U.S. Department of Education

2024-2027 Climate Adaptation Plan

Section 1: Agency Profile

Agency Profile	
Mission	The U.S. Department of Education's (ED or the Department) mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.
Agency Head	Miguel A. Cardona U.S. Secretary of Education
Agency Climate Adaptation Official	Jim Hairfield, Chief Sustainability Officer, Department of Education
Agency Risk Officer	Ray Crawford, Agency Risk Officer, Department of Education
Point of Public Contact for Environmental Justice	Andrea Falken, Special Advisor for Infrastructure and Sustainability, andrea.falken@ed.gov
Owned Buildings	0 owned buildings (Facilities and Logistics Services Division, 2024)
Leased Buildings	29 leased buildings of 1,357,111 square feet (Facilities and Logistics Services Division, 2024
Employees	4,232 Full Time Equivalents (Agency Human Resources, 2024)
Budget	$80.1 billion FY22 Enacted $83.5 billion FY23 Enacted $78.8 billion FY24 Enacted $82.4 billion FY25 President's Budget
Key Areas of Climate Adaptation Effort	There are no public-facing programs authorized at ED that are exclusively dedicated to climate adaptation. ED Infrastructure and Sustainability is a public engagement initiative that promotes equitable access to healthy, safe, sustainable, modern school facilities, and environmental sustainability education. It also considers schools' climate adaptation and resilience.

	U.S. Department of Education Green Ribbon Schools is a recognition award for whole school sustainability, encompassing environmental impact, health, and learning. The Disaster Recovery Unit supports school community stakeholders affected by Federally declared natural disasters across the K-12 and higher education spectrum. It manages an annual disaster recovery related grant and others as any new natural disaster appropriations are passed. School Infrastructure Programs are intended to build capacity on school infrastructure matters, at both state and local levels. These grants are inclusive of school sustainability, health, safety, and equity considerations.

This U.S. Department of Education (ED or the Department) Climate Adaptation Plan provides a framework for agency management, leadership, policy, and programs based on the current and future impacts of climate change. The Department's 2024 Climate Adaptation Plan looks to implement agency strategies that prepare its management and operations and continue to lead the nation's schools on the path towards adapting to climate impacts.

The goal of this plan is to ensure that ED:

1. Executes and adapts its mission and operations securely, effectively, and efficiently in the face of climate change;
2. Exhibits leadership in the areas of school climate adaptation;
3. Advances educational equity and justice as part of this work; and
4. Complies with Executive Orders (EOs) 14008, 14057, and 14030, which direct agencies to take action to address the climate crisis.

This plan aims to integrate climate change planning and actions into ED operations, programs, policies, and public engagement. To achieve these goals ED will:

1. Engage in climate change planning and adaptation measures, making use of available information and data;
2. Develop and publish a climate adaptation plan which shall include consideration of each of ED's principal offices, as appropriate;
3. Leverage its leadership to inform the education sector in promoting climate adaptation; and
4. Consider appropriate inclusion of climate change vulnerabilities, impacts, and adaptation strategies in policies, programs, guidance, technical assistance, and data initiatives.

Through its Climate Adaptation Plan, ED is also able to advance environmental justice, consistent with EO 14008 and with EO 14096 on *Revitalizing Our Nation's Commitment to Environmental Justice for All*. As the Department implements its Climate Adaptation Plan to increase the resilience of its facilities and operations, the agency evaluates, as appropriate and consistent with applicable law, how it may also: address disproportionate and adverse environmental and health effects (including risks) and hazards, including those related to climate change and cumulative impacts of environmental and other burdens on communities with

environmental justice concerns; and provide opportunities for the meaningful engagement of persons and communities with environmental justice concerns.

The Deputy Secretary is responsible for ensuring implementation of all aspects of this plan.

This plan does not alter or affect any existing duty or authority of individual components or Principal Offices. This plan is effective immediately and will remain in effect until it is amended, superseded, or revoked.

Section 2: Risk Assessment

ED used the Federal Climate Mapping for Resilience and Adaptation Application (Federal Mapping App)— which was developed for federal agencies by the White House Council on Environmental Quality (CEQ) and the National Oceanic and Atmospheric Administration (NOAA) to conduct a high-level screening of climate hazard exposure for federal facilities and personnel. ED assessed the exposure of its employees to extreme heat, extreme precipitation, sea level rise, and wildfire risk.

