

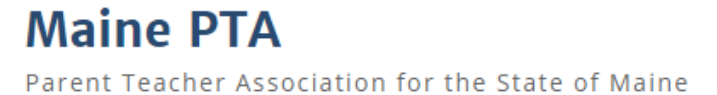
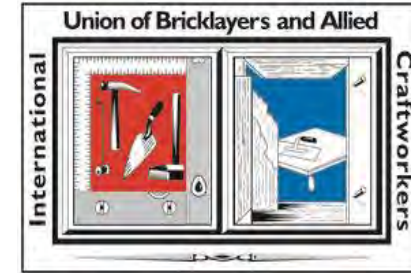


## The Case for Investing in our Nation's Crumbling Public School Infrastructure

- Introductions
- Get the facts
- Hear from our panel
- Discuss how school facilities needs, inequity and public support align to Congressional action



is a non-partisan coalition that supports federal funding to ensure all children attend safe, healthy, educationally inspiring and environmentally sustainable school facilities.



30+ Members and growing...

# Meet the Panel

- ✓ **Mary Filardo**, 21<sup>st</sup> Century School Fund, facilitator
- ✓ **Jerry Roseman**, Philadelphia Federation of Teachers, Health & Welfare Fund
- ✓ **Zachary Scott**, National Association of Secondary School Principals
- ✓ **Robert Boyd**, Secure Schools Alliance
- ✓ **Adrienne Dayton**, Ed Market Association
- ✓ **Brian Kennedy**, International Union of Bricklayers and Allied Craftworkers
- ✓ **Bryan Howard**, U.S. Green Building Council
- ✓ **Stephen Ward**, VH Strategies

# Scale

Elementary and Secondary Public School Infrastructure: State of our Schools 2016 America's K-12 Facilities [www.stateofourschools.org](http://www.stateofourschools.org)



**100,000**

Public K-12 schools in U.S.



1 in 6 Americans sets foot in a school each day



total square footage equal to 2,800 Empire State Buildings

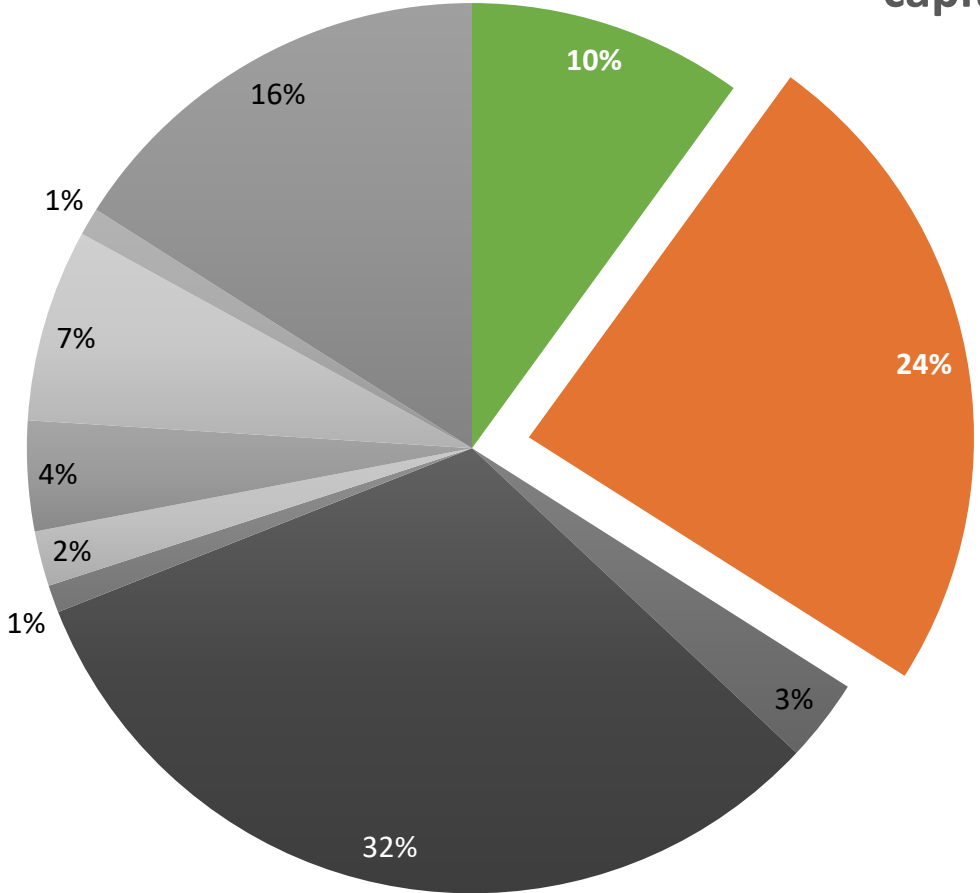


2<sup>nd</sup> largest public infrastructure investment after transportation

**CRV**  
**\$2T**

\$2 trillion is the 2014 current replacement value (CRV) of our nation's public school facilities

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



- Higher Education
- K-12
- Hospitals
- Highways
- Public Safety
- Natural Resources
- Parks and Rec
- Sewerage
- Solid Waste
- Utilities

K-12 FACILITIES ACCOUNT FOR NEARLY ONE-FOURTH OF STATE AND LOCAL INFRASTRUCTURE INVESTMENTS

# 20 YEARS OF FACILITIES INVESTMENT & SPENDING

ANNUAL AVERAGE (2014\$)

