



COMPOUND (IN)SECURITY AT HOME:

The Convergence of Threats Across America

© Isaiah (Ike) Wilson III (Wilson W.i.S.E Consulting, LLC) All Rights Reserved

Compound (In)Security at Home: The Convergence of Threats Across America

Introduction: A Governor's Plea in a Time of Crisis

It's early February in Washington, D.C., [and California Governor Gavin Newsom finds himself in a familiar but exhausting role: lobbyist-in-chief](#) for his beleaguered state.

The devastation wrought by the latest wildfire season—arguably the most severe on record—has not only scorched millions of acres of forest but also triggered a domino effect of crises. Thick smoke has settled over California's Central Valley, exacerbating respiratory illnesses.

Drought conditions have intensified as reservoirs reach historic lows. Agricultural production is stalling, threatening the state's critical role in America's food supply chain. Insurance actuarial tables and algorithms are all 'thrown askew'. And the electric grid, weakened by both fire damage and high demand, teeters on the edge of collapse.

Newsom has come to Capitol Hill to plead for federal recovery funds and, more importantly, to press his case for systemic change. As he speaks with lawmakers, he frames California's situation not as an isolated series of misfortunes but as a symptom of a much larger, interconnected crisis—a *compound security threat*.

[“This isn't just a one-off bad fire season,” Newsom says, exasperated. “We're caught in a feedback loop where climate change, public health, infrastructure, and food security all reinforce each other.](#) And if we don't change how we handle these threats, it won't just be California asking for help—it'll be every state.”

Newsom's warning is prophetic. Across the United States, localized crises—water shortages in the Midwest, infrastructure collapses in the South, and public health emergencies in urban centers—are *converging and compounding*, creating risks of national significance. America's security landscape has changed. The threats are no longer external or conventional in nature; they are internal, systemic, and increasingly lethal.

Part I: The Changing Nature of 'Domestic' Threats

A. Traditional vs. Emerging Threat Frameworks

For much of American history, threats to national security were seen primarily through the lens of external aggression—military invasion, terrorism, or geopolitical conflict. Domestically, issues like climate change, public health, or infrastructure needs were compartmentalized into policy areas unrelated to security. They were treated as administrative or economic challenges, to be managed through bureaucratic oversight and budgetary measures.

But in the 21st century, these "domestic" threats have begun to converge and accelerate, creating complex systems of insecurity that transcend traditional policy silos. [This convergence is driven by what threat and risks theorists and analysts refer to as *compound risks*: vulnerabilities that feed off and amplify one another, creating cascading effects.](#)

Where once a wildfire might have been considered a localized disaster, today it disrupts interconnected systems—polluting water sources, overburdening hospitals, and destabilizing agricultural markets. [Similarly, a public health crisis like the COVID-19 pandemic revealed how fragile and interdependent the nation's supply chains, healthcare infrastructure, and social cohesion truly are.](#)

B. Examples of Compounded Threats Across the U.S.

These systemic crises are not limited to California. Across the nation, different regions are grappling with their own forms of compounded security dilemmas:

1. California's Wildfires: A Compound Climate-Ecological-Human Security Threat

California faces one of the most extreme climate-driven security dilemmas, as rising global temperatures and prolonged drought have created unprecedented wildfire risks. These fires do more than destroy homes; they decimate biodiversity, displacing wildlife, while releasing vast quantities of carbon dioxide that accelerate climate change in a dangerous feedback loop.

- **Human Impact:**

Worsened air quality leads to respiratory illnesses like asthma and exacerbates pre-existing conditions such as chronic obstructive pulmonary disease (COPD). [In 2020 alone, wildfire smoke accounted for over 1,000 excess hospitalizations related to cardiovascular events across the state.](#)

- **Economic and Food Security Impact:**

[Farmers in the Central Valley, one of the nation's key agricultural hubs, report crop losses due to water shortages caused by droughts.](#) Almond and grape growers, for example, face diminishing yields, impacting both domestic and international food markets.