Climate Data Used in Agency Risk Assessment

Hazard	Description	Scenario	Geographic Coverage
Extreme Heat	Measured as whether an asset is projected to be exposed to an increased number of days with temperatures exceeding the 99th percentile of daily maximum temperatures (calculated annually), calculated with reference to 1976-2005. Data are from high-resolution, downscaled climate model projections based on the Localized Constructed Analogs (LOCA) dataset prepared for the 4th National Climate Assessment.	RCP 4.5	CONUS
		RCP 8.5	CONUS
Extreme Precipitation	Measured as whether an asset is projected to be exposed to an increased number of days with precipitation amounts exceeding the 99th percentile of daily maximum precipitation amounts (calculated annually), with reference to 1976-2005. Data are from high-resolution, downscaled climate model projections based on the LOCA dataset prepared for the 4th National Climate Assessment.	RCP 4.5	CONUS
		RCP 8.5	CONUS and AK
Sea Level Rise	Measured as whether an asset is within the inundation extents from NOAA Coastal Digital Elevation Models and the 2022 Interagency Sea Level Rise Technical Report. Intermediate and Intermediate-High sea level rise scenarios used as proxies for RCP 4.5 and 8.5, respectively.	RCP 4.5	CONUS and PR
		RCP 8.5	CONUS and PR
Wildfire Risk	Measured as whether an asset is in a location is rated as high, very high, or extreme risk based on the U.S. Forest Service Wildfire Risk to Potential Structures (a data product of Wildfire Risk to Communities), which estimates the likelihood of structures being lost to wildfire based on the probability of a fire occurring in a location and likely fire intensity. Data reflects wildfires and other major disturbances as of 2014.	Historical	All 50 States
Flooding	Measured as whether an asset is located within a 100-year floodplain (1% annual chance of flooding) or 500-year floodplain (0.2% annual chance of flooding), as mapped by the Federal Emergency Management Agency National Flood Hazard Layer.	Historical	All 50 States and PR

Exposure to extreme heat, extreme precipitation, and sea level rise were evaluated at mid- (2050) and late-century (2080) under two emissions scenarios, Representative Concentration Pathway (RCP) 4.5 and RCP 8.5. Exposure to flooding and wildfire risk were only evaluated for the present day due to data constraints.

Climate Scenarios Considered in Agency Risk Assessment

Scenario Descriptor		Summary Description from 5th National Climate Assessment
RCP 8.5	Very High Scenario	Among the scenarios described in NCA5, RCP 8.5 reflects the highest range of carbon dioxide (CO_2) emissions and no mitigation. Total annual global CO_2 emissions in 2100 are quadruple emissions in 2000. Population growth in 2100 doubles from 2000. This scenario includes fossil fuel development.
RCP 4.5	Intermediate Scenario	This scenario reflects reductions in CO_2 emissions from current levels. Total annual CO_2 emissions in 2100 are 46% less than the year 2000. Mitigation efforts include expanded renewable energy compared to 2000.

Additional details about the data used in this assessment are provided in Appendix A.

2A. Climate Hazard Exposures and Impacts Affecting Federal Buildings

The Department has 29 mission-dependent sites/facilities that are leased from or through GSA. The climate hazard exposure of these buildings is described in GSA's 2024 Climate Change Risk Management Plan.

2B. Climate Hazard Exposures and Impacts Affecting Federal Employees

Indicators of Exposure of Employees to Climate Hazards	RCP 4.5 2050	RCP 4.5 2080	RCP 8.5 2050	RCP 8.5 2080
Extreme Heat: Percent of employees duty-stationed in counties projected to be exposed to more days with temperatures exceeding the 99th percentile of daily maximum temperatures (calculated annually), from 1976-2005	100%	100%	100%	100%
Extreme Precipitation: Percent of employees duty-stationed in counties projected to be exposed to more days with precipitation amounts exceeding the 99th percentile of daily maximum precipitation amount (calculated annually), from 1976-2005	100%	100%	100%	100%
Sea Level Rise: Percent of employees duty-stationed in counties projected to be inundated by sea level rise	11%	71%	11%	76%
	High Risk	**Very High Risk**		**Extreme Risk**
Wildfire: Percent of employees duty-stationed in counties at highest risk to wildfire	0%	0%		0%

The Department has 4,232 employees. The headquarters in Washington, DC, houses half of the ED workforce, and employees are currently permitted to telework part-time. The Department's employees will be most impacted by increases in extreme heat and extreme precipitation and the coastal sea level rise. In addition, the Department headquarters and several satellite facilities are located along the coastal regions of the United States, which are affected by the increase in rain and temperature. Increased temperatures may heighten workers' risk for heat-related issues, and

flooding may present hazardous conditions. The fact that many ED employees telework for portions of their work schedules may reduce the impact of climate hazards on the agency's ability to accomplish its mission. However, climate-related disruptions to the communities that employees live in can also cause humanitarian and welfare concerns.

2C. Climate Hazard Exposures and Impacts Affecting Mission, Operations and Services

SUMMARY OF KEY CURRENT AND PROJECTED CLIMATE HAZARD IMPACTS AND EXPOSURES		
Area of Impact or Exposure	Identified Climate Hazard	Description
School operations	Extreme Heat; Extreme Precipitation; Sea Level Rise; Wildfire Risk; Flooding	School infrastructure across the nation is ill-equipped to operate in conditions with increased risks from climate hazards, with the average age of schools' main instructional building being 49 years old, according to a recent National Center for Education Statistics Survey.[1,2]
Student and staff health	Extreme Heat; Extreme Precipitation; Sea Level Rise; Wildfire Risk; Flooding	Climate related stress and anxiety is impacting student and staff physical and mental health, performance, and retention.[3, 4] Climate change can negatively impact students and staff physical health and this impedes their ability to learn.[5,6]
Learning	Extreme Heat; Extreme Precipitation; Sea Level Rise; Wildfire Risk; Flooding	Climate impacts can cause learning loss due to school closures, increased absenteeism, and other situations that limit students ability to learn

