New Hampshire	79.4	$14,969
Vermont	78.8	$18,769
Maryland	76.8	$14,431

Sources: Education Week, "Quality Counts 2017: State Report Cards Map," available at https://www.edweek.org/ew/qc/2017/2017-state-education-grades-map.html?intc=EW-QC17-LFTNAV (last accessed August 2018); Stephen Q. Cornman and others, "Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014–15 (Fiscal Year 2015)" (Washington: National Center for Education Statistics, 2018), table 4, available at https://nces.ed.gov/pubs2018/2018301.pdf.

TABLE 2

States with the lowest academic outcomes tend to have below-average spending

Per-pupil spending of states with lowest scores on Quality Counts' K-12 achievement index

State	Grade	Per-pupil spending
South Carolina	64.4	$9,831
West Virginia	62.8	$11,512
Louisiana	62.8	$11,106
New Mexico	61.8	$9,724
Mississippi	60.0	$8,445

Sources: Education Week, "Quality Counts 2017: State Report Cards Map," available at https://www.edweek.org/ew/qc/2017/2017-state-education-grades-map.html?intc=EW-QC17-LFTNAV (last accessed August 2018); Stephen Q. Cornman and others, "Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2014–15 (Fiscal Year 2015)" (Washington: National Center for Education Statistics, 2018), table 4, available at https://nces.ed.gov/pubs2018/2018301.pdf.

Additional research points to the impact of education spending on students' future earnings. Research examining the relationship across districts between per capita income and per-pupil expenditures on students who are now adults and earning income found a correlation between improving school finance equity and the intergenerational income mobility of low-income students.[15] The study also explored how equalizing revenue is associated with reduced disparities across high- and low-income districts, including disparities in teacher-to-student ratios.

A recent study quantified this intergenerational mobility effect, finding that a 10 percent increase in per-student spending was associated with an increase in low-income students' adult wages by about 7 percent, as well as a 3 percent lower poverty rate.[16] Both this and the earlier study found correlations between specific inputs that were made possible through increased funding—such as raising teacher salaries and lengthening the school day—and student achievement.

Lack of funding means low salaries for teachers

Cuts to education spending affect all aspects of students' academic experience, from the condition of the school building to the courses offered and the teachers in the classroom. In fact, teacher salaries and benefits account for the majority of public school spending. As of 2015, salaries and benefits accounted for about 80 percent of per-pupil expenditures—including the salaries and benefits of teachers, administrators, and other staff.[17] It is not surprising, then, that in this decade of brutal cuts to education funding, teachers are feeling the squeeze.

Teacher salaries have been stagnant for the last 20 years. In fact, from 1996 to 2015, the average weekly wages of public sector teachers decreased $30 per week, from $1,122 to $1,092 in 2015 dollars.[18] During this same time period, the weekly wages of all college graduates rose from $1,292 to $1,416. As a result, teachers' weekly earnings are now 23 percent lower than those of other college graduates.

Furthermore, midcareer teachers often struggle to afford a home and pay for basic necessities, especially if they live in high-cost areas. Many take on second jobs to support their families, and those who are breadwinners often qualify for a number of means-tested assistance programs as a result of their low salaries.[19] In a study of 113 large public school districts, researchers found that it can take nearly 25 years, on average, for teachers to earn a yearly salary of $75,000.[20] Because teachers' salaries tend to be higher in states where unions are stronger, the recent ruling in *Janus v. American Federation of State, County, and Municipal Employees (AFSCME)*, which is expected to shrink and weaken unions, could mean teacher pay will lag even further.[21]

Declining salaries and underfunded schools may be one explanation for the precipitous drop in the enrollment numbers of teacher preparation programs since 2008. While the exact cause of the decline is not yet known, enrollment in these programs is down 39 percent since 2008. Over this time period, schools have made not only recession-related funding cuts but also significant layoffs that have disproportionately affected new teachers.[22]

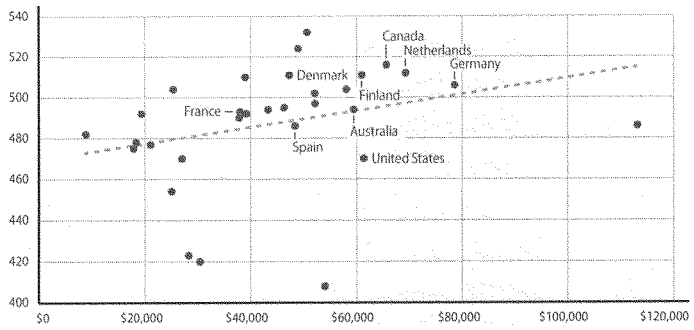
As a result of both state disinvestment and declining interest in the teaching profession, some of the worst-funded states—including Arizona and Oklahoma—are suffering from acute teacher shortages. In many cases, this has led states to revert to substitute and emergency credentials in order to ensure that students have someone—no matter how unqualified—in front of their classrooms.[23]

Studies demonstrate that there is a link between teacher pay and student outcomes. A 2011 study comparing teacher pay and student outcomes theorized that paying teachers a higher wage attracts new teachers, which promotes competition and, in turn, higher-quality applicants.[24] The researchers found a correlation between higher pay and student performance across countries. Figure 3 illustrates a similar correlation.

FIGURE 3

Countries with higher teacher salaries tend to have higher student achievement

Correlation between upper secondary teacher salaries and Programme for International Student Assessment (PISA) 2015 mathematics scores



* All salaries are in 2015 U.S. dollars.

Sources: Organisation for Economic Co-operation and Development, "Teachers' salaries (indicator)," available at https://data.oecd.org/edure-source/teachers-salaries.htm (last accessed August 2018); National Center for Education Statistics, "Average scores of 15-year-old students on the PISA mathematics literacy scale, by education system: 2015," available at https://nces.ed.gov/surveys/pisa/pisa2015/pisa2015highlights_5.asp (last accessed August 2018).

Furthermore, a natural experiment that occurred in England, which isolated the impact of teacher pay, found that student academic performance suffers when teachers are paid below market rates.[25] U.S. research, meanwhile, showed that the inverse is also true. A meta-analysis of studies that isolated the impact of merit-pay programs for teachers found that when teachers were able to earn more based on performance, there was a statistically significant improvement in student achievement.[26] An additional study of Texas teachers found that teacher pay may also increase student achievement because it is correlated with reduced turnover.[27]

Lack of funding means an inability to invest in what matters for students

In addition to providing resources for higher teacher pay, there is a range of ways in which greater spending is likely to positively affect student achievement. Poor school conditions, for instance, can have negative effects on student learning. Research indicates that poor air quality or lighting, uncomfortable temperatures, and excessive noise can all impede student learning.[28] A study of New York City middle schools found that, among other aspects of the physical and social environments, the building condition was a contributing factor to academic performance.[29] Every student should be able to learn in a safe and comfortable environment. But more than half of U.S. public schools are in need of repairs.[30] The U.S. Department of Education estimates that deferred maintenance and repairs alone would cost about $200 billion.[31] Investing in crumbling school buildings and updating facilities would indicate that communities value student learning.

Hiring additional instructional coaches for teachers can also improve student achievement. Research indicates that high-quality coaching programs—especially content-specific programs—can help teachers not only improve students' test scores but also support students' social and emotional development.[32] Effective coaching requires more than a few professional development days or workshops; it must include coaches' observations of teachers, scheduled time for feedback from coaches, and training of master coaches who support and train other coaches—all of which require significant investment. Similarly, providing trained mentors for new teachers may significantly boost student achievement. One 2017 study looked at two school districts where some new teachers received up to 100 hours of training a year and met with mentor teachers once a week. It found that the new teachers who received these supports saw improved student achievement and higher student standardized test scores than the teachers who received more limited support.[33] Another personnel-related intervention is class-size reduction, which, according to some research, is correlated with increased student achievement.[34]

In addition, specialized pupil support services personnel, such as school psychologists and social workers, help to reduce many of the barriers that hinder student success. Mental health and behavioral issues—including delinquency, attention difficulties, and substance abuse—are significantly associated with lower achievement.[35] Research indicates that psychological distress and depression may increase the likelihood of homework trouble, absenteeism, and course failure.[36] Likewise, experiencing trauma such as violence or abuse is associated with lower standardized test scores, not just for the students who experience trauma but also for their classmates.[37] Nevertheless, many students' mental health needs go unmet, as school-based mental health professionals are operating far below recommended ratios.[38] Investing in additional specialized pupil support services personnel can address student needs that interfere with learning.

Investing in content-rich, varied, high-quality curriculum can also lead to significant gains in student achievement. Research shows that instructional materials can have an impact equal to or greater than the impact of teacher quality.[39] While curriculum quality is not solely measured by cost, adopting new curricula requires significant investments in resources and educator training.[40]

Conclusion: Prioritizing investment in education

Since the Great Recession, many states have systematically disinvested in education. This has affected all aspects of school quality, from teachers to school environment to instructional materials used in the classroom. By underfunding schools year after year, too many states are doing a great disservice to their students—and they are potentially harming the nation's long-term economic potential. States should increase funding for K-12 public schools. In addition, the federal government can play a role in investing in teacher pay, first, by rejecting administration efforts to cut funding and, then, by expanding existing funding streams. It can also bring forward any of a number of proposals to improve teacher compensation that have recently been introduced in Congress.[41] If education is truly to be an engine of opportunity and economic mobility, states and the federal government must invest far more in the communities that need resources most.

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Chairman SCOTT. I look forward to discussion.

And now I recognize our distinguished ranking member, Dr. Foxx, for her opening statement.

[The statement of Chairman Scott follows:]

Prepared Statement of Hon. Robert C. "Bobby" Scott, Chairman, Committee on Education and Labor

This hearing is now called to order. This morning, we are here to discuss how chronic underfunding of public education is affecting students, parents, teachers, and communities.

This is a discussion our constituents are eager for us to have, and a challenge the American people are calling on us to solve. In Oklahoma, West Virginia, Virginia, Arizona, Los Angeles, and many cities and states in between, voters are demanding greater support for public education.

In a time of extreme polarization, support for public education is a rare bridge across our political and cultural divisions. In a poll conducted after the 2018 midterm elections, the overwhelming majority of Americans, both Democrats and Republicans, said increasing K–12 funding is an "extremely important priority" for the 116th Congress.

The widespread support for public education makes our longstanding tradition of failing to prioritize public education both confounding and frustrating.

Look no further than Title I of the Elementary and Secondary Education Act the largest grant program in K–12 education. Title I supports public schools with large concentrations and numbers of students living in poverty. In the 2017–2018 school year, Congress gave schools less than a third of the full authorization amount for the basic grant program.

The Individuals with Disabilities Education Act, known as IDEA, is another example. IDEA protects the right of children with disabilities to receive a free, appropriate, public education in the least restrictive environment.

To help achieve this goal, it authorizes grants to offset extra costs associated with supporting students with disabilities. IDEA has not been fully funded at any point in its 44-year history. In fact, funding for IDEA has never reached even half of the authorized levels.

And despite the evidence linking well-resourced facilities, well-supported teachers, and healthy buildings to better academic and life outcomes, the Federal Government dedicates no money to public school infrastructure improvements.

The lack of Federal support has exacerbated the issues caused by a lack of commitment to robust public education funding at the State level.

According to the Center on Budget and Policy Priorities, 29 states spent less per student in 2015 than they had in the 2008 school year, before the Great Recession. In 17 states, funding per student was cut by at least 10 percent.

Today, despite the long and growing list of school building failures that have endangered students and educators, 12 states contribute no money to support school facilities, and 13 states cover between 1 percent and 9 percent of school facility costs.

The combination of chronic Federal and State underfunding in public education has left many schools at a literal breaking point. According to a State of our Schools report published in 2016, public K–12 school facilities are on average underfunded by $46 billion every year compared to building industry and best-practice standards.

In 2014, a Department of Education study estimated that it would cost $197 billion to bring all public schools into good condition.

This problem is not limited to physical infrastructure. As technology becomes increasingly central to providing a quality education, the lack of funding for basic school upgrades has forced schools to put off needed investments in digital infrastructure.

A 2017 "Education Super Highway" report found that more than 19,000 schools serving more than

11.6 million students, nearly a quarter of public school students, "are without the minimum connectivity necessary for digital learning."

In a nation that primarily funds public education using property taxes, the erosion of Federal and State support has had a particularly harmful impact on low income school districts, where schools are chronically underfunded, and the needs are the greatest.

For example, in September 2018, dozens of New Jersey schools closed for weeks because of mold. Baltimore also closed schools the same month during a heatwave

because many schools did not have air conditioning. Notably, only 3 percent of Baltimore schools are less than 35 years old.

Five years after the discovery of lead contamination in the water, schools in Flint, Michigan finally have water filtration systems, but only because of a private donation.

Two weeks ago, I joined Congressman Norcross and Senator Jack Reed, along with 180 Members of Congress, to introduce the Rebuild America's Schools Act.

This bill would create a $70 billion grant program and $30 billion tax credit bond program targeted at improving the physical and digital infrastructure at high-poverty schools.

In doing so, it would also create roughly 1.9 million good-paying jobs. In fact, the Rebuild America's Schools Act would create more jobs than the Republican tax bill, at just 5 percent of the cost.

At the start of his presidency, and again in the State of the Union last week, President Trump called for a massive infrastructure package to rebuild America. School infrastructure must be part of any package we consider.

This should be a bipartisan effort. An overwhelming majority of Americans understand the clear line between the consistent, nationwide failure to support public schools and its role in perpetuating inequality in education. Unfortunately, not everyone has drawn the same conclusion.

Rather than understanding the achievement gap as the inevitable result of structural inequality and chronic underfunding of low-income schools, some attribute the achievement gap to the failure of individual parents, students, and educators.

Rather than seeing the urgent need for a robust public education system, some see an opportunity to cut funding and expand the role of private schools and voucher programs.

Others have also argued that our existing investment has not produced uniformly positive results and, therefore, it is time to divert funding into private options. But those individuals fail to acknowledge the larger community-based issues that contribute to student performance. Students succeed when they are surrounded by strong local economies, thriving businesses, successful human services programs.

They need access to health care, adequate transportation, affordable housing, and nutritious food. As other developed nations have demonstrated, this support system is a critical component for students' success.

Critics of public schools also ignore the chronic underfunding of education to date. Total U.S. spending on education accounts for 2 percent of the Federal budget, which is less than many other developed countries.

And supporters of funding cuts for public schools do not acknowledge the devastating impact that efforts to privatize public education have had on low-income communities.

It will take a long-term commitment to public schools in order to see the consistent results we all expect. And we must be willing to make that commitment.

I want to close by recognizing the burden we continue to place on America's educators. While crumbling school buildings are a visible risk to students, the effect of chronic underfunding on America's teachers is equally, if not more concerning.

Accounting for inflation, teacher pay fell by $30 per week from 1996 to 2015. Public school teachers earn just 77 percent of what other college graduates with similar work experience earn in weekly wages.

Teachers who live at the intersection of declining salaries and under-resourced schools continue to demonstrate their dedication to their students. Teachers spend an average of $485 of their own money every year to buy classroom materials and supplies.

If we cannot attract and keep talented and passionate teachers in the classroom, we will fail to provide students the promise of a quality education. That is simply not an option.

I look forward to this discussion and I now recognize the Ranking Member, Dr. Foxx.

Ms. FOXX. Thank you, Mr. Chairman.

Teachers work hard on behalf of American students and families, and they deserve paychecks that reflect their tireless efforts. And all students deserve access to safe, clean, and healthy school facilities regardless of zip code. To dispute these two facts would make anyone out of touch with reality.

Over the past year, there has been a steady stream of well-publicized strikes across the country. Teachers' unions in West Virginia, Oklahoma, Colorado, Arizona, Los Angeles, and most recently Denver, all called attention to these matters. So given the recent uptick in teachers union strikes, a reasonable person would assume that State and local governments are cutting budgets and disinvesting in public schools. Quite the contrary.

In fact, most states have actually increased public school spending, but instead of increasing salaries, improving structures, and investing in classroom equipment, many school districts have ended up pouring taxpayer funds into administrative bloat that leaves students and teachers high and dry.

It has been said that the definition of insanity is doing the same thing over and over again and expecting different results. When it comes to these two issues, teacher pay and school construction, Democrats have not had a new idea in decades.

Any time a challenge arises, Democrats look to refill the same prescription of more money, more bureaucracy, and more power punted to distant figures in Washington. Is the answer more control from Washington? Well, having just emerged from a government shutdown, I think most Americans would agree that the less politicians can control and leverage, the better.

Teachers and students deserve more than the same tired fights over money. We need to find new and innovative approaches to public school success. Republicans still and will always believe that the best solutions for serving children emerge from the communities in which they live and grow.

I have been fortunate to have had the opportunity to serve my community as a member of the local school board, so I know firsthand how complicated it can be trying to make resources, regardless of whether they are local or Federal resources coming from taxpayers, actually serves students in a way they can recognize. That is why we need to engage thoughtfully and hopefully in new initiatives to make education a central focus in community development.

Community development can come in all shapes and sizes, and one of the most interesting new concepts to emerge has been opportunity zones. Opportunity zones are areas of the country that look very much like the community in which I was raised and which I proudly represent today. These are communities where the poverty rate exceeds 30 percent and local industry has struggled to rebound from the 2008 recession. Opportunity zones, which are home to over 50 million Americans, will spur private industry and make long-term investments in these communities.

This bipartisan community development initiative was initially championed by Senators Tim Scott and Cory Booker, and in 2017, was signed into law by President Trump as a provision of the Republican Tax Cuts & Jobs Act.

The provisions in this law have the potential to unleash trillions of dollars in private capital for long-term investment in impoverished parts of the country. Time will tell if opportunity zones and other new initiatives will finally help us solve the problems of low teacher pay and poor school facilities, but time has already told us

that higher price tags and more bureaucracy in Washington don't deliver higher results.

Today we are going to be listening for fresh ideas and signs of innovation as we pursue our shared goals of better environments for students and teachers.

Thank you, Mr. Chairman. I yield back.

[The statement of Mrs. Foxx follows:]

Prepared Statement of Hon. Virginia Foxx, Ranking Member, Committee on Education and Labor

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It's been said that the definition of insanity is doing the same thing over and over again and expecting different results. When it comes to these two issues—teacher pay and school construction—Democrats have not had a new idea in decades. Any time a challenge arises, Democrats look to refill the same prescription of more money, more bureaucracy, and more power punted to distant figures in Washington.

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Chairman SCOTT. Thank you, Dr. Foxx, and I wanted to thank you for your comments. I was especially delighted to hear your

compliment that we have been consistent in our refrain that we need more Federal funding for education, and we haven't backed off on that. And I want to thank you for that compliment.

Without objection, all other members who wish to insert written Statements can do so by notifying the committee clerk within 7 days.

In introducing the witnesses, I note that the first witness is from North Carolina, and two members have insisted on the privilege of introducing her. So I will first yield to the gentleman from North Carolina, Mr. Walker.

Mr. WALKER. Thank you, Mr. Chairman.

I am pleased to introduce Dr. Sharon Contreras to our committee today. Dr. Contreras is the Superintendent for the Guilford County Schools in my district in North Carolina. We have enjoyed working together on several occasions since she first joined the Guilford County School District in 2016. She has an extensive career in education, since she first began her career as a high school English teacher in Rockford, Illinois. Dr. Contreras has a real heart to serve the students of Guilford County. She is a woman of faith, if I might add. We don't always agree with exact approach, but most importantly, she is my friend.

Dr. Contreras has accomplished all of this while being hearing impaired. So as we talk to her today or ask questions, just make sure that she has eye contact and she will deliver in a very accomplished manner today.

I would now like to yield to the gentlewoman from North Carolina, Ms. Adams, to say a few words about Dr. Contreras.

Ms. ADAMS. Thank you. I thank my friend for yielding.

As some of you may know, before a change in the district lines in our State, for 31 years, I represented parts of Guilford County and Greensboro, and began my service in public office as the first African American woman elected to the school board, so I do have some sense of the Guilford County schools.

Dr. Contreras is the first woman and the first Latina superintendent of Guilford County schools. Guilford County has 126 schools and serves more than 71,000 students, 40 percent Black, 30 percent White, 16 percent Latino, 6 percent Asian. Seven percent of Guilford County school students have disabilities, and 64 percent of its students are low income. And under Dr. Contreras' leadership, the high school graduation rate has reached 89.8 percent, the highest in Guilford County history.

I just want to mention as a personal note that Dr. Contreras is a woman of vision. She spearheaded the first assistant principal's leadership academy through the new leaders program, and my daughter is a member of that academy, and I want to thank her for not only her leadership.

Dr. Contreras, welcome to the committee. And I thank the gentleman from North Carolina for allowing me a brief comment in this introduction, and I yield back to him.

Mr. WALKER. I thank the gentlelady for yielding and refraining from too much shade. And with that, I yield back to the chairman.

Chairman SCOTT. Thank you.

Our next witness is also represented by a person with us today. I would like to yield to the gentlelady from Oklahoma, who is not

a member of the committee, but without objection, will be recognized for purposes of an introduction.

Ms. HORN. Thank you so much, Chairman Scott, for the opportunity to address the committee and the privilege of introducing Anna King.

I am honored to introduce a proud Oklahoman with a strong history of advocating for public education. Anna has dedicated over 20 years of her life to not only improving educational quality for her children and grandchildren through local PTAs, but also to advocating for every single child across the country through her current role as the Vice-President of Membership of the National Parent Teacher Association, which has over 3.5 million members nationwide.

I have had the privilege, as she resides in my district, of watching and working with Anna and seeing her passionate support for public schools and students. Anna firmly believes that education is the cornerstone of opportunity in this country. The best investment that we can make in America's future is an investment in the minds of our youth. And as our nation grows and diversifies, our schools must have the tools and resources to keep pace, something which I know Ms. King will speak about.

Across this country, including my home state, teachers are far too often forced to work second and multiple jobs because their salary simply isn't enough to pay the bills, and parents and advocates like Anna are speaking up because their kids deserve better.

In 2018, we have some experience with this, as you mentioned, Chairman Scott, Oklahoma saw more than 50,000 individuals, educators, parents, and community members walk out in support of our public schoolteachers, our students, and our communities. Simply put, quality public education is a cornerstone of our communities and a strong economy, and if we want communities to thrive, we can no longer ignore the challenges our schools face.

So thank you, Anna, for your passion, your advocacy, and for wanting the best for all kids regardless of their zip code. The thousands of future leaders in Oklahoma's 5th Congressional District and children across the nation will benefit from your advocacy.

Thank you again, Chairman, for allowing me to speak, and thank you to the members of the committee, and I look forward to your testimony.

Chairman SCOTT. Thank you very much.

Next witness is Dr. Benjamin Scafidi, who is a Professor of Economics and Director of Educational Economics—the Director of the Education Economic Center at Kennesaw State University in Georgia. He has a Ph.D. in Economics from the University of Virginia and his B.A. from Notre Dame. His research is focused on urban policy and education, and he was previously an Education Policy Advisor to Governor Sonny Perdue of Georgia.

Randi Weingarten is president of the 1.7-million member American Federation of Teachers, AFL–CIO. As president, she has overseen the development of AFT's quality education agenda, which advocates for reforms grounded in evidence, equities, scalability, and sustainability. She has used her platform to advocate for more State and Federal investment in public education, as noted by AFT's recent report, A Decade of Neglect: Public Education Fund-

ing in the Aftermath of the Great Recession. She holds degrees from Cornell University's School of Industrial and Labor Relations and the Cardozo School of Law.

We appreciate all the witnesses for being with us today and look forward to your testimony, and remind you that we have—your full statements are available and will appear in full in the record pursuant to committee rule 7(d) and committee practice. Each of you is asked to limit your presentation to a 5-minute summary of your written statement. We remind the witnesses that pursuant to Title 18 U.S. Code, Section 101, it is illegal to knowingly and willfully falsify any statement, representation, writing, document, or material fact to Congress or otherwise conceal or cover up a material fact.

Before you begin your testimony, please remember to press the button on the microphone in front of you so that it will turn on and members can hear you. As you speak, the light in front of you will turn green. After 4 minutes, it will turn to yellow, indicating 1 minute remaining, and when the light turns red, your 5 minutes have expired, and we would ask you to please wrap up your testimony.

We will let the entire panel make presentations before we move to member questions. When answering a question, please remember, again, to turn your microphone on.

We will first recognize Dr. Contreras.

STATEMENT OF SHARON L. CONTRERAS, SUPERINTENDENT, GUILFORD COUNTY SCHOOLS

Ms. CONTRERAS. Good morning, Mr. Chairman, Ranking Member Foxx, Congressman Walker, Congresswoman Adams, and members of the committee. I am Sharon Contreras, Superintendent of Guilford County schools in Greensboro, North Carolina. With me today are my colleagues, Angie Henry, the chief financial officer; and Julius Monk, the executive director of facilities. Thank you for inviting me to speak today.

As an educator and administrator of nearly 30 years who has worked in public schools in several states, I have seen firsthand how good facilities can create healthy, safe, and innovative spaces that truly support 21st century learning. I have also seen firsthand how inadequate facilities, broken HVAC systems, and dilapidated buildings negatively affect learning. The substantial obstacles we face in bringing America's schools up to par date back generations and are found in every state, particularly in our urban and rural areas, which serve the highest concentrations of children and adults living in poverty.

Guilford County schools serves more than 73,000 PreK–12 students in 126 schools in a countywide district that spans about 650 square miles and encompasses urban, suburban, and rural areas. Our students come to our doorsteps eager to learn. Unfortunately, our doors don't always open to facilities designed to meet the needs of students in the postindustrial era.

Our average school building is about 50 years old and was designed for an industrial era that no longer exists. We have 469 mobile classrooms, 58 percent of which are more than 20 years old. We have five mobile units that date to 1972. We had to move one

last year. It was so old it broke apart while we were transporting it, blocking traffic for hours. Our maintenance staff responds to more than 30,000 work orders annually for failing HVAC units, plumbing systems, leaky roofs, and other basic building needs. Schools routinely use buckets and trash cans to catch the water during heavy rains. Water seepage and flooding is also common, especially since our county has, during just the past year, experienced a devastating tornado, two hurricanes, an unusual 12-inch snowfall, and a record 64 inches of rain.

A recent comprehensive facility study indicated we need more than $1.5 billion in capital investment to renovate and upgrade current facilities and build new schools. According to the study, more than 45 percent of our schools were rated as unsatisfactory or in poor condition. Many of the schools rated as unsatisfactory or poor are also Title I schools educating the poorest and most vulnerable students. Ten schools were in such bad shape that they were recommended for possible closure.

The deferred maintenance backlog in our district was pegged at $800 million, while renewal funding for preventative maintenance and reasonable replacement cycles was estimated at $6.9 billion over a 30-year period. Our current maintenance budget, however, is only around $6 million a year.

While the physical condition of our buildings is troubling, our greatest concern is that most of our schools do not meet the baseline standards required to adequately support 21st century learning, with the average school rated as poor in terms of educational suitability on the same recent facility study. I could give many more examples from school districts in North Carolina and some are outlined in my written testimony.

Our crumbling school infrastructure requires national leadership and Federal funding to assist state and local efforts to upgrade our schools for our students. I support Chairman Scott's introduction of the Rebuild America's Schools Act of 2019, and encourage this committee and Congress to come together and prioritize investments in our school buildings and our students. Transforming learning and life outcomes for children and young people is not a partisan issue. It is the issue our nation must address if we want future generations to prosper, if we want our children and grandchildren to live fulfilling lives, and if we intend to preserve our great democracy.

Again, thank you for the opportunity to speak to you today about the infrastructure needs of our nation's public schools. I look forward to any questions you may have.

[The statement of Ms. Contreras follows:]

Testimony on

**"Underpaid Teachers and Crumbling Schools:
How Underfunding Public Education Shortchanges America's Students"**

**Committee on Education and Labor
U.S. House of Representatives**

**Sharon L. Contreras, Ph.D., Superintendent
Guilford County Schools
Greensboro, North Carolina**

February 12, 2019

Good morning, Mr. Chairman, Ranking Member Foxx, Congressman Walker, Congresswoman Adams and members of the Committee. I am Sharon Contreras, superintendent of Guilford County Schools in Greensboro, North Carolina. With me today are my colleagues, Angie Henry, chief financial officer, and Julius Monk, executive director of facilities. Thank you for inviting me to speak today, and thank you for your leadership and service. I deeply appreciate the invitation to testify about the condition of our facilities and how critical school infrastructure needs impact our students and their teachers.

OVERVIEW

As an educator and administrator who has worked in public schools in several states, I have seen firsthand how school design, construction, renovation, timely repair and maintenance can create healthy, safe and innovative spaces that truly support 21st century learning. I have also seen firsthand how inadequate facilities, broken HVAC systems and dilapidated buildings negatively affect learning and put our students at a competitive disadvantage in terms of career and college readiness.

The substantial obstacles we face in bringing America's schools up-to-par from a facilities standpoint date back generations, and are found in every state, particularly in our urban and rural areas, which serve the highest concentrations of children and adults living in poverty. A 2011 Council of Great City Schools survey of 50 urban school districts found that these systems alone needed approximately $20.1 billion in new construction, $61.4 billion in repair, renovation and modernization, and $19 billion in deferred maintenance costs, or some $100.5 billion in total facility needs.

More recently, the joint publication of the 21st Century School Fund, Inc., U.S. Green Building Council, Inc., and the National Council on School Facilities, "2016 State of Our Schools", estimated that $145 billion should be spent nationwide each year to provide 21st century facilities for all children. In 2017, the American Society of Civil Engineers gave a grade of D+ for America's school infrastructure and reported an annual underinvestment in school facilities of $38 billion, which only serves to compound the deterioration of the nation's schools ever year.

LOCAL CONTEXT

We see this in my school district as well. Guilford County Schools (GCS) serves more than 73,000 PreK-12 students in 126 schools in a county-wide district that spans about 650 square miles and encompasses urban, suburban and rural areas. Students of color represent the majority at 68 percent. About 65

percent of our students are considered economically disadvantaged, while 13.3 percent of our students qualify for special education services, and 10 percent are considered English language learners. Our students come to our doorsteps eager to learn; unfortunately, our doors don't always open to facilities designed to meet the needs of students in the post-industrial era.

INFRASTRUCTURE CHALLENGES

Our facilities team manages 126 schools, 300 buildings, nearly 3,000 acres of land and 12.5 million square feet of facilities as well as sidewalks, driveways, curbs, fencing, security systems, athletic facilities, and other components. Our average school building is about 50 years old and was designed for an industrial era that no longer exists. We have 469 mobile classrooms, 58 percent of which are more than 20 years old. We have five mobile units that date to 1972.

Our maintenance staff responds to more than 30,000 work orders annually, many for failing HVAC units, plumbing systems, leaky roofs and other basic building needs. Schools routinely use buckets and trashcans to catch the water during heavy rains. Water seepage and flooding is also common, especially since our county has – during just the past year – experienced a devastating tornado, two hurricanes, an unusual 12-inch snowfall and a record 64 inches of rain.

We do have some new and partially renovated schools thanks to a $457 million bond approved by voters in 2008 and $34 million in Qualified School Construction Bonds (QSCB) provided in 2009 and 2010 via federal stimulus funds, which helped us upgrade three schools as well as replace HVAC systems, windows/doors and roofs in 24 schools. An additional $10 million in stimulus funds also were used to upgrade our technology infrastructure to better support wireless connectivity – an advantage that many school systems in North Carolina and nationally have not had.

Despite these investments, a recent, comprehensive facility study funded jointly with bipartisan support by our school board and county commissioners, indicated we need more than $1.5 billion in capital investment to renovate and upgrade current facilities and build new schools. According to the study, 45 percent of our schools were rated as unsatisfactory or in poor condition. Many of the schools rated as unsatisfactory or poor are also Title I schools, educating the poorest and most vulnerable students in Guilford County. Ten schools were recommended for possible closure while one new school and 27 replacement schools were proposed to improve conditions and alleviate overcrowding.