- **National Implications:**

[Disruptions in California's food production strain national supply chains.](#) For instance, shortages of fruits, nuts, and vegetables raise prices nationwide, affecting food affordability for millions of Americans.

2. Mississippi's Water Crisis: Infrastructure, Inequality, and Climate Intersection

Jackson, Mississippi, exemplifies how infrastructure failure, exacerbated by historical racial and economic inequalities, can leave entire communities without essential services.

- **Context and Causes:**

[Decades of neglect have left Jackson's water system brittle and unprepared for climate-driven flooding.](#) In 2022, severe rainfall overwhelmed treatment plants, leaving the city without potable water for several weeks.

- **Public Health Consequences:**

Residents faced waterborne disease risks and were forced to rely on emergency bottled water supplies. Poor sanitation conditions contributed to heightened health risks, particularly among children and the elderly.

- **Structural Challenges:**

Similar vulnerabilities exist across other U.S. cities with aging infrastructure, underscoring a nationwide need to modernize critical systems. Without strategic investment, climate-related stressors will exacerbate these infrastructure failures.

3. The Midwest's Agricultural Nexus: Threats to National Food Security

The American Midwest, often referred to as the nation's "breadbasket," faces compounding challenges as climate change disrupts traditional weather cycles.

- **Water Scarcity and Drought:**

[Prolonged droughts have led to lower water tables, affecting irrigation-dependent crops such as corn, soybeans, and wheat. In some regions, critical aquifers like the Ogallala are depleting faster than they can recharge.](#)

- **Economic Ripples:**

Reduced crop output not only impacts farmers but also regional industries such as food processing and transportation. [A study from 2021 highlighted that a 10% reduction in Midwest corn yields could cause a ripple effect resulting in \\$1.5 billion in losses across supply chains.](#)

- **Global Implications:**

Since the Midwest contributes significantly to global grain exports, disruptions here have contributed to rising food insecurity abroad, particularly in countries heavily reliant on U.S. imports.

4. Urban Infrastructure Collapse: *The Fragility of Metropolitan Systems*

Cities like New York and Chicago are struggling with deteriorating infrastructure as extreme weather events become more frequent and severe.

- **Storms and Flooding:**

Record rainfall events have overwhelmed drainage systems, leading to flash flooding. [In 2021, remnants of Hurricane Ida caused severe subway flooding in New York City, halting public transit and stranding commuters.](#)

- **Energy Grid Vulnerability:**

Heatwaves and storms have exposed the fragility of power grids. [In Chicago, extreme heat events have led to rolling blackouts in historically underserved neighborhoods, raising concerns over heat-related illnesses and deaths.](#)

- **Social Disparities:**

Vulnerable populations—elderly residents, low-income families, and those without access to cooling centers—are disproportionately affected by these disruptions. This inequality underscores the need for targeted resilience planning and infrastructure investment.

Systemic Insights and Policy Considerations

These regional crises are interconnected through national security concerns such as food supply, economic stability, and public health. For example, the reduced productivity in the Midwest’s agriculture sector contributes to higher food prices in urban areas already struggling with infrastructure challenges. Similarly, environmental degradation in California exacerbates climate conditions that influence weather patterns across the country.

Recommendations for Mitigation:

1. **Integrative Resilience Planning:** Policies should prioritize cross-sector collaboration between federal, state, and local governments to develop holistic resilience strategies that account for the compound nature of threats.
2. **Targeted Infrastructure Investments:** Aging infrastructure must be modernized with climate adaptation in mind, including flood management systems, smart grids, and sustainable agricultural practices.
3. **Equity-Focused Solutions:** Addressing systemic inequalities is critical to ensuring that marginalized communities are not disproportionately impacted by compounded security threats.

Each of these cases illustrates how local challenges are increasingly interconnected, with national and even global implications.

Part II: Compound Security—Defining the New Threat Landscape

A. Compound Security Defined

[This pattern of converging crises demands a new conceptual framework: *Compound Security Competition \(CsC\)*.](#)

Unlike traditional security threats, which often arise from single actors or events, compound security threats emerge from the interaction of multiple, mutually reinforcing risks. These threats span economic, environmental, and public health domains, often overwhelming existing governance structures designed to manage them in isolation.