**\$99 BILLION**

CAPITAL CONSTRUCTION

MAINTENANCE & OPERATIONS

PER YEAR (1994-2013)

PER YEAR (2011-2013)

**\$49 BILLION**

**\$50 BILLION**



# Need for Federal Funds

Low-wealth school districts can not deliver healthy, safe and educationally inspiring public school buildings and grounds

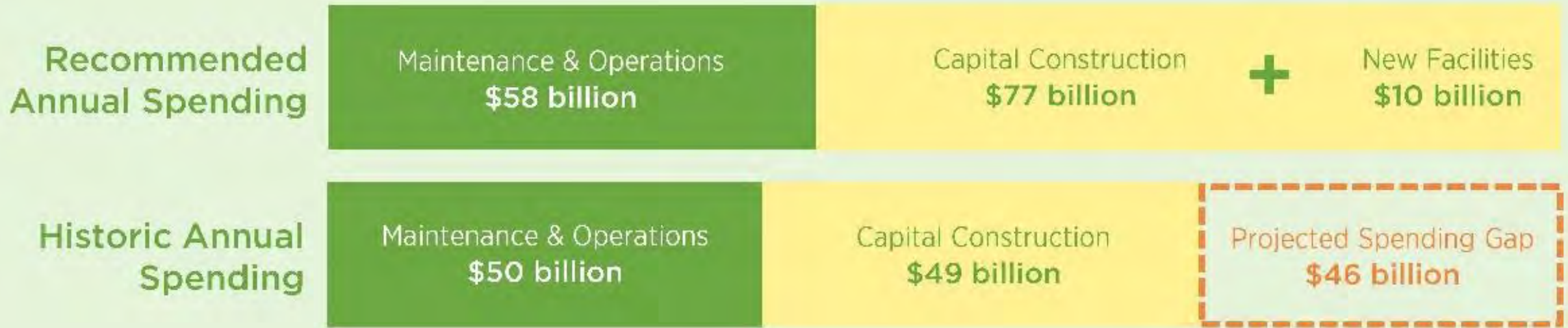


# Public Schools Need Facility & Grounds Improvements

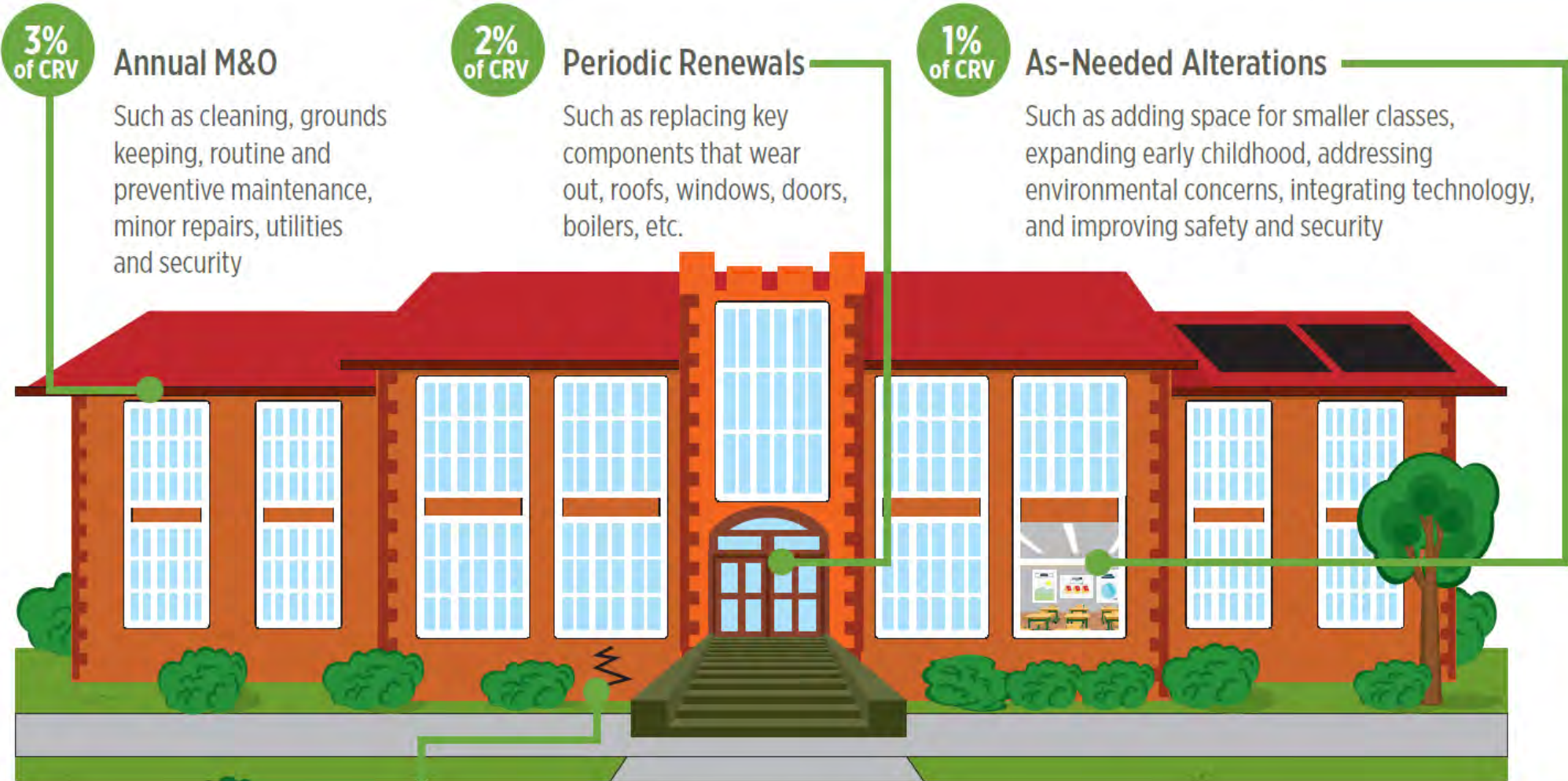
- ✓ Public school facilities = 50 years old on average
- ✓ Over half of U.S. schools are estimated to need major repairs
- ✓ Facilities' use serves entire communities
- ✓ Construction codes, including ADA compatibility
- ✓ Enrollment changes + expanded early education
- ✓ Education delivery and curriculum changes = more technology
- ✓ Sustainability and disaster resiliency concerns
- ✓ Safety and security concerns