[1] National Center for Education Statistics, How Old Are America's Public Schools, https://nces.ed.gov/surveys/frss/publications/1999048/
[2] December 2023 School Pulse Panel, https://nces.ed.gov/surveys/spp/results.asp.
[3] American Psychological Association, https://www.apa.org/topics/climate-change/mental-health-effects
[4] National Institute of Environmental Health Sciences, Climate Change and Human Health, National Institute of Environmental Health Sciences: Mental Health and Well-being (nih.gov)
[5] Education Week. "Wildfire Haze and Poor Air Quality: Here's How Schools Are Responding," June 8, 2023, https://www.edweek.org/leadership/wildfire-haze-and-poor-air-quality-heres-how-schools-are-responding/2023/06
[6] Education Week, "The School Year Is Getting Hotter. How Does Heat Affect Student Learning and Well-Being?," Sept. 26, 2022, https://www.edweek.org/leadership/the-school-year-is-getting-hotter-how-does-heat-affect-student-learning-and-well-being/2022/09

2D. Climate Impacts on and Exposures to Schools

ED's primary customer, schools across the nation, are finding climate to be a relevant and timely consideration in their operations, student and staff health, and in the learning opportunities that they offer. Climate change is affecting school operations in the form of closures from increased heat and natural disasters.[7] Student and staff physical and mental health and performance is encumbered by reduced outdoor air quality, heat, and climate-related anxiety.[8,9] Local leaders, and students themselves, have called for climate learning so that the students of today are better equipped to mitigate and adapt to climate change which is present and worsening.

Although climate change presents a risk of disrupting learning, there are also opportunities to connect climate change to all subject areas, prepare students for college and career pathways in the green economy, and engage in civic learning. Solution-oriented education regarding climate can support students experiencing climate change related anxiety.[10] By adopting climate solutions, schools can serve as role models for climate action and trusted sources of information for communities. In addition, school facilities often have a critical role in community emergency planning as centers for accessing basic services, including medical care, food services, and cooling. Organizations across the nation are developing overarching frameworks for climate action in education, including strategies for both mitigation and adaptation.[11] By including the climate impacts to schools in this climate adaptation plan, ED highlights the need for not only the Department as an agency, but also schools across the nation to have more resources and investment into risk assessments in response to increase climate impacts.

Section 3: Implementation Plan

3A. Addressing Climate Hazard Impacts and Exposure

Public Initiatives

Background

ED is statutorily prohibited from directly influencing curriculum and is not generally authorized to provide long-term and widely available funds to directly plan, design, finance, construct, operate, maintain, or renovate K-12 schools, two areas that are often considered as important leverage points in climate adaptation.

Historically, ED has been authorized to administer limited programs and funding opportunities in these areas. The most notable is the now retired Educational Facilities Clearinghouse of the

[7] Ramirez, Rachel and Gabe Cohen, "Are Heat Days the New Snow Days," Sept. 6, 2023, https://www.cnn.com/2023/09/06/us/heat-closing-schools-climate/index.html
[8] Clayton, S., Manning, C. M., Hill, A. N., & Speiser, M. (2023). Mental Health and Our Changing Climate: Children and Youth Report 2023. Washington, D.C.: American Psychological Association and ecoAmerica.
[9] Education Week. " Wildfire Haze and Poor Air Quality: Here's How Schools Are Responding," June 8, 2023, https://www.edweek.org/leadership/wildfire-haze-and-poor-air-quality-heres-how-schools-are-responding/2023/06
[10] Cianconi et al. "The Impact of Climate Change on Mental Health." Frontiers in Psychiatry, 06 March 2020. Volume 11 - 2020 | https://doi.org/10.3389/fpsyt.2020.00074
[11] See: This is Planet ED, K12 Action Commission, K12 Climate Action Plan, 2021.

1990s and early 2000s. Other programs that have been used to fund school construction include Impact Aid (for schools in federally impacted areas), State Charter School Facilities Incentive Grants, and, to some extent, the Elementary and Secondary School Emergency Relief Fund.

More recently, because of the December 2022 omnibus appropriations bill, the Office of Elementary and Secondary Education has developed two new School Infrastructure Programs, designed to build capacity, described further in section 3B.

In the absence of a formal unit specifically dedicated to climate change or healthy school physical environments, ED's Infrastructure and Sustainability Initiative, within the Office of Communications and Outreach (OCO), conducts public engagement related to equitable access to healthy, safe, sustainable 21st century school facilities, and environmental education. Without funding and very limited staff, OCO leads on messaging and advising regarding these topics, utilizing meaningful engagement tools, the U.S. Department of Education Green Ribbon Schools recognition award, and similar strategies to increase work on climate change without new funding or statutory authorities. Learn how ED has advanced green schools, including climate action, through meaningful public engagement in Appendix C.

Actions Continue conducting public engagement and outreach that highlights climate impacts and risks to schools. See Appendix C for examples of this work.

1. **Addressing Climate Hazard Exposures and Impacts Affecting Federal Buildings**

ED leases all facilities through the General Services Administration (GSA). The Department plans to partner with GSA to address the vulnerabilities of these sites and facilities to incremental climate impacts and exposures. The Department supports all of GSA's environmental efforts to meet the requirements of various Executive Orders. Moving forward, GSA and ED will work closely to address the climate concerns ED buildings face and ensure our employees work in safe, healthy, and sustainable facilities.