The deferred maintenance backlog in our district was pegged at $800 million, while renewal funding for preventative maintenance and reasonable replacement cycles for furniture, fixtures, equipment and technology was estimated at $6.9 billion over a 30-year period. Modern standards do exist for maintaining and upgrading current K-12 public school facilities. A general industry standard for facility maintenance and operations, including utility and security costs, indicates that a minimum of 3% of the current replacement value (CRV) should be budgeted annually. An additional 1% of the current replacement value should be budgeted annually to systematically reduce the accumulation of deferred maintenance over the next ten years (ASBJ, June 2018). Our current maintenance budget, however, is only around $6 million, which equates to just 50-cents per square foot.

Because our maintenance budget is so severely underfunded, when a HVAC system failed at one of our middle schools several years ago, we were forced to replace it in phases over a three-year period at the cost of approximately $5 million. Had we replaced the HVAC system in one year, that upgrade for a single school would have nearly depleted our entire annual maintenance budget.

Considering the limits of our capital funding and the age of our buildings, roofs, walls, plumbing, HVAC systems, doors and windows, all of which affect structural integrity and indoor air quality, it is not surprising that we spend operating dollars every year addressing remediation and intervention as opposed to more proactive measures. Essentially, we must take money from our operational budget that should be used to improve teaching and learning because we do not have enough capital money to maintain and update our facilities. We do not have enough funds to meet our telecommunication needs, and our technology replacement cycle for classroom devices is nine years, well past the useful shelf-life in many cases. Most of our schools do not have career and technical education (CTE) spaces, maker spaces, modern science labs, current technology, flexible student and teacher work spaces, adequate electrical infrastructure or modern safety measures and design. Accessibility for students with disabilities is inadequate. Our schools and campuses by and large were designed in an era when classrooms opened directly to the outside, with multiple buildings on open campuses that are more challenging to monitor and secure.

And, while it's easy to dismiss administrative facility needs as unimportant or unnecessary, we struggle to maintain our fleet of more than 1,000 school buses in an outdated maintenance shed with limited repair bays, lifts, storage and an antiquated online inventory system. Our financial accounting system is more than 30 years old, and is incompatible with our equally outdated personnel software, making position control difficult and requiring additional staff to manage transactions. These and other behind-the-scenes support structures designed to facilitate teaching and learning fall woefully behind those of business and industry, and wealthier school systems. I am proud that a robust study of our finances and expenditures found that 96 percent of our expenditures directly support the educational program in our district (Schoolhouse Partners, 2015). However, I also know that we could drive more innovation and student success with more current and efficient systems.

While the physical condition of our buildings is troubling, our greatest concern and frustration is that most of our schools do not meet the baseline standards required to adequately support 21st century learning, with the average school rated as "poor" in terms of educational suitability on the recent facility study. We cannot adequately prepare students for the careers of tomorrow in the fastest growing STEM industries, advanced manufacturing, and other high-skill, high-wage professions using outdated instructional materials and technologies in cramped, poorly lit and poorly ventilated spaces. Similar conditions are found not only across North Carolina, but throughout the United States, particularly in regions like ours that are characterized by fewer (or exiting) major employers, slower economic growth and higher rates of poverty.

CHRONIC UNDER-INVESTMENT

In our district, and nationally, the deteriorating condition of our aging facilities requires us to address potential health and safety issues piecemeal and with stopgap measures. For example, we patch leaky roofs and repair outdated HVAC systems innumerable times, but do not have adequate funds for roof replacement or new HVAC systems, which would address the root causes of water intrusion and humidity that cause indoor air quality concerns. In short, we make every effort to protect teacher and student health from harm that may otherwise be caused by inadequate, or undermaintained facilities, but we do so on a shoestring budget that often does not allow us to provide a truly optimal, healthful learning environment.

Our business and industry partners tell us repeatedly that our students must use current technologies, systems and equipment, work in a team environment, and know how to interact appropriately and communicate effectively. How can our educators manage all of this effectively if their students are

sitting on register covers in over-crowded classrooms, their computers are outdated, and they're using tattered textbooks that still highlight George W. Bush as the current President of the United States?

GCS is not unique in terms of its facility needs. Gaston County Schools in North Carolina has identified school repair, renovation and replacement projects that would cost more than $650 million. In May 2018, voters approved a $250 million school bond referendum, the largest in the county's history, but it will only address one-third of Gaston's critical school facility needs. The New Hanover County Schools estimate its unmet capital needs at $500 million due to growth in student enrollment, safety and security, and deferred maintenance. Flexible learning spaces require new technology and innovative furniture. Per New Hanover's superintendent, funding is essential to provide safe, healthy. and orderly school environments supportive of academic success and to improve the operating efficiency of their facilities. Burke County Public Schools in the Western part of our state has identified nearly $78 million short-term and $16 million long-term facility needs, while Rowan-Salisbury Schools estimates that its current capital needs exceed $208.5 million due to deferred maintenance and aging facilities, 60 percent of which are over 50 years old. The district faces an annual capital funding deficit of nearly $3 million funding deficit each year. I could give many more examples from North Carolina, alone.

I am grateful that the North Carolina state legislature has increased public education funding since 2011; however, as of 2017, North Carolina still ranks 37th nationally in per pupil funding. If Guilford County Schools were funded at the national average per pupil spending, we would receive at least an additional $150 million per year, some of which would be used for facilities' maintenance.

Public schools help children and young people see what is possible. What vision are we providing our students if the walls in their classrooms drip with humidity, the circuits blow when the teacher plugs in a computer or space heater, there aren't enough laptops or devices to go around, the security cameras don't work and are so old the manufacturer doesn't make parts for them anymore, their sidewalks and parking lots are turning into gravel and their playgrounds have the same equipment their parents and grandparents used when they attended school there? This is the daily reality of far too many students today, even though the potential economic return on investment in public education is powerful and well-documented.

ECONOMIC IMPACT

Greater investments and efficiencies in K-12 education pay for themselves via increases in economic productivity. A National Bureau of Economic Research study regarding the financial return of states' investment in improving K-12 education indicated that if all students in the U.S. could achieve basic mastery as measured by the National Assessment of Educational Progress or NAEP, the U.S. GDP would increase by $32 trillion, or 14.6 percent. Yet, spending on K-12 education by states and localities amounted to just 4 percent of the total GDP of $18.57 trillion in 2016.

Good schools, are in fact, good for the economy, with even modest improvement in student achievement generating gains in productivity that outweigh investment costs (Hanushek, Ruhose and Woessmann, 2015). Communities associated with higher levels of learning tend to have more robust economies, better health outcomes and higher quality of life indicators. Greenville, South Carolina, for example, is booming in part because it has opened 82 new or renovated schools since 2003.

In North Carolina, a 2015 study showed that each graduating class of the Wake County Public School System generates between $1.4 billion and $1.6 billion in additional lifetime income and saves taxpayers about $639 million in welfare, crime and health costs. In addition, the study found that every $1 million

spent on school construction projects creates about 10 local jobs. Given that the average elementary school typically costs between $15 million to $20 million to build, the economic impact of building new schools and keeping current schools in good repair is significant (Walden, 2015).

Economic growth and housing values are largely shaped by the quality of schools available in each neighborhood and community—ask any realtor. The chronic underinvestment in public school infrastructure, educational programming and teacher compensation constrains teaching and learning, harms students and families, and hampers economic growth and development.

CONCLUSION

Our crumbling school infrastructure requires national leadership and federal funding to assist state and local efforts to upgrade our schools for our students while also sparking greater investment in the urban and rural areas that are hit hardest by rising rates of poverty, dwindling tax bases and chronic funding shortfalls. Bridging the current gap in funding in our district and in school systems across the United States also will require new designs for learning and more ingenuity at the local and state level. I support Chairman Scott's introduction of the "Rebuild America's Schools Act of 2019," and encourage this Committee and Congress to come together and prioritize investments in our school buildings and our students. Transforming learning and life outcomes for children and young people is not a partisan issue, it is the issue our nation must address if we want future generations to prosper, if we want our children and grandchildren to live fulfilling lives, and if we intend to preserve our great democracy.

Again, thank you for the opportunity to speak to you today about the infrastructure needs of our nation's public schools. I look forward to any questions you may have.

Chairman SCOTT. Thank you very much.
Ms. KING.

STATEMENT OF ANNA KING, BOARD MEMBER, NATIONAL PTA, PAST PRESIDENT, OKLAHOMA PTA

Ms. KING. Chairman Scott, Ranking Member Foxx, and members of the committee, thank you for inviting me to testify today on this panel to share the perspectives of parents and families on a lack of investments and resources for our nation's students, teachers, and schools. I am speaking on behalf of the National PTA, the Nation's oldest and largest child advocacy association with members in all 50 states, D.C., Virgin Islands, Puerto Rico, and Europe.

Since 1897, National PTA has been a strong advocate for all families to effectively change their child's education. Long-term success of our nation depends on robust and equitable public investments in our education system. Public education is a major vehicle for preserving the basic values of a democratic system of government. It must be strengthened and continue to be governed by public officials accountable to the public and funded fairly.

National PTA has long advocated to ensure all children have access to equitably funded public schools that improve overall well-being and help them achieve their academic success.

While I come to you today as the vice-president of membership of the National PTA, the most important role I have is a mother and a nana. I am a proud mother of three and a grandmother of nine. Like me, every parent wants to be successful, and as an association, we want all kids to be successful, not just one school or one group of kids. I am here today to speak for every child with one voice on the need to adequately fund our nation's public schools.

In 2002, my daughter Annalishia was a freshman at Frederick A. Douglass High School in Oklahoma City. She could not complete her homework because her and all her ninth grade classmates did not have regular access to textbooks for her English class. There were some old books available, but they were old, pages were missing, and students had to share them during class. No one could take them home to do homework. I had to speak up not only for Annalishia but for every child in my daughter's class.

We were told that the district, the school district didn't have the money for additional textbooks, so we as parents testified at the next school board meeting and showed up at every one to push until we got the funding. Finally, the school district provided funding to purchase textbooks and put parents on decisionmaking committees. However, 17 years later, the same equity challenges remain.

Our teachers in Oklahoma walked out of their classrooms in 2018 for the same reasons I started advocating in 2002: underfunding and a lack of resources. We can't continue to repeat this vicious cycle.

Bottom line, Oklahoma does not invest enough in our schools. My state ranks 47th per pupil spending. Funding has been steadily cut, and teachers are underpaid. Also, Oklahoma is one of the 12 states, 12, that does not provide any funding to school districts to build, improve, or renovate schools.

As a grandparent now, I see my children are fighting the same fight and facing the same challenges in education that I went through years ago. PTA appreciates Congress' recent investments in increasing funding; however, student and educator needs still are not met.

Congress must raise discretionary spending caps. Without an increase in these caps, education, health, and work force funding will face close to $20 billion cuts. This means 10 percent less funding for students with disabilities, 10 percent less spent on low-income students, and less spending to support teacher professional development.

Congress needs to better fund critical programs in the Every Student Succeeds Act and the Individuals with Disabilities Education Act. In particular, Congress must ensure Title I and the State grants for special education services are fully funded.

Additionally, more resources need to be provided for educator professional development, English learners, safe and supportive schools, technology and access to the well-rounded education with robust student support services.

Congress should also increase its investments in family engagement through the statewide engagement family centers. This initiative is assisting parent centers in 13 states around the country to ensure families can engage in their child's school to support their education. We urge Congress to increase funding to at least $15 million in the Fiscal Year 2020 and put this program on a funding path to ensure all states can benefit in the coming years.

Budgeting is a reflection of priorities. In Oklahoma and across the nation, our priorities should be investment in all children. All schools should be equally resourced, and Congress must do its part to make sure that every child's potential becomes a reality. If you are not already a member of PTA, I welcome all of you here today to become members of the Nation's oldest and the largest child advocacy association, PTA.

Thank you for the opportunity to be here to testify on behalf of our nation's children and families for increased investments in public education, and I am happy to answer any of your questions.

[The statement of Ms. King follows:]

Written Testimony
Anna King
Mother, Grandmother, Public Education Advocate, and Vice President of Membership of National PTA

Before the House Committee on Education and Labor Hearing on Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students

February 12, 2019

Chairman Scott, Ranking Member Foxx, and members of the Committee:

Thank you for inviting me to testify today on this panel to share the perspective of parents and families on the lack of investments and resources for our nation's students, teachers and schools. I am speaking on behalf of National PTA, the nation's oldest and largest child advocacy association with congresses in all 50 states, DC, Virgin Islands, Puerto Rico and Europe. Since 1897, National PTA has been a strong advocate, a reputable resource for empowering all families to effectively engage in their child's education and works to ensure every child has the resources and supports to reach their fullest potential.

The long-term success of our nation depends on robust and equitable public investments in our education system. Our system of public education is the major vehicle for perpetuating the basic values of a democratic system of government. Public education must be strengthened, continue to be governed by public officials who are accountable to the public and funded fairly. National PTA has long-advocated to ensure all children have access to equitably funded public schools that improve their overall well-being and help them achieve academic success. From a lack of textbooks and lab equipment and crumbling infrastructure to not enough school counselors to support students and provide mental health services, there have been far too many children left with insufficient resources. This is why National PTA and its 3.5 million members across the country advocate to ensure schools have the proper resources needed to help every child learn, grow and succeed.

While I come to you today as the Vice President of Membership of National PTA, the most important role I have is mom and grandmother. I am the proud mother of Annalishia, Anthony, and Glenn II and grandmother to A'Mari, D'Mario, Lykel, Alani, Alina, A'Nyla, Avianace, Aniyah, Amiyah. Like me, every parent wants their child to be successful. As an association, we want all kids to be successful, not just one school or one group of kids. State and federal policymakers must support and enact policies that enable the success of all children. That's why I am here today to speak for every child with one voice on the need to adequately fund our nation's public schools.

In 2002, my daughter Annalishia was a freshman at Frederick A. Douglass High School in Oklahoma City. One day Annalishia came home and told me she didn't have homework. I came to learn that it wasn't that Annalishia didn't have homework, it was because she could not do

her homework. Annalishia and all her 9th grade classmates did not have regular access to textbooks for their English class. There were some books available for the students to use in class, but they were old, pages were missing, students had to share them during class and no one could take them home to do their homework.

As a mom, I couldn't believe what I was hearing. I had to speak up for not only Annalishia, but all the kid's in my daughter's class. I wasn't sure where to start, so I talked to three moms whose kids ran track with Annalishia. We decided to first meet with the teacher who told us what she had for textbooks. She then directed us to speak with someone at the school district who oversaw textbooks. I was thinking to myself, is there a textbook man or woman? We went to the school district and they told us they didn't have the money for additional textbooks and that we needed to go to the school board. So, off us four moms went to a school board meeting. At the first meeting we attended they told us we could only have three total minutes between the four of us. We gave our collective three minutes of testimony that day and then showed up at every subsequent school board meeting to speak. We sent emails every day to school board members. We reached out to all the 9th grade parents to let them know that their child didn't have an English textbook. Then lots of parents were calling school board members advocating for textbooks. Finally, our calls for action were heeded and funding was allocated to purchase textbooks for every student in 9th grade English. It took 7 months, but our children received textbooks and the district superintendent placed parents on committees to ensure parents and families were at the decision-making table. I never felt so empowered.

However, 17 years later, the same equity challenges remain. Teachers in Oklahoma walked out of classrooms in April 2018 for the same reason I started advocating for in 2002—underfunding and a lack of resources to meet the needs of all students. We can't continue to repeat this same vicious cycle.

The school district where my children attended school and my grandkids currently attend consists of approximately 85–90% of children of color and is in the process of closing under-resourced schools throughout the district, particularly on the Southside and Northeast side of the district as well as Spencer—high poverty schools with large African American and Latino populations. The goal of the closures is to integrate and place students in lower income communities in better resourced schools. While it's the right thing to do under our current circumstances in Oklahoma City, it has divided the community and created "othering"—wealthy parents don't want their kids to go to school with those "other kids." I am frustrated that our school district must close neighborhood schools because they are underfunded and bus students across the city. All schools—including the public schools in poor neighborhoods—deserve adequate and appropriate funding.

Equity challenges in Oklahoma City are a microcosm of underfunding statewide: Oklahoma ranks 47th in per pupil spending, funding has been cut steadily, and teachers are underpaid. Analysis from the Oklahoma State School Boards Association shows that Oklahoma invests $1,600 less per average than a cohort of surrounding states—Kansas, Missouri, Arkansas, New Mexico and Colorado. According to the National Center for Education Statistics (NCES), the

state of Missouri has 229,274 more students than Oklahoma and spends more on each student than Oklahoma by $2,156.

One glaring area is school facilities. According to the 2016 State of Our Schools: America's K–12 Facilities report, Oklahoma is one of 12 states that provides no funding to local education agency (LEA) capital construction costs to build, improve and renovate schools. While areas like Oklahoma City and Tulsa can use bonds to try to close the gap, other parts of the state are in disrepair and are too poor to finance through bonds. This places tremendous constraints on the ability of Oklahoma schools to keep pace with technology as well as provide safe and modern learning environments for our children. In particular, this problem is especially damaging in the rural areas of our state where schools are serving high need and American Indian students and where poorer districts do not have the tax base or economy of scale to have sufficient capital funds.

In addition to our poor facility funding, we have other serious fiscal needs in Oklahoma. This is evidenced from the record number of educators who have run for public office to demand more resources for our state's public schools. In Oklahoma City Public Schools (OKCPS), 12% of our teachers have no training because underinvestment in our teachers has put districts in the position of hiring emergency certified teachers. About 42% of our teachers are have 0–3 years of experience and most don't stay 5 years. In contrast, almost 1 in 4 of our teachers is eligible to retire. This talent crisis in our classrooms is hurting kids and will be felt for generations if we don't think about teacher training and compensation differently. While recent marches, strikes and protests in Oklahoma City secured more investment from state, it is not enough.

Decades of state and federal underinvestment in children—and public education in specific—has created unsustainable situations. Our children see their value in the schools they attend, and all students should feel valued because all students can achieve.

As a grandparent now, I see my children fighting the same fights and facing the same challenges in education I went through years ago. It's frustrating. We must do better. We have to do better. Our nation's future depends on it. It is our nation's public schools that will provide the educated, innovative and creative workforce of tomorrow—the entrepreneurs, engineers, scientists, artists, political leaders who will ensure that our nation will flourish in an increasingly competitive global economy. However, this is only possible with a strong and rigorous public education system coupled with support and adequate funding. We must invest more in education. PTA appreciates Congress' recent increases in education funding, however student and educator needs are still not met. National PTA has several recommendations that I strongly urge you to consider.

First, Congress must raise discretionary spending caps. Without an increase in discretionary spending caps, domestic spending will endure a $55 billion cut. This will translate into a nearly $20 billion cut in education, health and workforce funding. Overall, the budget caps would cause a 10% reduction in annual discretionary spending. Imagine 10% less IDEA funding or

spending to support professional development for teachers. I urge you to make raising the budget caps your number one priority in the early days of this Congress.

Second, Congress needs to better fund critical programs in the Every Student Succeeds Act (ESSA) and the Individuals with Disabilities Education Act (IDEA). In particular, Congress must ensure programs that support low-income students and students with disabilities, such as Title I and state grants for special education services, receive substantial funding. Additionally, more resources need to be provided for educator professional development in Title II, English learners in Title III, safe and supportive schools, technology and access to college and career counseling, STEM, music and arts, civics, IB/AP, computer science through Title IV-A, and family engagement in education in Title IV-E.

In recent years, Title I funding has remained around the same level, despite the increase in K-12 public school enrollment and growing number of low-income students attending public schools. The disparity between current Title I funding levels and the additional cost of ensuring all students receive a high-quality education means that the federal government has essentially enacted cuts to the Title I program.

For instance, from 2010 to 2015, low-income student enrollment grew by 4%, becoming the majority of public school students. Despite the increase in low-income student enrollment, Title I funding for schools essentially remained the same, meaning there were less funds to go to a larger number of students. This decreased Title I funding in almost half of the states and U.S. territories. When adjusted for inflation and taking into account reservations required by federal law, it's been an actual cut to Title I-A at the local level. Congress must fully fund Title I to meet the increasing number of low-income students and supports needed to ensure all schools regardless of zip code are equitably funded.

Additionally, IDEA state grant funding has remained around the same level even though the number of students with disabilities attending public schools has increased by more than 2%. This has actually resulted in a net cut to special education funding, bringing the percentage of the federal commitment to 14.9% out of the 40% promised by Congress. The disparity between current IDEA funding levels and the additional cost of ensuring that all students receive a free, appropriate public education (FAPE) means that the federal government has essentially enacted cuts to the IDEA program. Congress promised to fully fund IDEA and they must follow through on that promise. Our association urges Congress to put IDEA on a path to full funding. PTA has consistently supported the IDEA Full Funding Act and looks forward to working in a bipartisan manner to pass this legislation. We also call on Congress to increase investment in IDEA early intervention services.

Congress should also increase its investment in family engagement through the Statewide Family Engagement Centers program in Title IV-E of ESSA. This reenergized initiative, receiving funding in fiscal year 2018 for the first time in 8 years, is assisting parent centers in 13 states around the country to ensure families can engage with their child's school and support their education. Unfortunately, due to funding constraints not all states have been able to benefit

from this program. We urge Congress to increase funding to at least $15 million in FY 2020 and put this program on a funding path to ensure all states can benefit in the coming years.

Lastly, Congress must ensure that public schools are included in any infrastructure package which Congress considers later this year. Schools are a critical part of our nation's infrastructure and it is essential that investments are made to repair, renovate and modernize school facilities to ensure they are safe, healthy and well-equipped to advance student achievement, grow our economy and improve our competitiveness. PTA is pleased to support the Rebuild America's Schools Act so that all districts in Oklahoma and across the country can provide the education that children deserve in safe and welcoming school buildings. Our association urges bipartisan support of improved school facilities and infrastructure to ensure safe, modern, healthy, energy efficient schools for our students.

As you consider these requests, it is important to keep in mind that federal funding for public education programs has remained at approximately 2% of the federal budget for decades, despite the increase in public school enrollment and the rising cost of education resources and services. When accounting for inflation, enrollment, and student needs, federal investment in K-12 remains lower than pre-recession levels. Recent polling from POLITICO and Harvard University found that almost three-fourths of the public identified increased federal spending on public elementary and secondary education as an "extremely important priority." It's time we prioritize our investments in our children.

Budgeting is a reflection of priorities. In Oklahoma and across the nation, our priority should be investment in children. All schools should be equally resourced, and Congress must do its part to make every child's potential a reality.

I welcome all of you here today to become members of the nation's oldest and largest child advocacy association – PTA.

Thank you for the opportunity to be here today to testify on behalf of our nation's children and families for increased investments in public education. I am happy to answer any questions.

Chairman SCOTT. Thank you.
Dr. SCAFIDI.

STATEMENT OF BEN SCAFIDI, PROFESSOR OF ECONOMICS AND DIRECTOR, EDUCATION ECONOMICS CENTER, KENNESAW STATE UNIVERSITY

Mr. SCAFIDI. Thank you, Mr. Chairman.

Chairman Scott and distinguished representatives, since 1992, according to publicly available data at the National Center for Education Statistics, NCES, at the U.S. Department of Education, real inflation adjusted spending per student in American public schools increased by 37 percent.

First slide, please. Thank you. There it is.

That is public school students in 2016 had 37 percent more in real resources devoted to their schooling relative to students in 1992. So where did these increased resources go? Over this period, there was a 20 percent increase in the number of public school students and a 30 percent increase in the number of public schoolteachers. This fact is commonly known as class size reductions were implemented throughout the nation. We reduced class sizes. So where did the rest of the money go?

Second slide, please.

First, using publicly available data from NCES, one can sort public school employees into two categories: teachers and everybody else. I call this second category all other staff, and it literally includes all public school employees who are not teachers. This category of all other staff increased by 52 percent over this time period. When compared to the 20 percent increase in students, this category of all other staff increased by more than 2–1/2 times as the increase in students. I do not believe this fact is widely known.

As you know, some dislike economists. Perhaps we are too nerdy. Perhaps we do not brush our teeth regularly. Perhaps there are many other good reasons for these negative feelings, but another reason why some dislike economists is because we point out that in real life when we make choices, there are uncomfortable opportunity costs.

You might expect that if public schools are given a 37 percent increase in real resources, the teachers would get a real increase in their salaries, but you would be mistaken. Real teacher salaries actually declined by 1 percentage—just under 1 percentage point. That means on average a teacher in 1992 had a slightly higher real salary than a teacher in 2016. Why? One reason for this stagnation in teacher salaries was the tremendous increase in all other staff.

For the sake of illustration, let's keep the class size reductions. However, suppose that the increase in all other staff had only been 20 percent to match the increase in students. If the all other staff had increased 20 percent to match the increase in students, then a cautious estimate of the savings to the public education system is $40.8 billion per year in annual recurring savings. This tremendous increase in all other staff presented a significant opportunity cost.

What could we have done instead with $40.8 billion per year? One thing would be to give all American public school teachers a $12,900 per year increase in compensation. Another possibility

would have been give over 5 million children scholarships to attend the private schools of their choice.

Next slide, please.

In a sharp break with American public school history, as of 2016, the majority of public schools' employees in the United States were not teachers. This staffing surge in public schools began long before 1992.

Next slide, please.

In fact, the staffing surge has been going on since at least 1950. Since 1950, the number of public school students in America has roughly doubled. The number of teachers has increased almost 2–1/2 times that amount. But the increase in all other staff has been seven times the increase in students.

These trends could be forgiven if outcomes have improved tremendously or if American public schools were the envy of the world. According to long-term trend scores on the NAEP, National Assessment for Educational Progress, scores for 17-year-olds have been stagnant since 1992.

Next slide, please.

If taxpayers continue to provide significant increases in resources to the conventional public education system, literally decades of history has taught us there will be significant increases in employment of all other staff, stagnant teacher salaries, and stagnant outcomes for American students.

Mr. Chairman and distinguished representatives, there is a better way. We now have a large research base that indicates that increasing opportunities for American families to exercise choice to both charter and private schools would improve long-run outcomes for American students. First, virtually all the evidence shows that students who are allowed to exercise choice have significant gains in postsecondary attainment and in wages. NAEP scores have gone up dramatically in Arizona and Florida, the two states with the most choice.

Thank you for listening, and I look forward to your questions and discussion.

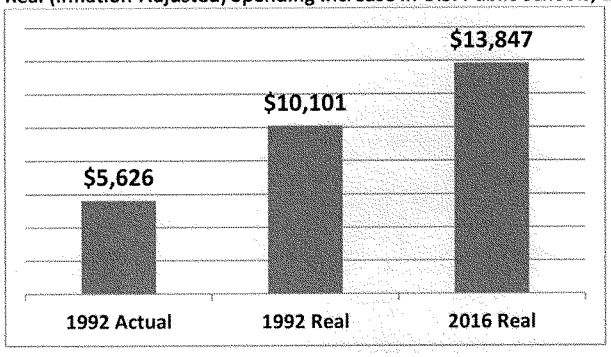
[The statement of Mr. Scafidi follows:]

Ben Scafidi Testimony Before the U.S. House Committee on Education & Labor
February 12, 2019

Mister Chairman and Distinguished Representatives:

Since 1992, according to publicly available data at the National Center for Education Statistics (NCES) at the U.S. Department of Education real (inflation-adjusted) spending per student in American public schools increased by 37 percent. That is, public school students in 2016 had 37 percent more in real resources devoted to their schooling relative to students in 1992.

Real (Inflation-Adjusted) Spending Increase in U.S. Public Schools, 1992 to 2016



Source: National Center for Education Statistics, U.S. Department of Education: https://nces.ed.gov/programs/digest/d18/tables/dt18_236.55.asp?current=yes

So, where did these increased resources go? Between 1992 and 2016, there was a 20 percent increase in the number of public school students, and a 30 percent increase in the number of teachers. This fact is commonly known, as class size reductions were implemented throughout the nation.

We reduced class sizes. Where did the rest of the money go?

First, using publicly available data from the NCES, one can sort public school employees into two categories—teachers and everybody else. I will refer to these categories as "teachers" and "all other staff". The "all other staff" category includes literally everyone employed by public school districts who is not a teacher.

This category of all other staff increased by 52 percent between 1992 and 2016. When compared to the 20 percent increase in students, this category of all other staff increased more than two and a half times the rate as the increase in students. I do not believe this fact is widely known.

As you know, some dislike economists. Perhaps we are too nerdy, perhaps we do not brush our teeth regularly, perhaps we are too direct, or perhaps there are many other good reasons for those negative feelings. But, another reason some dislike economists is because we point out that in real life, when we make choices, there are uncomfortable opportunity costs.

You might expect that if public schools are given a 37 percent increase in real resources that teachers would get a real increase in their salaries. But, you would be mistaken.

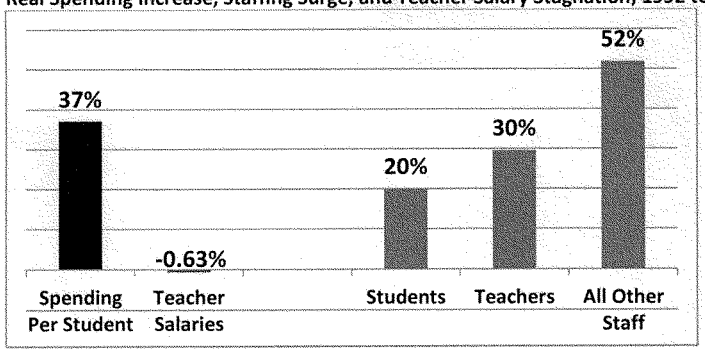
Between 1992 and 2016, again according to data reported by the NCES, real teacher salaries actually declined by just under 1 percentage point. What that means is that, on average, a teacher in 1992 had a slightly higher real salary than a teacher in 2016. Why?

One reason for this stagnation in teacher salaries was the tremendous increase in all other staff. For the sake of illustration, let's keep in place the significant class size reductions since 1992. However, let's suppose the increase in all other staff had been only 20 percent since 1992, where this 20 percent increase in all other staff would match the 20 percent increase in students.

If all other staff had increased 20 percent—to match the increase in students—then a cautious estimate of the savings to the public education system is $40.8 billion dollars per year in annual recurring savings. Thus, the tremendous increase in all other staff in the American public school system presented a significant opportunity cost.

What could the U.S. public education do instead with that $40.8 billion per year? One thing would be to give all teachers a $12,900 per year increase in compensation. Another possibility would be to give over 5 million children scholarships to attend the private schools of their choice.

Real Spending Increase, Staffing Surge, and Teacher Salary Stagnation, 1992 to 2016



Source: National Center for Education Statistics at the U.S. Department of Education, https://nces.ed.gov/programs/digest/d17/tables/dt17_213.10.asp?current=yes ,

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https://nces.ed.gov/programs/digest/d17/tables/dt17_203.20.asp?current=yes ,
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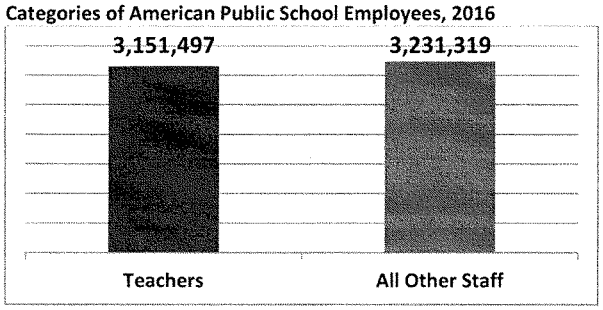
https://nces.ed.gov/programs/digest/d17/tables/dt17_211.50.asp?current=yes ,
https://nces.ed.gov/programs/digest/d18/tables/dt18_236.55.asp?current=yes

In a sharp break with American public school history, as of 2016 the majority of public school employees in the United States were not teachers.