# Projected Annual Facilities Need for School Construction Capital Outlay is \$87 Billion



# MODERN STANDARDS FOR K-12 FACILITIES



**3% of CRV**  
**Annual M&O**  
Such as cleaning, grounds keeping, routine and preventive maintenance, minor repairs, utilities and security

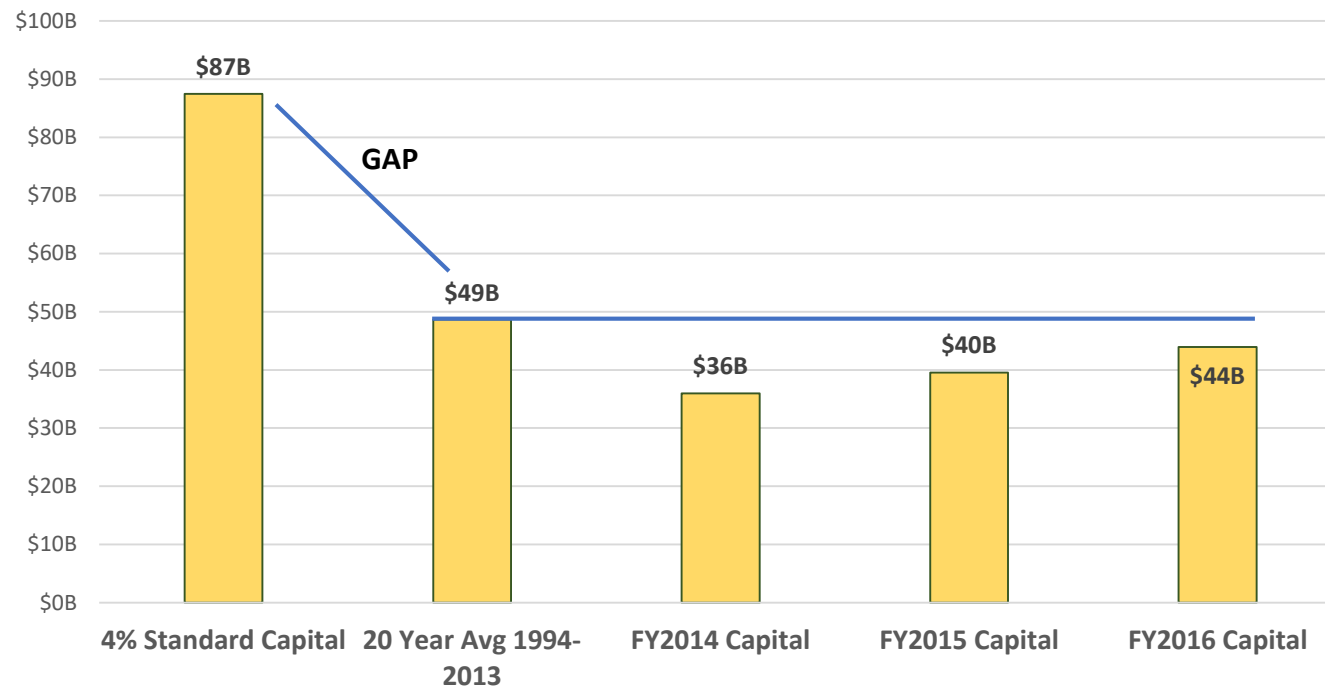
**2% of CRV**  
**Periodic Renewals**  
Such as replacing key components that wear out, roofs, windows, doors, boilers, etc.