PRIORITIZED ACTIONS TO ADDRESS CLIMATE HAZARD EXPOSURES AND IMPACTS AFFECTING FEDERAL BUILDINGS		
Climate Hazard Impact on and/or Exposure to Buildings	**Priority Action**	**Timeline for implementation (2024-2027)**
All	Partner with GSA to address vulnerabilities to climate change.	By 2025
The Federal Mapping app indicates that the agency will be exposed to sea level rise.	The agency will continue to support remote and hybrid work policies during hazardous times.	The timeline for implementation is from the current time to the foreseeable future.

2. Addressing Climate Hazard Exposures and Impacts Affecting Federal Employees

ED employs 4,232 federal employees around the United States and in all GSA regions. To help alleviate the impact of environmental concerns on employees, the Department has established a remote and hybrid work program that allows approximately 50% of its staff to work from home.

PRIORITIZED ACTIONS TO ADDRESS CLIMATE HAZARD EXPOSURES AND IMPACTS AFFECTING FEDERAL EMPLOYEES		
Climate Hazard Impact on and/or Exposure to Employees	**Priority Actions**	**Timeline for implementation (2024-2027)**
According to the Federal Mapping App, the Department faces a significant heat hazard. 100% of the Department's employees will be affected by increasing temperatures.	The Department supports the use of part-time remote work. Because of this, the agency can allow employees to work from home should a facility be closed due to hot weather.	The timeline for implementation is from the current time to the foreseeable future.

3B. Climate-Resilient Operations

1. Accounting for Climate Risk in Planning and Decision Making

ED does not have an established method of including results of climate hazard risk exposure assessments into planning and decision-making processes. However, the Department is fully supportive of the GSA's efforts to use risk assessments to ensure that ED can accomplish its mission.

Actions

ED will continue to be involved in all phases of the planning and procurement process, guaranteeing that the most sustainable, resilient, and climate adaptative options are chosen.

2. Incorporating Climate Risk Assessment into Budget Planning

ED does not currently incorporate climate risk assessment into budget planning. ED does not have an agency-wide process or tools that incorporate climate risk into planning and budget decisions. The Department does not currently incorporate climate risk into high-level budget and planning decisions.

Actions

ED will evaluate ways to incorporate climate risk assessment into budget and planning decisions.

3. Incorporating Climate Risk into Policy and Programs

Background
Despite having limited statutory authority to address either school curriculum or facilities and grounds directly, two critical leverage points for climate adaptation, ED works creatively and

utilizes low-cost public engagement and new capacity building programs to show leadership and highlight innovative practices for climate resilience and school sustainability.

ED leads efforts to advance messaging on climate risks from the Office of Communications and Outreach, with the Infrastructure and Sustainability initiative. This includes managing the U.S. Department of Education Green Ribbon Schools recognition award, private sector school commitments, an annual Green Strides Tour, a monthly newsletter, and making efforts to coordinate internally and across the federal family and non-profit partners to communicate resources that stand to impact adaptation to schools, as well as offering public engagement events on these topics. ED plans to continue to implement these successful strategies.

The Department has established a regular internal meeting on matters related to school climate, sustainability, and environment, which serves as a network for weighing these matters as they relate to all policies and programs.

The Department recognizes the intersection of climate change and environmental injustice. Evidence, such as a 2022 U.S. Government Accountability Office (GAO) study on recipients of federal natural disaster recovery grants, showed that the impacts of natural disasters are disproportionally felt by students from socially vulnerable groups[12], and suggests that schools and districts in disadvantaged communities have disproportionate levels of climate impacts. ED seeks to ensure that programs are equitably promoted so that communities with environmental justice concerns benefit. As indicated in the Department's Environmental Justice Strategic Plan, ED will achieve this by promoting strategies that state and local agencies can take to ensure all students have access to school facilities that are resilient to climate impacts and climate learning to support their success in school and as global citizens.

Actions
Going forward, and in alignment with the Department's Environmental Justice Strategic Plan, the Department's implementation plan for incorporating climate risk into policy and programs will evaluate ways to:

1. Promote equitable access to healthy, resilient, sustainable, and modern learning environments;
2. Highlight environmental sustainability and climate learning; and
3. Advance career, technical, and adult education (CTE) and workforce development programs in clean energy and sustainable development.

See the Department's forthcoming Environmental Justice Plan for the specific strategies, actions, and outcomes that undergird these goals.

[12] https://www.gao.gov/products/gao-22-104606#:~:text=Officials%20from%20five%20selected%20school,and%20physical%20(see%20figure).

5. Climate Informed Funding to External Parties

Background
ED does not have authorization or funding for climate adaptation or resilience specific grant programs. However, ED requested and received funds in the December 2022 omnibus appropriations bill to administer two school infrastructure grant programs. These are designed to build state capacity and establish a national clearinghouse and technical assistance center on school infrastructure. They do not fund construction or renovation of schools directly.

In early January 2024, Secretary Miguel Cardona announced eight new grant awards totaling more than $37 million over five years for the Supporting America's School Infrastructure (SASI) program and one new grant for $10 million over five years under the National Center on School Infrastructure (NCSI) program. Together, these awards seek to increase the capacity of States to support high-need local educational agencies (LEAs) and schools in ensuring equitable access to healthy, safe, sustainable, and modern learning environments. Climate adaptation is one consideration among physical environment matters.