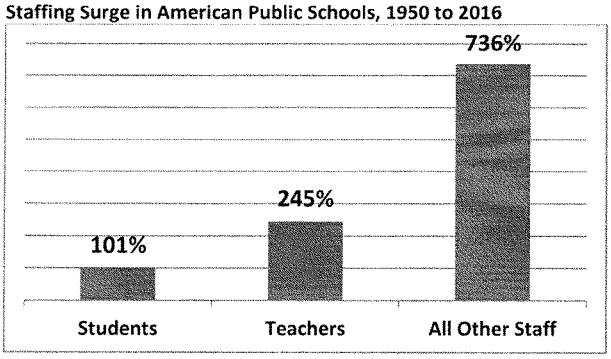
Categories of American Public School Employees, 2016



Source: National Center for Education Statistics at the U.S. Department of Education,
https://nces.ed.gov/programs/digest/d17/tables/dt17_213.10.asp?current=yes

This staffing surge in public schools began long before 1992. In fact, this staffing surge has been going on since at least 1950. Since 1950 the number of public school students in America has doubled. The number of teachers employed in our public schools has increased almost two and a half times as fast. But, **the number of all other staff employed in public schools increased more than 7 times the increase in students**.

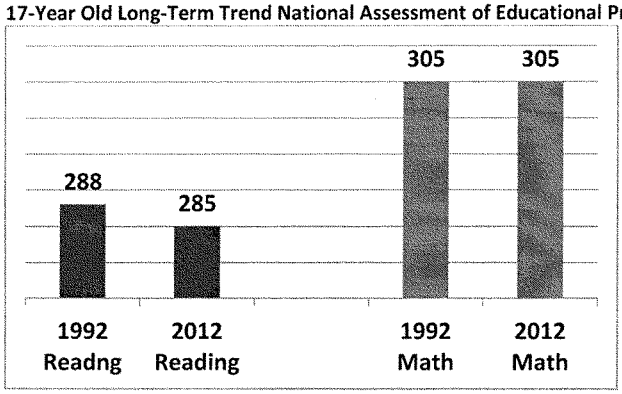
Staffing Surge in American Public Schools, 1950 to 2016



Source: National Center for Education Statistics at the U.S. Department of Education, https://nces.ed.gov/programs/digest/d15/tables/dt15_201.10.asp , https://nces.ed.gov/programs/digest/d17/tables/dt17_203.40.asp?current=yes , https://nces.ed.gov/programs/digest/d17/tables/dt17_213.10.asp?current=yes

These trends could be forgiven if student outcomes had improved tremendously or if American public schools were the envy of the world. According to Long Term Trend scores on the National Assessment of Educational Progress, or NAEP, scores for 17-year olds have been stagnant since 1992.

17-Year Old Long-Term Trend National Assessment of Educational Progress



Source: National Assessment of Educational Progress, https://nces.ed.gov/nationsreportcard/

If taxpayers continue to provide significant increases in resources to the conventional U.S. public education system, literally decades of history tells us that there will be significant increases in the employment of all other staff, stagnant teacher salaries, and stagnant outcomes for American students.

Mr. Chairman and distinguished members of the committee, there is a better way. We now have a large research base that indicates that increasing opportunities for American families to exercise choice—to both charter and private schools—would improve long-run outcomes for American students. First, virtually all of the evidence shows that students who were allowed to exercise choice experience significant gains in post-secondary educational attainment and even early labor market earnings. Second, statewide scores on the National Assessment of Educational Progress (NAEP) have showed tremendous gains in both Arizona and Florida—the two states that permit the most choice to charter and private schools. Arizona has had the biggest gains in the nation since 2004 and Florida's gains have been impressive since 1998—for both states, their eras of enhanced school choice.

Thank you for listening, and I look forward to your questions and the discussion.

Chairman SCOTT. Thank you.
Ms. WEINGARTEN.

STATEMENT OF RANDI WEINGARTEN, PRESIDENT, AMERICAN FEDERATION OF TEACHERS

Ms. WEINGARTEN. Good morning, Chairman Scott, Dr. Foxx. And as this high school social study and government teacher on leave from Clara Barton High School in Brooklyn New York, I am very grateful for the opportunity to testify in our democracy and to testify about how deep and chronic underfunding of public education has led to a lack of investment in school infrastructure and public services, which in turn, has shortchanged the 90 percent of America's school children that attend public schools. AFT members and our students live with the effects of this every single day.

For example, I just returned from visiting schools in the Virgin Islands, the U.S. Virgin Islands, where teachers are spending 10 cents per page in their local Staples to adding up to hundreds of dollars a week of their own money to ensure that kids have learning materials before them. And there are still mold-infested schools, mold that any asthmatic, including myself, could detect in a brief time there. You are seeing some of the pictures that we have just taken over the course of the last couple of years about the building conditions.

Speaking of mold, last year, two Philadelphia elementary schools were closed because of mold throughout the buildings. Of course, many schools that have mold are not closed because we need them to educate our kids. And a recent survey of Detroit's schools found that nearly a third of the school buildings are in unsatisfactory or poor conditions with exposed electrical wires, leaky roofs, and rodent infections, and as the Chair said, we have been at this for 25 years. I filed a suit in New York City 25 years ago about these issues.

Baltimore, last winter, teachers called on the city to close schools because of chronic heating problems as indoor temperatures plunged into the 30's, and children tried to learn bundled in coats and hats.

And speaking about Florida, in Hillsborough County, the district could afford to fix or replace air conditioners at 10 schools this summer leaving 38 still in major repairs, and so when schools opened or reopened in August, indoor temperatures were at 88 degrees.

Last, teachers across the country tell me all the time about having to clean up mouse droppings in the morning and brand-new white boards rendered unusable because of no access to electricity. Frankly, we can do better, and that is why teachers in Oklahoma, Arizona, and other places actually went on walkouts this year to say we can do better.

Teachers are helping. We are digging into our own pockets literally, as the Chair said, almost $500 of their own money every year to buy school supplies, but in Title I schools, that number goes up to almost $600. The Chair talked about the systematic way that we have looked at this, and, Dr. Foxx, listen, we actually looked at these things, and in 25 states, we are spending less on public education than we did before the recession, and in 41 states we are

spending less on higher education. We did this district by district, state by state.

Ultimately, we are trying to help. We will do whatever we can, regardless of the conditions in schools, but we need help from others too. And the communities are engaged in self-help too. During the 2018 election, Wisconsin taxpayers passed referendums to direct at least $1.3 billion to school districts for capital projects while maintaining or expanding programming. In Florida, every local ballot initiative for school funding passed 20 out of 20, and there are similar stories throughout the country, but we know that property taxation only exacerbates inequality.

The AFT is helping too. We are doing what we can in terms of funding community schools, in terms of engaging in this help, and in terms of fighting to fund our future, but we need Congress to help too, and that is why we completely endorse Chairman Scott's proposal to pass the Rebuild America's Schools Act, because that will direct funding for capital projects. We also think we have to fund Title I so that every Title I student has access to physical and mental health services, such as the full-time teacher assistants and the librarians and the guidance counselors that they need and that this anniversary of Parkland are showing that we need. We need to fund the IDEA. The government promised 40 percent of funding, yet the contribution never exceeded 16 percent.

Look, I am passionate about this. I live these schools. I work these schools. My kids have done really well in these schools, but it is a defining moment to work together on real sustainable solutions to this disinvestment.

Thank you.

[The statement of Ms. Weingarten follows:]

Testimony of Randi Weingarten,
President
American Federation of Teachers

Before the House Committee on Education and Labor

Full Committee Hearing on:

Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students

February 12, 2019

Good morning, Chairman Scott and Ranking Member Foxx. My name is Randi Weingarten, and I am president of the American Federation of Teachers. On behalf of the AFT and its 1.7 million members, I greatly appreciate the opportunity to be here today to discuss how underfunding public education has led to a lack of investment in school infrastructure and public services that has shortchanged America's students.

The AFT represents people who work in almost every aspect of education—in public, private and charter schools, from early childhood and pre-K through 12th-grade teachers, paraprofessionals and other school-related personnel to higher education faculty and professional staff. We also represent federal, state and local government employees, and nurses and healthcare workers.

Our members and the students they teach see and feel the effects of this lack of investment in education, from the health and safety risks to the lack of opportunities.

How do we send children to school with black toxic mold on floors, classrooms without heat or air conditioning, leaking ceilings and contaminated water? How do we say technology is important, yet not have enough of the necessary equipment? How do we say knowledge is important, yet have teachers spending their own money just to provide educational materials for their students?

We send our children to schools in these conditions, and we expect them to thrive. Our children deserve better, and AFT members recognize the unique role the federal government can play to infuse support into our public education system—including public school infrastructure and the related services needed—so all children can receive a high-quality education.

Having just returned from the Virgin Islands and Puerto Rico, I have smelled the mold and observed the conditions in schools myself—and the Trump administration's decision to cut $1 billion in FEMA aid for rebuilding Puerto Rico's schools after the hurricanes makes legislation supporting infrastructure and federal education programs even more critical. These are the very same teachers who are spending 10 cents per page for hundreds of copies to make sure their kids have materials for class.

As I continue to describe the dismal conditions of too many of our public schools, you will see why our members are very, very grateful for the focus of this hearing and for legislation that will invest in school resources and infrastructure.

- Last year, two Philadelphia elementary schools were forced to close for an extended time because of major mold growth throughout the buildings, with resulting remediation costs in the hundreds of thousands of dollars. Asthma prevalence can be as high as 40 percent for students who are exposed. Those at highest risk are already among the most vulnerable: students of color and students from economically disadvantaged backgrounds.
- A recent survey of Detroit's schools found that nearly a third of school buildings are in an "unsatisfactory" or "poor" condition. Missing ceiling tiles expose electrical wires. Roofs leak, leading to toxic black mold, and students are forced to learn in classrooms that are either way too warm or way too cold. Expensive computers are kept in rooms with buckling floors.
- In Baltimore last winter, teachers had to call on the city to close schools in the face of chronic heating problems that plunged indoor temperatures into the 30s and 40s. Children were bundled up head to toe in coats and hats. Kids can't learn and teachers can't teach in freezing classrooms and in schools with no heat, frozen pipes and frigid winds coming in through drafty windows.
- In Virginia, overcrowded and under-resourced schools are crumbling under the weight of deferred maintenance and declining investment.
- In Hillsborough County, Fla., the district could only afford to fix or replace air conditioners at 10 schools this summer, leaving 38 in need of major repairs. When schools opened, pictures of thermostats showed temperatures of 87 and 88 degrees indoors.
- In Oklahoma, where education funding as a whole has dropped drastically in the past decade, parents and teachers during last year's teacher strike shared pictures of decrepit or out-of-date textbooks. Books with torn pages, broken bindings and outdated information—including some that listed George W. Bush as president—became a symbol of the fight for adequate resources.

There are hundreds and hundreds of more examples from across the country: Stories of teachers picking up mouse droppings as part of their morning duty. Stories of brand-new white boards that are unusable because there is no access to electricity. In 2017, in a report on the nation's infrastructure, the American Society of Civil Engineers gave school facilities a D-plus.[1] The report found that nearly a quarter of permanent public school buildings were in fair or poor condition; more than 30 percent of public school facilities, windows, plumbing and HVAC systems were in fair or poor condition, and 53 percent of public schools needed to make repairs, renovations or upgrades to be in good condition.

[1] American Society of Civil Engineers, "2017 Infrastructure Report Card," www.infrastructurereportcard.org/wp-content/uploads/2017/01/Schools-Final.pdf.

And the problem is not new. In 1994, my home local, the United Federation of Teachers in New York City, fed up with deteriorating conditions and incompetent inspections, sued the city on behalf of its members, parents and children. I remember—I was the counsel who that led that case. Twenty-five years later, we are still at it.

Teachers dig into their own pockets—literally, 94 percent of America's teachers use, on average, $479 of their own money every year (in schools where 75 percent or more of the students participated in free or reduced-price lunches, teachers spent, on average, $554) to buy supplies for their classrooms. They do this to ensure their students get the public education they deserve, while lawmakers persistently underfund public schools. According to a recent AFT report, "A Decade of Neglect: Public Education Funding in the Aftermath of the Great Recession," governments in 25 states have shortchanged public K-12 education by $19 billion over the last decade.

Among the report's findings, 25 states spent less on K-12 education in 2016 than they did prior to the recession. Chronic underfunding explains why, in 38 states, the average teacher salary is lower in 2018 than it was in 2009, and why the pupil-teacher ratio was worse in 35 states in 2016 than in 2008.

The problem is worse in higher education, where 41 states spent less per student, creating a massive affordability and accessibility gap. This explains why tuition and fees for a two-year degree in 2017 rose at three times the rate of inflation when compared with 2008, and why the cost of a four-year degree rose even higher, putting college woefully out of reach for far too many Americans. In addition, student debt is collectively over $1.5 trillion, and this debt surpasses all types of household debt other than mortgages.

Funding has been promised before—take, for example, the promise of Title I and the Individuals with Disabilities Education Act. The Alliance to Reclaim Our Schools last year released a report, "Confronting the Education Debt," detailing the systemic underfunding of public schools, focusing specifically on underserved populations. According to the AROS findings, the historic underfunding of Title I and IDEA has reinforced a separate and unequal education system, leaving a $580 billion funding hole that has shortchanged the futures of our nation's most vulnerable students. At the state and local levels, the report highlights that, on average, districts with large populations of students of color received about $1,800 less in per-pupil funding than districts with a majority of white students.

Things were made worse with the GOP tax plan that passed last year. The plan paid for corporate tax cuts by limiting the deduction for state and local taxes (SALT), which pay for public education, public colleges, public safety and infrastructure. Millions of people will pay more taxes and, as a result, it will become harder for states and communities to raise money for these public investments. Because of this, New York state's income tax receipts are down more than $2 billion so far, and the cap on the SALT deduction is the primary reason.

While the recession may have forced budget cuts on our schools, both the AFT and AROS reports expose how certain state legislative bodies and governors exacerbated the damage by cutting taxes for the rich at the expense of public schools. These are choices some states have

made, to the detriment of kids who needed this funding most, and it's why Rep. Scott's legislation is so vital right now.

I hear the same things over and over from AFT members: Disinvestment in public education and lack of attention to infrastructure needs, including public schools, are hurting kids and hurting educators. They're struggling to get by on salaries that don't reflect the importance of their work. They are forced to make do with inadequate and often dangerous working conditions. They're frustrated by their lack of latitude to meet children's needs and policies that have weaponized student achievement.

Substandard school conditions and outdated materials prompted the recent walkouts in Los Angeles, West Virginia, Oklahoma, Arizona, Colorado, Kentucky and North Carolina, and they're why my colleagues marched to the state Capitol in Richmond, Va., earlier this month.

Educators, parents, students and our community allies have engaged in self-help. They have exposed how widespread disinvestment is, how low teachers' pay is and how high their healthcare costs are. They have exposed the worsening conditions in public schools, particularly for children of color and children from low-income families. AFT members have been working collectively with the NEA, other unions and community members to advocate for our public schools. But frankly, the diversion of resources to private alternatives has further exacerbated the problem. That may be why in the latest PDK poll, when asked about strengthening public schools or moving to private alternatives, nearly 80 percent said strengthen public schools.

You can see that public support in levy referendums. During the 2018 election, Wisconsin taxpayers voted to direct at least $1.3 billion more into their local public schools, raising their own property taxes in most cases to pay for it. In all, 77 referendums were passed enabling school districts to borrow money for capital projects or exceed their state-mandated revenue limits to maintain or expand programming. In Florida every local ballot initiative for school funding passed—20 out of 20. This made 2018 a record year for school district referendums. Similar stories come from Maryland, Montana and Missouri.

The 2018 PDK poll of Americans' attitudes about public schools made clear that most Americans have trust and confidence in public school teachers. Overwhelmingly Americans send their children to public schools: 91 percent. But they want public schools strengthened. They believe teachers are underpaid; they say they would support them if they went on strike for better wages. And, as they have for nearly two decades, Americans cite lack of funding as the biggest problem facing their local schools. Another new poll by *Politico* and the Harvard T.H. Chan School of Public Health asked Americans about their priorities for the new Congress in 2019. The top six priorities included increasing spending on the nation's infrastructure and increasing federal spending on K-12 public education.

Teachers and communities are demanding a reordering of priorities—it's not enough to simply say our children are important; we have to show they're important, and that means investing in public education in a meaningful way. The question now is whether lawmakers' priorities will change.

With all due respect, let me address head-on the arguments that are often made that spending on education is inefficient, or that the United States spends more than other countries on education. Should we spend every dollar wisely? Of course. And can all of us find some waste and inefficiency? Of course. Do we need to reorder our priorities? Of course. For instance, personally, I would rather spend money on community schools and mental health services for kids than on testing or endless test prep.

Let me be real: Most federal education funding flows to state education agencies based on the number of eligible students. The states in turn allocate the funding to local educational agencies that distribute the funding to individual schools. All along the way, there are tight limits on how much each agency may use for administrative purposes.

According to the Organization for Economic Cooperation and Development, which tracks education in 35 industrialized and emerging nations, the United States spends 4.7 percent of its gross domestic product on public K-12 education—the exact average among OECD countries. And a key difference is that in the United States, most of the funding comes from state and local governments, while many other countries have a federalized education system. In fact, 14 OECD countries spend a greater share of their GDP on education, including France, Norway and the United Kingdom.[2] And in the United States, unlike these other countries, spending on teachers' salaries does not account for the costs of employees' contributions for retirement or healthcare plans.

It is time for both state governments and the federal government to step up.

Our members and leaders want to help with this advocacy. The AFT is launching Fund Our Future, a national campaign to get necessary sustainable investments in our public schools and public colleges. It's time to reverse the funding cuts in our cities and states and stop diverting money from our schools to give tax cuts to the rich or to fund for-profits and unaccountable charters.

Congress can help us by:

- **Investing in rebuilding and modernizing schools and colleges.** The AFT strongly supports the Rebuild America's Schools Act, a $100 billion proposal to address the chronic underinvestment in school buildings across the country, including the creation of sustainable community schools. We hope it will be one of the first items of business for the committee. We urge you to include it in any infrastructure package. It is time to address the deteriorating and obsolete school facilities that exist in far too many of our communities. The Rebuilding America's Schools Act makes school infrastructure a priority and commits resources to back that claim up.

- **Fully funding Title I to support schools that serve poor students.** According to the AROS report, if Title I were fully funded, every Title I student could have access to health and mental health services, including dental and vision exams; there could be a

[2] https://data.oecd.org/eduresource/public-spending-on-education.htm

full-time teaching assistant in every Title I classroom; and there could be a full-time nurse, librarian and counselor in every Title I school.

- **Fully funding the Individuals with Disabilities Education Act** to support students with special needs, including Part C, which serves 3- to 5-year-olds. The federal government promised 40 percent of the funding when the law was first enacted, yet the federal government's contribution has not exceeded its current level of 16 percent. IDEA protects the rights of more than 6 million students with disabilities (approximately 13.5 percent of students) to receive a free and appropriate public education. We must make sure the resources are there to make it happen; 40 means 40.

- **Supporting H.Res. 58**, which expresses the sense of the House of Representatives that compensation of public school teachers should be comparable to that of other college graduates with years in the workforce where the teachers are employed.

- **Investing in higher education.** The Higher Education Act and its Title IV federal financial aid programs—consisting of grants, loans, work-study funds and other mechanisms—are the primary ways the federal government supports students' access to higher education. The student loan programs are a mess. Last year nearly 29,000 applications for Public Service Loan Forgiveness were submitted and processed, but of those 29,000, just 289 applications were approved. That's a 99 percent denial rate. Meanwhile student debt has increased from $600 million to $1.5 trillion in 10 years. Congress should increase funding for Pell Grants; enact student loan borrower protections, such as restoring bankruptcy protections for student loan debt; improve the Public Service Loan Forgiveness Program; and prevent predatory lending institutions from defrauding and abusing students and taxpayers.

This is defining moment. We must find real, sustainable solutions to the disinvestment in public education and services. Investing in our nation's public schools will pay dividends as we prepare our nation's young people for equal and responsible citizenship and productive adulthood.

I look forward to working with many of you on this important effort and answering questions from the members of the committee.

Chairman SCOTT. Thank you.

I will now have questions from members, beginning with the gentleman from Arizona, Mr. Grijalva.

Mr. GRIJALVA. Thank you very much, Mr. Chairman.

Just, Ms. Weingarten, and the questions—I am going to present you with a question somewhat jumbled because I haven't—and I know you will be able to provide a response. You know, part of the reason we are at this point in terms of school funding facilities, teacher pay, et cetera, is, I think part of the reason is the movement during this period of time intensifying of privatizing public education and the incentivizing with taxpayer dollars, that growth. This policy shift has affected many things: classroom teachers, basic facilities' renovations and upgrades, new construction. Can you talk about that correlation?

Ms. WEINGARTEN. Yes. Yes, I can, Congressman. So, look, I brought an op-ed that was dated 2/12/2019, which we will put in the record, from Dennis Smith in the West Virginia Gazette, entitled, Words of caution from experience in failed charter systems. This was a charter school administrator and authorizer that ended up talking about what happened in Ohio. We all know what happened in L.A. where charters take the first dollar, $600 million dollars out of the public school systems, and it syphons off that money in that way.

And let me just say, before I read his quote here, that I actually run one of the highest performing charter schools in the United States. It is called UNI PREP. It is in New York City. It is a public charter school. It is a unionized school. We have between a 95 and 100 percent graduation rate for the last 6 years, and what we have done is actually put one guidance counselor for every hundred kids.

But what Mr. Smith says is take Ohio, where charters have operated for 20 years. From a high point of 400 schools, 340 are operating today. Moreover, there is a junk pile—this is his words, not mine—of failed charters that have closed. The Ohio Department of Education website lists 290 schools that are shuttered, with some closing midyear, disrupting the lives of students and their family. Moreover, total charter school enrollment in the state is down by 16,000.

Mr. GRIJALVA. Thank you. Thank you.

Ms. WEINGARTEN. My point is just this: Charters have to operate within a public school system. They have to be accountable. They have to be transparent. And they cannot syphon off money that other children need.

Mr. GRIJALVA. Thank you.

If I may, Ms. King, a question along that same topic. Having been a school board member way back when back home in Tucson Unified School District, one of the issues with charters, whether they be public or private for-profit as well, is the issue of accountability and oversight, that public school systems are required by law, and justifiably so, to produce financial records, disclosure, conflict of interest, keep your minutes, board members are bound by the open meetings law. Charters don't have that. Do you think it is important that, if we are going to have this public charter or private for-profit, that they too have some level of accountability for their finances and their work, that be public and that be noted?

Ms. KING. Absolutely. When we are talking about public education and the funding that goes into our schools, that is important. We have accountability for a reason. And listening to our guests today speak passionately about public education and even why public education is needed. Our charter schools, and whether they are public or for charter or, you know—Ok. So I am nervous. And I am very passionate about kids. So if I feel like I am getting ready to cry, I have to calm myself down, because our students right now need resources. Our schools—our teachers need to be paid, right? And it is not fair when we are taking public dollars and putting them in for-profit charter schools and there is no accountability on anything that they are doing to run their schools, but we are held at a higher level of accountability for public schools. It is not fair for the students in our communities and in our schools and for the families that they serve.

Mr. GRIJALVA. Thank you, Mr. Chairman. I yield back.

Chairman SCOTT. Thank you.

Dr. FOXX.

Ms. FOXX. Thank you, Mr. Chairman, and I want to thank all of our witnesses here today. I will make one brief personal comment.

Dr. Contreras, I wanted to be a high school English teacher, but I was too poor to do student teaching, so I wound up, look at this, with a wasted life here. Instead of becoming—I could have become a teacher and a superintendent. Look at that. Thank you very much for what you do.

Dr. Scafidi, I have argued publicly several times before that teachers should be paid more. I appreciate that your testimony backs up my impression, which is that teacher salaries have not kept pace with the cost of living. I can understand why teachers are upset. Unfortunately, your research shows that all the activism from teachers is generating public education spending, which is largely directed away from instruction.

If you were advising teachers how they should approach negotiations with state and local leaders, what would you suggest they advocate for to ensure that new resources benefit them?

Mr. SCAFIDI. Ok. Thank you, Dr. Foxx. There are powerful forces in the public education system driving this increase in all other staff, and so if teachers, you know, their priorities should be what their priorities are, but if their priority is salaries, they should focus on that issue, because my kids are in public school in Georgia, and I wrote a paper about what I called the 13-layer cake.

There are 13 layers of public officials that have a say in what goes on in my children's classroom. Congress, the President, Secretary of Education, U.S. Department of Education, Governor, state House, we have a bunch of state education agencies, school board. All of them have policy priorities, and all those policy priorities might be great, but what it has led to over many decades is an increase in all other staff. If teachers want salary increases, they should focus like a laser beam on that.

Ms. FOXX. Thank you, Dr. Scafidi. You have pointed out that since 1992, public education has received a 37 percent increase in real resources, and you have pointed out that student performance hasn't significantly changed over that time. And yet we are con-

stantly told that if we just spend a little more, we will unlock the secret to vast improvements in performance.

Do you think you could highlight for me the level of magical spending we need to see an increase in performance?

Mr. SCAFIDI. You can always grab a study that says if we increase spending by X, we will get an achievement increase of Y, right? And some of those studies are well done by great researchers with great data, great methods, great research designs, what have you. But then when you look at the spending increases that they say will lead to this increase in achievement, then in the real world, we typically increase spending by even more than that, and the achievement gains don't materialize.

So it is perhaps ironic that the economists are saying we need to look at the real world. If in the real world spending increases aren't translating into achievement gains, then we have got to question that research. So there is no magic number in the current system.

Ms. FOXX. Thank you. Thanks. One more question. This may offend you, but as I was saying before, I have argued publicly several times that teachers should be paid more. What I have actually said is that elementary and secondary education teachers should be paid more and college professors should be paid less, because the teachers at the elementary and secondary have the tougher job.

I believe K–12 teachers have a harder job, but I also know that postsecondary salaries are much more market driven. Are there steps that state and local policymakers could take that would make teacher salaries more market responsive?

Mr. SCAFIDI. Sure. There is a professor retired at Stanford University, Mike Kirst. You should look him up. He shares your views about salaries.

Yes. In higher ed, our salaries are largely market driven. Disciplines like business, law, medicine, engineering that have good outside options, even economics, we are paid quite well. Disciplines like the humanities that have less good outside options, actually, they probably financially would have been better off being a K–12 teacher instead of spending all that time and money getting a Ph.D. So for humanities professors, it is rough.

So how could we make teacher salaries more market driven? All of our rage in policy debates is about monopsonistic labor markets, one buyer of labor. The most monopsonistic labor markets in the United States is the public education system, because in a community or even a county, you have one buyer of labor that is the big player. And when there is one buyer of labor in any walk of life, the workers can be exploited. We need to have a more market-driven education system, and then teachers will get paid more and they will be treated a lot better.

Ms. FOXX. Thank you very much. Thank you, Mr. Chairman.

Chairman SCOTT. Thank you.

The gentleman from Connecticut, Mr. Courtney.

Mr. COURTNEY. Thank you, Mr. Chairman. I want to yield my time to my colleague from Connecticut, Congresswoman Hayes, the 2016 National Teacher of the Year.

Mrs. HAYES. Good morning. Thank you all for being here.

First of all, Ms. King, please don't ever apologize for being passionate about children. And my apologies to Randi Weingarten. I could have given you a proper introduction, had I known. But we are here today to discuss a topic that hits home for me. As you heard my colleague say, I am a public school educator. In fact, this time last year, I was teaching high school social studies at John F. Kennedy High School before going on to be named the National Teacher of the Year.

Something very interesting that I would like everyone to know. In my year as National Teacher of the Year, there are four finalists for this honor that are celebrated in their profession, the top teachers in the nation. Last year, three of those four finalists went on strike.

I would say to you, Mr. Scafidi, if you think this is just about salaries, that is not how this works. That is not how any of this works. My colleagues from Oklahoma, Washington, and LAUSD went on strike not for salaries, for resources and to make sure their students got what they needed.

So I am interested to learn—I know a lot about education. I know a lot about what the other members of the panel said, but I am trying to unpack your testimony and perhaps gain some valuable insight.

In reviewing your testimony and your previous writings, I found that you spent your career advocating for school choice and for voucher programs. In your 2015 paper, The Integration Anomaly, you argue that for choice to improve integration, it should be free from regulation. We also heard at the start of this hearing that the last thing schools need is more control from Washington.

Mr. Scafidi, would you categorize the Individuals with Disabilities Act as a regulation? Yes or no.

Mr. SCAFIDI. Yes.

Mrs. HAYES. Yes. Would you categorize Title IX of the Educational Amendments of 1972 as a regulation?

Mr. SCAFIDI. Yes.

Mrs. HAYES. Would you categorize Title VI of the Civil Rights Act of 1964 as a regulation?

Mr. SCAFIDI. Yes.

Mrs. HAYES. Would religious private schools that accept vouchers be allowed to ignore any of these regulations on the basis of religious freedom?

Mr. SCAFIDI. In my paper, I advocated, the paper you referred to, that they should have to abide by civil rights laws.

Mrs. HAYES. Not what you advocated, would they be able to ignore any of those regulations?

Mr. SCAFIDI. It depends on the plan. It depends on how the bill is written or the law is written, but I would advocate that they should follow civil rights.

Mrs. HAYES. Not what you would advocate. Yes or no.

Mr. SCAFIDI. It depends on the law.

Mrs. HAYES. Yes, they would. Do you think that skirting Federal civil rights protections that are codified in regulations would help achieve greater integration?

Mr. SCAFIDI. No, and I wrote that they should not.

Mrs. HAYES. Would it make public schools safer or better for all students?

Mr. SCAFIDI. If—

Mrs. HAYES. If they were allowed to skirt the regulations.

Mr. SCAFIDI. No.

Mrs. HAYES. No. In my time as National Teacher of the Year, one of the things I was able to do was travel all around the country, visit over 40 states and view firsthand their educational opportunities, experiences, settings for kids, and I promise you, trust me, they do not all look the same, and we don't want to leave that up to states and local municipalities.

Can you help explain how it is possible to achieve greater integration through school choice without any of these regulations in place?

Mr. SCAFIDI. Sure. What we have done in this country in public education, and a lot of it is great, is making schools similar. We have equalized funding, which is great, but now states have common standards and common testing, and so schools are becoming more similar, so students are sorting by sociodemographic characteristics in this country. There is my study and another study by some sociologists have found that since 1980 or so, public school segregation increased between then and 2000 by race. After 2000, public school integration has lagged neighborhood integration. Public school integration by income has increased dramatically in this country since around 1970.

I think a well-designed school choice program giving, for example, bigger scholarships to low-income children and what have you, and I list a whole list in my report that you referred to, would promote integration, and I think that is the only best hope to promote integration by race and class in this country in schools.

Mrs. HAYES. I am almost at the end of my time, but I can assure you that I have lived, worked, educated my children in a Title I school district. That was not by choice. For many people, it is their only option. And it sounds like, under your plan, this idea that export the highest performers out and keep those people right there will not work.

Mr. Chair, I yield back.

Chairman SCOTT. Thank you. And the gentlewoman yields back her time.

The gentleman from Tennessee, Dr. Roe.

Mr. ROE. Thank you, Mr. Chairman.

First of all, Ms. King, I want to tell you that the most difficult political job I ever had was president of the Towne Acres Elementary School PTA. I am going to start with that. And anyone who has ever been a school director, your life expectancy is not that long around the country, 3 years, I think. I am a public school proponent. I didn't go to kindergarten. They didn't have one. And the facility I started in was a two-room country school without indoor plumbing or running water. But I had great teachers. And I want to thank those teachers at that little country school that I started at.