**1% of CRV**  
**As-Needed Alterations**  
Such as adding space for smaller classes, expanding early childhood, addressing environmental concerns, integrating technology, and improving safety and security

**1% of CRV**  
**Systematic reduction of deferred maintenance**  
Making up for delayed M&O, renewals, and alterations

# Gap Between Historic Investment and Current Expenditures Has Grown

U.S. Facilities Capital School Construction Spending in Billions

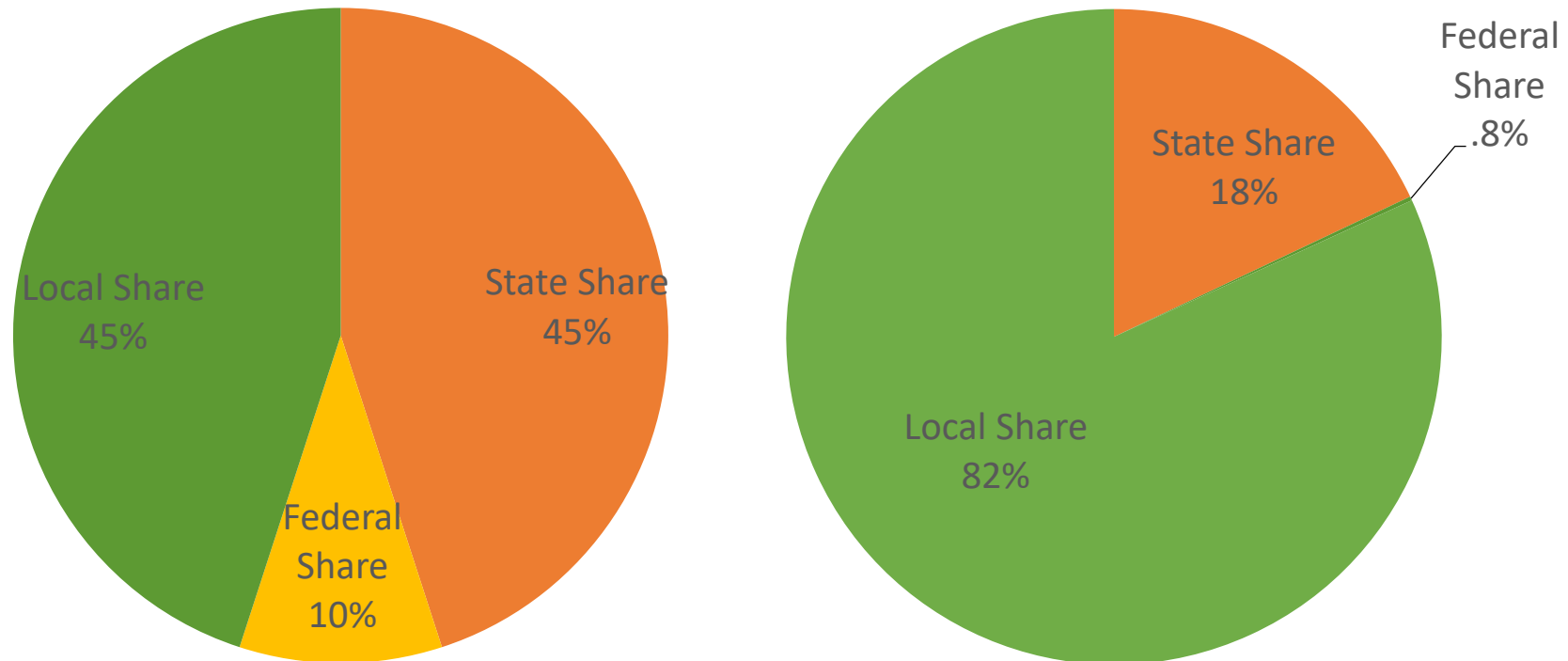


- Local district long term debt of \$434 billion end of FY2016—nearly \$9,000 per student.
- \$18 billion for interest on district long term debt in FY2016—more than the annual Title I Federal Funding for school districts.

# AN INEQUITABLE FUNDING SYSTEM

---

Local communities pay 45% of M&O and 82% of capital construction outlay



Because local wealth varies greatly, some communities have modern, high-quality schools, while others do not.

# School Facilities Data

Learn about your state, know your Congressional District

# Example of State Profiles: [www.stateofourschools.org](http://www.stateofourschools.org)

## Colorado K–12 Public School Facilities

2013			
Enrollment	# of Schools	Area of K–12 District Buildings	Average Area per Student
851,063	1,825	124 million gross square feet (GSF)	145 GSF

K–12 school buildings and grounds have an impact on our children's educational success, the health and economic vitality of our communities, and the environment. Local school districts and many states have been working hard to support the ongoing maintenance, operations, new construction, and capital improvements of public school facilities.

Without a standards framework to inform spending levels, however, communities cannot plan or advocate for what their schools need. And communities with the least wealth are often the ones least able to meet the need. This fact sheet provides facilities spending and investment data within a standards framework to encourage a solutions-oriented public dialogue on how Colorado can provide healthy, safe, and educationally appropriate schools for all students.

For background, analysis, and data sources, visit [www.stateofourschools.org](http://www.stateofourschools.org) for the companion report *State of Our Schools: America's K–12 Facilities 2016*.

## 20 Years of Facilities Spending and Investment

### Maintenance and Operations (M&O) Spending

Responsible maintenance and operations result in healthy and safe environments and help to secure the full life of school-construction investments already made. From 1994 through 2013, Colorado public school districts reported to the U.S. Census of Governments that they spent an inflation-adjusted total of \$12.9 billion from their annual operating budgets on "Maintenance and Operation of Plant," which includes cleaning, routine and preventive maintenance, minor repairs, utilities, and school security. During this period, Colorado school districts spent 9.8% of their total operating funds on maintenance and operations.