[Compound security dilemmas challenge the very foundations of governance by blurring the boundaries between “security” and “domestic policy.”](#) Public health crises are no longer just medical issues; they are national security threats. Infrastructure collapses aren’t just local governance failures; they are vulnerabilities in America’s defense posture.

B. Threat Drivers and Governance Challenges

The evolution of compound security risks in the United States is driven by several interrelated factors, including (but not limited to...) *climate change, public health crises, infrastructure fragility, and economic inequality*. These drivers exacerbate one another, creating a feedback loop that heightens both the frequency and severity of crises. Traditional governance frameworks, designed for linear and compartmentalized challenges, struggle to address this complex landscape. Federal, state, and local agencies often work in isolation, their efforts fragmented by jurisdictional and resource limitations.

Climate Change: *Intensifying Natural Disasters and Environmental Degradation*

Climate change is accelerating the occurrence of extreme weather events, such as hurricanes, wildfires, heatwaves, and droughts. Rising global temperatures increase the volatility of weather patterns, leading to more destructive and frequent disasters that overwhelm existing response capacities. Wildfires in California, for example, have become a year-round threat, with the state experiencing record-breaking fires that destroy entire communities and critical ecosystems.

In coastal regions, hurricanes like Katrina and Ida have demonstrated how unprepared infrastructure can magnify disaster impacts. The erosion of protective wetlands in the Gulf Coast, compounded by rising sea levels, has left urban centers more exposed to storm surges. These events also have far-reaching secondary effects, such as air quality deterioration from wildfire smoke or disruptions in agricultural production due to prolonged droughts in the Midwest.

Without integrated climate adaptation policies, these disasters will continue to compound, placing enormous strain on emergency management systems, insurance markets, and community resilience efforts.

Public Health: *Chronic Diseases and Pandemic Vulnerabilities*

The intersection between environmental degradation and public health is becoming more pronounced. Climate change exacerbates chronic health conditions, particularly respiratory and cardiovascular diseases, due to worsening air quality and extreme heat events. Urban areas with high pollution levels experience increased hospital admissions during such events, as was seen in cities like Los Angeles during wildfire seasons.

In addition, the COVID-19 pandemic highlighted the vulnerabilities of global public health systems. Rapid transmission across borders, overwhelmed hospitals, and supply chain failures revealed how interconnected public health and security threats have become. These risks are particularly acute for marginalized populations who already face limited access to healthcare services.

Public health infrastructure must evolve to integrate climate resilience, preventive care, and rapid response capabilities. For example, expanding telemedicine networks and deploying mobile clinics can ensure that communities affected by climate events receive timely care.

Infrastructure Fragility: *Aging Systems Under Increasing Strain*

The U.S. faces a growing crisis of infrastructure degradation. Many critical systems, including transportation networks, energy grids, and water management facilities, were built decades ago and are now failing under the combined pressures of increased demand, climate stress, and insufficient maintenance. [Recent examples include New York City's subway system, which experienced catastrophic flooding during Hurricane Ida, and widespread power outages in Texas caused by a 2021 winter storm that overwhelmed the state's unprepared energy grid.](#)

These failures expose how deeply interconnected infrastructure vulnerabilities are. For instance, power outages often disrupt water treatment facilities, leading to public health emergencies. Similarly, the collapse of transportation networks during extreme weather events hampers emergency logistics and evacuations.

To mitigate these risks, infrastructure modernization efforts must focus on redundancy, climate adaptation, and technological innovation. [Investing in resilient "smart grids" and decentralized water systems can enhance stability and reduce the risk of cascading failures.](#)

Economic Inequality: Exacerbating Vulnerability to Compounded Risks

[Economic inequality significantly amplifies the impact of compound threats](#). Low-income communities, often located in areas more prone to environmental hazards (e.g., floodplains, industrial zones), are disproportionately affected by disasters. These populations typically have fewer resources to prepare for, respond to, and recover from crises. [For example, residents in underserved neighborhoods of New Orleans faced prolonged displacement and recovery delays after Hurricane Katrina due to inadequate access to financial assistance and housing support](#).

