

Creating a More Resilient America

Social Infrastructure's Role in Responding to the Climate Crisis



The shock of the coronavirus pandemic, a mounting climate crisis marked by extreme hurricanes and wildfires, and the outcry for racial justice have exposed alarming weaknesses in the United States' social infrastructure. To build stronger, more resilient communities across the country, now is the time for federal, state and local governments to shore up and expand access to the services, institutions and caregiving that enable the well-being of people and their communities. Taking this step will advance America's efforts to overcome threats caused by a changing climate, build a balanced economy, and create more opportunities for working families to lead secure, fulfilling lives—no matter what their color or where they were born.

Social Infrastructure is a Valuable Investment

Robust social infrastructure creates resilient communities that are strong enough to bounce back and even bounce forward during difficult times. As the United States confronts an era of climate-driven change, our social infrastructure will face enormous new strains that threaten to pull apart our country and leave millions of working families behind. -- especially Black, brown, and Asian Pacific Islander Americans.

Averting and managing the acute and inequitable crises of the future will require investing in, rebuilding and sustaining America's social infrastructure at a much higher level. **Social infrastructure is the people, resources and programs required to promote and protect the nation's economic, health and social well-being through both ordinary hardships and episodic emergencies.** Social infrastructure comprises public health, home care and social workers. It also includes services in schools, libraries and recreation centers, as well as 911 operators and other emergency responders.

Unequal access to social infrastructure is a long-standing problem in American life. In the aftermath of Hurricane Katrina, then-Senator Barack Obama said "the people of New Orleans weren't just abandoned during the hurricane. They were abandoned long ago." Once again with the COVID-19 pandemic, the patterns of infection, economic hardship and death expose the accumulated effects of abandonment, particularly for already vulnerable communities. Obama recognized that while the erosion of social infrastructure is most glaring in a time of crisis, the condition is chronic and has deep historical roots.

The disproportionate effects of COVID-19 point unambiguously at social determinants of health as key risk factors. Those dealing with precarious employment and inadequate wages exacerbated by systemic racism and disinvestment in communities of color are the worst hurt by the economic fallout of the pandemic. As with Hurricane Katrina, the crisis has revealed an already ailing system too corroded to address daily hardships and too frail to withstand the blow of an extreme event. Just as other physical infrastructure requires continuous investment in maintenance to both function reliably on a day-to-day basis and withstand extreme weather, social infrastructure requires continuous investment to manage hardships and function in the face of calamity.

Investments in physical infrastructure have long served as a way to stimulate the economy, create jobs and support long-term prosperity. Likewise, investments in repairing and upgrading social infrastructure can put people back to work, ensure a more equitable recovery, and enhance long-term resilience. Physical and social infrastructure are complementary; however, the inadequacy and fragility of one limits the effectiveness of the other.

Investing in Social Infrastructure Creates Jobs – Investing in social infrastructure creates three times more jobs than investing in physical infrastructure. For example, \$1 billion invested in state and local public health, child care and home care would create 17,400 jobs, while the same amount invested in hospital construction and public infrastructure would create 5,300 jobs. The 2016 ITUC report, "Investing in the Care Economy," found that investing 2 percent of GDP in the care economy would yield 7.1 million jobs compared to 2.6 million in construction.

Investing in Social Infrastructure Addresses Racial and Economic Inequality – Public sector employment also improves racial and economic equity. Over centuries, Black workers were systematically excluded from the private sector and as a result have found quality jobs in healthcare, education and transportation as the government expanded services. Today one in five Black workers is employed in the public sector, two-thirds of them women. And the jobs are better: Black workers in the public sector earn 46 percent more than their private sector counterparts.²

