

CLIMATE ALLIES how urban/military interdependence enables adaptation

As climate impacts escalate, U.S. cities and regions have attempted to fill the federal leadership vacuum in spite of their own resource constraints. In the midst of federal inertia, the Department of Defense (DoD) acknowledges climate risk, mainstreaming it into policy, while defense experts highlight how climate change threatens national security. However, defense adaptation has been modest at best. Installations and the communities around them remain vulnerable, but their **shared risks surface the potential for joint adaptation planning**. Through case studies of two regions with large defense complexes and the climate security policy community in DC, this study addresses the following questions: how and why do municipal and military leaders undertake joint adaptation? What impact does this have on commonly understood barriers to adaptation? What implications does this have for additional adaptation planning in the U.S. and beyond?

Hannah M. Teicher M.Arch., PhD MIT, June 2019 In Hampton Roads, Virginia and San Diego, California, urban leaders are leveraging the military presence to reinforce their own adaptation efforts and elevate a broader adaptation agenda. In each case, **leaders have deployed the most readily available joint planning mechanisms**. In Hampton Roads, an opportune Intergovernmental Pilot Project helped to consolidate a regional community of practice; those practitioners then pursued several Joint Land Use Studies to develop actionable resilience plans. In San Diego, the Navy and Port built a history of working together through an Integrated Natural Resource Management Plan and used that as a foundation for a Memorandum of Agreement to develop consistent adaptation planning. Defense professionals circulate lessons from these cases and climate security advocates have achieved federal legislation that expands the funding and basis for joint community/military adaptation.

This alliance operates and is being reinforced and expanded through **two main enabling mechanisms: recognizing interdependence and constructing credibility**. As climate impacts compromise infrastructural and social networks, urban and military stakeholders have adopted interdependence as an operating premise, explicitly rejecting military islanding. Amidst the politics of doubt, the military serves as a "credible messenger" on an institutional and individual level; climate security advocates have been working strategically, deploying this authority to build support for climate action.

Amidst the politics of doubt, the military serves as a 'credible messenger.'

Both enablers reinforce the centrality of effective framing and multilevel coordination to urban adaptation. Benefits include: **expanded cooperation**, not only between urban and military partners, but between associated municipalities and non-governmental organizations; **increased technical capacity** through data-sharing and federally funded planning processes; and pathways to substantial **adaptation infrastructure funding** through an expanded Defense Access Roads program and a new Defense Community Infrastructure program. However, these joint planning efforts may also exacerbate underlying risks: prioritizing high value assets over vulnerable populations, emphasizing adaptation at the expense of mitigation, and prioritizing sensational risks over more ordinary and pervasive ones.

Urban leaders' qualified success in leveraging the military for adaptation suggests multiple **avenues for additional adaptation planning**. First, numerous defense communities throughout the U.S. could **tap existing joint planning and funding mechanisms** including Joint Land Use Studies (JLUSs), Integrated Natural Resource Management Plans (INRMPs), Readiness and Environmental Protection Integration (REPI) partnerships, and the Defense Access Roads program to augment their adaptation capacity. Second, communities throughout the U.S. could use **urban/defense partnerships as a model** for other forms of local/federal cooperation, such as working with the U.S. Forest Service to address wildfire risk.

In addition, the climate security agenda has gained traction beyond the U.S. through multilateral organizations such as the Planetary Security Initiative; this increasingly influential message may be helpful in **reinforcing implementation across the geopolitical spectrum**. Finally, with their powerful place-based presence and a mission aligned with adaptation, military installations are a form of anchor institution, which can include universities, hospitals, and corporations among others. They are often interdependent with the community and simultaneously connected to larger networks that construct credibility for climate action; in other words, these anchor institutions could become an **array of adaptation allies**.

Photos Top: US Navy, Michael Pendergrass, Hurricane Isabel in Norfolk, 2003. Right: MTA, Rebuilding tracks in the Rockaways, 2012.

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Key takeaways:

Communities are initiating urban/military partnerships to augment their adaptation capacity.

- _Local installations tend to be willing partners based on shared climate risks,
- responsibility for community relations, and cost-sharing opportunities
- _Adaptation and joint planning are relatively lower priorities for bases

Both urban and military contingents increasingly recognize their interdependence through infrastructure and social networks.

- _ Transportation, power, water, and other municipal services are all implicated
- _ Social and professional networks develop as military personnel at all levels live
 - off base throughout a region, creating community ties

Urban decision-makers leverage the military at an institutional and individual level as a "credible messenger" to instigate and reinforce climate action.

Benefits of urban/military collaboration include:

- expanded regional cooperation across a range of jurisdictions and sectors
- enhanced technical capacity
- _ increased access to federal funding

Emerging risks of urban/military collaboration include:

- _ prioritizing high value assets over vulnerable populations, i.e. choosing to invest adaptation funds in a military gate rather than a low-income neighborhood that is home to enlisted personnel
- _ emphasizing adaptation at the expense of mitigation, i.e. addressing the immediate impacts of flooding rather than the cumulative human causes
- _ prioritizing sensational risks over more pervasive ones, i.e. planning for sea level rise rather than heat stress

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Key recommendations for urban decision-makers:

_ Take advantage of existing joint civilian/military planning tools when initiating partnerships.

_ Coordinate with national advocacy groups to pursue increased adaptation authority and funding for defense communities.

_As urban/military interdependence supplants defense-dependency, champion community needs with attention to social vulnerability and pervasive climate risks:

- Conduct robust, inclusive public engagement that exceeds the requirements of existing joint planning tools
- _ Employ evaluation tools that account for a range of social and environmental factors in place of traditional cost/benefit analysis

Frame mitigation as key to adaptation in climate security messaging.
Evaluate the role of other anchor institutions (i.e. universities, hospitals,

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corporations) as complementary partners to galvanize climate action.

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