

What you need to know about stimulus funding for school building upgrades

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Over \$250 billion in stimulus funding for schools is available now — but it won't last forever.

Since the pandemic began, the federal government has made \$257.9 billion in funding available to public and private Pre-K-12 schools, colleges, and universities to ensure a safe and healthy learning environment.

Schools like yours can use this funding to modernize HVAC and building systems, thereby improving indoor air quality (IAQ) and energy efficiency for years to come. An added benefit: The downstream cost savings from these efficiency improvements will free up funding for future projects.

But the funds won't last forever — they'll expire in 2023.¹ This guide, full of FAQs on IAQ, helps you get started.

What is the funding opportunity for school upgrades?

The Elementary and Secondary School Emergency Relief (ESSER) Fund was established and expanded via three pandemic-era stimulus bills passed by the federal government. These funds are accessible primarily via your local educational agencies — states and districts.



ESSER timeline and funding totals, at a glance²

ESSER	ESSER II	American Rescue Plan (ARP) ESSER Supplement
		
\$19.4B billion total funding for schools	\$77B billion total funding for schools	\$161.5 billion total funding for schools
\$13.5B for K-12	\$54.3B for K-12	\$122B for K-12
\$5.9B for higher education	\$22.7B for higher education	\$39.5B for higher education
Funds available until September 30, 2022	Funds available until September 30, 2023	Funds available until September 30, 2023
Established by the Coronavirus Aid, Relief, and Economic Security (CARES) Act, Section 18003, Division B, passed in March 2020	Established by Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, Section 313, passed in January 2021	Established by the ARP, Section 2001, passed in March 2021

What upgrades and investments qualify?

Over 90 percent of ESSER funding is available for a broad category of needs, under the discretion of the local funding agency. General ESSER funding can support immediate pandemic needs, such as masks, testing, sanitizers, and plexiglass barriers. It also provides aid to mental health services and students facing disadvantages such as homelessness and disabilities.



ESSER funding can also be put toward improving indoor air quality. These permanent upgrades to the building can include:

- Filtration, ventilation, purification, and other air cleaning systems
- Inspections, testing, maintenance, repair, and replacement of aging building controls and HVAC systems
- Technologies related to temperature scanning, occupancy counting, access control, and security systems
- Outdoor learning infrastructure, such as the renewable-energy [Sustainable Outdoor Learning Environment](#) for hands-on STEM education
- Energy performance contracting and modernization services that increase financial flexibility for upgrades
- Any other improvements that “enable operation of schools to reduce risk of virus transmission and exposure to environmental health hazards, and to support student health needs”⁵

Why is indoor air quality so important?

Improving IAQ reduces the spread of airborne pathogens. But the benefits extend beyond mitigating viral spread. There is an established scientific relationship between poor IAQ and lower student performance on cognitive tests.⁴ **Why?** High levels of carbon dioxide (from exhaled breath) and volatile organic compounds (VOCs, i.e., airborne pollutants) can be harmful to human health. For more detail on the value of healthy buildings and schools, [explore our illustrated guide](#).



IAQ is primarily controlled by ventilation and filtration — replacing stale air with outdoor or purified air. Unfortunately, many schools' HVAC systems are outdated and need replacing. With ESSER funding available, now is the perfect time to pursue these upgrades.



4-6x
Experts recommend 4-6 air changes per hour to minimize infectious pathogens.



3x
By code, only 3 air changes are required.



1/2
But the average classroom likely only gets half the amount required by code due to aging or misused equipment.⁵

How do modernized HVAC systems and building management systems compare to older versions?

Put simply, the advanced [digital building management systems](#) (BMSs) of today give your HVAC system a powerful brain. Most older systems require manual operation or run on pneumatic controls with limited intelligence.

With a digital BMS, you can connect your HVAC system to software and cloud analytics that give your facilities team real-time visibility into asset health and performance. Facility managers can pinpoint faulty equipment, track energy use, and shift from reactive to proactive maintenance.

Modern HVAC equipment such as chillers, air handlers, and economizers, can help you heat, cool, and ventilate your building using far less energy than older alternatives. This equipment can be automated for maximal energy efficiency.

You can also connect [occupancy and VOC sensors](#) to BMSs to detect overcrowding, stale air, and classrooms that need targeted ventilation increases. This will help you comply with pandemic-era regulations and enhance safety for students, teachers, and staff.



How do you access ESSER funding?

ESSER funding processes vary by state. The federal government is making ESSER funding available to states, who in turn will deliver funds to individual districts and schools. You should reach out to your state's education department for more information. You can find more details on allocation methodology [here](#) and state-level allocations [here](#).



What's the best way to get started designing a solution to improve IAQ?

With schools reopening across the country, there's no better time to invest in your school's infrastructure, HVAC systems, and building controls.

It's also important to move fast — **ESSER funding is set to expire in 2023**. We at Schneider Electric™ can help you design a solution to improve IAQ and modernize your facilities, while assisting you in securing stimulus funding. We specialize in making buildings more digital, healthy, and energy-efficient. Our products are found in 70 percent of buildings worldwide. We don't just sell products — although we do provide everything you need from a single source. We build solutions customized to your needs.

We've worked with schools across the country to modernize and digitalize their building systems. Just one example: In South Carolina, we helped Richland County School District One improve IAQ and upgrade building systems in its facilities, which will save the district [\\$28 million on energy costs](#).

\$260M

Amount of stimulus funding we helped clients secure during the Great Recession in the late 2000s



We're ready to help you assess your needs, design a solution, and get the project done now, so that you can focus on the most important thing — educating our future generations. **Contact us**

¹ As of publication in April 2021, funding for ESSER was set to expire in 2023.

² Figures sourced from the [U.S. Department of Education's Fact Sheet on ESSER](#)

³ Sourced from [National Council on School Facilities](#)

⁴ Allen et al., 2016, [Environmental Health Perspectives, 124, No. 6](#).

⁵ Harvard Healthy Buildings Program, ["Coronavirus \(COVID-19\): Press Conference with Joseph Allen, 9/2/20"](#)

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