

# Examining Climate Change: A Threat to the Homeland

Prepared statement by

**Alice C. Hill**

*David M. Rubenstein Senior Fellow for Energy and the Environment  
Council on Foreign Relations*

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Thank you Chairman Demings, Ranking Member Cammack, and members of the subcommittee for inviting me to testify before you today about climate change as a threat to the homeland. My remarks will focus on how the Department of Homeland Security (DHS) could better address the homeland threats posed by climate change to our country.

## **Introduction**

Climate change impacts—bigger wildfires, heavier precipitation causing “rain bombs,” deeper droughts, greater temperature extremes, and sea-level rise—are no longer a matter for the distant future. They are already wreaking extensive damage to all 50 states and six territories. Last year, in the midst of the coronavirus pandemic, the country suffered 22 separate weather events each costing over \$1 billion, according to the National Oceanic and Atmospheric Administration (NOAA). Americans in 2020 witnessed so many named storms in the Atlantic basin that meteorologists had to resort to the Greek alphabet for names; wildfires scorched over 10 million acres in the American west, spawning a new vocabulary word—“gigafire”—to describe a fire that burns more than a million acres; and probably the highest ever-recorded temperature on earth—130 degrees Fahrenheit—registered in the aptly named Death Valley in California. Experts anticipate that this year will offer little respite.

The 2021 hurricane season will likely bring above average storm activity and firefighters across the American west are already bracing for a severe wildfire season. The property research firm, CoreLogic, has estimated that more than 31 million homes on the Gulf and Atlantic coasts, with a combined value of \$8.5 trillion, face risk of damage from hurricane winds, and nearly 8 million homes are vulnerable to flooding from storm surge during the Atlantic hurricane season. The firm opined that as “climate change continues to reshape the way storms behave, the risk...will continue to increase.”<sup>1</sup> Close to 90 percent of the American west is currently in drought, with over half of the area in extreme to exceptional drought. According to the U.S. Drought Monitor, this is the most intense and expansive drought this century. Snowpack fell to new record lows in some areas. Not surprisingly, wildfire researchers have forecasted a “grim” 2021 wildfire season.<sup>2</sup>

These and other climate-worsened extremes do not only bring significant economic damage. They also cost lives, undermine public health, and threaten national security. Climate-fueled impacts cause cascading failures of infrastructure. As the nation witnessed during Superstorm Sandy in 2012, the failure of the electric grid can pull down critical systems like transportation, communication, and wastewater treatment systems. Without sustained power, hospitals evacuated over 6,000 patients down darkened stairwells. Researchers have identified climate change as the cause of \$8 billion of the estimated \$70 billion in damages caused by the storm.<sup>3</sup> According to the National Institute of Building Sciences (NIBS) 2020 report, disaster losses across the country are growing about 6 percent a year, costing an average of \$100 billion.<sup>4</sup>

America is not doing enough to prepare for the heightened threats posed by climate change. NIBS estimates that America’s resilience investment gap exceeds \$520 billion. The Center for Climate Integrity and Resilient Analytics calculates that \$400 billion is needed for coastal protection in 22 states.<sup>5</sup> To safeguard homeland security, the United States needs to better prepare itself for the new, harmful extremes that accompany rising temperatures. It needs to get smarter about risk reduction and resilience to future climate-worsened disasters. The Department of Homeland Security can and should play a central role in that effort.

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<sup>1</sup> “The 2021 Hurricane Report,” CoreLogic, June 1, 2021, [https://www.corelogic.com/insights/storm-surge-report.aspx?WT.mc\\_id=crlg\\_210527\\_MTXQB](https://www.corelogic.com/insights/storm-surge-report.aspx?WT.mc_id=crlg_210527_MTXQB).

<sup>2</sup> Nicole Karlis, “Wildfire researchers have a “grim” forecast for 2021’s fire season, say it could be worse than 2020,” Salon, April 14, 2021, <https://www.salon.com/2021/04/14/wildfire-researchers-have-a-grim-forecast-for-2021s-fire-season-say-it-could-be-worse-than-2020/>.