State Maintenance & Operations of Plant FY 2011–2013 (in 2014\$)	National Average	
Annual Average	\$719 M	\$50 B
Annual Average per 2013 Student	\$845	\$1,039
Annual Average per GSF	\$5.82	\$6.64

### Capital Construction Investments

Changes in enrollments; updated standards for education, health, and safety; and normal deterioration of building systems and components require capital investments over the lifespan of every school facility. From 1994 through 2013, Colorado K–12 school districts reported spending an inflation-adjusted \$14.2 billion on school-construction capital outlay. An estimated 53% of Colorado's construction spending in these years went to new school construction, either as replacement schools or to serve growing enrollments. On average, Colorado school district enrollments increased by 26.6% between 1993-94 and 2012-13 as compared with an increase at the national level of 11.3%.

State Capital Outlay for School Construction FY 1994–2013 (in 2014\$)	National Average	
Annual Average	\$710 M	\$49 B
Annual Average per 2013 Student	\$834	\$1,008
Total Investment 1994–2013 per 2013 Student	\$16,674	\$20,157

Colorado's school districts paid 97% of the costs for K–12 capital projects with local funds, and Colorado's local school districts' long-term debt at the end of fiscal year 2013 totaled \$7.7 billion or \$9,087 per student, as compared with the national average of \$8,465. The state provided 3% of the cost of capital construction as compared with the national average of 18%.

## Using Standards to Plan for the Future

### M&O Spending Standards

For Colorado school districts to operate healthy, safe, and educationally appropriate school facilities, they should plan to spend from annual operating budgets an amount equal to at least 3% of the facilities' current replacement value (CRV) on maintenance and operations—an estimated \$1,012 million per year. From 2011 through 2013, Colorado spent 71% of this standard. Meeting the standard would require spending an additional \$293 million statewide or about \$344 more per student.

State Average New Construction		State Facilities Gross Square Footage		Current Replacement Value
\$273 per GSF	X	124 million GSF	=	\$34 billion

## Colorado K–12 Public School Facilities

### Capital Construction Investment Standards

Colorado should plan to spend an amount equal to at least 4% of its facilities' CRV annually in capital funds on building system and component renewals, reducing accumulated deferred maintenance, and making alterations to ensure that its existing facilities support the educational programs and modern health and safety requirements—an estimated total of \$1,350 million per year. On average, from 1994 through 2013, Colorado districts spent 53% of the standard. Meeting the standard for its existing facilities would require an increase in annual average capital construction investments of about \$640 million statewide or \$752 per student.

### New Construction to Meet Enrollment Growth

The National Center for Education Statistics projects that, between 2012 and 2024, Colorado will experience a statewide total enrollment increase of 97,839 students or 11.3 percent. Colorado should accordingly plan to spend an average of an additional \$310 million per year for new facilities to accommodate the additional students.

New Seats <sup>1</sup>	GSF per New Seat	Cost per GSF	Estimated 10-Year Cost	Estimated Annual Cost
78,111	145	\$ 273	\$3,097 M	\$310 M

(1) 80% of the projected increase in enrollment.

## Projected Annual Gap in Facilities Spending and Investment

Including the costs of any new construction required to accommodate enrollment growth, Colorado should plan to spend an average annual total of \$2,672 million on its K–12 facilities. Based on historic rates of spending, meeting this standard would require spending an additional \$1,242 million statewide or about \$1,459 per student.

K–12 Facilities Responsibilities		Modern Standards	Historic Spending	% of Standard	Projected Annual Gap
Maintenance & Operations at 3% of CRV		\$1,012 M	\$719 M <sup>2</sup>	71%	\$293 M
Capital Construction	Existing Facilities at 4% of CRV	\$1,350 M	\$710 M <sup>3</sup>	43%	\$950 M
	New Facilities	\$310 M			
<b>TOTAL</b>		<b>\$2,672 M</b>	<b>\$1,429 M</b>	<b>54%</b>	<b>\$1,242 M</b>