[Similarly, communities in the Rust Belt, which have experienced decades of economic decline, face heightened vulnerability to industrial pollution and public health crises](#). Job losses and deteriorating infrastructure leave residents with fewer options to escape or adapt to environmental and economic threats.

Targeted policies that address economic disparity are essential to reducing these vulnerabilities. This includes expanding access to affordable housing, healthcare, and education while promoting job creation through climate-adaptive industries.

Governance Challenges: Fragmented Responses to Complex Threats

Traditional governance structures in the U.S. are not designed to manage the interconnected nature of compound threats. Federal agencies, state governments, and local authorities often have overlapping but uncoordinated responsibilities. This fragmented approach results in inefficiencies and gaps in crisis management. For instance, during the COVID-19 pandemic, states faced difficulties securing medical supplies due to a lack of centralized federal coordination, leading to uneven resource distribution and response outcomes.

Similarly, [wildfire mitigation in California is hindered by jurisdictional disputes between federal land agencies, state forestry departments, and local governments](#). These silos prevent a cohesive strategy for vegetation management, fire prevention, and emergency response, leaving high-risk areas vulnerable to recurring disasters.

To overcome these governance challenges, there must be greater integration across agencies and levels of government. [National frameworks that promote cross-jurisdictional collaboration, such as federally supported resilience task forces, can facilitate resource sharing and unified planning](#). Incentives for regional cooperation, coupled with improved data-sharing platforms, can further enhance the capacity to anticipate and respond to compound risks.

Addressing these threat drivers and governance obstacles [requires a shift from reactive, siloed policies to proactive, multi-dimensional strategies](#). By recognizing the interconnected nature of these risks, policymakers can develop more comprehensive approaches that strengthen infrastructure, protect public health, and reduce economic vulnerabilities. This transformation will be critical to ensuring national resilience in the face of accelerating compound security challenges.

Part III: A Prescriptive Framework for Addressing Compound Security

California's ongoing struggles with interconnected threats, such as wildfires, water scarcity, climate-induced health crises, and infrastructure fragility, provide a compelling case study of a complex-system dilemma.

The state has begun exploring integrated solutions to manage these risks, investing in wildfire prevention, sustainable water management, climate-resilient infrastructure, and healthcare capacity-building. However, these efforts continue to face significant barriers, particularly fragmented coordination between state, federal, and local agencies and political polarization that complicates long-term planning.

One example of California's integrated initiative is [the Wildfire and Forest Resilience Task Force](#). This task force works to mitigate fire risks through comprehensive strategies like controlled burns and vegetation management while enhancing infrastructure resilience. In 2022, a program led by the task force focused on clearing fire-prone areas around Lake Tahoe. This effort not only reduced the risk of catastrophic fires but also strengthened the health of the local ecosystem through prescribed burns. Meanwhile, California's approach to water management has integrated infrastructure upgrades with natural solutions. [The Los Angeles Basin Stormwater Capture Project](#), for example, redirects urban floodwaters to replenish groundwater supplies. This initiative brings together local water

agencies, the Army Corps of Engineers, and the Department of Water Resources, providing a model for enhancing water security.

Healthcare systems are also a crucial component of California's resilience strategy. [After the 2020 wildfires, the state deployed mobile clinics to regions experiencing hazardous air quality, offering respiratory care and support to underserved communities.](#) However, despite these efforts, institutional silos hinder efficient coordination. The state's multi-level governance structure creates challenges in resource sharing and emergency response planning.

Additionally, political polarization often obstructs consensus on critical projects, such as wildfire buffer zones or water infrastructure upgrades.