<sup>3</sup> Andrea Thompson, “Climate Change Added \$8 Billion to Hurricane Sandy’s Damage,” Scientific American, May 18, 2021, <https://www.scientificamerican.com/article/climate-change-added-8-billion-to-hurricane-sandys-damage1/>.

<sup>4</sup> Multi-Hazard Mitigation Council, *A Roadmap to Resilience Incentivization*, ed. K. A. Porter and J.Q. Yuan (Washington, DC: National Institute of Building Sciences, 2020), [https://www.nibs.org/files/pdfs/NIBS\\_MMC\\_RoadmapResilience\\_082020.pdf](https://www.nibs.org/files/pdfs/NIBS_MMC_RoadmapResilience_082020.pdf).

<sup>5</sup> “Study: U.S. Coastal Communities Face More Than \$400 Billion in Seawall Costs by 2040,” Institute for Governance & Sustainable Development, June 20, 2019, <https://www.igsd.org/study-u-s-costal-communities-face-more-than-400-billion-in-seawall-costs-by-2040/>.

## **DHS Work on Climate Change Preparedness during the Obama Administration**

In 2009, President Obama issued an executive order requiring federal agencies to develop adaptation plans.<sup>6</sup> As Senior Counselor to DHS Secretary Janet Napolitano, I was responsible for developing DHS' first-ever adaptation plan. To embark on this important effort, I assembled a task force from across DHS' almost two dozen agencies tasking them with answering a basic question, "Should the Department of Homeland Security in 2009, with all of its other responsibilities, care about the impacts of climate change?"

During a multi-month effort, the task force met with dozens of scientists, planners, and security experts, including those from the Department of Defense, NOAA, and NASA. As our work progressed, task force members realized that climate change would have profound effects on virtually all the systems humans have come to rely upon, both natural and human-built. As we learned about the projected hurricanes, wildfires, and droughts that could pummel America in the near future, causing catastrophic, permanent harm, the task force had its answer: DHS should care deeply about climate change.

To satisfy President Obama's order, DHS published the DHS Climate Change Adaptation Roadmap in 2012.<sup>7</sup> The Roadmap states that climate change "must be accounted for in Departmental policy, strategy, plans, business processes, programs, institutional practices, and operations in order to best position the Department for success over the long term... Understanding how major strategic drivers such as climate change may evolve is at the crux of effectively and decisively managing risks to the Nation's security." It warned that climate change could directly and indirectly impact core homeland security missions and identified four strategic objectives:

1. Manage climate risks for cross-cutting or other key homeland security issues.
2. Protect and ensure the resilience of critical infrastructure and key resources to potential impacts of climate change.
3. Ensure the nation's resilience to more frequent or extreme weather events and natural disasters.
4. Contribute to safety, stability, security, and environmental protection in the Arctic.

In 2013, President Obama issued additional guidance regarding climate change, prompting DHS to create its Climate Action Plan.<sup>8</sup> The Plan again warned that climate change would impact DHS's missions. For example, with regard to preventing terrorism, the Plan foretold that more extreme weather could provide opportunities for militant groups to extend influence when foreign governments lacked the ability to provide aid. The Plan predicted increased pressures on our borders from climate-induced migration, including migrants from Central America. It apprised that climate change could curtail DHS's ability to safeguard lawful trade and travel as well as impede the Department's efforts to stop smuggling and trafficking. It also recognized that higher temperatures and more intense storms could damage and disrupt

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<sup>6</sup> E.O. 13514, Federal Leadership in Environmental, Energy, and Economic Performance, signed on October 5, 2009.

<sup>7</sup> *Climate Change Adaptation Roadmap* (Washington, DC: U.S. Department of Homeland Security, 2012), [https://www.dhs.gov/sites/default/files/publications/Appendix%20A%20DHS%20FY2012%20Climate%20Change%20Adaptation%20Plan\\_0.pdf](https://www.dhs.gov/sites/default/files/publications/Appendix%20A%20DHS%20FY2012%20Climate%20Change%20Adaptation%20Plan_0.pdf).