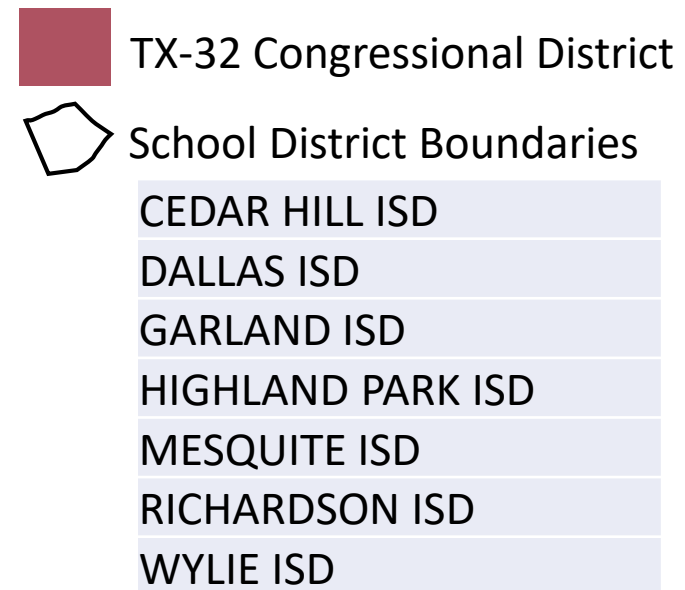
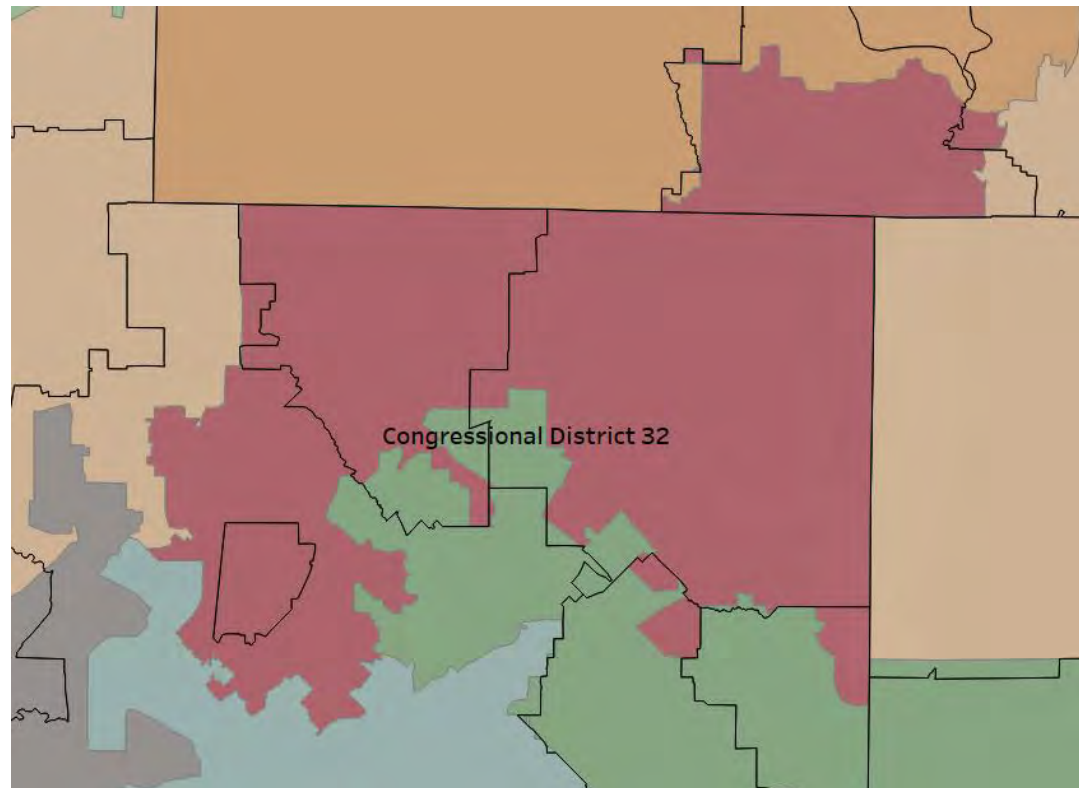
(2) FY2011-13 average; (3) 20-year (FY1994–2013) average, including NEW construction.

## Data Sources

- Basic state data are from the National Center on Education Statistics (NCES) Common Core of Data (2012-13) with charter school enrollment and number of schools included, when included in NCES state totals.
- Area of K-12 district building gross square footage (GSF) was provided by the Colorado Department of Education.
- Facilities maintenance and operation spending, capital investment, debt, and state capital revenue data are district reported on fiscal surveys (F-33) to the U.S. Census of Governments, published by NCES for fiscal years 1994-2013.
- Maintenance and operations spending and capital construction are adjusted to 2014 dollars, using the education adjusted Consumer Price Index, and the Turner Construction Index, respectively.
- The Percentage of new construction is based on Dodge Data & Analytics costs at contract start of public school districts' school construction projects by project type and state and year (1995-2013).

# CDs Include 100s of K-12 Schools with 1000s of Children

- Avg # of publicly funded schools is 230 per congressional district
- Average enrollment in these schools is 115,000 students





# Making the Case

Perspectives from the Field

✓ **Jerry Roseman**, Philadelphia Federation of Teachers, Health & Welfare Fund

✓ **Zachary Scott**, National Association of Secondary School Principals

✓ **Robert Boyd**, Secure Schools Alliance

✓ **Adrienne Dayton**, Ed Market Association

✓ **Brian Kennedy**, International Union of Bricklayers and Allied Craftworkers

✓ **Bryan Howard**, U.S. Green Building Council



Examples of public school facilities that need local, state, **and** federal funds so districts can provide their students and staff healthy, safe, and educationally inspiring public school facilities.



PHILADELPHIA  
FEDERATION of TEACHERS



**PHILADELPHIA**  
*FEDERATION of TEACHERS*



- Elementary School Bathroom – Condition pictured present for 3+ years
- Significant damage to lead paint and plaster from moisture & steam leaks
- Unguarded radiator – 200°F – exposed to children
- Children run their hands over efflorescing lead-painted wall
- > 2000 SF of deteriorated lead paint present in dozens of spaces and hundreds of individual walls ceilings & other structures throughout the school
- Debris on multiple surfaces [floors, window sills, desks, chairs, etc.]



# Consequential & Cascading Damage





- Steam Leak in Mechanical Space - Present for Extended Time [months/years]
- Low Priority – Non Teacher/Student Occupied
- Next to Cafeteria and leading to Hallway
- Steam & Moisture Impacted Asbestos Floor Tile and Electrical System Components
- Mold Growth Resulted from ongoing steam leak
- Problem scale, scope and costs greatly escalated
- A simple fix became a very complex fix





PHILADELPHIA  
FEDERATION of TEACHERS

Elbow to elbow  
Knee to knee  
I'll read to you and  
You'll read to me!