Investing in Social Infrastructure Stimulates Local Economies – In addition to these employment benefits, social infrastructure investments yield high returns. A study conducted on the IMPaCT community health program in Philadelphia demonstrated a \$2.47 return on every dollar invested. The author of the study estimated that providing the same level of support to 15 percent of all U.S. Medicaid patients would require 198,000 community health workers, cost \$18.6 billion, and result in savings of \$46 billion a year.³ Another study found a 3-to-1 return on investment when a hospital in the Bronx directly tackled social determinants of health.⁴

Investing in Social Infrastructure Improves Community Health Outcomes – Social infrastructure also reduces vulnerability of at-risk populations and enhances community resilience. Studies of the 1995 Chicago heat wave revealed the same disproportionate impacts on people of color in low-income areas as we saw with Hurricane Katrina and, more recently, with COVID-19. However, researchers also found that low-income African American neighborhoods with high levels of community interaction and engagement had some of the lowest death rates in the city, despite facing the same housing, health and economic disadvantages faced by other low-income communities. Similar results were found when Superstorm Sandy struck the Eastern Seaboard. Given the game-changing value of social cohesion, it can't be left to chance. We need a strong public sector to ensure that everyone has someone looking out for them.

Custom analysis using the IMPLAN economic model shows that \$1M invested would create 9.7 direct jobs in state and local public jobs, 22.2 childcare jobs, 20.3 home healthcare jobs, 6.3 hospital construction, 4.8 building repair and maintenance jobs, or 4.7 civil infrastructure jobs.

² https://www.labor.ucla.edu/publication/reimagined-recovery-black-workers-the-public-sector-and-covid-19/

³ https://www.healthaffairs.org/doi/10.1377/hlthaff.2020.00836

⁴ https://www.healthcarefinancenews.com/news/what-montefiores-300-roi-social-determinants-investments-means-future-other-hospitals

Too often we've answered the call to action for social infrastructure by relying on volunteerism or outsourcing. Relying solely on the charitable actions of volunteers, for-profit entities or underresourced community-based organizations (CBOs) is ultimately insufficient. Public agencies that are adequately staffed to provide ongoing support, training and oversight are more efficient in the long haul because social infrastructure isn't about the one-time delivery of services. Success relies on the dense weave of the safety net, maintained and strengthened by sustained investments over time, with continuity of relationships and coordination of programs.

While continuous investments in social infrastructure improve community well-being, reduce the effects of poverty and racism, and can mitigate future crises, the inverse is also true. Decadeslong disinvestment, as we've seen in the United States, makes us all more vulnerable both on a daily basis and in times of crisis. The COVID-19 pandemic has exposed the fragility of our social infrastructure. As of late September, it has infected more than six million and killed more than 200,000 Americans (disproportionately afflicting the Black and Latinx communities), eliminated 40 million jobs (disproportionately held by women, Black and Latinx, young and low-wage workers), and pushed millions of essential workers into risky situations without adequate personal protective equipment or paid sick leave.

I. Social Infrastructure is a Pillar of Climate Policy

As we enter the climate change epoch, we can learn from past failures and make social infrastructure a central pillar of a U.S. climate plan. The daily burden of climate change makes life harder for working-class Black, white, brown, and Asian Pacific Islander Americans. Hotter days lead to higher energy costs for low-income households, forcing impossible choices that can leave people without power or even homeless. Asthma is exacerbated by heat stress and high ozone levels. Extreme heat also increases rates of heart attacks, cardiovascular mortality and respiratory mortality, further burdening low-income communities of color already suffering health effects from localized environmental pollution5. It is these same communities where residents have more precarious employment with low wages and lack of sick time or family leave. The impacts of climate change disproportionately hurt the most vulnerable, those with the fewest resources to weather additional hardships. Climate change is a risk multiplier, which can be partially neutralized with strong social infrastructure.

