Integrating Extreme Heat into Federal Infrastructure Legislation

President Joseph Biden
President of the United States

The Honorable Antony Blinken
Secretary of State

The Honorable Janet Yellen
Secretary of the Treasury

The Honorable Lloyd Austin
Secretary of Defense

The Honorable Merrick Garland
Attorney General

The Honorable Deb Haaland
Secretary of the Interior

The Honorable Tom Vilsack
Secretary of Agriculture

The Honorable Gina Raimondo
Secretary of Commerce

The Honorable Marty Walsh
Secretary of Labor

The Honorable Xavier Becerra
Secretary of Health and Human Services

The Honorable Marcia Fudge
Secretary of Housing and Urban Development

The Honorable Pete Buttigieg
Secretary of Transportation

The Honorable Jennifer Granholm
Secretary of Energy

The Honorable Miguel Cardona
Secretary of Education

The Honorable Denis McDonough
Secretary of Veterans Affairs

The Honorable Alejandro Mayorkas
Secretary of Homeland Security

The Honorable Michael Regan
Administrator of the Environmental Protection Agency

The Honorable Gina McCarthy
National Climate Advisor to the President
Open Letter to the President, the Cabinet, and Congressional Leaders:

Federal infrastructure legislation, including proposals to enact The American Jobs Act, creates a critical opportunity to reduce the risk of extreme heat to people all over the country. As you develop the details of this and other bills, we strongly urge you to fully integrate actions to address Extreme Heat and the Urban Heat Island into your work.

Heat is the face of climate change, and it is an increasing threat to people and infrastructure everywhere. Heat is the silent killer, responsible for more deaths than all other climate perils. Yet, in part because it does not cause major structural damage, it is often ignored in climate plans. The federal government’s approach to heat is fragmented, uncoordinated and inadequate to meet the challenge.

Heat is both a chronic problem, especially in cities that experience the urban heat island effect, and an acute problem threatening public health. Heat threatens infrastructure including the electrical grid in many states (see Texas and California), roadways, bridges, dams and air travel. Heat can also lead to thermal expansion and cracking if Smart Surfaces—surfaces that better manage water and heat like reflective, green, and porous pavements, trees, and solar PV—are not used.
Integrating heat into resilience projects is fully aligned with the President’s goals – it will protect public health and safety, create jobs, address climate change and ensure that taxpayers’ money is effectively spent.

The negative economic, environmental, and health effects of extreme heat are disproportionately borne by low-income communities and communities of color. The United States cannot build back better unless it considers the effects of heat on public health and on infrastructure investments.

The necessity to address heat is underscored by the spate of heat waves blanketing the country and in the White House Fact Sheet on the American Jobs Act that states,

“Building back better requires that the investments in this historic plan make our infrastructure more resilient in the face of increasingly severe floods, wildfires, hurricanes, and other risks.” One important unnamed risk is extreme heat.

“Safeguard critical infrastructure and services, and defend vulnerable communities.” Action on heat will help protect low-income and BIPOC communities and other vulnerable populations including the elderly, those with compromised health status, the unhoused, and more.

The American Jobs Act and similar policy initiatives should fund a large and comprehensive suite of infrastructure projects to reduce the risk of heat including:

1. **Built infrastructure** – Adaptive and resilient infrastructure including cool roofs, cool pavements, cool walls, cool paint; bus shelters, shade structures, insulation in low-income communities, air conditioning programs with rate discounts for low-income households, energy efficient HVAC research and deployment, building design including mandating passive cooling in all federal buildings, Cool schools with air conditioning, green school yards, openable windows, weatherization; mobile transportation including air conditioned buses.

2. **Natural infrastructure** – tree canopy, green roofs, parks and other urban greening, water features, permeable pavements, green school yards.

3. **Social infrastructure** – community resilience centers (cooling, hydration, medical consultation), cooling equipment, and subsidized transportation, back-up energy; programs to check on elders and homebound individuals, additional programs to build social cohesion.

4. **Communications infrastructure** – improved early warning systems and communications including ranking and naming heat waves, annual Heat Season Kick-offs, public information campaigns, frequent heat health surveillance reports, improved hospital coding practices for heat.

5. **Planning infrastructure** – Tree equity goals, urban design, zoning, comprehensive heat action planning, siting of buildings, safe streets – integrating cool pavement, traffic calming elements, tree canopy and greening, public gathering spaces,

6. **Policy infrastructure** – Procurement guidelines on heat; mandate cool roofs on all new federal and federally funded buildings and retrofits, integrate heat into all federal
efficiency standards for buildings, materials, appliances; indoor high heat standards for all federal buildings, schools and federally-funded buildings, federal heat standards for indoor workers and outdoor workers; regulations to ensure reliable energy grid management during extreme heat.

Accompanying this letter are two documents sent previously to key legislative committees focused on Smart Surfaces—surfaces that effectively control heat and water such as green, porous, and reflective surfaces, trees, solar photovoltaics, or a combination of these solutions; these letters are endorsed by our groups.

We urge you to give your full consideration to the requests in this and the attached letters. Aggressive action on heat now will save lives, promote equity, avoid maladaptation and ensure public funds are spent effectively. The American people deserve nothing less.

Signed,

Adrienne Arsht-Rockefeller Foundation Resilience Center
All Aces Inc.
American Forests
Chemical Fabrics and Film Association
The CLEO Institute
Climate Resolve
California Nevada Cement Association
Flex Membrane, Inc
Global Cool Cities Alliance
Local Government Commission
Metropolitan African Methodist Episcopal Church
Next Leads
Precovery Labs
Resilience 21
Resilient Cities Network
Sika Corporation
Smart Surface Coalition
The Trust for Public Land
UCLA Fielding School of Public Health Center for Healthy Climate Solutions
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