And I want to thank the teachers at New Providence Elementary School I went to and then the high school I went to because I would not be sitting here today if I did not have a great public edu-

cation. All of my children went to public schools in Johnson City, Tennessee.

And I think when you look at a public school, its product are its students and the outcome of those students and how well they do. That is what we should look at. In a previous life, my wife taught in an inner city school in Memphis when I was in school in Memphis, and it was much different than the rural system that—I now represent rural Appalachia in northeast Tennessee in a very rural area.

Now, I talked to my school director yesterday in my hometown who is a friend of mine, and I asked him, I said: What are the challenges that you have?

And many of you have mentioned some of those. I will go through them: a limited amount of money for a lot of compliance; No. 2, the way we fund Title I or special education; and, three, for him, was the English language learners. We have 14 teachers in our system with 8,000 students we have had to hire for English—limited English, and that adds a huge burden in cost.

Now, having said that, I listened to the—it sounds like with Dr. Contreras in their school system, we are not in a wealthy area. But in the last 10 years, we have invested almost $200 million in our schools. We have made the tough choices. I was a city commissioner and the local mayor, and we made those tough choices, and we had to raise property taxes to do it, but we believe in education, and we funded that.

There are no charter schools in the First District of Tennessee. There are faith-based schools in there because of the education that some parents want and home schoolers—we have sort of left them out—some people that don't feel like that the school system is meeting their needs. But no charter schools.

In my district, we have heavily invested in those schools and it is not just the facility. And I don't—I would encourage all of you all—many of you all probably have read M. Night Shyamalan's book "I Got Schooled." And he mentions five things in his book that result in good outcomes: One is get rid of ineffective teachers, not many of them, but if you are ineffective in the classroom, you do damage. No. 2 is get the principal out of office and put them in the class. A good principal in a school is absolutely critical. And then frequent collaboration and feedback about what you are doing, school size, not these big, huge mega schools, but the smaller the school, not necessarily the classroom, and then adding classroom time, making sure that students stay in the classroom long enough.

So I think it is a local issue. And, Dr. Scafidi, I would like to have you comment on that. Where the Federal Government comes in, I know in higher education, our good friends up at Vanderbilt University stated that just complying with Federal regulations—if it came on those strings, that would be one thing, but it all comes with strings—adds $10,000 per student for their tuition, just complying with Federal regulations. It is ridiculous. And that goes along where you all are. You spend an enormous—and that is some of that big bar graph you saw. The other is compliance that you have had. Would you comment on that?

Mr. SCAFIDI. Yes. Just in higher ed, my prior university, an email went out that the university was having a job search for a

director of institutional effectiveness. And, you know, economists are kind of wiseacres, so one of my colleagues immediately forwarded that email to the rest of us—we had all gotten it—and said: If you have to have a director of institutional effectiveness, that is prima facie evidence your institution isn't effective.

Well, now universities have offices of institutional effectiveness just a few years later. The compliance in higher ed is terrible. In K–12, it is even worse. And so when I give this talk to like local audiences, before I am done with the first paragraph the local public educators immediately blame State and Federal mandates.

I have looked at data. That is not completely true. All three levels of government have contributed to the staffing surge, but definitely compliance is an issue, yes, sir.

Mr. ROE. Well, I would like to have the educators that are here point out those things. That is something we could do to actually help them have more resources at a local level, is to reduce that somewhat.

Mr. Chairman, my time is expired. I yield back.

Chairman SCOTT. Thank you.

The gentlelady from Ohio, Ms. Fudge.

Ms. FUDGE. Thank you very much, Mr. Chairman.

And thank you all for being here today.

I just want to make a couple comments before I get to my questions. I mean, certainly, I think Dr. Foxx is right; you know, sometimes government is not the answer, especially when we have a shutdown that the President bragged he would be proud to own. So the leadership does make a difference.

Second, I think it is important for us to understand that education has become the civil rights issue of our time. If you are wealthy, you are guaranteed at least a chance at getting a good education; if you are poor, you are not.

We look at Dr. Scafidi's charts. If you just looked at them in a vacuum, you would assume, oh, we are spending so much more money on education, which, in fact, is not true. It is true in some places but not in others, in particular, not in my state where most of my schools get their local funding through property taxes.

So, if you are a community that does that and you are a poor community, property taxes are not the same anymore. They are going down every year. We are not only not giving more money in most instances, in some times, we are giving less, especially when we do things like cut the eState tax, which they thought was such a great idea, or we do things like cut corporate taxes, or we do things like say: You know what? You pay too much money for your property taxes.

It is not a tax cut; it is a tax shift. And so, as it funnels down, local communities get less and less. So they can call it what they want. It is a scam is what it really is.

I want to just say—I was going to actually talk to Dr. Scafidi about some of his charts, but after I heard his answers about what he thinks is onerous, I thought I would just ignore it.

I do want to recognize, I have some sorority sisters sitting out there—how are you all?—who have traveled here to hear Dr. Contreras.

Dr. Contreras, I have a question for you. In your testimony, you say that inadequate facilities, things like broken HVAC systems, et cetera, put students at a competitive disadvantage. Could you explain to me how that is?

Ms. CONTRERAS. So many of our facilities have—

Ms. FUDGE. Is your mike on?

Ms. CONTRERAS. Thank you. Many of our facilities have basic mechanical problems, HVAC problems. As I said, there are 50—the average age of the facility is 52 years old. We have deferred maintenance needs in the amount of $800 million, and we have received $6 million a year for capital needs, maintenance needs.

So we have to take operations money to try to address some basic needs for students. In fact, when I first got to Guilford County, we had a HVAC issue in one middle school that cost $5 million. It took us 3 years to fix the cooling system because it would have totally taken all of our capital money for the year. It would have depleted the budget.

So our students are in old classrooms, buildings with technology infrastructure but without modern technology. The students are collecting the rain in buckets.

Ms. FUDGE. Dr. Contreras, I don't really—I need to just cut you off because I have one other quick question. I think that we get the point. I bet you could do a whole lot with $1.375 billion dollars. What you think? Ok.

Randi Weingarten, last question here quickly. When Chief Justice Earl Warren delivered the majority opinion in Brown v. Board, he stated that education was a right that must be available to all on equal terms. We know now that we are more segregated than we probably were in 1968. Can you explain to me how the underfunding of Title I and IDEA are creating part of this problem?

Ms. WEINGARTEN. So, thank you, Representative Fudge.

The underfunding, there is a new report by AROS that showed that the underfunding of Title I and of IDEA together leaves about $580 billion dollar hole. So this is what it means: Our kids who have the least should get the most from the Federal Government.

We know that property taxes, as you just said, exacerbates inequality, but yet some of these districts are doing that because they are trying to fund their schools as, you know, Dr. Roe had said. But that is where, if it is a civil right, which it is, that is where we need to actually fund the schools in urban and rural areas where kids are not getting what they need.

And that is what we thought the Brown decision was intended to do, and that is what we thought IDEA and Title I is intended to do. So guidance counselors, nurses, lower class sizes, the kind of technology you need to have the engagement in career tech ed, Title I issues, or IDEA issues. When kids need an individual education plan, how do you actually make that happen other than the compliance?

Ms. FUDGE. Thank you so much. My time is up. And I just want you to know that is the law. It is not a regulation, sir.

Thank you. I would yield back.

Chairman SCOTT. Thank you.

The gentleman from Kentucky, Mr. Guthrie.

Mr. GUTHRIE. Thank you, Mr. Chair. I appreciate it.

And, Congresswoman Fudge, you have your sorority sisters here. I know you have them in Bowling Green, Kentucky, because you came to speak at Western Kentucky and your sorority sisters. So you have a wonderful group of sisters.

I want to start, Dr. Scafidi, teacher salary stagnation and the growth of nonteacher staff has gone on a long time. Why do you think this has not been yet addressed?

Mr. SCAFIDI. I think partly people didn't know it was going on. I mean, I got the idea for the paper when I first wrote it from public school teachers. But, again, I think there is so many elected officials and government employees at three levels of government that have a say in how our public schools are run, that is causing the problem.

I am starting new research to investigate this, and a big issue that I kind of forgot in my 13 layers is the courts, when there are school funding lawsuits periodically in states, and they kind of rotate around to all the states, after a school funding lawsuit is won for more funding for public schools, there is a big increase in nonteaching staff in those schools right after that.

Mr. GUTHRIE. Ok. Thank you.

And it kind of leads me into my next question. You have talked about the inefficiencies in our education system that lead to a misallocation of resources. Maybe this is your next paper you are talking about. Have you looked specifically at what decisions made by Federal, state, and local policymakers might be the main drivers?

Mr. SCAFIDI. Again, I am starting to investigate that, but in some sense, it is all of the decisions. I mean, this has been going on a long, long time. And people have good ideas, you know, legislators and state officials and Federal officials in saying: We should do this in the schools or that in the schools.

And then it is just layer, layer, layer on top. And, you know, that is a choice, right. And that money that goes to increasing the staff is not used in other places like building schools or rehabbing schools or salaries.

Mr. GUTHRIE. Ok. Thanks.

And then you note in your testimony that one of the benefits of addressing the misallocation of resources could be to give every teacher in the country a $12,900 raise. If we could reallocate resources into teacher pay, would an across-the-board increase provide the greatest benefit to teachers and students?

Mr. SCAFIDI. I don't think an across-the-board raise is the right answer. I would support more market-driven pay for teachers because I think that would get more people to come into the profession because then people would be paid what they are worth.

Mr. GUTHRIE. Ok. You know, I was in the state legislature in Kentucky, and we have struggled with a lot of other states in getting the right formula to our students and to our schools. And our general fund budget since I first got there, like 2000, was about $14 billion, and that is just property tax that goes with the state government, sales tax, income tax. Last year, I think it was $24 billion, so we have gone up $10 billion.

And one of the issues we are having here is that so much money is now obligated, particularly like Medicaid, Medicaid expansion,

and so forth obligates so much money, the room to move and to do the things I think our state citizens say: These are priorities we really want to move forward.

So I know our state legislature is struggling. I know they want to make it right. I think we do too, but it needs to be done at the right level, you know, and so right level of government without putting too much more bureaucracy in place and other things.

Because I always said when I was a state legislator, every time we would require a report, and there are a lot of bills that say report on this, report on that, report on—which are important, because if you measure it, you manage it, but it also requires somebody to write the report that is not teaching the students. So those are the, I am sure, issues that you are looking at.

And I appreciate you all being here. I appreciate you being here, for your testimony. And I will yield back my time.

Chairman SCOTT. Thank you.

The gentleman from the Northern Mariana Islands, Mr. Sablan.

Mr. SABLAN. Yes. Thank you very much, Mr. Chairman, for holding today's hearing, and I thank the witnesses for being present.

A caveat, my two youngest are school teachers. One teaches English in the tenth grade and the other is a special education teacher, and so I do have little bit of interaction whenever I am home with two teachers.

But, Dr. Contreras, 3 months ago, the students in my district, in the Northern Mariana Islands, went through Super-Typhoon Yutu, the second strongest storm to hit U.S. soil in history. Multiple schools were lost, which means these students are now going to have their courses in FEMA-built temporary tent classrooms, like ones in huts.

Our public school system serves around 10,000 students on three islands on the Western Pacific where typhoons are common. You stated in your testimony that you have spent time teaching in different school districts across the nation. If you and your school district colleagues would design a school at this scale for students in this environment, what elements would you say are the most important?

Ms. CONTRERAS. One moment. She is going to repeat what you said because of my hearing loss.

Thank you. I think certainly there are ways to design schools to make sure that you are less likely to experience some of the massive damage that you experienced in your district or that we experienced with three of our schools in Guilford County. However, that does take significant funding. You know, you would have to speak to someone who is an expert in that specific design.

But I think that speaks to the need for the school funding and for making sure that districts are receiving adequate funding, not just for building schools but for building schools that can withstand earthquakes, tornados, hurricanes, which is more complicated, complex, and does take some additional funding than just renovating a school. That takes significant funding.

Mr. SABLAN. Thank you. And I have another question. Not only is the—on the policy is—not only is the percentage of funding for IDEA actually at its lowest it has been in decades, but we also

have a Secretary of Education and a President who failed to prioritize students with disabilities in their annual budgets.

In the Fiscal Year 2018 budget, President Trump proposed a massive cut to IDEA funding, and in the Fiscal Year 2019 budget he proposed flat funding, which would have resulted in an essential cut.

Schools in the Northern Marianas and across the nation need the resources to train teachers and support students with disabilities. In fact, in the insular areas, the Marianas, Guam, American Samoa, the U.S. Virgin Islands are not included in the special education preschool grant program under IDEA.

So, Dr. Contreras, how has the deprioritization of IDEA funding impacted students, teachers, and decisions you have made about how dollars are spent?

Ms. CONTRERAS. Absolutely. Not prioritizing IDEA is causing significant problems in schools. In fact, in Guilford County, we have one nurse for 1,700 students. And teachers, classroom teachers are having to catheterize students themselves because we do not have adequate staff to meet student needs.

We are not able to handle their transition plans accordingly, and we cannot provide the state-of-the-art kind of instruction and technology that those kids need and deserve to meet their IEP goals. So flat funding would not be a way, in my educational opinion, to meet the needs of the most vulnerable students in the district.

Mr. SABLAN. Thank you. I don't mean to cut you off. I do have a question for Ms. King, if I may.

Ms. King, could you share from a parent's perspective why it is important to provide more funding to the Individuals with Disabilities Education Act to support students with disabilities?

Ms. KING. Yes. Funding Title I in IDEA would give our children less—some less—disadvantage in schools, more resources that they need. We have students in our classrooms that the teacher-to-student ratio is huge. It is much larger. They can't get the one on one that they need to be successful, not even with creating their own individual planning for them to be successful inside of their schools.

The fact of thinking that children with special needs is not important to put funding to is very difficult to think about as a parent or as a grandparent who actually has a son right now that is classified as having a disability. My daughter is going through things right now to get him help. And to think that we don't think that our students need or have the want, the capability of having any kind of resources or funding is ludicrous to me as a parent.

Mr. SABLAN. Ok. Thank you.

I will submit other questions for the witnesses to answer, but we will be holding additional hearings on IDEA and Title I. Thank you. Thank you very much.

Chairman SCOTT. Thank you.

The gentleman from Wisconsin, Mr. Grothman.

Mr. GROTHMAN. Yes, a few questions.

First of all, for Mr. Scafidi—I know I am pronouncing that wrong. There is a popular talk show host in Milwaukee spells his name the same way.

Just a followup. I noticed in one of the things that you prepared, over an almost 20-year period, staff was going up so much more than the number of students. It looks like nationwide, during a period in which there was an increase in students of 17 percent, an increase of staff of 39 percent.

Could you comment on that? I mean, it looks to me like either resources are being horribly misallocated or something is going on. I mean, it seems to me if you have that big of an increase in staff, something was going on. Could you comment on that?

Mr. SCAFIDI. Yes, sir. That was a different time period than what I presented today, a little bit shorter time period. But this has been going on for a long, long, long time. So, if we keep the same system, I don't know why we think it would change. And, second, I wouldn't care about the increase in all other staff if we were getting a return. It is not clear we are getting a return on that, and so that is why I argue that is inefficient.

Mr. GROTHMAN. Ok. And just to look what I have here, when you are increasing the number of staff by about 40 percent when the increase in students is about 17 percent, that would not indicate a lack of funding, right?

Mr. SCAFIDI. No.

Mr. GROTHMAN. Ok. Next question for you, something that just kind of mystifies me here: In the State of Wisconsin right now, we have a substantial budget surplus. And just doing a quick google, that is true of other states. Apparently, Ohio has a surplus of hundreds of millions of dollars too.

Right now, might have changed in the last couple months, but last time I checked, it looks like this year the Federal Government is going to be borrowing about 22 percent of our budget. I mean, irresponsible beyond belief.

Could you comment psychologically as to why, when you have two levels of government, the level of government closest to the people running surpluses of hundreds of millions of dollars, and here in Washington, we are borrowing over 20 percent of our budget already, why, when people feel we need more money for schools, do they think it is the Federal Government who ought to be kicking in more money when we are broke out of our mind and the states are running surplus, and when the states are closest to the people so presumably would be able to do a better job of seeing where it should be spent or what ties we put with it?

Mr. SCAFIDI. Yes. I have actually worked for two Georgia Governors, a Democrat and a Republican, and it really rankles them that the Federal Government can spend—deficit spend—seemingly to a large extent, and they have balanced budget amendments in their states.

Mr. GROTHMAN. But why would you—and I understand—it scares me when I hear people in education, you know, who are educating the next generation of children, who are apparently coming up here and their role model for young people is ask this completely broken Federal Government for more money when you are running surpluses locally. It just amazes me that anybody would do that, but comment.

Mr. SCAFIDI. Yes. It is just a different system. I mean, the Federal Government can run deficits. The state governments have bal-

anced budget amendments. And, you know, it has led to very different outcomes. You know, one has big fiscal problems and states, you know, balance their budget every year.

Mr. GROTHMAN. Ok. That is true. I mean, it is just kind of a scary thing.

Next thing, people talk about teachers' pay, and I don't know—there is one in our papers today, but at least when I have looked at things in the past, frequently don't take into account fringe benefits. And when you take into account fringe benefits, I mean, very generous health benefits, very generous pension benefits, the gap kind of closes or disappears. Do you think that is true nationwide?

Mr. SCAFIDI. Sorry. I didn't hear the last part of your question.

Mr. GROTHMAN. Is that true nationwide?

Mr. SCAFIDI. Yes, sir. Public school employees, and I am in a public university, we have very generous health and retirement benefits, including retiree health benefits.

Mr. GROTHMAN. That is one of the reasons—

Mr. SCAFIDI. And my analysis did not take into account. I am just looking at salary.

Mr. GROTHMAN. Ok. So, if you take into account the fringe benefits, maybe things disappear.

I will point out it bothers me when people in the education system try to discourage people from getting involved. I remember even when I was a child, I think everybody just thinks about being a teacher. I had a teacher who decided to take time out from his class and rip how much he was making. And I think, for people who care about education, I think people ought to take that into account.

Chairman SCOTT. Yield back?

Ms. FOXX. Do you yield back?

Mr. GROTHMAN. Oh. I yield back, yes. When we are out of time, you can just grab it back.

Chairman SCOTT. Thank you very much.

Dr. Adams.

Mr. ADAMS. Thank you, Mr. Chair.

And thank you, Ranking Member.

And thank you to all the witnesses for being here today, and thank you for your testimony. Many years ago, when I was a member of the school board, I ran because I was an angry parent, and today I am an angry grandparent about what is not going on that should be going on.

But, Dr. Contreras, I want to thank you for all you do to educate our children back home in North Carolina. And, you know, there is no reason why when Guilford County Schools needs more than $1.5 billion in capital investment, that local and state school funding per student in our state has fallen 19.6 percent since 2008 as of 2015.

As Dr. Contreras stated in her testimony, our state has increased public education funding since 2011, but the fact of the matter is it is just not enough. Now, I served as a member of the state House for 20.5 years, and I have got to tell you that our state legislators, not just North Carolina, but North Carolina specifically, need to do better.

We need to make public education a priority. But we cannot think that our schools can improve our children for the 21st century work force in an increasingly global economy and still have schools that not only not have up-to-date technology in workplaces but also threaten the health and safety of our children.

Dr. Contreras, can you tell me the last time Guilford County built a new school, and is that school up to model standards and codes?

Ms. CONTRERAS. I do not have the—

Mr. ADAMS. You want to put your microphone on? Your microphone.

Ms. CONTRERAS. I am sorry. I do not have the date of the last time we built a school, but the latest schools are built to current code and standards. But we have far too few that have been built recently. And about, as I mentioned, about half of them need—are rated poor, half of the schools are rated poor or unsatisfactory, meaning they need to be rebuilt or we need to demolish them and build totally new schools.

Mr. ADAMS. Ok. Now, you mentioned that Guilford County is stretching dollars for mobile units due to the class size mandate. Is North Carolina not helping counties to fund that mandate?

Ms. CONTRERAS. The state would say they are funding the teachers, but that mandate has required that we increase the number of classrooms by about 940, which causes a problem with facilities.

We also are not funded for any of the textbooks, technology, and materials. And 58 percent of all new teachers in the district are lateral entry, have no formal training because of the mandate.

Mr. ADAMS. Ok. So, quickly, is learning different in the mobile units versus the mortar buildings, the brick and mortar?

Ms. CONTRERAS. Is there a difference in the mobile units?

Mr. ADAMS. Yes, in terms of the learning of our children.

Ms. CONTRERAS. I think it is obviously preferable that they were in the building with the rest of the students. Obviously, students are moving in and out of the building in bad weather, and we have students who are very vulnerable students in those mobile units. We are grateful that the tornado occurred on a Sunday because the mobile units were completely destroyed, leveled to the ground.

Mr. ADAMS. Right. That is a safety issue too.

You know, I have got a lot more I want to say, but I do want to get back to something Dr. Scafidi said in terms of all of the increases and—but more specifically the claim about nonteaching staff and their value or nonvalue. And so, Ms. Weingarten, if you would just give us your reaction to that, please.

Ms. WEINGARTEN. So the title that—

Ms. ADAMS. Your microphone.

Ms. WEINGARTEN. Sorry. Thank you. Thank you, Representative Adams. The timetable that Dr. Scafidi was talking about also included the timetable of the Individuals with Disabilities and Education Act and the Disabilities Acts, and those actually required that or promised that the Federal Government would spend 40 percent of those requirements. It only ever spent sixteen.

Mr. ADAMS. This is for the nonteaching folks. That is where I am going.

Ms. WEINGARTEN. Right. This is what it means—

Ms. ADAMS. And I have only got—

Ms. WEINGARTEN [continuing]. the paraprofessionals, the nurses, the psychologists, the social workers, all of the physical and other kind of hardware and instructional supplies. And all of that, if you did an audit, you would, I think, see that most of the nonteacher increases in schools across America was because of the needs in IDEA.

Mr. ADAMS. Thank you very much. And, you know, just one point, we need all of those individuals to help facilitate the learning that has to go on in the classroom that students do need that support.

Thank you, Mr. Chair. I yield back.

Chairman SCOTT. Thank you.

The gentleman from Indiana, Mr. Banks.

Mr. BANKS. Thank you, Mr. Chairman.

Dr. Scafidi, your testimony was quite compelling. And I want to go back for a moment to your definition of teachers versus everybody else. Are you aware of any Federal definitions that do lay out the difference between in the classroom versus out of the classroom cost in education?

Mr. SCAFIDI. Well, the NCES, National Center for Education Statistics, right down the street, they have a definition of who is a teacher and who is not. And they ask states to report that data to them in that way.

Mr. BANKS. Do those definitions perhaps change from state-to-state as to how they are quantified at the state level versus the Federal definition?

Mr. SCAFIDI. I have worked a lot with state personnel data, and states have what are called job codes, and so each public school employee has a job code. And so states could have different definitions, but they are supposed to conform to the Federal definition when they report it to the state—sorry, report to the Federal Government.

Mr. BANKS. In my state, the State of Indiana, there is currently legislation working through the state legislature that would provide more transparency when it comes to in the classroom versus administrative costs in education. Is that the answer?

Is that the way to go, greater transparency of these dollar figures to show the American people, in my case to show Hoosiers, the incredible statistics that you shared with us in your testimony, or is there a better way to go? Should we mandate certain metrics of in the classroom versus administrative cost, in your opinion?

Mr. SCAFIDI. I think transparency is a great thing because it lets public school employees, teachers, parents, taxpayers, elected officials see the tradeoffs, and then they can make better decisions, so, yes.

Mr. BANKS. Do you have any examples of where you have seen that type of transparency effectively drive down that startling metric that you provided before?

Mr. SCAFIDI. Not yet. There are strong forces against transparency, so—

Mr. BANKS. What are those strong forces?

Mr. SCAFIDI. Often State departments of education, they report spending on their website, you know, how much we spend in public

schools, they often exclude funds. In my State of Georgia, we exclude well over $3 billion a year in funding. And so, when state legislators are debating education, when the newspaper is talking about how much we spend in public schools, they report the official number that is over $3.5 billion less than the truth.

And the website is very Orwellian. It has a spreadsheet that says here is how much we spend in each district. It has the categories. Then, if you scroll down below the spreadsheet, it has a list of included funds and a bunch of fund codes over there. Then it has excluded funds and a bunch of fund codes. So we just exclude funding from the total. That seems silly.

Mr. BANKS. Along those lines, is it your opinion that Federal mandates and Federal involvement in K–12 education has driven up that "everything else" category?

Mr. SCAFIDI. If you listen to public school officials at the local level, that is the first thing they will say. And that appears to be true, yes.

Mr. BANKS. Well, thank you very much. Again, your testimony is quite compelling. I hope to share it with everybody that I know back home because it makes an incredible case for how we can do what we need to do to award teachers the salaries that they deserve for the important work that they do. Thank you very much.

I yield back.

Chairman SCOTT. Thank you.

The gentlelady from Washington, Ms. Jayapal.

Ms. JAYAPAL. Thank you, Mr. Chairman. And thank you for your incredible commitment to this issue for so long.

I am a mother of a proud public school kid, and I just want to say thank you so much to all three of you that have done so much work for our public education system.

Last week, I met with this amazing group of dedicated teachers from my home State of Washington, and they showed me this very simple but disturbing photograph that echoes what, Ms. Weingarten, you mentioned and many of you have talked about, which is a thermostat at 52 degrees Fahrenheit when the kids came in the morning.

A teacher at that school, Mrs. Copeland, later showed me a picture of her and a student sitting on a lab bench warming their feet over a hot plate. That is what this is: a hot plate. And she wrote to me, and she said: By the fifth period, I didn't care anymore about decorum. We had kids huddled over hot plates all day to try to stay and get warm. Sergio came to me asking if he could go to another classroom so that he could get warm. It about broke my heart. Tommy and I both found blankets for our kids, and I brought in any extra warm clothes I had.

These are our public schools. These are not shelters. They are our public schools. And it is just crazy to me that we would not be investing everything we can into making sure that our kids and our teachers and our communities have the resources they need.

So my first question is to Ms. Weingarten. In your testimony, you expose how teachers are often forced to make do with inadequate and often very dangerous working conditions. Can you tell us why giving teachers more latitude to meet children's needs could improve student achievement and what that looks like?

Ms. WEINGARTEN. So, yes. Thank you—

Ms. JAYAPAL. Turn on your microphone.

Ms. WEINGARTEN. Sorry. Thank you, Congresswoman.

You know, there are actually some studies that show that when you have collective bargaining in schools, that teachers can actually sculpt the conditions in their schools to what their kids need. And, frankly, they do not start with salaries, as you have heard before. They start with things like nurses and guidance counselors, even though they know that they need higher salaries.

But there is a recent EPI study, which we can put in the record, that shows that collective bargaining, especially, frankly, with this ability to strike, actually does far more than any kind of other market conditions to create the conditions in schooling.

And so what you see, to answer your question directly, we see teachers of kids with special needs who are out there all the time talking about ensuring that those kids get the instructional materials they need.

We see that, when the debate was raging about the ACA and Medicaid expansion, it was superintendents and teachers that were out there saying, "We need the equipment," like wheelchairs, like other kinds of catheterization equipment that Dr. Contreras was talking about so that kids can be educated in the mainstream.

But what happens is that they actually know the needs of their kids and want to start with well-being and an engagement, and they will often forsake their own salaries in order to actually get the needs that kids need.

Ms. JAYAPAL. Thank you, Ms. Weingarten.

I think that was made clear with teacher strikes where teachers were not just advocating for their own salaries. They were advocating with the community, with their families, for all of the resources.

Ms. King, thank you so much for your moving testimony. I hope you don't ever stop being passionate about schools and education. It is a blessing for all of us.

You mentioned in your testimony that, from 2010 to 2015 low-income student enrollment grew by 4 percent, becoming the majority of public school students. Despite the increase in low-income student enrollment, Title I funding for schools has essentially remained the same. So can you tell me how we are supporting today's increasingly diverse learners?

Ms. KING. We aren't. More money doesn't mean that our kids are getting educated. As Dr. Scafidi has said on many times, we are having more staff and more funding for these schools. Our schools are crumbling in the education system. Our schools are having more students attend with less money.

In Title I schools, I am a parent that has had children that graduated from a Title I school and a school that I serve as a PTA leader right now is a Title I school. And the funding that they have doesn't help them with the needs of the children in the schools when we are talking about counselors, when we are talking about books in the classroom, technology, and any and everything that we need for our students is important.

Title I right now is a big issue across the country with funding. And a lot of people think that the more funding that you get, that

your schools will be successful, and they are not because they don't have a lot of funding, as the person to my left, Dr. Scafidi, has personally stated that it is working and that we have to have some kind of mechanism to make sure that it is working.

OK. So I am nervous right now. I am getting nervous.

Ms. JAYAPAL. No problem. You are doing great. I am out of time, so let me just say that this is, I think, an incredibly important issue in my state. Washington state was actually—the state supreme court actually ruled that the state was not meeting its constitutional obligation to fund public education way back in 2012, and we finally are correcting that situation and putting more in, but we need Congress to act.

Thank you, Mr. Chairman. I yield back.

Chairman SCOTT. Thank you.

The gentleman from Georgia, Mr. Allen.

Mr. ALLEN. Thank you, Mr. Scott.

And thank you, panel, for being here with us. I switched chairs and—but I am glad to be able to hear what we are covering in this hearing.

One of the first things that I wanted to clear up was, Dr. Scafidi, you indicated in your research that the surge in nonteaching staff in our schools, and point out that this surge have significantly boosted—hasn't significantly boosted achievement. Many staff in nonteaching positions provide our schools valuable leadership and services.

Could you clear up: Are you saying nonteaching staff aren't needed, or can you clear that up a little bit, be a little clear about what you see—where you see the real problem is and, of course, like bus drivers and things like that? Can you give us some feedback as far as your research on that?

Mr. SCAFIDI. Yes. Absolutely, nonteaching staff are crucial and essential, but the issue is in what numbers and in what capacities. And so I guess I have to ask: Where does it end? That is one reason why I started my data in 1992 in my main analysis. Like Ms. Weingarten said, you know, in the 1970's, we started paying attention to special needs students, which was great and long overdue. And that led to a big increase in staff. But it is still going on today, and it is even going on literally in the school year right now, which is after my data. So the question is, where does it end?

Mr. ALLEN. As far as—well, my parents were farmers and educators. My dad served on the Board of Education. We lived education. Growing up I didn't have a choice. And, of course, now, in my role as Republican leader on the Early Childhood, Elementary, and Secondary Education Subcommittee, I am going to be traveling the country to look at, you know, K–12 education, see what is being done.

But I think, you know, where we are innovating, where we are doing the things we need to do, and then certainly, you know, what I have learned here today. I mean, it is shameful some of the things that we are seeing here today.

But I do want to congratulate you on our success in Georgia. We have had great leadership in Georgia. Obviously, one of the fastest growing states in—I mean, we added 800,000 jobs. GDP, economic

growth has a lot to do with education and as far as innovation in education.

You know, one of the things I realized in serving on this committee is how do you motivate young people. I mean, this one-size-fits-all, top-down approach, this does not seem to work. We are seeing that in Georgia, you know, for example, themed schools, things like that, that really get students motivated.

Could you give us a little background on how we are accomplishing so much in Georgia because, I mean, we have, you know, in my district, we pretty much have all new schools. And so can you talk about how you have worked in Georgia to make it what I think is, you know, one of the best school systems in the country right now?

Mr. SCAFIDI. Yes. I can talk to you long, but I will just tell one quick story. In 2003, I used to have lunch every week with Superintendent Kathy Cox, the state school Superintendent. I had only been, you know, working for Governor Perdue for a couple weeks.

