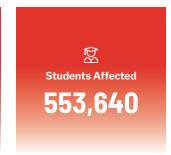
# **Michigan**









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, peerreviewed 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 MICHIGAN

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 1,135 Michigan schools to install AC at a cost of \$2,347,759,000, impacting 553,640 students across 214 school districts in Michigan. By 2025, 43% of students in 38% of schools across Michigan will be impacted by these costs.

Once installed, schools will have to spend an additional \$50,176,000 every year to operate and maintain these systems, which will impact 553,640 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.



# The Cost of Cooling Michigan's Schools

## TOP 10 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	Detroit Public Schools Community District	\$209,143,675	\$5,670,997	47,528	↑ 11/34
2	Dearborn City School District	\$87,334,126	\$1,911,077	20,618	↑11/37
3	Ann Arbor Public Schools	\$72,972,128	\$1,516,807	17,397	<b>≈ 11</b> /35
4	Plymouth-Canton Community Schools	\$72,759,839	\$1,598,373	17,141	↑ 13/37
5	Livonia Public Schools	\$59,424,035	\$1,357,301	13,900	<b>≈ 12</b> /37
6	Kalamazoo Public School District	\$51,570,568	\$1,042,254	12,438	<b>≈ 12</b> /41
7	Troy School District	\$51,172,363	\$1,039,590	12,220	<b>≈ 11</b> /33
8	Wayne-Westland Community School District	\$42,872,877	\$836,430	10,223	<b>≈ 12</b> /36
9	Portage Public Schools	\$36,230,622	\$757,492	8,644	<b>≈ 12</b> /40
10	Birmingham City School District	\$31,379,182	\$703,984	7,320	↑ 10/33

## TOP 10 SCHOOL DISTRICTS, RANKED BY OPERATIONS & MAINTENANCE COST

		16 To College Berniere, Mainten S. C. Ellariotto & Haint Enance 555							
RANK	SCHOOL DISTRICT	TOTAL EQUIPMENT	ANNUAL OPERATIONS & MAINTENANCE	# OF STUDENTS IMPACTED	INCREASE IN HEAT DAYS (TOTAL HEAT DAYS)				
1	Detroit Public Schools Community District	\$209,143,675	\$5,670,997	47,528	↑ 11/34				
2	Dearborn City School District	\$87,334,126	\$1,911,077	20,618	<b>≈ 11</b> /37				
3	Plymouth-Canton Community Schools	\$72,759,839	\$1,598,373	17,141	↑ 13/37				
4	Ann Arbor Public Schools	\$72,972,128	\$1,516,807	17,397	↑11/35				
5	Livonia Public Schools	\$59,424,035	\$1,357,301	13,900	↑ 12/37				
6	Kalamazoo Public School District	\$51,570,568	\$1,042,254	12,438	↑ 12/41				
7	Troy School District	\$51,172,363	\$1,039,590	12,220	11/33				
8	Wayne-Westland Community School District	\$42,872,877	\$836,430	10,223	↑ 12/36				
9	Portage Public Schools	\$36,230,622	\$757,492	8,644	↑ 12/40				
10	Birmingham City School District	\$31,379,182	\$703,984	7,320	↑ 10/33				

 $\label{thm:continuous} \textbf{Total equipment} \ is \ the \ combined \ estimated \ HVAC \ installation \ and \ upgrade \ costs \ from \ 1970-2025.$   $\textbf{Annual Operation \& Maintenance} \ is \ the \ estimated \ costs \ of \ operating \ and \ maintaining \ the \ HVAC \ systems.$   $\textbf{Heat days} \ are \ the \ number \ of \ days \ 80^{\circ} \ or \ warmer \ between \ September \ 1 \ and \ June \ 15.$   $\textbf{The increase in heat days} \ was \ estimated \ between \ 1970-2025.$ 

See our full report for more data at coolingcrisis.org