<sup>8</sup> *DHS Climate Action Plan* (Washington, DC: U.S. Department of Homeland Security, 2013), <https://www.dhs.gov/sites/default/files/publications/DHS%20Climate%20Action%20Plan.pdf>.

“telecommunications and power systems, creating challenges for telecommunications infrastructure, emergency communications, and cybersecurity.” The Plan forecast that climate change could challenge continuity of operations, delivery of emergency services, and response capabilities.

Under the Trump Administration, the Department slowed its climate-related activities to a trickle at best. It omitted the words “climate change” from its core documents, including FEMA’s 2018-2022 Strategic Plan and the 2019 National Preparedness Report.<sup>9</sup> Unfortunately, the change in policy did not mean that climate change impacts lessened. The lull in planning activities has come at a cost. DHS will need to act with alacrity to fulfill its mission of protecting the nation from the harmful effects of rising temperatures.

In the close to a decade since DHS first embarked on adaptation planning, many of the events that the Department predicted have come to pass. Time after time, the Department and the nation have struggled to handle climate-fueled extremes, be it a record-breaking hurricane season in the Atlantic, wildfires in the west, temperature extremes in the south, or melting permafrost in the Arctic. As the climate changes, bringing new, unprecedented weather and sea-level rise, DHS has an important role to play in ensuring that not only that it can fulfill its missions effectively under the new conditions, but also that it can assist its partners in state, local, and tribal governments, as well as the private sector, to prepare and respond.

Both the Roadmap and the Plan created under the Obama administration should serve as guiding documents for DHS’s continued planning. Since many of the recommendations have still not been implemented, these strategic documents provide solid ground for DHS to recommence its climate preparedness efforts.

### **DHS as Part of the National Effort to Prepare for Climate Change**

DHS has an essential part to perform when it comes to climate change. Perhaps of all the federal agencies, it has the deepest reach and most consistent contact with state, local, and tribal governments, other federal agencies, as well as the private sector. It operates in every state and territory and is frequently asked to help people after disasters have driven them from their homes and caused physical harm. Its responsibilities for protecting our borders, coastal areas and inland waterways, critical infrastructure, and emergency response make it a very big cog in the wheel of climate preparedness. But, as the Government Accountability Office (GAO) has repeatedly stressed, the federal government will need “a cohesive, strategic approach with strong leadership and the authority to manage risks across the entire range of related federal activities.”<sup>10</sup> The GAO has correctly noted that a government-wide strategy would allow for a more comprehensive approach, including the ability to prioritize investments that address the country’s highest climate risks.

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<sup>9</sup> Alice Hill, “What will it take for FEMA to take climate change seriously?,” the *Hill*, August 21, 2020, <https://thehill.com/opinion/energy-environment/513012-what-will-it-take-for-fema-to-take-climate-change-seriously>.

<sup>10</sup> J. Alfredo Gómez, “Limiting the Federal Government’s Fiscal Exposure by Better Managing Climate Change Risks,” Government Accountability Office, <https://www.gao.gov/highrisk/limiting-federal-governments-fiscal-exposure-better-managing-climate-change-risks>.

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The failure to develop a national adaptation plan has made the United States an outlier among developed nations. The Netherlands, one of the most climate-prepared nations in the world, has had a national adaptation plan since 2007. China has had a national plan since 2013 and Russia since 2019. Canada is in the process of drafting its plan.<sup>11</sup> Without such an approach, individual agency efforts risk falling short of meeting the mark to effectively reduce the nation's climate risk.

DHS should therefore work with the White House and other agencies to develop the nation's first climate adaptation plan. In the absence of a national strategy, DHS efforts may include gaping holes that leave the nation even more vulnerable to climate change, for example, by failing to prioritize investments to help people relocate to safer areas.