Identify, photograph and report issues in your school building

Download the

# PFT HEALTHY SCHOOLS TRACKER

Available for iPhone and Android devices!

To download the app, use your smartphone to scan a QR code



**APPLE APP STORE**



**GOOGLE PLAY STORE**

More information at [PFT.org/fixing-school-buildings](http://PFT.org/fixing-school-buildings)



**A District and PFT partnership to improve school conditions.**



# Panelist

**Zach Scott**

NASSP Senior Manager of  
Advocacy



# School Infrastructure and Equity

“Structurally sound and well-maintained schools can help students feel supported and valued. Students are generally better able to learn and remain engaged in instruction, and teachers are better able to do their jobs, in well-maintained classrooms that are well-lit, clean, spacious, and heated and air-conditioned as needed. In contrast, when classrooms are too hot, too cold, overcrowded, dust-filled, or poorly ventilated, students **and teachers suffer.**”

- U.S. Department of Education, Office for Civil Rights

# School Infrastructure and Equity

- School districts with higher enrollments of students from low-income families are more likely **to report their buildings in “fair” or “poor”** condition.
- School districts with higher enrollments of students from low-income and minority families invest thousands of dollars less per student in facilities capital improvements than districts in high-wealth communities.
- **Infrastructure’s effect on teacher and principal turnover**





**SecureSchoolsAlliance**  
Research & Education

## About The Secure Schools Alliance

- Focused on improving the security infrastructure, security technology and life safety systems of America's K-12 public schools
- Recognize that secure schools need to also be safe and healthy to have a positive impact on students and teachers
- Safe means that we oppose any solution to make a school secure by violating life safety codes and laws that serve the handicapped and disabled (ADA)
- Healthy means that we want to see safe and secure solutions applied to school facilities that are free from environmental hazards and have working systems
- Support economically sound decision making (better pricing as a part of renovation and master contracts that bring down costs)



**SecureSchoolsAlliance**  
Research & Education

## **K-12 Public School Infrastructure Facts**

- 100,000 K-12 public schools; age 45 years; 7.5 billion square feet; 2 million acres of land; 50 million students, and 6 million teachers and staff.
- American Society of Facility Engineers rates school infrastructure as a D+ in 2017. Poor or substandard school buildings and grounds negatively affect the health of children and adults in schools, which in turn negatively affects their academic and job performance.
- School climate and positive social relations = key for academic achievement.
- Facility quality = key in shaping a schools' social climate. Properly planned, designed, and maintained school facilities promote the health, well-being, and performance of children and adults in schools.
- Most schools were built before we had studies on the critical role facilities play in education.



**SecureSchoolsAlliance**  
Research & Education

## **K-12 Public School Security Facts**

- 100% of mass incidents in elementary and 35% in secondary schools committed by intruders.
- **65% of mass incidents in secondary schools committed by students.**
- **65% of all public schools have reported incidents of violence in their schools**
- Facility quality plays a strong role in shaping a schools' social climate. Facilities are only a part of the solution, but they play a major role.
- Costs = PASS estimated basic costs = \$100K per elementary and \$170K per secondary
- 2018 DOJ/COPS grants: \$24.5 mil; avg grant = \$269K; 91 grants for 5380 schools in 44 states reaching 3 million students; mostly cameras, target hardening and technology





The Education Market Association represents, connects and serves people who want to succeed in the education market by providing events, resources and leadership to those serving education.

# Doesn't Every Child in the U.S. Deserve a School Like This?

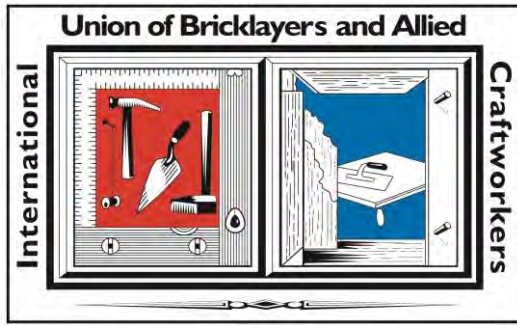


# Where Students Are Empowered



# And Innovation is the Norm





## International Union of Bricklayers and Allied Craftworkers

Founded in 1865, the International Union of Bricklayers and Allied Craftworkers represents craftworkers in the trowel trades across the United States and Canada.



TABLE 2

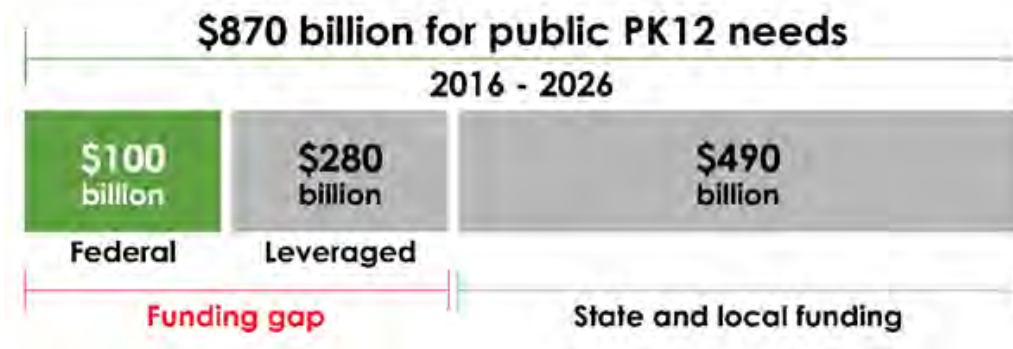
**Jobs generated through \$1 billion investment in construction sector, all and by demographic characteristics of workers**

	Jobs gained				Total
	Direct	Materials	K-input	Induced (responding)	
<b>Totals</b>	6,664	2,714	2,176	6,230	17,785

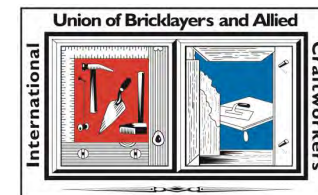
Note: Employment statistics represent pooled data from 2009-2012. Supplier jobs include materials and K-input(capital-input) jobs; indirect jobs include supplier jobs and induced responding jobs.

