Kentucky

❄
Total Equipment Cost
$2.5M

⚙
Total Operating Cost
$10.4M

👨‍🎓
Students Affected
670,340
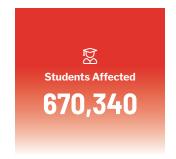
As climate change produces more extremely hot days across the country, many schools are struggling to cope with overheated classrooms and inadequate cooling systems—if they have them at all. This ongoing increase in the number of hot days during the academic year is forcing schools to install air conditioning or upgrade their equipment to a higher cooling capacity.

Hotter Days, Higher Costs: The Cooling Crisis in America's Classrooms analyzed localized heat trends during the school year from 1970 to 2025 using a widely used and publicly available ensemble of climate models. Our analysis identified a threshold of 32 days above 80 degrees Fahrenheit during the school year as the point at which air conditioning is needed, based on engineering protocols, peer-reviewed studies examining the relationship between heat and learning, and actual practice in school systems across the country. For every school district, we used climate model output to tally the number of days above the 80°F threshold during the school year in 1970 and 2025.

The result: billions of dollars in school cooling costs that are directly attributable to climate change.

THE IMPACT ON KENTUCKY

Climate change is leading to more hot days during the school year. Using 1970 as a baseline, by 2025 this climate-driven warming will require 3 Kentucky schools to install AC at a cost of $2,503,000, impacting 610 students across 2 school districts in Kentucky.

Once installed, schools will have to spend an additional $10,363,000 every year to operate and maintain these systems, which will impact 670,340 students.

THE IMPACT ON THE U.S.

Numerous studies have found that hot temperatures reduce a student's ability to learn.

Nationally, the bill totals over $40 billion to install or upgrade air conditioning in schools that serve a third of the country's public school students. That's equivalent to the amount that public schools spend each year on all capital improvements, according to the National Center for Education Statistics.

Who's going to pay for this? As it stands, taxpayers have been on the hook. The total bill is enormous, particularly for schools feeling the pinch from increased spending on security and health-safety measures, and burgeoning technology demands. Taxpayers, teachers, and students aren't to blame for rising temperatures. Oil and gas executives have known nearly half a century that their products were causing climate change, and intentionally misled the public about the dangers.

Schoolchildren understand that when you make a mess, it's your responsibility to clean it up. It's time to hold oil and gas executives accountable for the damage they've caused.

See our full report for more data at coolingcrisis.org

The Cost of Cooling Kentucky's Schools

SCHOOL DISTRICTS, RANKED BY EQUIPMENT COST

RANK	SCHOOL DISTRICT	TOTAL EQUIPMENT	ANNUAL OPERATIONS & MAINTENANCE	# OF STUDENTS IMPACTED	INCREASE IN HEAT DAYS (TOTAL HEAT DAYS)
1	Harlan County School District	$1,923,187	$112,814	3,912	⟰ 20/55
2	Letcher County School District	$579,814	$54,979	3,013	⟰ 19/63

TOP 10 SCHOOL DISTRICTS, RANKED BY OPERATIONS & MAINTENANCE COST

RANK	SCHOOL DISTRICT	TOTAL EQUIPMENT	ANNUAL OPERATIONS & MAINTENANCE	# OF STUDENTS IMPACTED	INCREASE IN HEAT DAYS (TOTAL HEAT DAYS)
1	Jefferson County School District	$0	$1,492,450	96,283	⟰ 18/78
2	Fayette County School District	$0	$591,495	40,680	⟰ 19/65
3	Boone County School District	$0	$312,945	20,558	⟰ 18/62
4	Kenton County School District	$0	$222,178	14,283	⟰ 18/63
5	Hardin County School District	$0	$221,272	14,526	⟰ 18/77
6	Bullitt County School District	$0	$217,413	13,128	⟰ 20/82
7	Warren County School District	$0	$202,448	15,935	⟰ 18/80
8	Oldham County School District	$0	$185,168	12,688	⟰ 19/72
9	Madison County School District	$0	$182,498	11,800	⟰ 17/74
10	Daviess County School District	$0	$165,980	11,512	⟰ 18/83

Total equipment is the combined estimated HVAC installation and upgrade costs from 1970–2025.
Annual Operation & Maintenance is the estimated costs of operating and maintaining the HVAC systems.
Heat days are the number of days 80° or warmer between September 1 and June 15.
The increase in heat days was estimated between 1970–2025.

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