Even in the absence of a national adaptation plan, however, there is much that the Department can do to improve its climate risk reduction efforts. These include improving risk communication, prioritizing risk reduction, planning for climate-driven displacement and migration, improving emergency response for concurrent and consecutive disasters, closing the environmental justice gap, and preparing for changes in the Arctic.

### **Improve Risk Communication**

DHS already creates the nation's flood maps, but if a homeowner, a business owner, or a government planner wants to identify future climate risks that could affect them in significant ways, there is no single place offered by the federal government to obtain that information. The United States lacks comprehensive risk-mapping that is sufficiently down-scaled to inform Americans regarding future climate risk. Without such information, developers and city planners continue to oversee new development in areas that are at great risk of future damage from climate impacts. Families rent and buy homes destined to burn. The federal government should compile risk information in an easy to understand, interactive, visual format that allows people to determine projected risks for their homes and/or places of business. DHS, in conjunction with the science agencies, should undertake responsibility for that work. Better, more easily available risk information could drive more-informed decision-making across the nation. That information could then inform outreach and planning efforts by the Department.

In addition to providing improved, downscaled risk information, DHS should deploy its capabilities to assist the federal government writ large as well as state, local, and tribal governments, in addition to the private sector, to plan for climate risk. Three areas hold particular promise.

- *Development of common climate risk scenarios.* The federal government has yet to establish a set of climate scenarios with which it conducts planning. DHS should, in conjunction with the federal science agencies, develop climate change scenarios for use across the government and in planning with state, local, and tribal governments, and the private sector. Use of common

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<sup>11</sup> Chris Field and Alice Hill, "Climate adaptation: The gaping hole in American environmental policy," the *Hill*, April 15, 2021, <https://thehill.com/opinion/energy-environment/548527-climate-adaptation-the-gaping-hole-in-american-environmental>.

scenarios will help increase awareness and understanding of the risks and the range of possible mitigation solutions.

- *Development of planning exercises.* DHS should develop planning exercises, including table-top exercises, based on the scenarios to help the federal government, communities, and regions understand and plan for their climate risks. To the extent possible, these exercises should include advanced model projections that reflect downscaled impacts. At the conclusion of each exercise, DHS should help coordinate outreach with other federal agencies to assist participants in accessing federal programs to close identified gaps. During the Obama administration, FEMA’s exercise division developed a pilot project offering exercises based on scenarios to several communities to assist their planning efforts. Norfolk, Virginia, credits the pilot offered in that region with contributing to its robust climate planning efforts.
- *Conduct federal government-wide exercises.* DHS should offer federal government-wide exercises on climate change based on the scenarios. These exercises would serve as an educational tool, base-line setting mechanism, avenue for identifying gaps, and opportunity to build relationships across agencies. DHS should collaborate with other federal agencies to identify programs that would proactively address any vulnerabilities identified in the exercise.

## **Prioritize Risk Reduction**

The federal government currently funds large portions of disaster recovery. Many decisions that affect the amount of damage disasters cause, namely land use and building practices, rest almost entirely in the hands of state and local governments. This means that local decision-makers can choose to build and develop in risky ways knowing that the federal government will likely foot the recovery bill. DHS should explore ways to improve state and local land use and building choices with a focus on reducing risks. In other words, it should develop policies to decrease the moral hazard created by federal disaster practices.

### *Promote Stronger Building Codes*

Research from the National Institute of Building Science has determined that every \$1 spent complying with disaster-resistant building codes can avert \$11 in damages.<sup>12</sup> FEMA estimates that adding features to protect against natural disasters adds little to the cost of construction—an average of one to two percent of the total cost of building.<sup>13</sup> Despite the risk-reduction benefits of stronger building codes, 65 percent of cities and towns have failed to adopt modern disaster-resistant codes. Moreover, even if these jurisdictions have adopted the most recent model codes, those codes may not reflect the future risk of climate change.