And she said: Ben, can you ask the Governor if we can move this one position in the State Department to be like the AP coordinator?

And I said: Yes.

And she said: Don't you have to ask the Governor?

I said: Well, I will ask forgiveness later. I said: Of course, he'll support this.

She said: Are you sure?

And I said: Yes.

She said: Well, you know, you have to call the budget director.

And so I pulled out my cellphone, and, you know, I called the budget director and said: Can you move one position from X to AP?

So this person, she was a teacher before. She drove around to every low-income school in Georgia and said: Here is how there is Federal resources—sorry, state resources and AP—college board resources to put AP programs in your schools.

And so, in Georgia now, I wrote a paper on this years later, disadvantaged students and also minority students are more likely to take AP than similarly situated students not in those categories. Florida had the same results. They did it with Jeb Bush. So, yes, you can do more if you use your resources quite well.

Mr. ALLEN. Exactly. And that is why I mentioned that, again, this top-down, one-size-fits-all concept is not really working. One of the biggest complaints that I hear is where we have funding for X and the school system needs Y and they can't do anything about it. So there is very little room to do the kind of things we need to do and innovate.

My time is up. And I yield back, sir.

Chairman SCOTT. Thank you.

The gentlelady from Georgia, Mrs. McBath.

Mrs. MCBATH. Thank you, Mr. Chairman.

I would like to thank my colleague, Mr. Morelle for switching spots with me.

Mr. Chairman, thank you so much for holding this hearing today.

And I would like to thank the witnesses for being here and for their prepared testimonies and your remarks.

In my home State of Georgia, our Governor Brian Kemp, has called for a $3,000 permanent salary increase for certified Georgia

teachers in his proposed budget. In his State of the Union address, he delivered—or excuse me, State of the State address he delivered last month, he said, and I quote: To enhance educational outcomes and build a 21st century state, we must invest in those who educate, inspire, and lead our students. To recruit and retain the best and brightest our schools, we must remove heavy burdens in the classroom and keep teacher pay competitive.

Now, I believe this is truly a step in the right direction, and I applaud our Governor Kemp for making the hardworking teachers of Georgia a priority. In 2017, the average teacher salary in Georgia was $55,532, and we are paying our teachers less than the national average.

On top of that, in 2015, the Georgia Professional Standards Commission reported that 44 percent of the state's public school teachers leave the education profession within the first 5 years of employment.

To find out why the rate is so high, the Georgia Department of Education in 2015 conducted a survey of 53,000 teachers, and the study included elementary, middle, and high school teachers with varying years of experience. And the results were truly striking.

Two out of three teachers who responded to the survey said that they were unlikely or very unlikely to recommend teaching as a profession to a student about to graduate from high school. The teachers also reported that they feel devalued and constantly under pressure. Now, we must address this, and we must make sure that we are attracting and retaining the best and the brightest educators in our schools.

My question is for Dr. Weingarten. Your testimony speaks to what led to this national movement across the country, and we are seeing that very thing now in Denver. Teachers are galvanized for increased school support. Can you speak to where we are now and the work that is left to ensure the success of teachers?

Ms. WEINGARTEN. So teachers—as you were talking, Representative, I was thinking back to when I was the President of The Teachers Union in New York City. And Mayor Bloomberg and I didn't agree on much, but we agreed that in order to have the best and the brightest, there needed to be significant salary increases.

And over the course—we just did an op-ed last year on this—over the course of 6 years, we were able to negotiate an increase in pay of 43 percent so that people could actually live in the neighborhoods in which they taught, which is what people want.

So what you are seeing in—but what teachers will tell you is that they are very shy about talking about their own wage increases. They would rather work two or three jobs instead of talk about that. And it could be psychological. It could be—you know, whatever.

But they will tell you there are two things. And the research, Ingersoll's research, other research will say: It is about the latitude by which to do our jobs, the conditions we need to actually meet the needs of children. That is No. 1. And No. 2 is, can we actually pay our bills including student debt, which is greater and greater, which is why the public service loan forgiveness is so important?

And what you are seeing in all these strikes is that people are actually focused on the top-of-the-mind issue. So that is why, in

Los Angeles, they were focused on nurses in schools, guidance counselors in schools to meet mental health and well-being issues, that the issue of people feeling afraid, as you know so well, about the safety of communities.

So but it is really, what are the conditions I need to do my job? And, second, am I being paid enough so that I can afford my student loan issues as well as my own family's needs?

Mrs. MCBATH. Thank you so much. And I appreciated hearing your remarks about the lack of state funding for public education after the Great Recession.

And, Dr. Contreras, my question for you, could you talk a little bit more about how underinvestment in the public education system impacts the economy?

Ms. CONTRERAS. I believe that we know that the academic outcomes of students is related to the education of the parent and the socioeconomic status of the parent. So, when parents do not have jobs and we are not investing in the community and in schools, you continue to see the sort of persistent underachievement from generation to generation. It is important that we address this situation, or we will be talking about this for the next 50 years.

Mrs. MCBATH. Thank you so much.

Chairman SCOTT. Thank you.

The gentleman from Kentucky, Mr. Comer.

Mr. COMER. Thank you, Mr. Chairman.

And, Dr. Scafidi, there is no question that everyone on this committee in both parties want to support every child in public education, and we want to do everything we can to change the schools that are low performing. In your experience, what do we need to know about what works in improving low-performing schools, and how should that inform policymakers at all levels?

Mr. SCAFIDI. We should be very humble. I think in the large part, we don't know how to turn around low-performing schools. And even if there is a study that says this one program worked with these two schools, that was idiosyncratic. You know, you had one really good guru go in and help turn around those schools, but is that person replicable? So I would be very humble about having any programs at any level of government to turn around, you know, low-performing schools.

Mr. COMER. As you know, Congress passed the Every Student Succeeds Act in 2015. However, the role of testing continues to be debated. What advice do you have for us as we consider the role assessments should play in evaluating school performance?

Mr. SCAFIDI. There is a lot of new research in the last few years, very new research that the state-based tests, you know, states—tests created by states or Consortium of states are not super predictive of later-life outcomes for students.

So I don't know the exact flexibility ESSA gives on testing. I am not an expert on that flexibility. But I think states should look to switch to more norm-referenced testing, you know, using tests that have been around a long, long time instead of these state-based tests. It seems like states aren't great at making their own tests.

Mr. COMER. Right. And let me say this: I went to public schools. My wife went to public schools. And our three children now go to public schools. And it does seem that there has been a big change

in teaching from the time when my wife and I were in school compared to our students today. And a lot of people wonder if we are, in public education, spending too much time teaching for the test instead of teaching basic skills. Is that something that you have encountered in your research?

Mr. SCAFIDI. Well, I have encountered that in real life. For nine years, we lived in a rural area in Georgia, and about day three, my kids, when they were in second grade, my two oldest, they were scared of something called the CRCT, the Criteria-Referenced Competency Test.

But here is the rub: I don't think policymakers, the business community, parents want to go back to the 1990's, where we just sort of give a bunch of money to the public education system and say, "We are going to trust you."

I think schools are going to be held accountable one way or the other, and it is either going to be through some kind of centralized system, like we do now, or it is going to be through a decentralized system where parents hold schools accountable directly when they make choices of where to go to school. And we have just got to pick as a society what do we think is best for students.

Mr. COMER. And I certainly support public education and have a lot of respect for teachers. I believe classroom teachers are underpaid when you consider the education that they are required to have to teach as well as the number of students, and they can't pick or choose which students they want to teach like in many private schools. Public school teachers inherit whatever they are given. And because of that, I have always had great respect for teachers. My mother was a public school teacher.

One of the things that I have noticed with respect to teachers' pay in the school systems in Kentucky, in my congressional district, and Congressman Guthrie touched on this a little bit, is the fact that the budgets have actually increased even though teachers pay, classroom teachers pay, has not increased significantly.

And it appears in most school systems, in Kentucky anyway, that the highest salaries, aside from the superintendent, are in the central office. And I have always believed that—and when I say "central office," I am talking about administration. I have always believed that the three highest paid employees in the school system should be the superintendent, the principal, and the classroom teachers, because many classroom teachers are like me in business or most Americans want to make the most money. And I feel like we need to reprioritize where we pay the highest salaries in public education.

Mr. SCAFIDI. I think if we had a choice-based system of education, the compensation across different types of public school employees would be very different. And I think their most important staff, the teachers, would be the big winners.

Mr. COMER. Thank you, Mr. Chairman.

I yield back.

Chairman SCOTT. Thank you.

The gentlelady from Pennsylvania, Ms. Wild.

Ms. WILD. Thank you, Mr. Chairman.

Thank you to all of you for being here to address this very important subject.

I am the mother of two children who are now in their 20's. Both of them were educated in a very fine public school district in Pennsylvania, which happens to be immediately adjacent to a very distressed school district. And I worked in the school district that was distressed. I went home to the school district that was better funded and where the children's outcomes were significantly better. So I feel as though, at least from the outside, I have seen it.

Ms. King, I also want to thank you for your role with the PTA. I was very active in my children's school's PTO organizations throughout their elementary school years until my children banned me from ever entering their school when they got to middle school, at which point I stopped. But it is important work that is done.

There are so many questions that could be asked here, but I want to direct my first question to you, Dr. Contreras, because by my count, you have either taught or been in five different school districts over the course of your career. Is that correct?

Ms. CONTRERAS.

[Nonverbal response.]

Ms. WILD. Yes?

And Illinois, Georgia, Rhode Island, New York, and North Carolina?

Ms. CONTRERAS.

[Nonverbal response.]

Ms. WILD. So I assume you have seen some schools that have better funding than others. Is that fair to say?

Ms. CONTRERAS. With respect to facilities, I have, yes.

Ms. WILD. Ok. Can you speak just to that issue then, the issue—what you have seen based on your personal experience in five different school districts about how the students do when they have better facilities?

Ms. CONTRERAS. So I will say that I have dedicated my career primarily to working in poor communities, but there are some states that do contribute more to funding their capital needs. So, in Georgia, I did see that the school facilities were much newer and that students had a greater opportunity to participate in career technical education programs because of the educational suitability.

So it wasn't just a matter of maintaining the buildings; they actually could participate in programming that helped them with career education and, you know, career college readiness. I just implore us all to not simply look at data, which is important, but also to believe what we see what our own eyes and hear from the one-sixth of U.S. population that spends eight hours in our schools every single weekday who are telling us that they are struggling with dilapidated schools, with significant environmental issues, and that is what I have seen primarily throughout my 26, 27 years in education.

Ms. WILD. And do you consider digital connectivity to be part of a school's infrastructure?

Ms. CONTRERAS. It is absolutely necessary, yes.

Ms. WILD. And have you taught in school districts where the students did not have access to computers or laptops or whatever?

Ms. CONTRERAS. Absolutely. So I am in a district where we have 100 percent connectivity, but the students do not have devices.

Ms. WILD. And what about those same students when they go home? Do you have any kind of information, even anecdotal, about their ability to access the internet and other learning tools?

Ms. CONTRERAS. We know that quite a few of the students do have internet connectivity or access to the internet. We don't know about their access to devices, but in primarily poor areas, this is going to become an issue for our families. So, not only do they not have access in school in many communities, they go home and they also do not have access, widening the opportunity gap for these children.

Ms. WILD. Thank you.

I have one series of questions—or one question for Dr. Scafidi, if I may. Your written testimony and your testimony today talks about the big increase in all other staff. What kinds of employees do you include in all other staff? Do you include librarians?

Mr. SCAFIDI. Yes.

Ms. WILD. And school psychologists?

Mr. SCAFIDI. Yes.

Ms. WILD. Guidance counselors?

Mr. SCAFIDI. Yes.

Ms. WILD. Reading specialists?

Mr. SCAFIDI. Yes, ma'am.

Ms. WILD. Tutors?

Mr. SCAFIDI. Yes, ma'am.

Ms. WILD. School bus drivers?

Mr. SCAFIDI. Yes, ma'am.

Ms. WILD. So all of those fall into that all other staff category, as well?

Mr. SCAFIDI. Correct.

Ms. WILD. Do you dispute that any of those categories are necessary in today's schools?

Mr. SCAFIDI. No, I do not.

Ms. WILD. Thank you. That is all I have.

Thank you, Mr. Chairman.

Chairman SCOTT. Thank you.

The gentleman from Texas, Mr. Taylor.

Mr. TAYLOR. Thank you, Mr. Chairman.

I appreciate this hearing, and this is certainly an important topic. I know, in my time in the state legislature, I was a strong advocate for increasing teacher pay, and it was incredibly frustrating to me to see what Dr. Scafidi you really pointed out here in your testimony today. And I just—and I think there is confusion about this. I mean, even in this hearing, I hear confusion about this. I mean, so, in 1992, we were spending $5,626 per child, and then, in real dollars in 2016, we are now spending $13,847. So, in real dollars on a per-child basis in public education in America today, we are spending a lot more than we were when I went to public school, right? Is that a fair statement or surmise from your testimony so far?

Mr. SCAFIDI. That is correct.

Mr. TAYLOR. Ok. So we are spending a lot more money on public education on a per-child basis in real dollars since when Van Taylor was in public school back in the eighties, right? So what is frustrating to me is that teacher pay is basically flat. So we are spend-

ing more, but teacher pay is flat. And, again, there is confusion about that. I mean, even in this hearing, I have heard people saying, you know, sort of saying we are cutting—we are not investing enough. Well, we are investing more and more and more, but it is not going to the teachers. And I was very frustrated at my time in the legislature. I was very happy that this legislative session the Governor of Texas and the Speaker/Lieutenant Governor made it an emergency item and said, "This is something really important; we are going pay teachers more," as they try to restructure education.

So, do parents—Dr. Scafidi, in your experience, do parents understand that the funding is going up, but it is not going to the teachers? I mean, it is clear to me that some of my colleagues don't understand that, but do parents understand that in your experience and your time in Georgia or elsewhere?

Mr. SCAFIDI. In my experience, you know, talking to parents when I was working at the state level, but also just in my kids' public schools parents do know about the increase in all other staff, and they talk about the number of assistant principals, you know, curriculum specialists curriculum directors. They do witness that. I am not sure they know about the increase in real spending.

Mr. TAYLOR. Why is that? I mean, I am very blessed to represent some really phenomenal public schools in my district, and I refer to them frequently as the crown jewels of my community, and they are clearly the driving force for why I represent a successful district or why I have a successful community. We have got great public schools. But even then, I find lot of confusion about the actual funding per child. There is a lot of confusion about what is spent. I hear people that really should know better saying we are spending $7,000 a kid, or we are spending—and then when you do the math, you do the total dollars divided by the number of kids and the per capita it is very different. And, actually, you spoke a little bit about that earlier about excluding certain numbers, excluding certain funds. Can you speak more about that in your experience?

Mr. SCAFIDI. Yes. I will tell another true story. One time I was sitting at my office, you know, we had caller ID, and the phone rang. And it said call transferred from the president of the university's office. I was like: Oh, no, what did I do now?

I answer the phone.

They said: Call transfer.

I said: Ok.

And the person said his name—I thought this was made up—he said his name was Mick Zais, the state school Superintendent of South Carolina. And so I am quickly googling it because I thought it was one of my friends pranking me, but that is a real person actually, and I believe he is up here now.

He said: This report, Dr. Scafidi, and it says we are not telling the Feds how many people work in our public schools.

I said: Well, yes, you guys have not told us how many people work in your public schools for decades.

And he said: What? I am going to fix that.

I said: Ok.

So he said: What do I do?

I said: Have a transparency button on the home page of your DOE website at the state level and just have three or four graphs that are very easy to understand, show the increase in spending, show the increase in staff relative to the increase in students, things like that, make it really simple so that parents and taxpayers and elected officials can know this.

And he did that.

But then he left office, and I went to go get that link because I was going put it in a paper, and the link was there, but it said the page had been taken off. We just need very simple transparency, and then people will understand.

Mr. TAYLOR. Sure. And I appreciate this hearing and this purpose because the key to great education is parental involvement.

And, Ms. King, I appreciate your involvement as a parent. The PTA members are so important for our public schools in Collin County, and it is local control, and it is great teachers. And if you are not paying teachers enough, you are not going to have great teachers. So I think it is really a question of local districts making the investment in teachers.

Mr. Chairman, I yield back.

Chairman SCOTT. Thank you.

The gentleman from New York, Mr. Morelle.

Mr. MORELLE. Thank you, Mr. Chairman, first of all, for holding this critically important hearing and for all the work that you are doing and also thank you to the panelists for being here. All of you make significant contributions, and if it is ok I will give a special shout out to Ms. Weingarten for her long leadership in my home State of New York and all the incredible contributions she has made and is now making nationally.

In my district Rochester, New York, I as a state legislator, authored two different phases of school modernization totaling probably about $8 million in construction dollars, something I am proud of but really scratches the surface of what we need to do in one urban school district in upstate New York, which has just shy of 30,000 students.

But school modernization and school reconstruction is beyond just brick and mortar, and I am sort of interested, Dr. Scafidi, in some of the things you said, which I found fascinating, but I actually take a different—I guess reach a different conclusion than you might or others have. I think it is important to look at the expansion of nonteaching personnel in the schools, but to me the importance of that is sort of drilling down and figuring out why. People don't just hire folks for no reason, and I thought, Ms. Weingarten, your comments relative to it were right on point in the sense that there are other needs now, and that is sort of what I want to get into.

More and more, in areas of high poverty in particular, there are multiple needs that children face, family needs, needs that the schools weren't intentioned to have to deal with nor do they necessarily have the expertise or the authority. So bringing more services into the schools where kids, frankly, are a lot of the day seems to me part of the rationale for the increase in the nonpedagogical staff there. So that is just my comment about the testimony that

you gave, and I think it is important, but I reach I think in my mind a different conclusion.

Child poverty in Rochester ranks third in the nation, and something that we are—even as we are rebuilding the schools.

But I wanted to ask Ms. Weingarten, if I might, in your testimony, you talked about the importance of fully funding Title I to support schools that serve poor students. And I just wanted to get your thoughts as I was talking about health services, social services, human services, educational service, all sort of combining, how important are those resources? When you think about particularly low-income schools, just your thoughts on trying to combine those services, integrating them and how important that is in the welfare and the development of children.

Ms. WEINGARTEN. So, No. 1, I want to give a shout out to Chairman Scott and those who did ESSA because they read and saw the research then, and that is why they kind of reenvisioned and recreated Title IV of ESSA, which is specifically intended to fund these things. The Aspen Institute and frankly any school teacher—Congresswoman Hayes will tell you this, as well—we have shifted to thinking about the well-being of children as first and foremost. You need to meet the needs of children before you can get to their instructional needs, and so that is part of the reason why schools that have these panoply of services, community schools, mental health services, physical health services, after-school childcare are really important in terms of not just custodial care but to the social economic well-being of kids, and so that is absolutely imperative. There is a lot of research around that.

Mr. MORELLE. I very much appreciate that. I also, it seems to me—and I had the benefit of being married to what is now a retired middle school teacher, and I think, no disrespect to elementary or secondary education teachers, but I think there is a special place in heaven for middle school teachers.

But I did want to ask Ms. King, and thank you for your testimony, but in your mind, what does effective family engagement in the schools look like?

Ms. KING. Family engagement—

Mr. MORELLE. Your microphone, I'm sorry.

Ms. KING. I am sorry about that. Because I want to read something that we have from National PTA. National PTA believes that there are four guiding principles to effective family engagement. First is inclusive, so that all families are valued and engaged. Second is individualized to meet the unique needs of each family and student. Third, it is integrated into the school system as part of the job responsibility, calendars, and instructional priorities. Last, it is impactful so that all families have the information and tools to make their child's potential a reality.

So, as a parent, what that says to me is that family engagement is a two-way communication. It empowers and it engages between families and the schools. Families no longer are being viewed as an enemy but as a child's partner with the teachers and the staffs inside of the schools. And by engaging and empowering families and parents in a meaningful way and including families on decisionmakings on the committees, not because you were told to but because you want to, says a lot and that you are valued and

that your voice matters. So anything that involves family engagement is a plus for a school.

Mr. MORELLE. Thank you.

Thank you, Mr. Chairman.

Chairman SCOTT. Thank you.

The gentleman from Texas, Mr. Wright.

Mr. WRIGHT. Thank you, Mr. Chairman.

I want to thank all of you for being here today, and I want you to know that I, too, get a little passionate about this issue. My late wife was a school teacher and a darn good one. My dad was a school teacher, went back and got his masters in counseling and guidance and became a high school counselor. I have always supported public schools. I served on the Board of Directors of the Education Foundation in Mansfield, Texas. It was a great experience. We engaged the private sector, engaged businesses, and raised and continue to raise millions of dollars and gave away millions of dollars for teacher grants in the Mansfield School District and greatly enhanced what they were able to do because I can tell you that there were times that my wife and I dipped into our own personal bank account to benefit her classroom, and I think that story plays out all over America with every public school teacher probably in the country.

But I also get passionate about when school children are denied the quality education they could have because of bad decisions and sometimes downright stupidity of adults when it comes to allocating education dollars. And, Dr. Scafidi, the information you provided today is disturbing, although I can't say I am shocked by it. But one of the most salient facts is the fact that, since 2016, the majority of public school employees in the United States are not teachers. That kind of hits home with me and that we have had these increases in spending across the country that didn't go to teachers, didn't go to the classroom, and I know that there is a lot of jobs in every school district that are important to the education of school children. I am not going argue that point, but I would say that when the majority of employees are not teachers, it is upside down because they are the ones that are delivering more than anybody else the education. They are the ones that are spending time with those students. And so I share my colleague from Collin County's frustration with the level of spending that goes to children, and I will tell you that if school districts are—and I know that a lot of this 736 percent, you know, nonteacher employees are administrators, and I am not here to beat up administrators. I know they are important, too. But I also know there has been a huge spike, a huge increase in the number of administrators vis and vis teachers. Would you know what that number is or what that percentage is?

Mr. SCAFIDI. I do not.

Mr. WRIGHT. Ok. Well, we both know it is a significant number. And here is the thing—because all of us on this committee want a quality education for every child in America; there is no question about that. How we deliver that is something we can have an honest debate about, but if a school district or a state is choosing to spend their money on more administrators instead of teachers, that is a bad decision in my opinion. If they are spending more money

on administrators for additional administrators than fixing the plumbing in their buildings, that is a bad decision in my opinion.

So my concern with what we are talking about today, and, Mr. Chairman, I applaud the good intentions of what you are trying to achieve is there is no accountability here. And we are going to wind up subsidizing the bad decisions that have been made when it comes to the allocation of education dollars at the local and state level.

As Mr. Taylor just mentioned in the State of Texas, we have right now our legislature is meeting, and the state Senate, they have already filed a bill to increase teacher pay by $5,000 a year. That is a good thing. But this is what we are talking about today, these grants, do not do anything to impact the performance nationwide of students, and that should be the goal: to improve student performance.

And let me tell you: I get it as far as how crumbling infrastructure can affect the environment of people, student and teacher alike. I was in high school before I ever attended a school with air-conditioning. And if you haven't sat in a classroom in August in Texas, believe me, you will appreciate air-conditioning. So I get it, believe me. But there is no accountability here. And the last thing Congress should be doing is subsidizing bad decisions that have been made at the local level. And I have a real problem with that.

Let me ask you, based on all the studies you have seen, is there any correlation between student performance, improvement in student performance, and additional administrators?

Mr. SCAFIDI. Not to my knowledge.

Mr. WRIGHT. Is there a study that—I mean, intuitively we all know this, but is there a study that would indicate any correlation between student performance and the quality of the infrastructure of a classroom or school building?

Mr. SCAFIDI. The evidence on that is mixed, and I think that is because of what Dr. Contreras said is—in some areas, we need more and better facilities, and some we don't, so—

Mr. WRIGHT. Well, I would certainly, you know, advocate for air-conditioned buildings in Texas based on my own experience.

Chairman SCOTT. The gentleman's time has expired.

Mr. WRIGHT. Ok. Thank you, Mr. Chairman.

Chairman SCOTT. Thank you.

The gentlelady from Connecticut, Mrs. Hayes.

Mrs. HAYES. Thank you, Mr. Chairman.

So many things. You put an educator on the Education and Labor Committee, you should see the notes I have on this paper. So I am going try to reel myself in so that I don't run down my time. I didn't realize that one of my colleagues that I spoke about earlier Shawn Sheehan from Oklahoma is in the room. I am glad you are here.

We hear lot about regulations, and, Mr. Scafidi, you talked about how schools should be free from regulation. So not a question, a statement. I am glad that my colleague Marcia Fudge brought in the fact that these are not regulations; these are laws. That is what I was getting to. So just rest on this for a minute: If you had to rank order which laws you would move out of the way so that schools of choice could move along more quickly and move some of

the regulations, would it be the laws that provide equitable access to women and girls under Title IX? Would it be the laws that require that we provide equitable access for students and children with disabilities under IDEA or ADA? Which student protections are we willing to gut in order to make these schools a lot more profitable?

The next thing I would ask you, and Mr. Scafidi's testimony argues that $41 billion—a $41 billion dollar investment would give over 5 million children scholarships to attend private schools of their choice. My question for everyone on the panel, and it doesn't require an answer because I think it is self-evident, what happens to the other 45 million children that attend our public schools? What happens to those kids?

So, finally, I come from a state where we have the largest equity gap in the country. My district houses some of the wealthiest and some of the poorest communities. We are talking about bringing it back down to the local level. One thing that I will agree with Mr. Scafidi on is that we need to listen to teachers. And the people who are closest to the pain are closest to the solutions. We have some valuable information to provide, so I guess there is some value in having a teacher on this committee.

What happens if there is no school in the area that I am living in that decides to cater to students with disabilities? How does a student in a city like Waterbury, Connecticut, not get left behind in this type of a system? And then I think more importantly, because this is the thing we haven't talked about—we talk about the connection with, Ms. King, you talked very eloquently about the role of parents and the role of communities. What happens to a kid who doesn't have a parent who knows how to advocate for them? Anyone who has heard me speak knows that my grandmother raised me. My grandmother didn't drive. She had a fifth grade education. My mother was an addict. Am I not entitled to a high-quality public education? Who is advocating for me and children like me if what we are saying is only the people with the loudest voice and the biggest megaphone and who live in the best communities should have the best public education? Isn't it our role as legislators, as educators, as leaders to advocate for the people who don't have a voice? Just yes or no.

Ms. CONTRERAS. Yes.

Mrs. HAYES. I am sorry because I, too, Ms. King, am very passionate about this. So, as we are talking about these things, I hear everyone talk about the level of respect they have for teachers. Everyone has a teacher in their family. So, if we respect teachers and we respect public education, why aren't we looking at it as an investment? And I think the thing that we are all confused about in this room—I agree with my colleague; there is some confusion, but about something very different. The confusion lies in the fact that we are thinking that it is one or the other: pay teachers or improve facilities. I want both. I want both. It is not a tradeoff. We are not talking about hire more staff or improve facilities and conditions. I want both. We are talking about this from an economic standpoint in dollars and cents. That is not what education looks like.

This is not an economist problem, and I appreciate what you bring, but if we are looking at it as a business, if we are treating

education and schools like corporations, then I would say we also need a $2 trillion dollar bail out. We need for government to save teachers, to save schools. We would like that bail out.

In this last tax plan, the $250 that I used to be able to claim as an educator to offset the thousands of dollars that I spent in my classroom was taken away. So, if you truly value education and you truly value teachers, then why are we continuing to take away and saying: But we appreciate you.

This is a profession. This is not mission work. We deserve the same rights, protections, benefits—fringe benefits, don't even let me go there—as every other profession.

Mr. Chair, I yield back.

Chairman SCOTT. Thank you.

The gentleman from Pennsylvania, Mr. Meuser.

Mr. MEUSER. Thank you, Mr. Chairman.

Thank you all very much, an extremely qualified knowledgeable panel. I thank you. I am certainly getting educated here myself, so it is very appreciated.

As my friend just mentioned from Connecticut, a good teacher has a profound effect on our children. Great teachers have a profound effect on our society. My three children, one in high school, public high school, and my daughters are older, but I would ask them at least two or three times a week: How are your teachers? Tell me which one of your teachers are great, which ones are good, and which ones maybe not so much.

It is probably one of the most important things outside of parenting. So we certainly all agree with that.

But I also believe, and I think we would agree that this is more about students, not so much, you know, the teachers and the staff. So I certainly believe teachers deserve to be paid very well. I think our young people should have modern schools. We are an affluent society for the most part, and I think these modern schools should certainly exist in every school district. That should be without exception, and that I find unacceptable when that is not the case.

We do, however, must also have respect for the taxpayers that expect results and expect achievement in our students due to the high level of spending that does, in fact, take place. There have been over the last 15 years Federal increases—and the numbers are the numbers—have gone up over 30 percent of Federal dollars. In Pennsylvania, the state general fund increases hundreds of millions every year. We have a school property tax situation in Pennsylvania that is getting to be unmanageable for many taxpayers. School property taxes just going through the roof, forcing people to move, many retired people. Pensions, pensions are something that certainly comes up and needs to be managed better, and it is billions of dollars in Pennsylvania alone. And this issue comes up with the growth of nonteacher staff. I agree some is necessary, but I think we might all agree probably not all. So, and then, when Mr. Scafidi brings up that 37 percent increases per student since 1992 after inflation adjustment—so now granted computers cost more than notebooks, and, you know, I get all that, but we have got a lot of money going into this very important investment.

So my question, and I will start with Mr. Scafidi is, are our children now receiving a better education than 20 years ago?

Mr. SCAFIDI. In terms of national test scores, it doesn't appear to be so. Just a little history, from 1970 to 2000, actually public high school graduation rates fell in this country in a very stark way, but in this century, they have actually come back up. So, in that respect, things have improved, but, you know, so we are kind of slightly higher than we were in 1970 now, even though we are spending a whole lot more money.

But you would expect the high school graduation rate to go up given changes in the economy because there has been a big return to high-skilled jobs. So more people—students on their own should be rationally choosing more education. So, on balance, I think the evidence is weak that schools are a lot stronger than they were decades ago.

Mr. MEUSER. What about versus other countries? I have seen the data, seen the rating systems. I am asking your opinions.

Mr. SCAFIDI. In terms of if you compared the U.S. compared to other rich countries, we are very mediocre on achievement.

Mr. MEUSER. Ok. Why do you think that is?

Mr. SCAFIDI. Lots of things. I mean, definitely it is probably culture, but also I think we could be getting more for our education dollars in our current education system if we change it.

Mr. MEUSER. Ok. And my other question is really to the full panel, if I could. Is there a model that exists out there in a particular state or school system that one could use to improve our overall system? And overall question is, is there a better way? Is there a better way? I leave it to the panel, but I will start with you, Mr. Scafidi.

Mr. SCAFIDI. Start with?

Mr. MEUSER. The question is to you, is there a model that you admire and should be followed?

Mr. SCAFIDI. I think Arizona and Florida have increased choice significantly. They still don't have a whole lot when compared to other countries that have choice, but their NAEP scores gains have been impressive.

Ms. WEINGARTEN. So I would disagree with Dr. Scafidi. I would just actually look at Massachusetts. If you look at all the states in the nation, the state that has actually done more in terms of investment on both standards and the teaching of standards, not the testing, is Massachusetts, but I would also go back to the fifty some odd years of Title I, the Johnson program, the Kennedy-Johnson program against poverty. And what you see is a huge increase in achievement of kids who are underprivileged in the first 25 years when you saw the kind of spending that was done at that time, and then you saw somewhat of a stagnation because of the fixation on testing and accountability as opposed to the investment that Representative Hayes was talking about. And what your colleagues did with ESSA led by Mr. Scott and others was to try to get to that flexibility on a local level to mimic—to try to replicate the results that we saw in the first 25 years with having appropriate oversight, and what you are starting to see is an increase again in graduation rates particularly in the C-tech programs. C-tech programs where you have real engagement with students you see two things. You see increased graduation rates, and you see lots of kids who go to career technical education also then go to college.