Source: Author's analysis of Current Population Survey Outgoing Rotation Group microdata. Economic Policy Institute, October 2018.

# Benefits of 10-year federal investment from Re build America's School Act (RASA) HR 865 and S 266



- Leverage state and local public funds
- Save maintenance and operations costs
- Increase and stabilize construction jobs
- Support resilient public school facilities
- Strengthen property values & communities



# WHERE WE LEARN MATTERS

School facilities have a direct impact on:



Student and staff health



Academic achievement



Environmental resources



Property values







## *Third-party verification*

affirms the integrity of green building commitments by guaranteeing that project teams are delivering on design plans and goals.



# Looking for a way forward

Federal Policy Opportunities

**ASCE**  
AMERICAN SOCIETY OF CIVIL ENGINEERS

**Schools**



53% of schools need improvement to reach "good" condition

Sweltering schools bring up age-old infrastructure problem in Pennsylvania

**GAO**

An estimated 43 percent of school districts, serving 35 million students, tested for lead in school drinking water in 2016 or 2017, according to GAO's nationwide survey of school districts. An estimated 41 percent of school districts, serving 12 million students, had not tested for lead. GAO's survey showed that, among

Detroit Schools Shut Off Drinking Water After Testing for Lead

*The Philadelphia Inquirer*

Schools Across the U.S. Find Elevated Lead Levels in Drinking Water

*The New York Times*

TOXIC CITY & SICK SCHOOLS

**DANGER:  
LEARN AT YOUR OWN RISK**

**THE WALL STREET JOURNAL.**



Students at this high school are so worried about mold, they wore surgical masks

# Increasing Federal Spending for School Buildings is “Extremely Important” & a Bipartisan Priority

January 2019

Total		Democrats		Republicans	
Priority	% saying “extremely important”	Priority	% saying “extremely important”	Priority	% saying “extremely important”
Increasing federal spending on school buildings	66	Increasing federal spending on school buildings	73	Increasing federal spending on school buildings	55

March 2018

*% saying extremely or very important priority*

	Total	Rep	Dem	Ind
Improving bridges	72	73	75	69
Improving school buildings	72	68	76	75
Improving roads	71	77	70	70
Improving the power grid	58	61	59	55

\*Poll conducted by: POLITICO/Harvard T.H. Chan School of Public Health

# Where are we today?

- **BASIC's advocacy**
  - 140+ meetings to-date with Members and staff
  - Fly-in "Advocacy Day" with the National Council on School Facilities—State School Facilities Officials
- **Legislative proposals and pledges**
  - "The Rebuild America's Schools Act" - H.R. 865, S. 266
    - 181 House co-sponsors, 25 Senate co-sponsors
  - Democratic leadership plan
    - \$40 billion for K-12 schools
- **Growing bipartisan support in both chambers**
  - Rep. David Joyce and 14 Republican House Members' letter to President Trump
    - 10 letter signatories are current House members
  - Senate amendment directing GAO to study the state of our nation's outdated school facilities for the first time since 1995 (Reed, Murkowski, Brown)
    - Senators Murkowski, Thune, Sullivan & Rounds led GAO request to study rural schools

# “The Rebuild America’s Schools Act” – H.R. 865, S. 266



- **Funding**

- \$100 billion in *targeted* federal funding to states to allocate competitively to local education agencies (LEAs) based on the poverty level of the school, fiscal limitations to raise funds to improve school facilities, and the severity of the need to improve school facilities.
- \$70 billion grant program and \$30 billion tax credit bond program.
- Provides 8% in direct grants toward the estimated annual school construction capital need for \$87 billion.

- **State Role**

- States are required to provide a 10% match and comply with a maintenance of effort provision and supplement, not supplant requirements.
- States must ensure that their distribution of grants represents the geographic diversity of the state, and states must collect and provide data, offer LEAs technical assistance, and review and establish standards.

- **Other Key Elements**

- Use of “opportunity zones” as an alternative financing source is permitted.
- Encourages “Green” practices and supports American manufacturing
- Other allowable uses include extending reach of broad-band which is especially important for rural schools and funding new early learning and CTE instructional space

# What's next for school infrastructure?

## **Scope:**

- Will an infrastructure package include infrastructure beyond roads and bridges? Will it include schools?

## **Scale:**

- How big, over how many years?

## **Approach:**

- Pressing need to increase Republican support, especially in the Senate
- Direct investment?
- Tax incentives/new investment structures
- Source of funding

## **Our Goal:**

Multi-billion dollar investment, a major part of which is direct funding to states, targeted to school buildings most in need of replacement or renovation, in lowest wealth communities