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<sup>12</sup> “National Institute of Building Sciences Issues Interim Report on the Value of Mitigation,” National Institute of Building Sciences, January 8, 2019, <https://www.nibs.org/news/national-institute-building-sciences-issues-interim-report-value-mitigation>.

<sup>13</sup> *Protecting Communities and Saving Money: The Case for Adopting Building Codes* (Washington, DC: FEMA, 2020), [https://www.fema.gov/sites/default/files/2020-11/fema\\_building-codes-save\\_brochure.pdf](https://www.fema.gov/sites/default/files/2020-11/fema_building-codes-save_brochure.pdf).

DHS should work with the model building code organizations to inform development of model building codes that account for future climate risk. While the model code organizations work to develop new codes, the Department should work, in collaboration with the National Institute of Standards and Technology (NIST), to develop federal risk management standards for damaging climate risks, including wildfire and heat, for any construction that uses federal taxpayer funding. The Department's prior role in developing the Federal Flood Risk Management Standard should inform this process. Creation and adoption of such standards for climate-worsened hazards could lead to substantial savings for the federal government in averted damage and lives saved.

### *Focus on Critical Infrastructure*

Climate change impacts can cause cascading failures of infrastructure that lead to physical and financial harm. As the February cold spell in Texas, rolling black-outs in California, and extended outages in the wake of storms show, once power is lost, other critical infrastructure systems also tend to fail—from transportation to communications to public health. Failures of interconnected infrastructure can quickly turn cataclysmic. These events can prove particularly damaging given the poor state of the nation's infrastructure, which according to the American Society of Civil Engineer's 2021 report card only deserves a C-.<sup>14</sup>

Through its National Risk Management Center (NRMC), DHS should amplify efforts to assist vital infrastructure owners and operators in understanding their climate risk and what they can do to reduce that risk. Modelling of critical failure points for interconnected infrastructure could inform climate scenarios and exercises offered by DHS. DHS should also expand its Regional Resiliency Assessment Program to include a strong focus on climate threats. The Department should recruit and train Protective Security Advisors to provide expert climate risk advice and support state, local, and private sector owners and operators of critical infrastructure with preparing for escalating threats.

### *Improve Cost-Benefit Analysis*

DHS should work with the Office of Management and Budget to adjust the cost-benefit analysis of projects. Existing cost-benefit analysis may not accurately account for the benefits of resilience measures that will protect against climate impacts in the future nor may it consider that some communities lack the economic wherewithal to meet traditional cost-benefit analysis.<sup>15</sup> Adjusting the cost-benefit analysis would lower the hurdle for investments in added resilience.

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<sup>14</sup> "2021 Report Card for America's Infrastructure," American Society of Civil Engineers, March 3, 2021, <https://infrastructurereportcard.org/>.

<sup>15</sup> David Espinoza, Jeremy Morris and Alice Hill, "Time is not Money, Risk is! A step towards a sustainable and equitable financial analysis practice," The Solutions Journal, December 1, 2020, <https://www.thesolutionsjournal.com/2020/12/01/time-is-not-money-risk-is-a-step-towards-a-sustainable-and-equitable-financial-analysis-practice/>.

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One of the hardest issues facing the nation with regard to climate impacts is that as a result of rising temperatures some land may become uninhabitable. To the extent the Department's programs provide support for new development in at-risk areas, it may be inadvertently exposing people and property to greater harm. DHS should determine how it can improve local land-use decisions through incentives or withdrawal of federal investment. For example, the Department should consider whether it should condition grant funding on more ambitious efforts to reduce development in areas vulnerable to climate impacts.

### **Plan for Climate-Driven Displacement and Migration**

Increased migration, both within the United States and globally, will affect homeland security. According to a report from the Internal Displacement Monitoring Centre, the number of new people forced to move within their own countries by climate disasters—like storms and floods—rose to the highest in at least a decade in 2020, even in the midst of a pandemic. Extreme weather events caused over 30 million people, equal to 75% of those uprooted within their borders, to migrate domestically.<sup>16</sup> Displacements can occur as a result of slow-moving events like droughts that desiccate crops or acute events like floods and wildfires. Every year, Americans are also displaced from their homes by climate-worsened events like the flooding that resulted from extreme precipitation in Houston in 2017 or the wildfires in California that same year. DHS needs to prepare for those that will migrate to our borders as well as for those displaced inside our borders.