Mr. MEUSER. Thank you.

Ms. CONTRERAS. Do you want—

Mr. MEUSER. Sure, if you wouldn't mind.

Chairman SCOTT. Briefly because the gentleman's time has expired. Very briefly.

Ms. CONTRERAS. Thank you. I believe that if we continue to invest in our teachers through fair compensation and also making sure they have mentors and professional learning opportunities, if we provide wraparound supports for those teachers so that they can teach—and I just want to clarify that each state categorizes licensed professionals differently. So, in the State of North Carolina, a homebound teacher who is a teacher who teaches students every day is not categorized as a classroom teacher, but they are still a teacher. That is true of the social workers or the counselors. So 73 percent of all of our staff are teachers, and TAs and supporting students providing direct services.

So I believe the more we provide support for teachers and leaders, that is the model for improving outcomes for students while we simultaneously provide wraparound services in the form of making sure that we continue to fund food programs for these children, making sure they have physical and mental health programs in schools, and making sure they have social workers, counselors, and other support staff.

Chairman SCOTT. Thank you. The gentleman's time has expired.

The gentlelady from Illinois, Ms. Underwood.

Ms. UNDERWOOD. Thank you, Mr. Chairman, for holding this hearing.

Federal investment in public schools is absolutely essential. And in my community in Illinois, we also have higher state and local taxes that goes toward funding our amazing public schools like Neuqua Valley High School where I went to school. But when I was home last weekend, I heard from so many of my neighbors whose tax bills skyrocketed this year because of the Republican tax law.

The Republican tax law limited the state and local tax, or SALT deduction, which helps offset the taxes we use to pay for public schools. Our community doesn't mind paying our taxes, but we expect a return on our investment. We want our tax dollars going to our children's schools, not to tax cuts for corporations.

Ms. Weingarten, can you please describe how limiting the SALT deduction impacts public schools especially in states like Illinois that have higher local taxes to fund public education?

Ms. WEINGARTEN. So, thank you, Representative Underwood, and what we have seen for the first time in the Tax Code is that the states that actually thought about the Lockean social good, social contract compact are now being hurt because of it. So that states that actually invested in public safety, safe streets, and public education, and public services where their constituents paid state and local taxes for that, they no longer—they now are subject to double taxation on that. And that we are seeing that in California, in Illinois, in New York, in Connecticut, and in New Jersey. And, you know, so there were real losers in the last tax bill. That was not simply that the rich got richer, but that those states that actually believed in that are seeing real limitations.

New York, for example, there is about a $2 billion dollar drop in revenues. And one of your colleagues earlier talked about an increase in revenues in some of the other states, but in the states that actually really made this commitment, there is drop, and many of us are trying to see if we can go back at this because this is really a defiance of federalism.

Ms. UNDERWOOD. Some versions of the Republican tax law also eliminated tax deductions for teachers who spend their own money to buy classroom supplies, as my colleague just outlined. Thankfully that provision was not in the final law, but placing this financial burden on teachers is not sustainable long-term. Ms. Weingarten, almost every public school teacher pays for classroom supplies out of their own pocket, right?

Ms. WEINGARTEN. Yes. There is all these studies that show that, on average, it is about $480. For Title I teachers who actually teach poor kids, it is higher. And you will hear many stories from myself and others about the thousands of dollars that we have spent on our kids.

Ms. UNDERWOOD. Yes. Now more than ever it is clear that students and teachers need support from the Federal Government. Last month, I sent a letter to the IRS asking them to help families in our community and across the country who are being hurt by the limited SALT deduction.

In addition, though, the Republican tax law, as you outlined, does need a legislative fix from those of us in Congress. As my colleagues and I work on legislation to stop the limited SALT deduction from hurting students and teachers, in your opinion, and this goes to the panel, what other fixes to the Republican tax law should we be looking at? And we can start with Dr. Contreras.

Ms. CONTRERAS. I am sorry. I would have to supplement the record. I don't have the information.

Ms. UNDERWOOD. Thank you. Ms. King?

Ms. KING. I don't have any information, as well.

Ms. UNDERWOOD. Ok. Sir?

Mr. SCAFIDI. I am not an expert on tax policy.

Ms. UNDERWOOD. Ok. Ms. Weingarten, did you have anything else to add?

Ms. WEINGARTEN. So what I would add, Representative Underwood, is there are—you know, we went into huge deficit spending to create this artifice of trickle-down economics. What happens if some of that got moved to the spending of infrastructure like Representative Scott and others, Chairman Scott and others, have suggested. The kind of real priming the pump that would do if we actually took a trillion dollars that went for tax cuts and moved them to the kind of spending that Chairman Scott and others are talking about that would create good jobs all throughout the country that would deal with the crumbling infrastructure not only in our schools but throughout our society, and it would actually create a real economic engine.

Ms. UNDERWOOD. Ma'am, as you describe it is reinvestment in our local communities.

Thank you so much. I yield back the remainder of my time to you, Mr. Chairman. Thank you.

Chairman SCOTT. Thank you.

The gentlelady from Nevada, Mrs. Lee.

Mrs. LEE. Thank you, Mr. Chairman, for holding this hearing on underfunding public schools and how it shortchanges students in America. I represent a large part of the Clark County School District in Nevada, one of the fifth largest school districts in this country. We have infrastructure challenges of somewhat a different sort. Average class sizes in our school district are the largest in the country at 25.86 students per teacher; 230 of our 336 schools are at or above capacity; and 24 schools are year-round; 21,000 students now are forced now to take online classes. All the while, our school district projects $8.3 billion is needed for capital improvements, not including deferred maintenance. And I want to thank all of you for first of all your commitment to education, commitment to our students, and I want to ask Ms. Weingarten, given the chronic underfunding of education can you address how inadequate funding of schools exacerbates overcrowding and how this impacts students' success?

Ms. WEINGARTEN. So, as you just talked about, Representative Lee, when you have that level of overcrowding in a school, there are lots of different impacts to it. No. 1, the kind of courses that Dr. Scafidi talked about—look, I taught AP government. I taught my Title I kids bioethics. You are not going to be able to have the space in a school to be able to do those classes, and because they may not be part of the core instructional requirement to get to a diploma, so they will always fall off. No. 2, band, music, those kinds of things. So course electives that are how kids—why kids actually come to school, you are not going to have. No. 2, the issues about infrastructure, both technology as well as crumbling facilities, very much impact kids. Take the health and safety issues of mold, of ventilation, that for many kids who have respiratory illnesses, that really impacts kids.

And then the issue that Representative Morelle raised earlier, if you actually can—and that Dr. Contreras raised—if you actually wrap services in a school, you need some places for those medical services and things like that, which are not there, but when you have those services, that actually hugely helps kids. So those are just some, off the top of my head, impacts.

Mrs. LEE. Thank you. Speaking of wraparound services, you have publicly stated numerous times your support of the community schools strategy, especially in schools serving a high percentage of students living in poverty, which unites resources and assets of the school family community through strong partnerships facilitated by a coordinator and at the school site, which ensures students' success. As the former president of communities and schools of Nevada, I couldn't agree with you more.

Your organization has directly supported the strategy in McDowell County, West Virginia, the poorest county in West Virginia. Can you tell me what you discovered there about the county's needs and how this community school strategy is an effective way to bring about collaboration needed to increase investment and resource alignment at our schools?

Ms. WEINGARTEN. So, first, I would invite any person on this panel to come visit the McDowell County schools with us. McDowell County, like some of the schools that some the other rep-

resentatives have testified about, is right in the middle of Appalachia. It is former coal mining—it is a former coal mining county. It is the eighth poorest county in America. It is a county that has been afflicted by opioid addiction.

After all sorts of other top-down ways of trying to create better outcomes for kids, the then Governor's wife, Gayle Manchin, asked us to take over the schools. We said: We don't believe in privatization. We could do, though, a public-private partnership.

And so for the last 6 years the AFT has done a public-private partnership with the McDowell County schools and others, and in those years, we have increased graduation rates over 12 percent. We have doubled the number of kids who are going to college. We have wrapped services around various schools. What we haven't been able to do is create jobs, but the other emotional and instructional impacts we have been able to change outcomes for kids, and so, when you see kids who used to actually look down, never talk to adults now talking about how they can use Lego to create code themselves, that is what I consider a success in schooling.

Mrs. LEE. Thank you. I do agree. I mean, you know, some of our site coordinators are in closets in some of our schools, and it really comes down to having that personal relationship, and you need to have space to have personal relationships. So thank you very much.

I yield back, Mr. Chairman.

Chairman SCOTT. Thank you.

My colleague from Virginia, Mr. Cline.

Mr. CLINE. Thank you, Mr. Chairman.

I think the underlying theme in this hearing both sides can agree on is that education matters. Having access to good education at an early edge exponentially opens opportunities for students and can accelerate a student's trajectory. And while we consider solutions, we have to remember that just as each student is their own individual, each school and school division is as well, and painting them with broad brush and trying to push money and regulations that have no ability to be customized does a disservice, not only to those schools and those students but also to the taxpayers who are funding fixes that do not actually seek to fix the underlying problems.

So I would ask Dr. Scafidi what inefficiencies do you see at the Federal level that can be eliminated to make room for state and local solutions?

Mr. SCAFIDI. I would ask school superintendents in your state and school board chairs what Federal regulations are causing them to misallocate funds. Ask them directly, and I think they will talk to you for a long, long time.

Mr. CLINE. And we heard from your testimony about the top-heavy administrative trend, the impact on students is felt through, among other things, larger class sizes because resources have to be allocated to that administrative burden. What other trends, what other impacts on students does this misallocation of resources have?

Mr. SCAFIDI. Yes, it is an opportunity cost. I mean, money spent on A is money that can't be spent on B, and there are lots of worthy B's. So the question is, if what we are spending on doesn't seem

to be moving the needle, we should reallocate those dollars, and that is going to differ in different communities. It is going to differ for different students. Like you were talking about customization, if certain kids need different things, and we shouldn't have one-size-fits-all from the Federal Government, from the state governments, or even within school districts or even within schools. So that is going change depending on the students' needs.

Mr. CLINE. In fact, can you see perhaps an inverse discouragement of states and local governments from addressing some problems with an allocation of Federal resources that might be inefficiently applied or inefficiently allocated that can disincentivize action at the Federal—at the state or local level?

Mr. SCAFIDI. Yes. Two things. I do worry that if there was a big Federal infrastructure spending bill, that it might not hit where it is needed most in terms of schools. Second is yes. If states and school districts have Federal money coming in, that might take the pressure off from them using their own money for those items, and so they might choose not to spend as much, say, on infrastructure or what have you.

Mr. CLINE. Thank you.

Mr. Chairman, I yield back.

Chairman SCOTT. Thank you.

The gentlelady from Florida Ms. Shalala.

Ms. SHALALA. Thank you, Mr. Chairman.

I apologize for being late. We flew to Detroit, circled and flew back, so we never landed for our colleague's funeral.

Ms. Weingarten, under the administration's proposal to drastically cut the education budget, dozens of schools in Miami-Dade County will lose close to $500,000 dollars in funding for afterschool programs, and teachers of the district could see more than $17 million in cuts for professional development.

The administration has repeatedly said that eliminating funding for afterschool programs is correct due to lack of evidence that such programs improve student achievement. Can you comment on that and on the importance of afterschool programs? And I think the superintendent might want to comment as well. Thank you.

Ms. WEINGARTEN. So the administration—any time the administration says this, it says to me that they actually haven't spent a minute with children. So because—and so part of the administration talks about how important childcare is and wanting to give deductions for childcare, but then, when you do it in an organized way by having afterschool programs or summer programs where you both have instruction and custodial care, you get a double value for that funding, so why would they cut this off? This is money that, frankly, every wealthy parent will do, spend money in terms of afterschool care in terms of piano lessons, ballet lessons, but why don't we give this to those kids who can't afford it? This is what Representative Fudge was talking about earlier in terms of civil rights, civil rights responsibility.

So there is a lot of research on this. The Aspen Institute just put research out on this. Others put research out. I don't know why they are saying that there isn't, but at the end of the day, this is the heart of what we think about schools. Schools should be centers of community. There should be wraparound services. They should

be open for a long period of time, and so that parents can actually have both—can actually see that their kids are safe after school, as well as having great instructional opportunities after school and in summer school as well as during school.

Ms. SHALALA. Dr. Contreras?

Ms. CONTRERAS. Thank you. Proposed cuts to afterschool programs would have a significantly negative impact on our school district and the most vulnerable children in the district who participate in these programs. Many of these students who are participating are exposed to toxic stress, such as experiencing violence or witnessing violence, having parents who may be incarcerated, the death of a parent, poor academic outcomes. They have high levels of trauma and experience a great deal of adverse childhood experiences that negatively impact their overall well-being.

We work very closely with our partners who provide these afterschool programs like Communities in Schools, and they align their programming to our academic program as well as provide other kinds of supports for these children and experiences. So cutting these programs would have a very negative impact.

Ms. SHALALA. Thank you.

Ms. King?

Ms. KING. For poor students, afterschool programs allow them to escape the streets. And if children who cannot afford extra activities during school or after school, they have an opportunity to participate in something that will keep them safe, whether it is mentoring programs after school where they could learn, whether it is a possibility of playing an afterschool sport where they don't play it regularly inside of a school, but they could play it inside of an afterschool program or just teach them a technical trade. There are many things that are possible for children in afterschool programs, and so, for us, to cut a program would be detrimental to our students.

Mr. SCAFIDI. I would prefer that we decide how much money we want to subsidize each child in this country. I would give bigger subsidies to low-income kids. Let they choose schools, and if they want afterschool programs, let me choose schools with afterschool programs. If they want schools with different afterschool programs, let them choose that. If they don't want afterschool programs and they want the money spent elsewhere, let them decide what is best for their children.

Ms. SHALALA. Are you actually talking about the children making those choices?

Mr. SCAFIDI. No, the families.

Ms. SHALALA. All right.

Mr. Chairman, I have one more question, if possible.

Chairman SCOTT. Very briefly.

Ms. SHALALA. Ok. Fine. I yield back.

Chairman SCOTT. Thank you. The gentleman from South Dakota, Mr. Johnson.

Mr. JOHNSON. Thank you very much, Mr. Chairman.

Mr. or Dr. Scafidi, I am trying to tease out the proper relationship between the state and the Federal Government here. I mean, I represent South Dakota, and in my state, as I suspect there are in many states, there is constitutional obligation for them to ade-

quately fund education. Of course, I am glad that is in our state's constitution. It is critically important. So state policymakers understanding that constitutional obligation have established a special capital outlay tax levy so that South Dakota can avoid some of the tragic nightmares as the chairman opened today's discussion with highlighting. State policymakers also recently instituted a substantial tax increase, statewide tax increase to allow for a significant increase in teacher salaries, and the money was targeted to that effect. And I don't think anybody would say that the job is done, but I think most South Dakotans would acknowledge that there have been good attempts by policymakers to meet their constitutional obligations.

So, as we talk about the creation of an additional, you know, $100 billion grant program to help out those who have not taken those prudent steps, I am concerned that we are rewarding bad behavior. Is my concern misplaced?

Mr. SCAFIDI. It is similar to the question that the Representative from Virginia asked. Money is fungible. If the Federal Government gives states and school districts money, they can use money that they were dedicating for that purpose, and move it somewhere else. And so, yes, I mean, you are allowing states to do that and school districts to do that if you increase Federal funding for schools for any purpose.

Mr. JOHNSON. Well, maybe even more of a concern long term, doesn't that send the message to states that if they lag in educational investment, if they don't make the uncomfortable decisions to properly invest in education, then, you know, perhaps the Federal Government will step up and maybe paper over their deficiencies?

Mr. SCAFIDI. Yes.

Mr. JOHNSON. So it seems to me that quite a number of people believe that our Federal Government is not properly funding Title I. It seems to me that there are quite a number of people who feel our Federal Government is not properly investing in IDEA, and lots of people, certainly in my state, think those things and also think we are not properly investing in impact aid, making good on our commitments that the Federal Government has promised.

I look at this, and I think: Well this seems like a very Washington, DC, thing to do. Rather than coming together to try to figure out how we properly invest in our existing programs and in our existing obligations, we are instead going to create another program so that we can once again overpromise and underdeliver. Am I just being too cynical?

Mr. SCAFIDI. No, it is just math. If you spend money here on any purpose, you can't spend that same money here. And that is true for any organization, any walk of life, government, nonprofit, for profit. That is just math.

Mr. JOHNSON. Well, and maybe I might close, Mr. Chairman, by just noting that, in any given day, this town doesn't work very well, and if we continue to concentrate more and more of our educational leadership and our educational investment in this town, I have grave concerns that the American people and the American school children will be disappointed in our efforts and our investment.

I yield back. Thank you.

Chairman SCOTT. Thank you.

The gentlelady from Minnesota, Ms. Omar.

Ms. OMAR. Thank you, chairman.

Thank you all for taking the time. I know it has been a couple of hours, and we really appreciate your patience and your ability to help us have a critical conversation about investment, as my colleague from Connecticut said. This is an investment. This is an investment in our children, which is an investment in the future. I know that there is a clear correlation between graduating kids to getting higher income, which is future opportunity to tax, which, again, right, becomes future investment in the well-being of all of us.

Dr. Contreras, thank you so much for sharing your story today. I have a set of questions for you that I would like a yes-or-no answer to. We are going to try to do this real quick. Have you heard of kids sitting in classrooms that are infested with mold or dripping with humidity?

Ms. CONTRERAS. Because of the—I am sorry. Because of the age of the facilities and of the HVAC systems, because the schools across the country are undermaintained, I think it is reasonable to say there is mold in classrooms across this country, significant cases.

Ms. OMAR. That is a yes?

Ms. CONTRERAS. Yes.

Ms. OMAR. Yes. So kids sitting in classrooms where there is mold, yes. Has there been an instance where the circuits blow when the teachers plug in a computer or a space heater that you have heard of?

Ms. CONTRERAS. Where they brought in a computer?

Ms. OMAR. Yes, plugged in a computer or space heater and—

Ms. CONTRERAS. Oh. Absolutely.

Ms. OMAR. Yes. All right. Do the security cameras work in your children's school?

Ms. CONTRERAS. No.

Ms. OMAR. Are the sidewalks at your children's school turning into gravel and their playgrounds deteriorating?

Ms. CONTRERAS. Are the sidewalks turning into gravel?

Ms. OMAR. Yes.

Ms. CONTRERAS. There are cases of that across the district.

Ms. OMAR. So yes?

Ms. CONTRERAS. Yes.

Ms. OMAR. Thank you. While your answers are very informative, they are also extremely alarming. Elevated levels of mold spores cause children with existing respiratory conditions, such as allergies or asthma, to have higher risk for health problems. Asthma attacks are triggered by damp buildings and mold growth.

So my question to you is, what are the asthma rates in North Carolina compared to the national average?

Ms. CONTRERAS. You are asking why are the asthma rates higher?

Ms. OMAR. No, no. What are the rates? Do you know?

Ms. CONTRERAS. What are the asthma—in my school district, we have about 5,500 cases of asthma that we know about in the schools. Fifty-seven percent of those cases are in the poor schools.

Ms. OMAR. All right. Thank you. In North Carolina, the total is 9.2 percent. The national average is 9 percent, so we could clearly see there is a correlation, so I do appreciate you for helping us talk about that.

Randi, I had a question for you. I know in your testimony, you cited the findings from a recent AFT report, A Decade of Neglect: Public Education Funding in the Aftermath of the Great Recession, that 25 states spent less on K–12 education in 2016 than they did prior to the recession.

Chronic underfunding explains why in 38 states the average teacher's salary is lower in 2018 than it was in 2009, why the people-teacher ratio was worse in 35 states in 2016 than in 2008. I know my colleague earlier, from South Dakota, mentioned the constitutional obligations that exist, but I am a little baffled about this statistic that you lay out in that report.

And so I wanted to ask you that, in the United States, do you think there is less value in education today than, let's say, in the previous 10 years, 20 years, 30 years, 40 years, 50 years?

Ms. WEINGARTEN. So let me just say, I think that parents value public education and value education as much today as they ever have. I think this is a creation of choices that post every—virtually every state has an obligation, as South Dakota does, to its students. They say it differently, but every state basically has it.

What we have seen over the course of time, particularly in the last 10 years, is that when the recession hit, there were lots of cuts, and there were many states that made different choices. And, frankly, some of the states that made the choices to actually fund education are now getting hit worse because of the cutting of SALT.

And so you see a terrible situation that the Federal Government in the last—the tax bill has actually—is actually going to penalize the states that made more effort to fund education.

Ms. OMAR. I believe in every district in this country education is a top priority. Our children are a top priority. In every community you go into, people talk about how important teachers are. So it is time that we put our values first and invest in our teachers, invest in our students, and invest in a proper future that all Americans deserve. Thank you so much for your testimonys today.

I yield back.

Chairman SCOTT. Thank you.

The gentleman from Idaho, Mr. Fulcher.

Mr. FULCHER. Thank you, Mr. Chairman.

And once again, committee, hang in there. You are getting close, all right.

First of all, just an observation and then a question for Mr. Scafidi. It is not a whole lot different but a little bit from what Mr. Cline, Mr. Johnson had to say.

In terms of an observation, this has been informative for me because the perspectives on these issues is so incredibly different on the legislative panel here.

And, for example, the scenario that my colleague, Representative Hayes, described in Connecticut is pretty much diametrically opposed to what we experience in Idaho. But it is a totally different demographic. It is a totally different set of needs and cir-

cumstances, which just, I will share my own bias in that sense, absolutely convinces me that there has got to be local governance over education.

But here is our situation in Idaho. We put a little bit over 50 percent of our general fund into K–12, another 12 or 13 into higher ed. So that is about 63 percent of our general fund goes toward education in some fashion. Interestingly enough, with medical costs raising and expansions of Medicaid and those type of things, we have healthcare competing with education for government money. And that puts some really interesting stakeholders at each other's throat.

But to further complicate things, we have nearly two-thirds of our land mass is federally owned, and we have a heavy dependence on property tax. So you take out two-thirds of the base and things have to get real creative in order to fund your education and, for that matter, anything else. So we have had to get creative. We have had to do different things.

And so two things have kind of been the focus for us. No. 1 is we have gotten away from the paradigm or we are trying to get away from the paradigm that throwing money at stuff helps. Yes, of course, you have got to have resources, but there is not an automatic connection between money and performance within the school system.

The second thing is, we have got a tremendous amount of rural areas. School choice has been—we have had to do it. And it is—it has worked. And it is not fun in a lot of cases because it has inserted some competition, but the results have really helped.

But you put up a slide right at the very beginning of your presentation. We see it. The administrative cost has gone up significantly.

Mr. Cline talked about Federal administrative, and there has definitely been some burdens there. If we had our choice, we wouldn't want any Federal money. We would send the whole thing to Connecticut or to New Hampshire, and I am sure that they would be fine with that. We don't want the regulations, and a lot of us don't want the money at all.

We have to do something because we don't have land mass to tax, but administrative cost is where I am trying to go with this diatribe here.

Can you provide any counsel or any guidance on are there ways—given our circumstances where we have got to be very creative in how we fund things, have you seen examples or patterns of success in reducing administrative cost so we can focus on keeping that in the classroom and to the teachers?

Mr. SCAFIDI. I have not. Forty-eight states, plus the District of Columbia, have had the staffing surge since 1992. Only Nevada and Arizona have not. Their student populations have grown dramatically, and their funding, you know, is just keeping up, so they are kind of roughly holding serve depending on the time period you look at.

I think we need more transparency in how public education dollars are spent. We need more transparency on what the total amount spent per student is, but also historical.

And finally, I think if we let educators choose how to run schools and we let parents choose which of those schools they think is best for their children, I think they would be choosing something very different in a lot of cases than what our kids are getting today.

Mr. FULCHER. Thank you, Mr. Chairman. I yield back.

Chairman SCOTT. Thank you.

The gentleman from Pennsylvania, Mr. Thompson.

Mr. THOMPSON. Chairman, thank you. Thank you for this hearing. Thanks for each member of the panel for being here. Important topic.

I am a recovering school board member. Obviously, before that I was a dad. My oldest was just going into kindergarten when somebody asked me, there was a vacancy on the school board, and they told me it was only 1 hour a month. Yes. It was a pastor that told me that. That is when I figured out pastors lie sometimes. But I am so glad that I did that. My wife went along for 8 years after I had served our school board. And I really—a lot of—and I appreciate the conversation.

You know me, I do think it comes to—my assessment, having spent so much time and been so passionate about education, there really is local leadership can make all the difference too, and state leadership, no doubt about it. States need to recognize that is a priority. Our school boards get their authority delegated through the state government. But at the local level, we need school board members, quite frankly, that hold our administrations accountable.

I was honored to work with a school board member that actually was—my wife and I went to school there. He was our—he taught problems of democracy. So if I mess up as a Member of Congress, I blame it on Mr. Fisher. But he was a great superintendent, you know. He had—he knew that we had to constantly invest in our schools, that you couldn't wait till things imploded and then expect somebody else to bail you out or do a huge tax increase all at once.

You know, we kind of nibbled at it, and we kept—and it is a very rural school district. Geographically it is one of the largest in Pennsylvania. Enrollment is not that big, though. I don't know if they have 1,200 students today. It is probably less than that.

And so I want to start with, Ms. King. First of all, thank you for your leadership of PTA. I really have enjoyed my relationship with the National PTA. We have worked together on a number of projects, including the family engagement center where—and I was pleased that, you know, we authorized that as part of ESSA, and it actually got appropriated for $10 million. Sometimes that is the hard part, getting the checks written. And we are at $10 million. And it just models really your engagement, which I so much appreciate.

And so my thoughts are, I am just curious, with the family engagement centers, which is something I worked hard with PTA and we put it into ESSA, you know, do we see that? And it is so important to engage families. But I am also hoping that we raise up our next generation of school board members, you know, by engaging families there that a mom or dad then will step forward, you know, and just take it that next step. Are we seeing any evidence of that yet?

Ms. KING. Well, any parent resource center is going to have even just a tad bit of progress inside of them where they can get information to families to be engaged inside of their schools. As far as the 12 states or the 13 states that have these resources, these family engagement centers inside of their states, right now, we don't have any information that could tell us if they are being successful or not.

But as a parent, anything that I can receive to empower me and engage me inside of my students' schools and communities is very important. So regardless if we don't have the data to tell us right now, I can say that any and everything that they are doing is empowering and engaging parents that are receiving information.

Mr. THOMPSON. And we hope—and I hope that motivates some parents to take that next step too—

Ms. KING. Absolutely.

Mr. THOMPSON [continuing]. in terms of that local governance. And thank you for what you have done.

Dr. Scafidi, I want to talk a little—just briefly, because I don't have much time, about Title I funding. You know, we were—we successfully put into the Student Succeeds Act at least a requirement for the Department of Education to do a study. It is not—to the best of my knowledge, it hasn't been completed yet, at least the results haven't been shared. It was about the equity of the distribution of those funding. That is something I have always championed in terms of—the act was called the ACE Act, All Children are Equal. Because depending what zip code you lived in, there was more money per child to offset the impact of poverty.

You know, is that something—in terms of Title I and the distribution, the equity of those funds, because right now, most of the money goes to large suburban districts that have poverty. There is not a zip code that doesn't have poverty, but the instance of poverty is smaller compared to, you know, rural and urban districts where it can be higher.

Any thoughts on the rule if we actually get that Title I funding fixed so it is distributed equally?

Mr. SCAFIDI. Just two comments. Does anyone know the lowest child poverty rate in this country since 1960, when that is? Right now. Second, Federal funding targeted to low-income students should go to low-income students. It should go where it is needed the most. And, you know, state departments of education need to, you know, make sure that is happening, and school districts within should work on that as well.

Mr. THOMPSON. So hopefully the Department of Education will get that study done in a timely manner. It is already passed that point, I think, and—so that we can perhaps fix those, a distribution system for those Title I funds.

Thank you, Chairman.

Chairman SCOTT. Thank you.

I now recognize myself for questions and start with Mr. Scafidi. You showed this chart. The purpose of statistics is to make a point, and we have said that the apparent point of this is that we are wasting all the money on other staff that could be spent somewhere else and what could be done with all that money. And I was surprised—initially surprised that it is about even-steven teachers and

nonteachers. Then I thought about it, teacher aides are not included as teachers, right?

Mr. SCAFIDI. Correct.

Chairman SCOTT. Ok. So if you had a teacher aide in each classroom, you would be up to even-steven already. All classrooms don't have teachers. But because of Individuals with Disabilities Education Act, you will have a lot of teacher aides.

Does this study include bus drivers?

Mr. SCAFIDI. Bus drivers are counted as all other staff.

Chairman SCOTT. Ok. So if you have a 30 classroom—30 classrooms, about how many bus drivers do you think you would have?

Mr. SCAFIDI. Thirty classrooms?

Chairman SCOTT. Yes.

Mr. SCAFIDI. Oh, it is—I guess, it depends on class size as well, but a bunch.

Chairman SCOTT. A bunch, Ok. Cafeteria workers?

Mr. SCAFIDI. Yes.

Chairman SCOTT. A bunch?

Mr. SCAFIDI. Yes.

Chairman SCOTT. Custodians?

Mr. SCAFIDI. Need them too.

Chairman SCOTT. Secretaries in the front office?

Mr. SCAFIDI. Need—well, they are more of a fixed cost, but, yes.

Chairman SCOTT. Ok. But, I mean, the idea—you are getting pretty close to 50/50, and I think I understood you, in response to the gentlelady from Pennsylvania, saying you couldn't figure out who to cut. We haven't gotten to guidance counselors. We never have enough of those. And we haven't started talking about superintendent's office, and you would expect a superintendent staff doing research and administration.

What would be a reasonable ratio?

Mr. SCAFIDI. The point I was making with that chart was that is a sharp break with American public school history.

Chairman SCOTT. Well, you didn't say anybody would be—when I grew up, they didn't have school buses for African American students, so, I mean, there is a lot of stuff that we are doing now that we weren't doing before.

Mr. SCAFIDI. That is a great point.

Chairman SCOTT. But you didn't indicate anybody that could be left off. And so the conclusion that all of this money is being wasted, isn't it an accurate conclusion that you ought to draw from the fact that it is 50/50? Isn't that right?

Mr. SCAFIDI. To your first point, that is why I start my main analysis at 1992, to allow for school integration and integration of specialty needs students.

Chairman SCOTT. Ok. But you said by the time you have gotten through teacher aides and bus drivers, you are almost to 50/50 already.

Mr. SCAFIDI. Well, if you are increasing students by 20 percent—

Chairman SCOTT. I am not talking about students. We are talking about what it is today.

Mr. SCAFIDI. Yes. What I am saying is—

Chairman SCOTT. You haven't indicated anybody in a normal school system, just in the school, 30—I mean, you don't have a foot-

ball coach. I mean, there are a lot of things that would add up a nonsupervisory.

Who would you cut out from the list that is there today?

Mr. SCAFIDI. I actually got this email from the CFO of a large school district in Florida when he saw one of my reports. And he said, what should I do? And I said, do what they do in other walks of life. Look at every single expenditure and every single person and say, is that the best use of those funds? And if the state government or the Federal Government is making you spend the money that way or hire that person, ask them to let you out of that requirement.

Chairman SCOTT. But the initial reaction that most people have is a 50/50 ratio is not—should not be shocking.

Ms. Weingarten, is there anything shocking about a 50/50 ratio of school employees?

Ms. WEINGARTEN. Not right now, given how much we do in terms of feeding kids and how much we do in terms of transportation, IDEA, and all the remedial kind of work and, frankly, all the testing kind of issues that have happened in schools.