Beyond the daily health and environmental burdens associated with a warming planet, there are the increasingly acute episodic events during which we will also need to depend on robust social infrastructure. We will experience fiercer floods, more persistent droughts, more frequent heat waves, vector-borne disease outbreaks, more powerful tornadoes and hurricanes, and more widespread wildfires—costs for climate-related disasters over the past 10 years topped a record-breaking \$800 billion6 The turmoil and level of destruction from such events going forward will be determined by the extent to which we properly plan for, insulate and protect our most vulnerable communities. Some climate change is inevitable, but climate disasters that cause massive damages and death are largely preventable—if we invest upfront in reducing vulnerabilities.

⁵ https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf

⁶ https://www.climate.gov/news-features/blogs/beyond-data/2010-2019-landmark-decade-us-billion-dollar-weather-and-climate

When we think about jobs that address climate change, facilities managers and building operators may come to mind, and indeed these workers are essential to implementing energy-savings programs and reducing emissions. In the context of resilience, we might think of the operators that ensure access to safe drinking water and manage stormwater pollution during heavy rains, or planners and engineers that make sure bridges and highways won't buckle during high winds or heat waves. But it is not only the workers maintaining physical infrastructure who do critical climate work.

Social infrastructure in the context of climate change will require a robust network of public and publicly funded services to work on both climate adaptation and mitigation.

This will include a whole class of care and community support workers in climate-relevant jobs working to strengthen community resilience.

- Home care, child care, nursing home and healthcare workers who understand the specific needs and vulnerabilities of the people they serve so they can keep them safe from harm;
- Public health workers working year-round to address underlying conditions that exacerbate
 the lethality of climate and pandemic disasters, and who can, during a heat wave organize
 community cooling centers to reduce community vulnerability; 7
- Social workers, such as those who serviced the community after the 2018 Paradise Fire helping those impacted find temporary housing and who, in ordinary times, support families in accessing affordable energy-efficient housing close to transit lines;
- Case managers to address large-scale displacement caused by rising sea levels, floods or fire
 by relocating communities or resettling climate refugees, such as the workers in Florida in 2017
 who helped relocate Puerto Ricans after Hurricane Maria;
- Librarians and parks and recreation workers whose regular work cultivates social cohesion and who can, in extraordinary times, check up on patrons by phone or open their facilities as cooling centers and safe havens; and
- 911 operators and other EMS staff who manage and respond to emergencies.

In addition, it will involve public service workers with vital roles to play in reducing greenhouse gas emissions beyond physical infrastructure development and maintenance, including those who:

- Determine eligibility and provide case management to enroll participants in equity-focused energy-saving programs;
- Engage communities in implementing climate action plans to increase active transportation, improve walkability and safety, and reduce energy consumption by homes and businesses;
- Provide case management, connection to services, and access to new opportunities for workers transitioning from jobs in extractive industries, for front-line communities, and for others historically excluded from economic opportunity;
- Write and enforce building and zoning codes that aim toward net-zero emissions and to maximize water-use efficiency;
- Develop regulations and compliance strategies that hold polluters accountable;
- Sanitation workers responsible for maintaining safe streets and parks and controlling diseasecarrying vermin and mosquitoes; and
- Groundskeepers and landscapers who plant and maintain trees to provide shade and reduce the heat island effect in urban areas.

The Green New Deal, the Report from the House Select Committee on the Climate Crisis, and the Biden climate plan all call for increased public investment to tackle climate change. If just 10 percent of Biden's \$1.7 trillion climate plan was invested in social infrastructure—that is, the public workforce required to enhance resilience, accelerate mitigation, and ensure climate and environmental justice—it would support 300,000 new public sector workers per year for 10 years. This could double the current size of the government public health workforce, bringing the public health system to the size experts say is necessary.8 Additional workers could include social workers to engage low-income and communities of color in energy- and cost-saving utility programs, find secure and safe housing for climate refugees, provide one-on-one transition support to displaced workers, staff cooling centers, and reduce the burdens of systemic racism.