The SASI program is the first in the Department's history intended to increase state capacity to support high-need school districts to improve their school facilities. States receiving SASI funds will be able to engage in such activities as conducting school facility needs assessments in high-need school districts; hiring new staff; and developing or improving public school infrastructure data systems, among other actions. The NCSI program establishes a national clearinghouse and technical assistance center that will consolidate resources related to public school infrastructure improvements that support safe, healthy, sustainable, modern, and equitable public school facilities. NCSI also provides targeted technical assistance to SASI grantees to expand state expertise in school infrastructure.

Actions
As detailed in the Department's Environmental Justice Strategic Plan, some actions and outcomes related to this work include:

- Continued administration of these grant programs, with ongoing funding.
- Evaluate opportunities for other appropriate federal grants, resources, data collection and analysis, and other deliverables to bolster equitable access to healthy, safe, sustainable, modern, and inspiring school environments.

Desired Outcomes
- States, schools, and districts feel supported with the resources they need to plan, finance, manage, construct, operate, maintain, and renovate all aspects of school environments with a view toward equity.

3C. Climate Training and Capacity Building for a Climate Informed Workforce

Background
ED curated a climate training resource for employee awareness and understanding. This resource provides the Department employees with knowledge of climate interventions and examples of successful strategies used throughout various governmental agencies. Climate 101

training is available for the ED workforce to complete to gain introductory climate information.

In terms of climate training to the public, ED will support efforts that promote greater access for youth and adults to programs and resources that increase their knowledge of and employability in climate resilience fields and related industry opportunities. The Bipartisan Infrastructure Law has generated unprecedented levels of funding for workforce development related to climate and environment. ED supports programs that help youth and adults prepare for and receive education to gain employment in called upon occupations.

Actions
As detailed in the Department's Environmental Justice Strategic Plan, some actions and outcomes related to workforce training include:

- Evaluate existing programs for potential opportunities to bolster "green economy" workforce development, especially for underserved communities.
- Incorporate climate into workforce education promotional events, programs, communications, and outreach.
- Strengthen collaboration between governmental and nongovernmental partners that encourage equitable access to workforce development programs.

Desired Outcomes

- Enhanced collaboration ensures youth and adult learners are aware of opportunities to access workforce development resources in climate fields and related sectors

Training and Capacity Building	
Agency Climate Training Efforts	The Department will publicize available training for completion by Department officials.
	23% of the acquisition workforce will have received climate training by June 30, 2024.
	The Department has curated climate activities from across the Federal government to provide various resources to the ED workforce. A Climate 101 course is available with seven (7) sections: 1. The Sun Provides Energy 2. Climate is Complex 3. Climate and Life 4. Climate is Variable 5. Understanding Climate 6. Humans Affect Climate 7. Climate Change has Consequences
	ED has less than one FTE with tasks relevant to climate adaptation in their job description.
Agency Capacity	Less than 1 FTE

Section 4: Demonstrating Progress

4A. Measuring progress

Key Performance Indicator: Climate adaptation and resilience objectives and performance measures are incorporated in agency program planning and budgeting by 2027.		
Section of the CAP	**Process Metric**	**Agency Response**
3A – Addressing Climate Hazard Impacts and Exposure	Step 1: Agency has an implementation plan for 2024 that connects climate hazard impacts and exposures to discrete actions that must be taken. (Y/N/Partially) Step 2: Agency has a list of discrete actions that will be taken through 2027 as part of their implementation plan. (Y/N/Partially)	Step 1: No. Step 2: No.
3B.1 – Accounting for Climate Risk in Decision-making	Agency has an established method of including results of climate hazard risk exposure assessments into planning and decision-making processes. (Y/N/Partially)	No.
3B.2 – Incorporating Climate Risk Assessment into Budget Planning	Agency has an agency-wide process and/or tools that incorporate climate risk into planning and budget decisions. (Y/N/Partially)	Partially. ED has a cross-agency group that meets at regular intervals and looks for opportunities to evaluate inclusion of environment, including climate adaptation, in programs, policies, services, and research.
3B.5 – Climate Informed Funding to External Parties	Step 1: By July 2025, agency will identify grants that can include consideration and/or evaluation of climate risk. Step 2: Agency modernizes all applicable funding announcements/grants to include a requirement for the grantee to consider	Step 1: No. Step 2: No.