Chairman SCOTT. Ok. And, Mr. Scafidi, you have indicated that we are talking about math. If we are talking about school construction and you are trying to discuss salaries with the school board and they show you what they are spending on eliminating mold, on fixing leaky roofs, on air-conditioning, and things like that, how does that affect your ability to discuss teacher salaries?

Mr. SCAFIDI. Different school districts, different individual schools have different needs.

Chairman SCOTT. This is to Ms. Weingarten. Thank you.

Mr. SCAFIDI. Oh, I am sorry.

Chairman SCOTT. How does that affect your ability to discuss teacher salaries?

Ms. WEINGARTEN. The—if—what is happening is that every issue, the most important, immediate issue is the one that teachers always want fixed first. So when schools are leaky or when there is this much mold or this much respiratory illness, you are going to hear everyone, including teachers, say fix that first. And so having a pot of money that goes for infrastructure will then enable locals and others to negotiate teacher salary and teacher conditions. That is why your bill, sir, is so important.

Chairman SCOTT. Thank you.

Dr. Scafidi, I cut you off. I didn't mean to. Did you have a comment on that?

Mr. SCAFIDI. No. I was just saying different schools have different needs, and, yes, they should address their highest priority.

Chairman SCOTT. And if you are talking arithmetic, if you are spending a lot of money on fixing a leaky roof, you don't have the money for teacher salaries. Thank you.

This ends the questioning. Dr. Foxx, do you have a closing comment?

Ms. FOXX. Thank you. Thank you, Mr. Chairman. I do have some brief closing comments.

And I want to begin by thanking the witnesses for being here today. It has been a long hearing, and I appreciate your patience

in being here. And I want to thank the Chairman for his attention to the issues.

This hearing is taking me back to my school board days. And even though that experience was one of the most formative in my life, a congressional hearing in Washington that sounds like a school board meeting is not necessarily a good thing.

Teachers and students deserve the best working and learning environments money can buy. And if the money we are spending at every level of government isn't buying what students need, the answer isn't more money. On that, our distinguished Chairman and I are just going to have to continue to disagree. But that doesn't mean our work in this area is done. Far from it. We are all very proud of the bipartisan work that went into the Every Student Succeeds Act. That law is now at a crucial stage of implementation, particularly as Mr. Thompson pointed out.

So I am committed, and I hope every member of this committee is committed to ensuring that law is funded at the levels we have already authorized and that it is implemented in the way we intended, and that is to serve students.

So we have talked about ESSA. We have talked about opportunity zones. But we have barely touched in this hearing on the historic economic growth communities are experiencing and what that means for local revenues.

And I very much appreciate what Dr. Scafidi said about the lowest rate of poverty for children right now in our country. You know there is more to Main Street than small businesses. There are an awful lot of schools on Main Street too. So, again, as Dr. Scafidi has pointed out, perhaps we need to spend more time thinking about how to reform the system to better use the resources we already have.

I am certain that if we put our heads together, we could find a new idea that would actually work for students that just might enter the realm of fiscal responsibility.

Thank you, Mr. Chairman. I yield back.

Chairman SCOTT. Thank you.

And I want to thank you again for—in your opening statement reminding everyone that Democrats have been advocating for more funding in education. We intend to continue that. And I appreciate your reminding everybody.

As we have heard today, this is not a moment for incremental change or of small increases. Title I is at a third of its authorized amount. IDEA has never gotten anywhere close to the authorized amount. And conversations around local government ignore the reality that low-income communities are receiving nowhere near the funding they actually need, and the Federal Government has provided some in closing that gap.

And we mentioned Every Student Succeeds Act. One of the things we put in there is that the additional funding should supplement, not supplant, what the school systems are doing. But the Federal role in education has traditionally been to kind of plug the gaps of areas where, in the normal course of things, don't happen, and that is why the school construction is one area that we have indicated. It is just not happening, and the Federal role can close that gap.

We did the same thing with special ed, IDEA funds things that are not being funded today, Title I, addressing low-income students, bilingual education. There are a lot of areas that—where we need to close the gap, and I think school construction is certainly one of them.

I remind my colleagues that the record will be open for 14 days for additional comments, and witnesses may be—you may receive questions, written questions. We would ask you to answer them as soon as possible. And if members have questions, that those be submitted within 7 days so that the witnesses can have adequate time to respond.

If there is no further business, the committee is now adjourned.

[Additional submissions by Dr. Scafidi follow:]

Kennesaw State University
Department of Economics, Finance &QA
Michael J. Coles College of Business

The Honorable Bobby Scott, Chair
House Education & Labor Committee

By Email

February 26, 2019

Dear Chairman Scott:

Thank you for having me testify before the House Education & Labor Committee on February 12, 2019. I also thank you, Ranking Member Foxx, and the committee staff for your hospitality.

I write to request a minor change to my written testimony. Please change the second to last sentence in my written testimony to the following:

"Arizona has had the biggest gains in the nation since 2009 and Florida's gains have been impressive since 1998—for both states, their eras of enhanced school choice."

Thus, the only change is that "2004" in the original written submission should be changed to "2009", as shown in the sentence above.

I apologize for the typo in my original submission, and thank you for including this correction in the record.

Sincerely,

Benjamin Scafidi

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[Additional submissions by Chairman Scott follow:]

Coalition *for* Healthier Schools

...providing the national platform and the forum for environmental health at school, since 2001...

Coordinated by Healthy Schools Network

Support: Rebuild America's Schools Act, HR 865

On behalf of more than 150 participating parent, public health, environment, and education groups in the national Coalition that was established in 2001, we offer our strongest support for the Rebuild America's Schools Act.

Children are not just little adults. Schools are not just little offices.

Every state requires children to attend school. Some 50 million children are in 100,000 public schools every day; there are more schools than zip codes. Schools are the places where children spend the most time when they are not at home. Children are biologically more vulnerable to environmental hazards than adults are. Schools are four times more densely occupied than offices and have diverse operations and sources of hazards. Robust research has shown that schools can increase attendance and achievement overall if their facilities are kept clean, dry, and quiet, have good ventilation and thermal comfort, control dusts, and reduce harsh odors. Thus, school facility siting, design, construction, operations, and maintenance are critical to children's educational outcomes.

RASA will help states and Tribal Nations take common sense steps to improving the conditions of the neediest schools and to providing public information on these community facilities. RASA will also offer support to local schools to help them address their critical facility needs.

The Coalition has long supported reforms to improve school environments in the states and federally, and has successfully championed new authorizations and funds for US EPA and Education to improve their efforts. It supports:

- the development of practical, problem-solving plans by the states to: 1- create and update an inventory of facilities, 2- identify and coordinate how various state agencies can assist schools, and 3- adopt policies to protect occupants of schools under demolition and reconstruction, as several states have already done;

- federal funds to help reduce or eliminate well-known hazards in schools such as lead in paint and water, PCBs, vapor intrusions, asbestos, molds, and to improve indoor air quality and lighting, as well as to help local schools come into compliance with safety and accessibility codes and regulations; and,

- high-performance/green school design standards that result in easy to clean and to maintain facilities that are healthy places for all children to learn and for all personnel to work.

# # #

TALKING POINTS
PUT OUR CHILDREN AND THEIR SCHOOLS FIRST

There are more schools than zip codes. All states require children to attend school. Every school day there are 50M children in 100,000 public schools.

School buildings still have a D? Many schools are in poor condition: ASCE graded them a D+ in 2017, up from D in 2013. The poorest children have schools in the worst shape (ASCE, GAO, NCES).

Children are more vulnerable to environmental hazards than the adults around them: they breathe more air/pound of body weight, drink more water, can't identify hazards (EPA, CDC, NIEHS, AAP).

Common hazards in schools decrease children's health, thinking and learning: lead in water/paint; polluted indoor air; chemical spills/misuses; pests/pesticides; hazardous cleaning products; noise; poor sanitation and lighting; asthma triggers (Harvard SPH; EPA; NRC).

Preventing hazards will raise attendance and test scores. Children do better in schools that are "clean, dry quiet, with good ventilation and air quality, and control dusts and particulates" (EPA, NRC, IOM).

SIX WINS from Better School Infrastructure

1, 2, 3, 4 – Reduce illnesses; improve attendance; improve test scores; save energy: investments in clean air, clean water, and updated heating, ventilation, and lighting.

5 – School repairs yield more high quality local jobs: big projects like roads and bridges are done by big contractors with big equipment. School retrofits are done by the trades: carpenters, electricians, plumbers, roofers, painters, and masons.

6 – School building investments yield great photo-ops: visit happier, healthier children and workers at a retrofitted school.

See the national indicators report on healthy school environments for all children:
Towards Healthy Schools: Reducing Risks to Children (Aug. 2016)

RASA 2019 Memo of Support:
Contact info@healthyschools.org, visit www.healthyschools.org

www.BuildUSschools.org

For Immediate Release
January 30, 2019

Contact: Mary Filardo
202-745-3745 X 11

WASHINGTON, D.C. – The [re]Build America's Schools Infrastructure Coalition (**BASIC**) pledges strong support today for the "Rebuild America's Schools Act." We commend Chairman Bobby Scott (D-VA) and Senator Jack Reed (D-RI) for their continued leadership, on behalf of America's students, in introducing this much-needed legislation.

Our nation's 100,000 schools are a core public infrastructure and the nation's second largest national infrastructure investment, after roads and bridges. Every weekday, 56 million children and adults - 1 in 6 of all Americans - set foot in a public school. Schools anchor communities. They provide our nation's children with a learning environment essential to their achievement and to the productivity of working parents and guardians. Schools serve as community centers for a wide array of programs, such as school breakfasts and lunches, after-school care, community health clinics, disaster-relief centers, and voting places.

Yet, the average public school building is about 50 years old and half of our nation's public schools - in urban and rural areas - need major facility repairs. In 2017, the **American Society of Civil Engineers gave our public K-12 infrastructure a "D+."** This leaves millions of public school children in schools that pose health threats and undercut their educational efforts and those of their teachers.

"Local communities and states have invested an average of $49 billion annually over the last 20 years to keep their public school facilities in good repair and to build additions and new schools to serve growing enrollments and changing educational requirements. To accomplish this, local districts amassed $434 billion in long term debt (as of the end of fiscal year 2016). But even with this tremendous effort, low wealth and high need school districts and states simply can't keep up with the needs of their aging buildings. Public school districts are short an estimated $38 billion each year," said Mary Filardo, Chair of BASIC and Executive Director of the non-profit 21st Century School Fund.

Recent news coverage of lead in school water fountains and students forced to wear winter coats in class because of failed furnaces underscore that the time is ripe for a large-scale solution. According to a January 2019 poll conducted by POLITICO and the Harvard T.H. Chan School of Public Health, **66 percent of Americans – the majority of Democrats and Republicans- identify federal spending on public school buildings as "extremely important."**

The federal government has a long history of supporting relatively small, discrete programs for public school facilities funding through many different federal agencies. Targeted federal funds for public school facilities have been provided through FEMA disaster relief and mitigation; U.S. Department of Education Impact Aid and charter credit enhancement; Department of the Treasury tax credit bonds; and the Department of Agriculture, Secure Rural Schools Program; Department of Health and Human

Services for Head Start facilities; and the Department of the Interior, for Payments in Lieu of Taxes (PILT) and Bureau of Indian Affairs Schools—to name a few.[1]

The issue now is one of fairness, scale, and efficiency. Low-wealth and high need school districts are simply unable to provide children, teachers, and other school staff the teaching and learning environments they need.

The funding and responsibilities for our public school facilities will remain with our states and districts—the Rebuild America's Schools Act can meet about only about 10% of the needs of districts. But it is a significant step forward, a smart investment in our nation's communities and economy, and an appropriate federal role. The legislation, if enacted, would provide targeted funding, in block grants to states, to help rebuild our nation's schools and struggling communities.

The Rebuild America's Schools funds will also leverage other state and local public and private investments. For example, states will need to match the federal funds and Rebuild America's Schools funding will buttress the impact of investments in Opportunity Zones, where 13,500 public schools are located--a benefit for investors and communities.

We urge Members of Congress to work across the aisle on this important issue to deliver safe, healthy, modern, and well-equipped schools to students across our nation.

###

The **[Re]Build America's School Infrastructure Coalition (BASIC)** is a non-partisan, diverse coalition of civic, public sector, and industry associations that support federal funding to help underserved public school districts modernize their facilities. Members believe that ALL children should attend healthy, safe, and educationally appropriate school facilities. For more information, visit us at www.buildusschools.org. Follow BASIC on Twitter @BuildUSschools

[1] https://crsreports.congress.gov/product/pdf/R/R41142 Congressional Research Service, School Construction and Renovation: A Review of Federal Programs, Updated November 16, 2015.

National Association
of Federally Impacted Schools

400 North Capitol Street, NW, Suite 290 | Washington, DC 20001 | (p) 202.624.5455 | www.NAFISDC.org

January 31, 2019

The Honorable Robert Scott
United States House of Representatives
203 Ford House Office Building
Washington, DC 20002

The Honorable Jack Reed
United States Senate
728 Hart Senate Office Building
Washington, DC 20002

Dear Chairman Scott and Senator Reed:

On behalf of the National Association of Federally Impacted Schools (NAFIS), we write to express our support for the Rebuild America's Schools Act of 2019. NAFIS represents the 1,200-plus Impact Aid-recipient school districts nationwide that educate more than 10 million students. The Impact Aid program replaces the lost local tax revenue associated with the presence of non-taxable Federal property such as military installations, Indian lands, low-rent housing, and national parks and laboratories.

NAFIS is especially pleased to see that funding for Impact Aid is a priority under Title IV. Federally impacted districts face the unique challenge of limited local tax revenue (and in turn, limited or non-existent bonding capacity) due to the presence of nontaxable Federal property. School districts are educating students in facilities with health and safety code violations, or that are more than 100 years old. Specific needs include overcrowding, tornado shelters, leaky roofs, cracked foundations, expired boilers, and more. In a 2017 survey of 218 federally impacted districts[1], NAFIS identified $13 billion in unmet construction need, including $4.2 billion in pressing need.

Congress recognized in 1950 that the Federal Government had an obligation to help meet the local responsibility of financing public education in areas impacted by a Federal presence, including funds for school construction. That same recognition holds true today; however, annual appropriations for Impact Aid Construction (Section 7007) have been stagnant at around $17 million for over a decade. A $172 million infusion of funds, as proposed, could be easily allocated – the program and staff capacity already exist – to address the significant backlog of facility needs.

We look forward to continue working with you and your colleagues to identify the cost of capital construction needs for federally impacted schools, and to address the unmet needs with adequate Federal funds. Thank you for making these school districts, and the students they serve, a priority.

Sincerely,

Hilary Goldmann
Executive Director

Leslie Finnan
Director of Policy & Advocacy

[1] https://www.nafisdc.org/wp-content/uploads/2017/07/2017-school-construction-report.pdf

THE NAFIS FAMILY

FLISA	MISA	MTLLS	NIISA
Federal Lands Impacted Schools Association	Military Impacted Schools Association	Mid-to-Low-LOT Schools	National Indian Impacted Schools Association

North American Concrete Alliance

January 31, 2019

The Honorable Bobby Scott
Chairman
House Education & Labor Committee
2176 Rayburn House Office Building
Washington, DC 20515

Dear Chairman Scott:

The North American Concrete Alliance (NACA) is a coalition of 12 concrete-related trade associations that provide construction materials and equipment essential for America's infrastructure. We employ tens of thousands of workers in well-paying American jobs, and we strongly support increased investment in the nation's infrastructure, including public school facilities.

NACA supports the reintroduction of the *Rebuild America's Schools Act*. The Department of Education's 2016 *State of our Schools Report* presented a $46 billion deficit of funding needed to improve and modernize our nation's schools. This deficit represents the health and safety risks posed to American students each day as aging schools face deterioration and neglect, despite the fact that school facilities are second only to highways in public infrastructure funding.

We believe this is a critical legislative effort. Students across America deserve the opportunity to learn in modern, structurally sound schools. The capital investment from the reintroduced bill would also include an economic benefit, resulting in nearly 18,000 jobs, according to the Economic Policy Institute. This investment creates growth that looks toward the future by providing thousands of jobs in underserved communities and, most importantly, improving outcomes for the next generation, which will enable the United States to remain globally competitive.

On behalf of our member institutions, we celebrate your committee's leadership and commitment to our nation's students and look forward to working with you to advance the *Rebuild America's Schools Act*.

Sincerely,

American Concrete Pavement Association
American Concrete Pipe Association
American Concrete Pressure Pipe Association
American Concrete Pumping Association
Concrete Foundations Association
Concrete Reinforcing Steel Institute
National Concrete Masonry Association
National Precast Concrete Association
National Ready Mixed Concrete
Precast/Prestressed Concrete Institute
Portland Cement Association
Tilt-Up Concrete Association

For Immediate Release
January 30, 2019

Contact:
Elena Temple
202-309-4906
etemple@aft.org
www.aft.org

AFT's Randi Weingarten on the Rebuild America's Schools Act

WASHINGTON—American Federation of Teachers President Randi Weingarten issued the following statement on the introduction of the Rebuild America's Schools Act, a $100 billion proposal to address the chronic underinvestment in school buildings across the country. The legislation will be unveiled tomorrow on Capitol Hill as one of the first items of business for the House Committee on Education and Labor.

"Every day, millions of students and educators across the country attend schools that put their health and safety at risk—black toxic mold on floors, classrooms without heat, leaking ceilings and contaminated water. We cannot send our kids to schools in these conditions and expect them to learn and thrive. Our children deserve better.

"Thanks to the leadership of Chairman Bobby Scott and Sens. Jack Reed and Sherrod Brown, Congress can take long-overdue action to address the deteriorating and obsolete school facilities that exist in far too many of our communities. Rebuilding America's public schools requires making our school infrastructure a priority and committing resources to back that claim up."

###

Follow AFT President Randi Weingarten: http://twitter.com/rweingarten

For Immediate Release

Friday, February 01, 2019

Contact: Omar Tewfik
Email: otewfik@afscme.org

AFSCME Applauds Congressional Proposal to Invest $100 Billion in America's Public Schools

Washington —

AFSCME President Lee Saunders issued the following statement in support of the Rebuild America's Schools Act, which would make a much-needed $100 billion investment in America's public schools:

"There's nothing more important to the strength of our communities than the quality of our schools. But for too long, schools have been neglected, starved of the investments our children need to thrive.

"Millions of students and education professionals spend all day in unsafe facilities without basic resources. Lack of proper air conditioning forced students in Ohio out of school last year; the year before, thousands of children in Flint, Michigan, were exposed to lead in drinking water. AFSCME applauds Chairman Bobby Scott for the Rebuild America's Schools Act, which would provide $100 billion to address critical physical and digital infrastructure needs in schools across the country."

AFSCME members provide the vital services that make America happen. With members in communities across the nation, serving in hundreds of different occupations — from nurses to corrections officers, child care providers to sanitation workers — AFSCME advocates for fairness in the workplace, excellence in public services and freedom and opportunity for all working families.

###

American Federation of State, County and Municipal Employees, AFL-CIO
1625 L Street, N.W. Washington, D.C. 20036-5687
Telephone: (202) 429-1145
Fax: (202) 429-1120

Parents For Students Safety, Tennessee

www.parentsforstudentssafety.org

Letter of Support

for "Rebuild America's Schools Act" (RASA) – H.R. 865

To Whom This Regards

Dear Members of Congress

Our Grassroots Organization "Parents For Students Safety" (www.parentsforstudentssafety.org) takes this opportunity to send this letter of support for The Rebuild America's School Act (RASA), bill number H.R.865 which has been reintroduced in the 116th Congress session of 2019-2020, by US Congressman Robert Scott [D-VA-3] with the purpose to provide for the long-term improvement of public school facilities, and for other necessities.

Many schools are in poor condition: ASCE graded them a "D+" in 2017, up from a "D" in 2013. The poorest children have schools in the worst shape (as per ASCE, GAO, NCES).

Children are more vulnerable to environmental hazards than the adults around them: they breathe more air/pound of body weight, drink more water, can't identify hazards (EPA, CDC, NIEHS, AAP). Students are forced to attend public schools, no matter in what condition a learning facility is, risking by that their health.

Too many schools across America still pose a significant health and safety threat to more than 50 million students and to 3 million teachers in public schools. According to a 2014 CDC survey, only 46.5 % schools have a program in place today to address indoor air quality (IAQ) issues.

The Rebuild America's Schools Act (RASA) H.R. 865, would invest $100 billion to create over 1.9 million jobs by addressing critical physical and digital infrastructure needs in schools which are poorest and need it the most. Our students' health and performance depend on these improvements. Thank you.

Best regards,

Daniela Kunz
President and Founder
Parents For Students Safety

Franklin, Tennessee, February 7th, 2019

[Additional submissions by Ms. Weingarten follow:]

Dennis Smith: Words of caution from experience in failed charter system (Gazette Opinion)

By Dennis D. Smith Feb 4, 2019

Dennis D. Smith

In the last several days, I took some time to examine Senate Bill 451 and its provisions for establishing charter schools in West Virginia. My interest in doing so was based on my previous service as a school administrator in the state, as well as 11 years of experience in Ohio as an administrator for a charter school authorizer and as a consultant in the charter school office of the Ohio Department of Education.

It is this experience in both public education and the charter school environment that allows me to urge West Virginia citizens to do everything possible to halt this odious legislation.

After more than 20 years of growth nationally, it is noteworthy that some of the trend lines for charters are on the decline. This experiment with deregulation has resulted in massive corruption, fraud and diminished learning opportunities for young people.

As a state monitor, I observed a number of incompetent people serve as charter school administrators because Ohio state law has no minimum educational requirements nor any professional licensing prerequisites for school leaders.

In addition, numerous conflicts-of-interest, including a board member serving as landlord and management companies charging exorbitant rents for properties conveniently used for charter schools, are only part of the problem of the charter experiment.

In Ohio, where charters have operated for 20 years, the trend line is down significantly. From a high point of more than 400 schools, 340 are operating today. Moreover, there is a junk pile of failed charters that have closed. The Ohio Department of Education website lists 292 schools that are shuttered, with some closing in mid-year, disrupting the lives of students and their families. Moreover, total charter school enrollment in the state is down by more than 16,000 students since 2013, the peak year of charter operations in the Buckeye State.

The West Virginia omnibus measure allows online schools to operate, as does Ohio and other states. But last year, Ohio's Electronic Classroom of Tomorrow, one of the largest e-schools in the country, closed amid scandal, where the owner and his administrators funneled millions of dollars in donations to friendly state legislators while padding enrollment numbers to gain state education payments.

In my home state of Pennsylvania, there is also a growing scandal involving an online school. The West Virginia Legislature has not heeded these lessons to be learned from its neighboring states that have been in the troubled charter school business for decades.

In a 2015 study by the Center for Research on Education Outcomes at Stanford University, the data collected nationally cast doubt on the effectiveness of these schools for K-12 learners. One summary of the report stated that "online charter schools place significant expectations on parents, perhaps to compensate for limited student-teacher interaction." Such a conclusion should give state educators pause and put a halt to this legislation.

With the demise of so many hyped "schools of choice," these now defunct "electronic classrooms of tomorrow" are, in fact, yesterday's schools of the failed charter experiment.

A final word of caution. To some, the very term "public charter school" may, in fact, be an oxymoron.

The public should know that, when states authorize charters to operate, exemptions are made in the state code to facilitate this deregulation of public education. But charters may not even be public schools. In cases testing the constitutionality of charter schools, the Washington State Supreme Court first held that charter schools were unconstitutional based on the fact that their governing boards were not selected by qualified voters in an election. The court modified its ruling in October 2018. But in a

dissenting opinion, one justice wrote that charter school legislation "creates a parallel public school system that provides a general education, serves all students and uses public funds, but lacks local voter control or oversight."

Members of the West Virginia Legislature would be wise to reread that sentence. In an age where the formulation of public policy serves to address how we apply limited resources to satisfy unlimited needs, we don't need and can't afford two systems of "public" education. And if the reason for such legislation is to exact revenge against public employees who protested the meagerness of their compensation and benefits, that is both wasteful of scarce public resources and shameful conduct by those who are in office to serve, not to inflict pain on those who also serve the public.

Dennis D. Smith is a former West Virginia education administrator and a former administrator of authorization of charter schools in Ohio. He lives in Westerville, Ohio

Economic Policy Institute

Working Economics Blog

Posted March 30, 2018 at 1:41 pm by **Lawrence Mishel**

Evidence shows collective bargaining—especially with the ability to strike—raises teacher pay

Some recent media reports on a **new academic study** by political scientist Agustina S. Paglayan give the impression that the paper's findings reflect badly on teachers unions. This is a misreading, however, of the study and of its implications. A key issue lost in the press accounts is that the study is, first and foremost, an historical analysis, examining the effects of the expansion of state collective bargaining rights for teachers between 1959 and 1990. Given the historical focus, the study excludes the experience of the last three decades, where the evidence clearly suggests that collective bargaining raises teachers pay.

But, even with respect to just the historical period studied, the paper's conclusions are much more nuanced than the press reports suggest. A central conclusion, which has been overlooked in media accounts, is the author's view that the reason that teachers unions might not have been effective in raising expenditures on education (including teachers' pay) in the early days of expanding collective bargaining rights is because the laws that allowed collective bargaining often simultaneously restricted the ability of public-sector unions to strike. What the law gave with one hand, it often took back with the other. To illustrate the point, the paper shows that in states where public-sector workers had both the right to collective bargaining and the right to strike, collective bargaining did appear to increase expenditures on education.

More recent evidence on the effect of unions on teacher pay

Any analysis of unionized public-sector teachers' pay needs to separate out two points of comparison: one is a comparison of teachers' pay with what similar workers earn in the private sector; the other is a comparison between what unionized and non-unionized teachers earn in the public sector.

Economist Sylvia Allegretto and I have **demonstrated** that since the mid-1990s a substantial penalty has emerged for public school teachers relative to similar workers in the private sector. In 1994, teachers' wages were about 2 percent below those of comparable workers in the private sector. By 2015, teachers' wages were about 17 percent below similar workers in the private sector. This wage gap was partially offset by improved benefits, but there was still a record "total compensation" gap of 11 percent in 2015. At the same time, we also found that, "Collective

bargaining helps to abate the teacher wage gap. In 2015, teachers not represented by a union had a 25.5 percent wage gap—and the gap was 6 percentage points smaller for unionized teachers." This suggests that teacher unions may have had a more substantial impact in the last few decades than what Paglayan found.

Two other recent papers also conclude that teachers unions do moderately raise wages and benefits and thereby lessen the pay penalty that teachers face relative to comparable workers in the private sector. A February 2018 report for EPI by Jeffrey Keefe, **"Pennsylvania's teachers are undercompensated—and new pension legislation will cut their compensation even more**" notes that prior research indicates:

> More than three-quarters of teachers today (including more than 70 percent of new teachers) say that, absent the union, their working conditions and salaries would suffer. A majority of teachers also agree that without the union they would be more vulnerable to school politics and would have nowhere to turn in the face of unfair charges by parents or students. Fully 84 percent say their union protects teachers through due process and grievance procedures, with 71 percent of teachers giving "excellent" or "good" ratings to their unions. Union teachers were found to be more enthusiastic about teaching and less likely to leave for better-paying jobs.

Keefe conducted his own analysis of *Current Population Survey Outgoing Rotation Group* (CPS-ORG) data for the years 2013 to 2015 to examine the union impact on pay. Specifically, Keefe compared the weekly earnings of union and nonunion teachers across the United States with controls for education, experience, gender, race, ethnicity, marital status, disability, citizenship, region, weeks worked per year, and weekly hours of work. He found that union membership, on average, resulted in "5.1 percent higher wages and 5.4 percent higher total compensation for its members when compared with the compensation of public school teachers who are not union members."

Separately, Allegretto and Tojerow, in ***Teacher staffing and pay differences: public and private schools***, published in Bureau of Labor Statistics' Monthly Labor Review, provide estimates of the union impact on teacher pay between 1996 and 2012. They pooled Current Population Survey data to estimate pay gaps for four teacher groups: unionized public sector teachers, unionized private sector teachers, nonunionized public sector teachers, and nonunionized private sector teachers. Their results, therefore, "compare teacher pay relative to that of comparable workers and among the four teacher groups." Allegretto and Tojerow use traditional human capital controls plus employ year and state fixed effects.

They find:

> Results indicate that the pay gap between nonteacher workers and similar unionized public school teachers is -13.2 percent while it is -17.9 percent for nonunionized public school teachers. The gap for unionized private school teachers is -26.2 percent, compared with -32.1 percent for the more likely situation of nonunion private school teachers. Thus, unionization helps to mitigate the teacher pay gap with nonteacher workers for both sectors.

And:

> For female public sector teachers, the pay gaps with female nonteacher workers are -7.2 percent for union workers and -14.2 percent for nonunion workers; for the male sample of public sector teachers, the corresponding pay gaps with male nonteacher workers are -24.6 percent and -26.8 percent.

Allegretto and Tojerow's results indicate that teacher unionization lifted wages in the public sector by 4.7 percent (17.9 percent less 13.2 percent) overall, by 7.0 percent among female teachers (14.2 percent less 7.2 percent) and by just 2.2 percent for male public school teachers (26.8 percent less 24.6 percent). Consistent with what Allegretto and I found in our earlier study, these results demonstrate that the teacher wage penalty was smaller for teachers in unions.

The role of strikes

Media attention has focused on the finding that the expansion of public-sector collective bargaining between 1959 and 1990 was not associated with increases in expenditures on education over and above pre-existing trends. But, the paper explains these results by arguing that many states granted collective bargaining rights and, at the same time, severely restricted new unions' legal ability to strike. In Paglayan's view, state collective bargaining legislation "often contain[ed] both pro- and *anti*-union provisions" (p. 30, emphasis in original). Restrictions on strikes, in her view, had a substantial impact on the way teachers unions affect state expenditures on education. In summarizing her findings, Paglayan writes: "...many mandatory bargaining laws contained provisions designed to limit unions' ability to strike... [and] laws that did not contain these provisions did lead to increased education spending." Paglayan's own assessment of her findings is not that collective bargaining failed to increase educational expenditures, but rather it was the lack of collective bargaining coupled with the legal right to strike that limited teachers ability to help to direct additional resources to state educational budgets.

PORTLAND PUBLIC SCHOOLS
Lincoln High School
1600 S.W. Salmon Street, Portland, Oregon 97205
Phone (503) 916-5200 / Fax (503) 916-2705
peytonc@pps.net

Dear House Education and Labor Chairman Bobby Scott and Committee Members,

My name is Peyton Chapman, and I am currently serving as the principal of Lincoln High School in Portland, OR. I am also the 2018–19 president of the Oregon Association of Secondary School Administrators and a former board member for the National Association of Secondary School Principals (NASSP). Thank you for your work to improve the impoverished school conditions to which we are currently subjecting our nation's children every school day.

When I was in graduate school in 1991, I read *Savage Inequalities*, a book that detailed how inner-city schools in Chicago had overflowing bathrooms that sent feces flowing down the hallway. Twenty-three years later in 2014, our country watched the lead crisis unfold in Detroit and gaped at toxic levels of lead, radon, and asbestos in all schools in my home district of Portland. The neuroscience is clear: These toxins damage the developing brain. Yet we legally require students, through compulsory education laws, to expose themselves to these toxins on a daily basis. Here in Portland, we also worry that earthquakes and unreinforced school masonry could wipe out an entire generation of children ages 5–18 if the "big one" were to happen. In other regions of our country, schools are not built to withstand the increasing dangers of flooding, hurricanes, and tornadoes. Those potential tragedies are often obscured by the very real, daily crises of falling ceiling tiles, electrical fires, floods caused by leaking roofs, and eye wash stations that no longer function in chemistry labs.