The crush of Central American migrants at our southern border has provided a vivid illustration of the challenge that migration poses. When I served as Senior Counselor to the Secretary at DHS, I oversaw the first surge of migrant children from Central America's Northern Triangle, the countries of Guatemala, Honduras, and El Salvador. In 2009, DHS apprehended approximately 20,000 children at our southern border. More than 80 percent were Mexican. But over the next two years, the number of children encountered at the border grew dramatically, and the number of children from the Northern Triangle surpassed the number from Mexico. Sixteen thousand child migrants from the Northern Triangle were apprehended in 2011, 25,000 in 2012, 38,000 in 2013, and 70,000 in 2014. In 2019, 85 percent of the nearly 70,000 children at the border came from the Northern Triangle. The influx has strained the federal government beyond capacity. The number of unattended children arriving at the southern U.S. border surged to a record high this spring amid the ongoing immigration crisis. In March 2021, Homeland Security Secretary Alejandro Mayorkas announced that the United States was "on pace to encounter more individuals on the southwest border than we have in the last 20 years," and in April, the number of detentions at the border reached the highest level in over two decades. The DHS Office of Inspector General (OIG) recently concluded that, in light of past large influxes of migrants, if the Department "does

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<sup>16</sup> Vicente Anzellan et al., *Global Report on Internal Displacement* (Geneva: Internal Displacement Monitoring Centre, 2020) <https://www.internal-displacement.org/global-report/grid2020/>.

not develop a DHS-wide framework for surges and address day-to-day fragmentation, [it] will face the same challenges in future surges.”<sup>17</sup>

The reasons these children travel to the United States are many, but among them are climate change. Northern Triangle countries are highly vulnerable to climate-worsened events, including greater temperature extremes, altered rain patterns, droughts, and bigger storms. The region depends on agriculture and in particular, coffee cultivation, which is susceptible to damage from drought, heavy rainfall, and higher temperatures. In 2020, two back-to-back Category 4 hurricanes further battered the region, leaving many people homeless and robbing them of their livelihoods.

DHS should, as identified in its Obama-era climate adaptation plans, “Coordinate a Departmental review of the effects of climate change on mass migration.” That review should examine how climate affects migration and displacement. In addition, DHS should address the OIG recommendations aimed at ending DHS’s fragmented approach to migration and improving planning.

To fulfill its mission, DHS also needs to understand how changing conditions could affect transnational crime, including terrorism. During extreme events, organized crime and extremists have been known to take advantage of a failed government response to expand their territory and increase recruitment. The pandemic has shown us how this can work. Drug cartels in Mexico provided essential supplies to populations struggling with the spread of the coronavirus, making daily home deliveries to disadvantaged areas. The head of the Cartel of the South was quoted saying, “If we protect [local populations], they’ll protect us as well.”<sup>18</sup>

DHS should also focus on developing frameworks to assist local, state, and tribal governments cope with internally displaced Americans. The Government Accountability Office (GAO) conducted a review of federal efforts that provide support to communities displaced by climate change and concluded that little support exists.<sup>19</sup> This means that when displacements occur, they risk becoming chaotic. That is what occurred in the wake of the 2018 Camp Fire that killed over 80 people and obliterated almost 14,000 residences. As a result of the fire, 16,000 people moved virtually overnight to nearby locations. The city of Chico, which had a population of 110,000, added 19,000 people, straining the city’s ability to absorb the influx. To help local communities avoid negative repercussions like increased real estate prices, overcrowded schools, and unplanned urbanization, DHS, in coordination with other agencies, should assist the nation by identifying areas for future relocation and help those receiving communities to prepare. DHS should develop modelling capabilities to help communities understand where displacements may occur and assist interested communities to determine how they can plan better.