Addressing these challenges requires adopting an *Integrative 3D+C (Defense, Diplomacy, Development, and Commercial) strategy*. This approach integrates efforts across sectors to enhance resilience and promote both preventative and adaptive solutions. In terms of *defense*, strengthening infrastructure is key to safeguarding critical systems such as energy grids, transportation networks, and water supplies. California has already taken steps to implement this concept with its [State Route 99 Resilience Corridor project](#), designed to protect essential infrastructure against earthquakes, floods, and fires. Investments in smart grids and rapid-response repair teams are further measures to ensure continuity of services during extreme events.

Diplomatic efforts in the domestic context involve fostering cross-jurisdictional collaboration. Compacts between states and federal agencies can help ensure coordinated responses to disasters. [The Interstate Compact on Water Resources](#) offers a successful example of how western states have worked together to manage shared water resources during periods of drought. Expanding such agreements could standardize resource-sharing protocols across regions and improve coordination for crises such as wildfires and floods. National task forces and joint disaster exercises can also enhance preparedness by testing the interoperability of emergency services across different states.

Development initiatives must prioritize sustainability and climate adaptation. [Programs like California's Sustainable Communities and Climate Protection Act promote zoning reforms that reduce urban sprawl, increase the use of green infrastructure, and improve public transit resilience.](#) In the agricultural sector, climate-adaptive practices such as [no-till farming](#), [drought-resistant crops](#), and [regenerative soil management](#) are becoming essential tools to mitigate the impacts of shifting climate patterns. These efforts are also reflected in healthcare systems, where expanding rural telemedicine and building climate-resilient clinics are helping to strengthen both preventive care and emergency response capacity.

Finally, *commercial partnerships* play a crucial role in addressing compound threats. Technology companies are deploying innovative solutions, such as *AI-based early warning systems* that use satellite imagery and predictive modeling to detect wildfires in real-time. Collaborations with agricultural cooperatives are equally important. By leveraging tech-driven platforms that monitor soil health and optimize water use, these partnerships are helping to secure food supplies and improve regional economic stability.

This prescriptive framework emphasizes that tackling compound security threats requires integrated strategies that span defense, diplomacy, development, and commercial engagement. The combination of preventative measures and adaptive innovations can mitigate immediate risks while building long-term resilience. By scaling and replicating these efforts across various regions, the United States can protect critical infrastructure, enhance cooperation among stakeholders, and better safeguard at-risk populations from the growing complexity of modern security challenges.

Part IV: From California to the Nation—A Generalizable Framework

The challenges California faces are not unique; they reflect the larger compound security dilemmas confronting various regions across the United States. While each region experiences a distinct mix of threats, these vulnerabilities are interconnected by national supply chains, economic interdependence, and climate dynamics.

Therefore, tailored regional responses must be synchronized under a broader national framework to ensure resilience across critical infrastructure, ecosystems, and communities.

Southern Border States: *Security, Climate Migration, and Water Management*

[Southern border states such as Arizona, New Mexico, and Texas face a complex interplay of security and environmental issues.](#) Migration patterns influenced by climate change, particularly in Central America, place pressure on border regions. Increasingly, people are fleeing droughts, extreme storms, and agricultural collapse, adding to the existing migration challenges driven by violence and poverty.

Integrated strategies are needed to manage these converging issues. One approach is to strengthen cross-border collaboration to address water scarcity. [The Rio Grande Water Management Partnership](#) serves as a case study. This initiative involves both U.S. and Mexican stakeholders who coordinate water usage from the shared Rio Grande Basin to ensure sustainable access for both agricultural and urban needs. Additionally, enhancing security through climate-resilient infrastructure, such as fortified shelters and resource centers at key border points, can mitigate potential tensions.

Investments in adaptive agriculture, such as desert-compatible crop varieties and water-efficient irrigation systems, also help stabilize local economies, reducing the push factors behind climate migration. Furthermore, developing climate-resilient energy infrastructure—such as solar farms in arid regions—can simultaneously boost economic growth and reduce dependence on external energy sources.