Furthermore, current security technology and hardware are completely incompatible with many outdated school facilities, including my own. Closed-circuit cameras—which security experts consider a baseline essential—require electrical outlets in hallways that don't currently have them, and wireless cameras need to be obscured to protect them from vandalism. Portland schools, all built prior to 1950, were designed without consideration of school shooters and intruders. Strategies for greater visibility, controlled foyer access, and other ways to "lock down" or "lock out" dangerous elements are not easily layered onto an early 20th-century structure. That disconnect leaves our students in regular peril.

Note that these concerns aspire to the embarrassingly low standard of assurance that school buildings not jeopardize our children's health. They say nothing of how poorly equipped our current facilities are to handle 21st-century technologies or today's large class sizes. Many classrooms have just one electrical outlet, no grounded internet access, and no interactive boards or presentation packages. Drilling into walls requires asbestos abatement and more expensive structural improvements. Classrooms are undersized for the active applied learning needs of today's students and interactive curriculum. At my school, for example, students in robotics classes are building their competition "field" in an old kitchen storage closet, and STEM classes

are being taught in rooms with no natural light and not enough room for students to rise from their seats to engage in active learning. Some classrooms have as little as 450 square feet for 30 students and their teacher (plus another teacher who shares the room) when the industry standard is 950 square feet. Other schools in Oregon have classes of as many as 40 students, forcing kids to sit on window ledges and radiators.

Our schools are not ADA accessible, and every principal I know can share stories of grandparents, alumni, and students with sports injuries who are humiliated and frustrated by the lack of ramps, elevators, accessible bathroom stalls, etc. Locker rooms and bathrooms also fail to provide safety and privacy for students who need gender-inclusive spaces. Ancient boiler systems create freezing classrooms and "hothouse" conditions on the same day in different parts of the building. I have seen teachers shivering in mittens and wool caps in one end of the building while students in other wings are fainting in unbearably hot rooms with inadequate ventilation.

Many school facilities in our country were built pre-Title IX, before girls were allowed to compete in sports. Lincoln High School, for example, has one gym, one field, no tennis courts, and no pool to support 1,700 athletes, including winter sports with three levels of girls' basketball, three levels of boys' basketball, girls and boys wrestling teams, and a dance team. Students are forced to be at school from 5:45 a.m. to 10:00 p.m. to participate in required sports practices—completely out of step with research on teen circadian rhythms that calls for school start times closer to 9:00 a.m. coupled with nine hours of sleep. The City of Portland is at capacity on court, gym, field, and pool spaces, so partnering with local parks and recreation services is rarely a viable option. Active students, brain research tells us, are less likely to be involved in drugs and alcohol and more likely to achieve in school. Yet in that context, supervised opportunities to be healthy, active, and fit are becoming scarcer. Where are children learning how to swim as a life skill? How can inner-city schools develop competitive swim programs? What spaces can be used for activities that help decrease trauma, stress, anxiety, and other mental health issues that today's children are facing at increasing levels? Where can we even house the wraparound social services we desperately need to provide to students?

Our facilities present countless questions, but other countries provide some of the answers. Last spring, I was fortunate to travel to Finland with a team of architects, teachers, students, and business leaders to visit their newly built schools and study the intersection of school infrastructure and instruction in the classroom. It was immediately clear to all of us that school designs with flexible spaces and larger gathering spaces are crucial to promoting group work, problem solving, movement, and best practices in active learning. Light-filled spaces boosted mood and productivity. Students and teachers had space to collaborate and plan engaging lessons. Bright, temperature-controlled schools filled with student work helped create an inclusive, welcoming environment where students feel safe as they learn. I had a similar experience during visits to our sister city-school in China and to Doha for the Wise Conference. New school facilities in both of those countries featured state-of-the-art science labs, maker spaces, mega gyms, and presentation spaces. They even included fine and performing arts rooms that inspire creativity and the "A" in STE(A)M. These rooms also had the ability to be flexibly used as school gathering spaces to build community. Not surprisingly, attendance is not the challenge in Finland, China, or Doha that it is in the United Stated, where students often feel unsafe or unable to learn in overcrowded, inadequate, dark, dank, and depressing conditions.

School districts have become dependent on local school bonds to update and rebuild school facilities. Some states offer "matching funds"; others are not able to. Decades of disinvestment in our public school infrastructure has compounded the severity of the problem. It will take decades for states alone to address these growing problems. My passion to improve our nation's public schools contributed to the development of a position statement on School Facilities, which the NASSP Board of Directors adopted in 2017. In addition to our recommendations for state and local policymakers, we do feel that the federal government does have a role in modernizing schools to provide safe and accessible 21st-century learning environments. Specifically, we urge the U.S. Government Accountability Office and the National Center for Education Statistics to update and collect data on school facility conditions, and share this information with Congress and other key decision-makers. NASSP also would like Congress to permanently extend the Qualified Zone Academy Bonds and pass the Rebuild America's Schools Act to ensure districts have funding to repair and modernize public school facilities to be safe, healthy, high-performing, and technologically up to date.

Educating students to compete in the 21st-century global economy calls for 21st-century classrooms—and we need those classrooms now. At a minimum, we have a moral imperative to educate students in safe facilities that don't cause injuries or irreversible long-term health problems. The future is growing in our public schools and we need to safeguard that future.

Thank you.

Peyton Chapman

Lincoln High School principal

We can expect more from teachers when we pay them like pros: Bloomberg and Weingarten

Michael Bloomberg and Randi Weingarten, Opinion contributors Published 3:15 a.m. ET April 27, 2018

Teachers participating in walkouts deserve better pay and greater authority. They shouldn't have to take part time jobs to make ends meet.

(Photo: 2013 epa photo)

Never before has there been so much labor unrest in America's public schools. Teachers, understandably angry about low pay and harmful cuts in education resources, have organized statewide walkouts in West Virginia, Kentucky and Oklahoma. Arizona and Mississippi may be next to act. This time of tension and frustration is also a moment of tremendous opportunity — to increase teachers' pay, acknowledge the importance of their work, strengthen accountability, ensure adequate education resources, and, most importantly, achieve the outcomes we need and want for all our kids.

We know this from experience. In 2002, one of us was a newly elected mayor; the other, the leader of the teachers union. We had plenty of disagreements, but we shared a fundamental goal: to provide students and families in the city we love great public schools. We both knew that must include raising teacher salaries, securing additional resources for schools, and raising standards and expectations for both teachers and students.

More: Teachers rising up in rebellion of 'everyday heroes': Randi Weingarten

More: Trump's awful plan to arm teachers is straight from the NRA playbook

Funding for New York City public schools was inadequate. Teachers had gone years without a raise and were badly underpaid, which made attracting and retaining great teachers difficult. Indeed, in 2002, thousands of teachers in New York City were not certified.

We agreed that the status quo was not acceptable. Graduation rates had hovered around 50% for two decades, and the system was plagued by patronage, dilapidated buildings, insufficient supplies and dysfunctional management.

We had very different ideas about how to improve the schools. That's the nature of labor-management relations. But our negotiations were guided by a shared principle: Teachers are valuable professionals deserving better pay and greater authority in exchange for greater accountability.

The first contract we negotiated included a substantial raise, a longer school day and greater responsibilities for teachers. In subsequent contracts, we further increased salaries across the board, with senior teachers earning more than $100,000, and extended school time for tutoring struggling students and professional development. We also addressed long-standing complaints — making the often lengthy due process procedures for disciplining teachers more fair, transparent and streamlined; ending the frequent reassignment of new teachers from school to school; and giving principals more autonomy in hiring decisions.

These and other changes helped decrease the number of uncertified teachers, reduce new-teacher attrition, improve student achievement, and create confidence in the promise and potential of New York City's public schools. By 2013, August graduation rates had risen 20 percentage points since 2002. Of the top-performing elementary and middle schools on the state's Common Core exams, 22 of 25 were city schools, compared to zero when we started. The city's schools, viewed as gems in earlier generations, started regaining their luster, and we both were proud of their progress.

More: Starvation issues in universities? The real college problem is obesity.

POLICING THE USA: A look at race, justice, media

Meanwhile, the city's education budget more than doubled, far outpacing spending by the state and federal governments, and teachers' base pay increased 43% between 2002 and 2008. And that's as it should be; teachers play an essential role in our society, and their wages and benefits must reflect that.

Great teachers are critically important to raising student achievement. When Bloomberg Philanthropies looks for school systems around the country to support, one of the factors it examines is teacher salaries. Districts that refuse to pay their teachers adequately aren't well-positioned to raise student achievement levels.

Teacher salaries vary widely by district and state, but in too many places, teachers are grossly underpaid compared with comparable professionals — a gap that is widening. Before the walkout in West Virginia, starting teachersthere made $31,000, with median pay at only $45,000. Teachers in some other states — including Oklahoma, where teachers are now walking out — make even less.

Professionals who have earned college and graduate degrees and do the essential work of educating our children should be able to live a middle-class life — not have to take second jobs or go on public assistance to care for their families. If we want smart, talented and ambitious college graduates to enter the teaching profession — and if we want our children to be able to compete in the global economy — we have to offer salaries that make the profession attractive.

Over the years, we debated, sometimes fiercely, how best to improve public schools, including whether to create community schools, the role of public charter schools, data and standardized testing, and how to fix chronically struggling schools. Neither of us ever got as much as we wanted. But by recognizing that New York City's public schools would gain from the mayor and the head of the teachers union talking, listening and compromising, we made real and sustainable progress for our kids.

The same principle applies nationwide. Public education is fundamentally a local matter, and states and districts reap what they sow. The federal government can push and prod, but it is up to districts and states — with labor and management working together, bargaining collectively and engaging with community — to drive long-term, sustainable change.

As educators across the country demand better pay and better learning and teaching conditions, elected officials have an extraordinary opportunity to sit down with them to discuss changes that are good for kids, are fair to teachers and benefit communities. That's the only way we'll be able to give America's children the knowledge and skills they need to pursue their dreams.

Michael Bloomberg is the former mayor of New York City. Randi Weingarten is the president of the American Federation of Teachers.

You can read diverse opinions from our Board of Contributors and other writers on the Opinion front page, on Twitter @usatodayopinion and in our daily Opinion newsletter. To respond to a column, submit a comment to letters@usatoday.com.

[Questions submitted for the record and their responses follow:]

February 22, 2019

Ms. Sharon L. Contreras, Ph.D.
Superintendent, Guilford County Schools
617 West Market Street
Greensboro, NC 27401

Dear Dr. Contreras:

I would like to thank you for testifying at the February 12, 2019, Committee on Education and Labor hearing "Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students."

Please find enclosed additional questions submitted by Committee members following the hearing. Please provide a written response no later than Thursday, March 14, 2019, for inclusion in the official hearing record. Your response should be sent to Loredana Valtierra of the Committee staff. She can be contacted at 202-226-3873 should you have any questions.

We appreciate your time and continued contribution to the work of the Committee.

Sincerely,

ROBERT C. "BOBBY" SCOTT
Chairman

Enclosure

Committee on Education and Labor Hearing
"Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students"
Tuesday, February 12, 2019
10:15 a.m.

Chairman Robert C. "Bobby" Scott

1. Dr. Contreras, given the state of climate change and concerns around sustainability, has North Carolina or your district made collective or individual efforts to reduce schools' carbon footprint?

Representative Suzanne Bonamici

1. Dr. Contreras, a recent study by Harvard T. H. Chan School of Public Health and the Nutrition Policy Institute at the University of California found that only 25 states had a school drinking water testing initiative between January 1, 2016 and February 28, 2018. Even in the states that did test, the researchers found that there was no uniformity in how the testing was done, or what actions schools took as a result of testing for lead. Can you tell us about how your district works to ensure water testing or other procedures are effective?

COMMITTEE ON EDUCATION
AND LABOR
U.S. HOUSE OF REPRESENTATIVES
2176 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6100

February 22, 2019

Ms. Anna King
Board Member, National PTA and Past President, Oklahoma PTA
1250 N. Pitt St.
Alexandria, VA 22314

Dear Ms. King:

I would like to thank you for testifying at the February 12, 2019, Committee on Education and Labor hearing on "Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students."

Please find enclosed additional questions submitted by Committee members following the hearing. Please provide a written response no later than Thursday, March 14, 2019, for inclusion in the official hearing record. Your response should be sent to Loredana Valtierra of the Committee staff. She can be contacted at 202-226-3873 should you have any questions.

We appreciate your time and continued contribution to the work of the Committee.

Sincerely,

ROBERT C. "BOBBY" SCOTT
Chairman

Enclosure

Committee on Education and Labor Hearing
"Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students"
Tuesday, February 12, 2019
10:15 a.m.

Chairman Robert C. "Bobby" Scott

1. Ms. King, thank you for speaking to us about your family and for your local advocacy to ensure schools are doing right by them. You mentioned you now have grandchildren in the same district your children attended. How different are the school facilities from the time your children attended compared to today?

2. Ms. King, your story about the lack of textbooks for your daughter and her classmates is happening every day with technology in our schools. Could you speak to what you see in Oklahoma schools regarding equitable access to technology?

Representative Suzanne Bonamici

1. Ms. King, what message is sent to kids of color and low-income children when their school buildings are run down or lack the resources of schools serving wealthier families?

COMMITTEE ON EDUCATION
AND LABOR
U.S. HOUSE OF REPRESENTATIVES
2176 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6100

February 22, 2019

Mr. Ben Scafidi, Ph.D.
Professor of Economics and Director, Education Economics Center
Kennesaw State University
MD 0403 Kennesaw State University
Kennesaw, GA 30144

Dear Dr. Scafidi:

I would like to thank you for testifying at the February 12, 2019, Committee on Education and Labor hearing on "Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students."

Please find enclosed additional questions submitted by Committee members following the hearing. Please provide a written response no later than Thursday, March 14, 2019, for inclusion in the official hearing record. Your response should be sent to Loredana Valtierra of the Committee staff. She can be contacted at 202-226-3873 should you have any questions.

We appreciate your time and continued contribution to the work of the Committee.

Sincerely,

ROBERT C. "BOBBY" SCOTT
Chairman

Enclosure

Committee on Education and Labor Hearing
"Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students"
Tuesday, February 12, 2019
10:15 a.m.

Chairman Robert C. "Bobby" Scott

1. Mr. Scafidi, your 2015 paper entitled *The Integration Anomaly* argues that unfettered school choice will lessen school segregation. I represent Charlotte, NC – a school system that's been the focus of much attention over the years as its worked to lessen racial isolation and improve equity. Most recently, much of the attention has been on the use of school choice through use of public charter schools to allow a predominantly white enclave to virtually secede from the relatively integrated Charlotte-Mecklenberg public schools. How is what's happened in my district consistent with your theory?

2. Mr. Scafidi, in order to achieve racial and economic integration in a school choice program, would you support using constitutionally permitted socioeconomic and race-conscious methods to achieve racial and economic integration, as long as children are not selected for a school or program on the basis of their race?

3. Mr. Scafidi, why do we have to replace the public school system with a private and charter system to achieve these results? Couldn't all your ideas be implemented within the public schools?

Deena A. Hayes | Chairperson, Board of Education
Sharon L. Contreras, Ph.D. | Superintendent

FROM
THE OFFICE
OF THE
SUPERINTENDENT

GUILFORD County Schools
SOAR TO GREATNESS

March 14, 2019

Committee on Education and Labor
U.S. House of Representative
2176 Rayburn House Office Building
Washington, DC 20515-6100

"Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students"
Additional Reponses submitted by Dr. Sharon L. Contreras
Superintendent, Guilford County Schools

QUESTION: Dr. Contreras, given the state of climate change and concerns about sustainability, has North Carolina or your district made collective or individual efforts to reduce schools' carbon footprint?

RESPONSE: Guilford County Schools understands the impact our facilities have on the environment. The district uses a program called Energy WISE (Wisdom is Saving Energy and the Environment) to reduce energy usage throughout our schools. This student-led program aims to educate building occupants and the community about energy efficiency. Currently, 66 schools are participating in the program.

Each participating school forms an Energy WISE team and completes conservation activities around their school. Students patrol the building to monitor and reduce energy waste, and develop outreach projects to inform their peers and local community about the value of conservation. Energy WISE teams have an opportunity to submit portfolios of their activities to the National Energy Education Development (NEED) Project. GCS Energy WISE teams have received 34 NEED awards since the 2010-11 school year.

Guilford County Schools adheres to a modified summer schedule to reduce energy usage. During the summer months, staff work four 10-hour days so that buildings can remain unoccupied on Friday, Saturday and Sunday. Before leaving for the extended weekends, staff will setback temperatures in unoccupied spaces, unplug items to avoid phantom loads, close blinds and turn off computer monitors and lights. Similar protocols are followed during winter break and spring break.

In addition, facilities staff make every effort to update HVAC equipment and controls to more energy-efficient models whenever possible. Lamps and ballasts are replaced with LED units when the older equipment fails. When new construction does occur, buildings are designed to meet revised performance and sustainability guidelines.

QUESTION: Dr. Contreras, a recent study by Harvard T. H. Chan School of Public Health and the Nutrition Policy Institute at the University of California found that only 25 states had a school drinking water testing initiative between January 1, 2016 and February 28, 2018. Even in the

states that did test, the researchers found that there was no uniformity in how the testing was done, or what actions schools took as a result of testing for lead. Can you tell us about how your district works to ensure water testing or other procedures are effective?

RESPONSE:
Our large, county-wide district has 126 schools spread out over 645.7 square miles. Our schools are located in urban, suburban and rural areas. While most are supplied by municipal water systems, some are supplied by well water. We also have several schools located on the campuses of colleges and universities. We have a combination of measures, including cooperating and working with local municipalities, to ensure that our students' drinking water meets appropriate safety standards. Each school utilizing well water is subject to State regulation and systematic testing. We are required to complete that testing and have done so for the many years those requirements have been in place. There are no state or local regulations relating to drinking water testing in schools that receive water from municipal systems, although the municipal water itself is tested by the water provider.

Following the heightened awareness of water safety issues raised in Flint, Michigan, GCS began a cooperative testing program in 2018 with our municipal water suppliers. All 99 schools using municipal water sources were initially tested for water quality – one centrally-located faucet at each school was tested. This was provided at no charge to the school district. There were follow-up tests at seven schools that showed evidence of lead levels above action levels of the Environmental Protection Agency's 3Ts guidance.

Because elevated lead levels were found in some schools, GCS established a system-wide water daily flushing process to limit the potential for exposure to elevated lead levels, and instituted a process for system-wide testing and remedial measures. We are still working through the process of testing all faucets and fountains used for drinking water or food preparation at each school, and taking appropriate remedial measures. Needless to say, the resources to test and remediate our water fixtures were not provided to us by any of our funding bodies and we continue to struggle to free up resources for this important task. The GCS website, gcsnc.com, includes information for parents, students and the public about our water quality test results at the special webpage designated Water Quality Protocols.

Sharon L. Contreras 3/14/19

Sharon L. Contreras, Ph.D.
Superintendent
Guilford County Schools

Helen P. Higgins
NOTARY PUBLIC
GUILFORD COUNTY, NC
Commission Expires 11/22/2021

Helen P. Higgins
11/22/2021

National PTA
everychild. onevoice.

Underpaid Teachers and Crumbling Schools: How Underfunding Public Education Shortchanges America's Students"
Held on Tuesday, February 12, 2019

Questions for the Record

Ms. Anna King
Mother, Grandmother, Public Education Advocate, and Vice President of Membership of National PTA

Chairman Robert C. "Bobby" Scott

1. Ms. King, thank you for speaking to us about your family and for your local advocacy to ensure schools are doing right by them. You mentioned you now have grandchildren in the same district your children attended. How different are the school facilities from the time your children attended compared to today?

When my children attended schools in Oklahoma City Public Schools (OKCPS) our school buildings were in need of many repairs. Schools had mold, lead, asbestos, windows with drafts, leaking roofs, crumbling foundations, outdated electrical and plumbing that backs up, restroom facilities that cannot accommodate the increased usage, parking lots with potholes, severe lack of parking and HVAC that didn't work.

OKCPS successfully passed a school bond that was centered on repairing each of our schools across our district. My grandchildren attend schools that have been improved from those bonds. We still have a growing population where many of our students are in annex buildings with no air during our months that are extremely hot and use floor heaters during the cold months. While OKCPS was lucky to pass a bond for school improvements, there are many districts in Oklahoma that are unable to do so. Which ultimately leaves their districts with crumbling buildings.

Every child deserves a safe school building to attend that should not depend on their zip code or socioeconomic status.

2. Ms. King, your story about the lack of textbooks for your daughter and her classmates is happening every day with technology in our schools. Could you speak to what you see in Oklahoma schools regarding equitable access to technology?

Technology access in our schools is increasing, but when schools are faced with

providing textbooks or providing technology, many go with the less expensive option or forgo for many years. During the teacher walkout last year in Oklahoma, many teachers from across the state showed examples of crumbling textbooks and history textbooks that didn't contain the Murrah building bombing that happened in our state on April 19, 1995.

School districts in the rural parts of Oklahoma are still struggling with obtaining internet access in schools. Internet access in student's homes in nearly nonexistent. We must do a better job of providing funding to assist our most vulnerable communities. Our students are being left out due to the digital divide.

Representative Suzanne Bonamici

1. Ms. King, what message is sent to kids of color and low-income children when their school buildings are run down or lack the resources of schools serving wealthier families?

Many of our students across the country don't feel valued or respected because of the communities they come from.

We tell our precious babies of color and low-income children they don't matter when we don't invest in them. We are constantly telling our young people to get an education to become successful. Yet their schools don't look like the schools in affluent areas. We have taught them they are not valued when we do not distribute or create a path for an equitably opportunity to learn in a safe building.

As an adult, I would not live or work in a location where the roof was leaking, or the restroom was inoperable. Why do we believe this is acceptable for children?

KENNESAW STATE UNIVERSITY
Coles College of Business
Department of Economics, Finance
and Quantitative Analysis

The Honorable Bobby Scott, Chair
House Education & Labor Committee

By Email

March 14, 2019

Dear Chairman Scott:

Thank you for the opportunity to respond to these important and interesting questions. My responses to each question are in bold below.

1) Mr. Scafidi, your 2015 paper entitled *The Integration Anomaly* argues that unfettered school choice will lessen school segregation. I represent Charlotte, NC – a school system that's been the focus of much attention over the years as its worked to lessen racial isolation and improve equity. Most recently, much of the attention has been on the use of school choice through use of public charter schools to allow a predominantly white enclave to virtually secede from the relatively integrated Charlotte-Mecklenburg public schools. How is what's happened in my district consistent with your theory?

In *The Integration Anomaly*, I point out that over the past few decades sorting by race in American public schools has either increased or lagged behind increases in integration in American neighborhoods. Specifically, from the early 1980s to 2000, sorting by race increased in the American public education system—while American neighborhoods became more integrated by race during that time period. From 2000 to 2010, public school integration lagged improvements in neighborhood integration. Given the tight relationship between neighborhood location and school attendance, this is a startling finding. My report, *The Integration Anomaly*, may be accessed here: https://www.edchoice.org/research/the-integration-anomaly/ .

My report also provides specific data on levels and changes in neighborhood and school integration for individual metropolitan areas. For the Charlotte-Gastonia-Rock Hill metropolitan area, public school sorting by race increased between 2000 and 2010, while neighborhood segregation decreased. Using the dissimilarity index, which measures the relative separation or integration of groups across all neighborhoods of a city or metropolitan area, neighborhood segregation fell by 3.3 points, while public school segregation increased by 1.4 points.

The question refers to the "relatively integrated Charlotte-Mecklenburg public schools". From a researcher's perspective, that characterization of integration in the Charlotte-Mecklenburg public schools seems to be incorrect based on available data. In 2018, the North Carolina Justice Center released an analysis of public school segregation in North Carolina that found the Charlotte-Mecklenburg public schools are the most income-segregated and the most racially segregated in North Carolina. Specifically, the dissimilarity index based on the household income of students increased from 0.49 to 0.59 in Mecklenburg County between the 2006-07 school year to 2016-17. The corresponding metric for racial segregation increased from 0.53 to 0.55 in Mecklenburg public schools during that time period. Please see page 8 of the North Carolina Justice Center's report for this information: https://www.ncjustice.org/wp-content/uploads/2018/11/STYMIED-BY-SEGREGATION-Integration-can-Transform-NC-FINAL-web.pdf .

As discussed at length in *The Integration Anomaly* (pages 13-21), the evidence on the impact of charter schools on segregation is mixed—at some times and in some places charter schools have promoted racial integration, and at other times they have not. Nevertheless, the evidence on voucher programs to date is almost universally positive—one study finds that the early years of the Milwaukee voucher program, which allows students to access private schools, had no real impact on integration, while all other empirical studies find that American voucher programs have increased racial integration.

Unfortunately, the experience of the public education system within Charlotte-Mecklenburg and in its entire metropolitan area is very consistent with the points made in *The Integration Anomaly*.

To be clear, *The Integration Anomaly* does not call for an "unfettered" choice system, as stated in this question. My report has a list of parameters that logic, research, and evidence suggest will promote integration—and these are listed and described on page 24 of the report. I reproduce that list below (footnotes in the original are omitted here):

School Choice Program Design DO's

Given the historical evidence on housing and school segregation and the studies discussed previously, I propose the following school choice program design features in order to maximize benefits to students and take to heart the equity concerns of those worried about the increase in race and class segregation that has been present in the American public education system since 1980. The school choice program "Do's":

• Universal scholarships. Offer scholarships to all families regardless of income. Scholarships to higher- and middle-income families will give them more incentive to live closer to employment centers in what we now know as lower-income communities—where scholarship programs will allow new, high-quality school options to open to serve existing and new residents. Universal school choice would also empower low-income families to send their children to schools located in neighborhoods only higher-income families may currently access. Universal scholarships will also maximize the amount of

competition in the school marketplace and build political support for more generous scholarship amounts—and both will enhance student outcomes.

• Progressive scholarships. Provide larger scholarships to students from lower-income families and students with special needs. Larger scholarships give schools more of an incentive to enroll students who may be more expensive to teach or who come from limited means. It also gives those families more power and influence within their schools by giving them more opportunities for "exit." Finally, it gives disadvantaged students an opportunity to attend schools their families currently cannot afford.

• External accreditation. Require that public and private schools that admit students with taxpayer- funded scholarships to be accredited by an external and independent accrediting body—or to immediately pursue accreditation in the case of new schools. Along with the enforcement of anti- discrimination laws, including the revoking of their tax-exempt status, accreditation will limit entry and persistence of any schools with "pernicious" intents, which is a fear of school choice skeptics. While accreditation raises operating costs, limits entry, and has other ill effects, it may be an unfortunate, yet politically necessary, compromise.

• Aid parents in choosing. Civil society can create online platforms, like GreatSchools.org, and organizations to help parents maximize the benefits of choice by finding the schools that are best for the specific interests and needs of their children.

2) Mr. Scafidi, in order to achieve racial and economic integration in a school choice program, would you support using constitutionally permitted socioeconomic and race-conscious methods to achieve racial and economic integration, as long as children are not selected for a school or program on the basis of their race?

I devote a section to this issue in my report, *The Integration Anomaly*. Please see pages 21-23 in the report, https://www.edchoice.org/research/the-integration-anomaly/.

These plans are clearly well intentioned, but we should judge policies based on their results—not merely their intentions. (For what it's worth, it's difficult to understand how your stated goals of "race-conscious methods to achieve racial and economic integration" without selecting children "for a school or program on the basis of their race" can co-exist.)

I do not support these types of plans because we have tried them before, and they appear to have led people of means to flee central city public school systems. That is, programs that endeavored to achieve racial and economic integration appear to have caused people of means—of all races—to move to the suburbs. At various times over the past few decades, Charlotte-Mecklenburg public schools has been a national leader in these sorts of programs to integrate schools by race and class—as suggested in the previous question. Where have these programs led? Using the most recent data available, 28.6 percent of

public school students in Charlotte-Mecklenburg are white, while 61.4 percent of public school students in the other North Carolina counties in metropolitan Charlotte are white. Sadly, the efforts to integrate public schools through the means indicated in the question have been a tragic failure—despite good intentions.

Based on evidence and research, I believe a well-designed choice program that allows access to conventional public schools, charter public schools, and private schools—along the lines described in *The Integration Anomaly*–will better promote integration, especially when compared to the dismal segregation outcomes the public education system in metropolitan Charlotte has produced thus far.

Adam Smith, the founder of the formal discipline of economics, wrote in the late 1700s that society needs to be cognizant that individuals (and families) will pursue their self-interest. This claim by Smith especially applies to families with school-aged children. The choice programs contemplated in this question—which assign students to schools based on their race and economic status—will leave parents who do not get their first choice schools upset. These parents—of all races—will endeavor to move to locations to get their children the best possible schools. Which parents are going to be the most able to move? Parents of means, of course.

As indicated above, the case of metropolitan Charlotte is a textbook example of the public education system failing to promote integration—despite good intentions and a lot of effort. We need to create an education system that encourages parents to seek the best schools for their children and promotes integration by race and income. After all, seeking the best possible schools for their children is what parents of means already do under the current K-12 education system. Under the choice system proposed in *The Integration Anomaly*, all families—regardless of means—would be able to pursue the best possible education for their children while at the same time promoting integration, as families would sort their children in schools according to common interests in pedagogy, educational approaches, and student needs.

3) Mr. Scafidi, why do we have to replace the public school system with a private and charter system to achieve these results? Couldn't all your ideas be implemented within the public schools?

In recent years, a handful of public school systems in America have started adopting policies that remove geographic barriers, implement programs of choice, and allow schools to operate a bit more autonomously. Unfortunately, change has been slow and timid within the public system, and the results have been disheartening. Why should families have to wait for a delivery system that's historically operated as a monolithic bureaucracy to improve when other options could be made available to serve their children? Why must there be only one mechanism in place to educate our students? Would we accept such a framework in any other part of our lives?

Christopher Jencks, an influential social scientist, wrote in 1966 that it was past time to try Milton Friedman's voucher idea because America had been trying for decades to improve public schools with little to show for it, https://www.nationalaffairs.com/storage/app/uploads/public/58e/1a4/9f7/58e1a49f73584658973268.pdf .

Since Jencks wrote that piece, NAEP Long-Term Trend scores for 17-year olds have been roughly flat, despite a greater than two-and-a-half time increase in real (inflation-adjusted) spending per student in American public schools.

With respect to racial and economic integration, the performance of the public education system has been equally dismal—public school segregation has increased or lagged improvements in neighborhood integration since the early 1980s. Sorting by income has increased in the public education system since at least 1990: https://journals.sagepub.com/doi/10.3102/0002831216652722 .

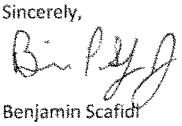
It is now 2019, and I share Jencks' view that it is long past time to consider alternatives to the conventional public education system, as it has produced stagnant student outcomes at an ever-higher taxpayer cost; increased economic segregation; and often increased racial segregation.

I believe a well-designed choice program—as outlined in *The Integration Anomaly*—would improve outcomes for students and promote racial and economic integration. I base that conclusion on decades of experience with the conventional public education system along with many other reasons described at length in *The Integration Anomaly*. Simply put, America can do better, and I believe a universal choice system that allows access to private schools is the only way to break the cycle of low expectations and low performance that currently is crushing families who lack the means to move or pay for the kind of education their kids deserve. Public schools will always be *an* option; they just won't be the *only* option.

As Steve Jobs, the co-founder of Apple, said back in 1995, "I've been [a] very strong believer that what we need to do in education is go to the full voucher system...what happens when a customer goes away and a monopoly gets control—which is what has happened in our country—is that the service level almost always goes down."
INTERVIEW: https://www.youtube.com/watch?time_continue=14&v=V-8JiOQOe6U

Thank you again for the opportunity to testify before your committee and to respond to these important questions. I wish you all the best in your efforts to improve educational opportunities for all children in America.

Sincerely,



Benjamin Scafidi

[Whereupon, at 1:44 p.m., the committee was adjourned.]

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