This \$17 billion annual investment in climate-related social infrastructure would save money in other parts of the federal budget while also reducing inequality, reducing sickness and death, promoting more widespread prosperity, and accelerating action on climate change. This amounts to about \$50 per capita. We cannot escape pandemic or climate threats altogether, but for a \$50-per-person annual investment, social infrastructure can downgrade the next potential crisis into a challenge met efficiently by a country prepared to withstand it.

II. Recommendations to Support Climate-Related Social Infrastructure

Infrastructure, both physical and social, are essential activities of the federal government largely carried out by local and state governments and the care economy (healthcare, home care and child care). In addition to backfilling the holes created by the COVID-19 response and those lingering from cuts made during the Great Recession, the federal government can begin investment in social infrastructure to bolster the nation's climate resilience through intentional direct spending and dedication or expansion of existing revenue streams. To ensure that social infrastructure is embedded into federal climate planning and response and that it be an essential element of federal operations, policy and implementation, we recommend the following:

- 1. Declare the climate crisis and environmental racism a national public health emergency.9
- 2. Co-invest in social infrastructure to achieve climate resilience at a scale and pace that complements our goals with physical infrastructure and clean energy. Allocate at least 10 percent of federal expenditures fund state, local, tribal and territorial government entities to create public sector jobs that address public health and climate resilience priorities. Ensure that 40 percent of all climate allocations go to benefit communities disproportionately burdened by pollution and climate impacts.
 - a. Rebuild and expand our public health and community-based services workforce that fosters social cohesion and build resilience.
 - b. Prioritize workforce-development investments that create a pipeline to public sector jobs and career pathways for local residents, especially those facing barriers to employment.
 - c. All jobs should be subject to high-road labor standards that require family-sustaining wages and benefits, including child care support; ensure safe workplaces; and protect the rights of workers to organize and join unions.

⁸ https://www.statnews.com/2020/04/05/deficit-public-health-workers-no-way-to-fight-covid-19/

⁹ US Call to Action for Climate Equity and Health https://climatehealthaction.org/cta/climate-health-equity-policy/ Accessed August 14, 2020

- 3. Invest in the care economy so that we protect our most vulnerable populations.
- 4. Implement the recommendations of the 2016 Resilience Roadmap based on principles of equity, community engagement, and investment in communities that are often overlooked.10
- 5. Reestablish the Council on Climate Preparedness and Resilience reporting directly to the White House as the intergovernmental coordinating mechanism for climate adaptation.
- 6. The Department of Health and Human Services (HHS) should develop a comprehensive national strategic action to address climate change as one of the top public health challenges of our time.11 The plan should be focused on opportunities to improve the social determinants of climate resilience and health, including adequacy of public health systems, food and housing security, emergency preparedness, worker health and safety, support to vulnerable populations, and environmental justice.
- 7. The Federal Emergency Management Agency (FEMA) should orient its programs to complement and build on community resilience work being shepherded in other agencies to reduce disaster risk, mitigate the consequences of disaster, and facilitate recovery focused on communities facing the greatest challenges to recovery due to systemic racism and historic disinvestment.
- 8. Rebuild the Environmental Protection Agency's ability to enforce our climate and environmental laws and hold polluters accountable for their actions, especially in those communities disproportionately burdened by pollution and economic and racial inequality. Ensure that infrastructure grant and revolving loan programs provide sufficient funding to address technical, managerial and financial capacity challenges in low-income and environmental justice communities.

The White House Council on Preparedness and Resilience. Opportunities to Enhance the Nation's Resilience to Climate Change. October 2016. https://obamawhitehouse.archives.gov/sites/default/files/finalresilienceopportunitiesreport.pdf

House Select Committee on the Climate Crisis. Solving the Climate Crisis: The Congressional Action Plan for a Clean Energy Economy and a Healthy, Resilient, and Just America. July 2020.

https://climatecrisis.house.gov/sites/climatecrisis.house.gov/files/Climate% 20 Crisis% 20 Action% 20 Plan.pdf