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<sup>17</sup> Office of Inspector General, *DHS’ Fragmented Approach to Immigration Enforcement and Poor Planning Resulted in Extended Migrant Detention during the 2019 Surge* (Washington, DC: U.S. Department of Homeland Security, 2021), <https://www.oig.dhs.gov/sites/default/files/assets/2021-03/OIG-21-29-Mar21.pdf>.

<sup>18</sup> Falko Ernst, “Mexican criminal groups see Covid-19 crisis as opportunity to gain more power,” the *Guardian*, April 20, 2020, <https://www.theguardian.com/world/2020/apr/20/mexico-criminal-groups-covid-19-crisis-opportunity-gain-power>.

<sup>19</sup> J. Alfredo Gómez et al., *A Climate Migration Pilot Program Could Enhance the Nation’s Resilience and Reduce Federal Fiscal Exposure* (Washington, DC: Government Accountability Office, 2020), <https://www.gao.gov/assets/gao-20-488.pdf>.

## **Improve Emergency Preparedness for Concurrent and Consecutive Disasters**

DHS should plan for and acquire the capabilities to respond with ever greater frequency to disasters worsened by climate change. With climate change, disasters may occur in multiple locations concurrently or close-in-time. DHS needs to make sure that it has the capabilities to respond. That means ensuring it has adequate personnel and resources to effectively manage consecutive and successive extremes. DHS should evaluate its emergency capabilities in light of increased disaster frequency with particular attention to surge capacity, the ability to respond to multiple locations simultaneously, and the delivery of mental health services in the immediate wake of a disaster. It should improve its modelling of complex events to inform its staffing, response, and resource needs. It should also conduct research on the efficacy of early warning systems and promote nationwide best practices to drive the nation to an easy-to-understand uniform system. Variations in warning systems can lead to unnecessary confusion and cause people to fail to heed messages to take shelter.

## **Close the Environmental Justice Gap**

DHS should continue to close the environmental justice gap, including bolstering efforts to evaluate the benefits of investments in light of their impacts on people rather than solely economic return. It should expand work to consider and address the disproportionate impact of climate-fueled disasters on disadvantaged communities, people with disabilities, older people, and children.

The Department should review disaster aid programs with the goal of removing barriers to access for low-income and disadvantaged communities. The application requirements of FEMA's competitive grant programs can impose barriers to some communities who lack the planning resources, staff, and expertise to navigate the process. FEMA records reveal that the new Building Resilient Infrastructure and Communities (BRIC) program has failed to attract applications from many poor communities with fewer than 3,000 residents even though the program will cover 90 percent of the project costs for those communities.<sup>20</sup> For some communities, the BRIC cost share of 10 percent may prove too high a hurdle.

## **Prepare for Changes in the Arctic**

Lastly, DHS should continue to prepare for changes in the Arctic as eco-tourism, damage to infrastructure from melting permafrost, resource competition, and global security tensions escalate with the opening of the Arctic Ocean for navigation.

## **Conclusion**

With its enormous responsibilities, reach across all sectors of society, and deep capabilities, DHS should play a pivotal role in improving the nation's preparedness for climate risk. The Department, of course, should start by making sure that it can continue to fulfill its missions in the face of changing conditions. But

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<sup>20</sup> Thomas Frank, "FEMA climate grants pose challenge for poor communities," E&E News, June 1, 2021, <https://www.eenews.net/stories/1063733777>.

it needs to move quickly beyond looking inward to find ways to lend significant assistance to state, local, and tribal governments, as well as the private sector, to understand, prepare for, and respond to climate risk. Fortunately, the Obama administration has given the agency a strong head start.

The risks, however, are mounting. There is no time to waste. For DHS to keep the United States safe, it needs to adopt and implement a robust strategy for tackling climate change.

Thank you for the opportunity to speak with you today. I look forward to answering any questions you may have.