	climate hazard exposures. (Y/N/Partially)	
Key Performance Indicator: Data management systems and analytical tools are updated to incorporate relevant climate change information by 2027.		
Section of the CAP	**Process Metric**	**Agency Response**
3A – Addressing Climate Hazard Impacts and Exposure	Agency has identified the information systems that need to incorporate climate change data and information, and will incorporate climate change information into those systems by 2027. (Y/N/Partially)	No.
Key Performance Indicator: Agency CAPs address multiple climate hazard impacts and other stressors, and demonstrate nature-based solutions, equitable approaches, and mitigation co-benefits to adaptation and resilience objectives.		
Section of the CAP	**Process Metric**	**Agency Response**
3B.3 – Incorporating Climate Risk into Policy and Programs	By July 2025, 100% of climate adaptation and resilience policies have been reviewed and revised to (as relevant) incorporate nature-based solutions, mitigation co-benefits, and equity principles. (Y/N/Partially)	No.
Key Performance Indicator: Federal assets and supply chains are evaluated for risk to climate hazards and other stressors through existing protocols and/or the development of new protocols; response protocols for extreme events are updated by 2027.		
Section of the CAP	**Process Metric**	**Agency Response**
3B.4 – Climate- Smart Supply Chains and Procurement	Step 1: Agency has assessed climate exposure to its top 5 most mission-critical supply chains. (Y/N/Partially) Step 2: By July 2026, agency has assessed services and established a plan for addressing/overcoming disruption from climate hazards. (Y/N/Partially)	Step 1: No. Step 2: No.

	Agency has identified priorities, developed strategies, and established goals based on the assessment of climate hazard risks to critical supplies and services. (Y/N/Partially)	No.
Key Performance Indicator: By 2027, agency staff are trained in climate adaptation and resilience and related agency protocols and procedures.		
Section of the CAP	**Process Metric**	**Agency Response**
3C – Climate Training and Capacity Building for a Climate Informed Workforce	Step 1: By December 2024 100% of agency leadership have been briefed on current agency climate adaptation efforts and actions outlined in their 2024 CAP. (Y/N/Partially) Step 2: Does the agency have a Climate 101 training for your workforce? (Y/N/Partially) If yes, what percent of staff have completed the training? Step 3: By July 2025, 100% employees have completed climate 101 trainings. (Y/N/Partially)	Step 1: No. Step 2: Partially. Step 3: Partially.

4B. Adaptation in Action

Successes

Key successes in the 2021-2023 climate adaptation plan period include the proposal and successful development of two new school infrastructure programs and making the ED Infrastructure and Sustainability public engagement initiative more robust with limited resources.

Meaningful Public Engagement on Climate

Despite having circumscribed authority at the federal education agency to address either school curriculum or facilities and grounds, which are considered two key leverage points for climate adaptation in schools, ED has worked to use creative, low-cost, and meaningful public engagement and new capacity building programs to show leadership and highlight innovative practices for school climate action.

Over more than a decade, the Department has worked to amplify school sustainability and climate action efforts. This work has intensified under the Biden Administration, with the designation of a Special Advisor for School Infrastructure and Sustainability and a Fellow for these areas. The Department also requested in the FY2023 budget, but did not receive, funding for an Office of Infrastructure and Sustainability. Additional proposals in Congress have included an Office of Sustainable or Climate Ready Schools.

ED currently leads efforts to advance climate and environmental justice matters from the Office of Communications and Outreach, with an Infrastructure and Sustainability initiative. This includes managing our U.S. Department of Education Green Ribbon Schools recognition award, private sector school infrastructure and sustainability commitments, an annual Green Strides Tour, monthly ED Infrastructure and Sustainability News, efforts to coordinate internally and across the federal family and non-profit partners to communicate resources to schools, as well as public engagement events on these topics.

Fluid Federal Collaboration Regarding Schools
ED is working more closely than ever before with colleagues at the U.S. Department of Energy, the U.S. Environmental Protection Agency, the White House, and other agencies, to help communicate agencies' Inflation Reduction Act, Bipartisan Infrastructure Law, and other school facilities related programs that stand to impact schools' climate readiness. This includes by planning shared convenings and resources. An inter-agency group meets regularly in what is a very effective and practically impactful cross collaboration.

U.S. Department of Education Green Ribbon Schools Highlights Innovative Examples
As noted throughout this CAP, since 2012, ED has highlighted examples of promising practices for whole school sustainability, encompassing facilities, health, and environmental learning. States nominate to ED for this award annually in February. ED announces winners in April and celebrate them in Washington, D.C. each summer. Over more than a decade, ED has recognized over 750 honorees from 47 different nominating authorities, including over 50 percent of honorees located in underserved communities. ED communicates their practices through annual reports, blogs, video, newsletter, and social media.

The Green Strides Tour Shares Best Practices
As part of its infrastructure and sustainability initiative, the Department conducts an annual sustainable schools tour. In September 2023, the Green Strides Tour visited Northern and Central California with the theme *Schools for Climate Solutions*.

A Call for Commitments
In February 2023, ED put out a call for non- and for-profit private sector to publicly pledge their support to school infrastructure, sustainability, health, climate, and environmental justice. ED received dozens of pledges related to school infrastructure aims. These commitments demonstrate the wide scope of actions and partners needed to ensure modern, healthy, sustainable schools for all students.

Challenges
Continued challenges include:

- ED's limited authorities related to school buildings and grounds and curriculum, two key leverage points for climate adaptation.
- Climate considerations have yet to be comprehensively integrated into the ED mission, vision, priorities, policies, budgeting, training, or public messaging.
- Climate and environmental matters are decentralized, and leadership is somewhat informal rather than forming part of a concrete unit.

Section 5: Appendices

Appendix A: Risk Assessment Data

The Federal Mapping App uses the following data:

Personnel
Personnel data comes from the Office of Personnel Management's (OPM) non-public dataset of all personnel employed by the federal government that was provided in 2023. The data contains a number of adjustments, including exclusion of military or intelligence agency personnel, aggregation of personnel data to the county level, and suppression of personnel data for duty stations of less than 5 personnel. Despite these adjustments, this data is still useful for screening-level exposure assessments to provide a sense of key areas of climate hazard exposure for agency personnel.