Rust Belt: *Revitalizing Industrial Infrastructure and Addressing Public Health*

[The Rust Belt, spanning states like Ohio, Michigan, and Pennsylvania, is grappling with decaying industrial infrastructure, economic stagnation, and severe public health disparities.](#) Many communities suffer from pollution-related health crises due to decades of unchecked industrial activity. In cities such as Flint, Michigan, lead contamination in water systems has created long-term public health emergencies that disproportionately affect low-income and minority populations.

A key strategy for the region involves rebuilding industrial infrastructure with sustainability in mind. This could include retrofitting factories to meet modern environmental standards while incentivizing green technologies through federal investment. [The Great Lakes Restoration Initiative \(GLRI\)](#) provides an example of multi-stakeholder collaboration to clean polluted waterways and restore ecosystems that support regional economies. By tying infrastructure upgrades to environmental recovery efforts, the Rust Belt can position itself for industrial renewal driven by clean technology.

Public health systems must also be enhanced to address pollution-related illnesses. For example, partnerships with healthcare providers can establish community clinics specializing in respiratory diseases and toxic exposure treatment. Integrating preventive care with job training programs can promote a healthier, more adaptable workforce while addressing longstanding social inequities.

Gulf Coast: *Hurricane Preparedness and Flood Defense Modernization*

[The Gulf Coast, encompassing states like Louisiana, Florida, and Texas, is increasingly vulnerable to the destructive impacts of climate change.](#) Hurricanes, coastal erosion, and rising sea levels threaten communities and critical infrastructure. Hurricane Katrina (2005) and more recent events such as Hurricane Ida (2021) exposed the weaknesses in the region's flood defenses and emergency logistics.

Modernizing flood defense systems is crucial for strengthening Gulf Coast resilience. [The Greater New Orleans Urban Water Plan](#) illustrates how cities can integrate natural and engineered solutions to protect against storm surges. This plan combines levees with wetland restoration, creating buffers that absorb floodwaters and reduce the strain on man-made infrastructure. Expanding such initiatives across other Gulf cities would enhance protection for both urban centers and vulnerable rural communities.

Emergency logistics also require optimization through improved coordination between local, state, and federal agencies. Investments in real-time data networks—such as [the National Hurricane Center's early warning system](#)—can support faster evacuations and better resource allocation. Additionally, pre-positioning emergency supplies at strategically located depots ensures that essential resources can reach affected populations without delays.

A National Blueprint for Regional Resilience

To unify these regional strategies, federal leadership must establish a flexible, national blueprint that incentivizes resilience-building measures through coordinated multi-agency partnerships. This blueprint should encourage innovation while recognizing that each region's circumstances require tailored approaches. [The Federal Emergency Management Agency's \(FEMA\) Resilience Program](#) offers a starting point, providing technical assistance and funding to states for projects that strengthen infrastructure, environmental defenses, and emergency response capabilities.

However, for this framework to succeed, it must be supported by cross-sector collaboration. Federal agencies, state governments, private companies, and community organizations must work together to share best practices, pool resources, and ensure accountability. Federal grants can be structured to reward regions that demonstrate measurable progress in integrating defense, diplomacy, development, and commercial solutions (3D+C) into their long-term planning.

Furthermore, national policy must prioritize equity to address the disproportionate impacts of compound security threats on marginalized communities. This includes ensuring that disaster recovery funds reach the most vulnerable populations and that infrastructure projects create opportunities for local employment and economic development.

By applying the lessons learned in California across the nation, the U.S. can create a unified yet adaptable system for mitigating compound security risks. Each region, though unique, is part of a larger interconnected landscape. Strengthening one part of the system inevitably enhances the resilience of others, creating a more secure and sustainable future for the nation as a whole.

Conclusion: The Path Forward

America is at a crossroads. The threats we face at home are no longer isolated or episodic—they are systemic and converging. The compound security dilemma demands a new approach to governance, one that integrates security, resilience, and equity across all levels of government. Without bold action, the cycles of crisis will continue, and amplify, deepening the divides in our society and weakening the nation's security posture.

The time for incremental reform has passed. It's time to confront the compound security challenge head-on—with urgency, foresight, and collaboration.