Climate Hazards
The climate data used in the risk assessment comes from the data in Climate Mapping for Resilience and Adaptation (CMRA) Assessment Tool. When agency climate adaptation plans were initiated in 2023, CMRA data included climate data prepared for NCA4. Additional details on this data can be found on the CMRA Assessment Tool Data Sources page. Due to limited data availability, exposure analyses using the Federal Mapping App are largely limited to the contiguous United States (CONUS). Additional information regarding Alaska, Hawai'i, U.S. Territories, and marine environments has been included as available.

Appendix B: A Department Offered Holistic Green Schools Framework

The U.S. Department of Education Green Ribbon Schools (ED-GRS) criteria present many ways to reduce environmental impacts and costs as the first pillar of this recognition award, including greenhouse gas emissions reductions, energy efficiency, water conservation, waste reduction, and clean transportation. There are three Pillars of ED-GRS, each with several underlying Elements. They are described below.

Pillar I: Reduced Environmental Impacts and Costs

- Reduced or eliminated greenhouse gas emissions, using an energy audit or emissions inventory and reduction plan, cost-effective energy efficiency improvements, conservation measures, and/or on-site renewable energy and/or purchase of green power;
- Improved water quality, efficiency, and conservation;
- Reduced solid and hazardous waste production through increased recycling, reduced consumption, and improved management, reduction, or elimination of hazardous waste; and
- Expanded use of alternative transportation, through active promotion of locally available, energy-efficient, and renewable energy options and implementation of alternative transportation supportive projects and policies.

Pillar II: Improved Health and Wellness

- High standards of Whole School, Whole Community, Whole Child Health, including health, nutrition, and outdoor physical education; health, counseling, and psychological services for both students and staff; family community involvement; and
- An integrated school environmental health program that considers occupant health and safety in all design, construction, renovation, operations, and maintenance of facilities and grounds.

Pillar III: Effective Environmental and Sustainability Education

- Interdisciplinary learning about the key relationships between dynamic environmental, energy, and human systems;
- Use of the environment and sustainability to develop STEM content knowledge and thinking skills to prepare graduates for the 21st century technology-driven economy; and
- Development and application of students' civic engagement knowledge and skills to address sustainability and environmental issues in their community.

Appendix C: Advancing Climate Action through Public Engagement

ED's Infrastructure and Sustainability Initiative within the Office of Communication and Outreach seeks to advance climate action using the following public engagement approaches:

Approach	Goal of Approach	Actions and Deliverables
Highlighting Best Practices	Promote the achievements of U.S. Department of Education Green Ribbon Schools (ED-GRS) honorees to inspire other schools to take similar action	• ED-GRS annual announcement, highlights report, social media • ED-GRS awards ceremony & corresponding celebration week events • Annual Green Strides Tour
Resources	Disseminate federal and nationally applicable resources so all schools can access high quality materials	• Green Strides School Sustainability Resource Hub • Monthly newsletter
Liaising	Serve as a liaison between school stakeholders, federal offices, states, and school districts to share resources, best practices, and develop partnerships	• ED participates in numerous work groups and task forces with the White House and other federal agencies, including the U.S. Department of Energy, U.S. Environmental Protection Agency, and numerous others focused on related topics • ED meets as needed with non- and for-profit stakeholders to address their requests and facilitate resource distribution
Public Engagement	Increase the national awareness of the impacts school infrastructure and sustainability can have on student health, learning outcomes, teacher retention, and district finances.	• Participate in regular webinars, conferences, and speaking engagements on these topics • Prepare remarks with ED colleagues and offices. • Host public engagement campaigns, such as the 2023 call for school infrastructure and sustainability Commitments

Appendix D: ED Climate Adaptation-Related Grant Programs

ED does not have grant programs focused on climate adaptation. ED's grant programs that most relate to climate adaptation include the School Infrastructure Programs and Disaster Recovery Unit programming.

School Infrastructure Programs

The School Infrastructure Programs increase capacity at state and local levels through state facilities authority grants and a national technical assistance center. With the first grantees announced in January 2024, the Supporting America's School Infrastructure (SASI) program is the first in the Department's history intended to increase state capacity to support underserved school districts to improve their school facilities. States receiving SASI funds will engage in some of the following projects:

- The SASI grant project for **Alabama** aims to bring about transformative changes in 21 high need local education agencies (LEAs) by addressing their unique challenges and significantly improving the quality of education and learning environments for their students. One key aspect of the project is conducting an expert assessment of school facility conditions in each identified LEA.
- The goals of the **Arizona** School Facilities Improvement Project are to build critically needed capacity of the School Facilities Division, the State educational agency (SEA) and LEAs (in particular the state's high-need LEAs) to navigate complex school facilities needs and processes through developing and providing needed technical assistance, training and supports. Additionally, the project will seek to modernize the state's capacity to collect and analyze school facilities conditions data, thereby providing more comprehensive information for the agency and state policymakers to engage in data-driven decision making to support LEAs with building renewal, new school construction, and preventative maintenance needs.
- The **California** Department of Education (CDE) will target small school districts (SSDs) that face key challenges that hamper their ability to provide equitable resources for their high-need students' academic success. The CDE prioritized 165 initial high-need schools based on three criteria as specified in the application. The direct services provided will allow these SSDs to be better equipped to assess their facilities needs with streamlined approaches, standardized tools developed through this project, and increased awareness of available funding opportunities resulting in greater investments in their facilities.
- The **Commonwealth of the Northern Mariana Islands** Public School System will enable three primary objectives: 1) the creation of a comprehensive 10-year School Facilities Master Plan; 2) the transition to a cloud-based facilities maintenance management system; and 3) the establishment of an innovative maintenance training program for district staff.
- The **Oregon** Department of Education (ODE) will accelerate the Statewide School Facility Assessment (SSFA) Program from a five-year completion timeline to a three-

year timeline. The ODE will prioritize the assessment of high-need LEAs' school facilities to ensure these buildings are assessed first within each region.

- **Pennsylvania** will establish a team of three staff to support the needs of high-need local education agencies in Pennsylvania and assist those school districts with assessing their infrastructure needs and securing and leveraging resources to provide safe, healthy, sustainable, and equitable learning environments. Pennsylvania will expand the Department's capacity to proactively assist high-need districts with assessing their infrastructure needs, navigating federal, state, and local systems, and leveraging resources to improve the state's highest-need public schools as well as have current assessments to inform fiscal and policy decision making statewide.
- **Rhode Island** Department of Education (RIDE) will focus on the five LEAs with the highest needs as measured by academic and health outcomes as well as by facility needs. RIDE will hire three full-time professional employees, alongside funding for essential consulting services and direct support for Facility Directors. These efforts seek to reduce chronic absenteeism and enhance educational outcomes, energy efficiency, facility appropriateness, and student health.
- The **Virginia** Department of Education will use the funding to increase support to Virginia's high need local education agencies by establishing a central database and dashboard for storage of school facility condition data, guidelines for data to be collected, training for local education agencies staff, tools for self-assessment, and ongoing state level support.

The Disaster Recovery Unit

The Disaster Recovery Unit (DRU) supports school communities affected by Federally declared natural disasters and coordinates interagency efforts for disaster response. A study by the General Accountability Office found that school districts in socially vulnerable communities faced heightened challenges after natural disasters. The GAO report discusses how children from low-income backgrounds, children of color, English learners, and children with disabilities can be disproportionately affected by disasters, making disaster recovery more challenging for school districts serving high proportions of students in these groups. The report also found that the majority of school districts in the study that received disaster recovery grants funded by ED and other government agencies served a higher-than-average proportion of students in these groups. Education disaster recovery programs and other support from the DRU can assist vulnerable students to recover from or avoid education disruptions caused by natural disasters, limiting situations of unequitable educational opportunities for underserved students. The DRU leads ED's financial support, technical assistance, and response and recovery coordination in assisting education communities recovering after a natural disaster.

- Financial support: The DRU addresses students' unmet education disaster recovery needs through timely financial support so that States, territories, districts, schools, and institutions of higher education more quickly and effectively recover from natural disasters by efficiently providing disaster education recovery-focused grants to K-12 and

higher education stakeholders affected by natural disasters. The Project School Emergency Response to Violence (Project SERV) grant program provides funding for districts and institutions of higher education in which the learning environment has been disrupted due to a violent or traumatic crisis. The purpose of Project SERV is to provide resources in response to such an event and restore a safe environment conducive to learning. In FY 2023, the DRU successfully managed a 225% increase in the number of Project SERV awards granted to schools following a natural disaster compared to FY 2022—including a 42% increase in the amount of award funding provided and the addition of awarding Project SERV natural disaster grants to institutions of higher education for the first time since the DRU's inception in 2018.

- Technical assistance: The DRU assists education communities with recovering after a natural disaster by providing clear and consistent technical assistance on education disaster recovery resources by providing timely, customer-driven technical support and guidance to states, territories, institutions of higher education, districts, and schools affected by natural disasters. This is evidenced by the DRU conducting a 675% increase in the number of education disaster recovery funding information sessions focused on Project SERV to SEAs, districts, and institutions of higher education following a major disaster declaration in FY 2203 compared to FY 2022.
- Response and Recovery Coordination: The DRU promotes effective and efficient education disaster response and recovery through coordination within ED and across Federal partners by spearheading implementation of ED's cross-agency response and recovery efforts after federally declared natural disasters. In addition, the DRU represents ED on a FEMA led cross-agency recovery governance structure called the Recovery Support Function Leadership Group (RSFLG). The RSFLG is made up of multiple departments and agencies across the federal government that work together to help communities recover from a disaster. The DRU expanded its role by representing ED in 233% more interagency disaster recovery missions in FY 2023 than in FY 2022. This accomplished more comprehensive education-focused disaster recovery needs assessments and subsequent recovery support and capacity building for education entities; incorporating higher education support in ED recovery efforts to account for the specialized need to institutions of higher education; and the establishment and coordination of the ED's Disaster Recovery Team, which consists of subject matter experts throughout ED who provide education program-tailored support to address education recovery needs in response to a natural disaster.