CHDS Futures Advisory Committee – Anticipated Future Trends in Homeland Security (March 2013)

Background

During the course of December 2012, the Center for Homeland Defense and Security (CHDS) Futures Advisory Committee (FAC) queried over 1,000 members of the CHDS family and other homeland security professionals with respect to their views as to 3-5 critical homeland security threats and challenges that they believed were either:

New and emerging homeland security threats and challenges that are going to play an increasing role in the coming decades, or

Existing homeland security threats and challenges that you feel are going to either continue to be of critical importance or increase in importance over time.

They were also asked to provide a short rationale with respect to each threat/challenge in terms of why they were convinced that it would either become critical or remain critical.

They were also asked not to necessarily think in terms of a given definition of the homeland security enterprise and to consider any critical threat/challenge to the capacity of the functioning of the government, society, and economy.

The FAC received 141 substantive responses. It should be noted that this was not an attempt to conduct a survey (the respondents do not necessarily comprise a representative sample of homeland security thinkers) but rather to gather ideas so that the FAC could provide recommendations regarding possible future trends in the field and ways in which CHDS might adjust its curriculum in order to capture emerging trends (or continue to capture existing trends that will continue to be important). Consequently, the ideas presented below have been gleaned by the FAC from these responses not only on the basis of issues that were raised by significant numbers of respondents but also on the basis of the merit and importance of certain ideas that may only have been raised by a handful of respondents. Moreover, the FAC has also looked at documents authored by DHS and other entities regarding future trends in the field and has incorporated those ideas into this document

Survey Results

The following issues (not listed in any order of importance) were raised by the respondents or the by literature in terms of critical (existing or anticipated) trends within the Homeland Security Enterprise:

1. **Cybersecurity** – cyber threats could potentially impact all critical infrastructure sectors as well as global commerce and supply-chain security. Cyber attacks could also undermine government services. There is a need for more secure information technologies and better legal tools to investigate and prosecute hackers. Efforts to centralize and regulate the Internet increase vulnerability.

2. **Long-Term Disaster Recovery/Resilience** – coordinating the agencies and budgets.

3. **Immigration and Global Demographic Flows** – greater need for skilled immigrants (especially in the context of the global competition for skilled immigrants). The aging of the US population. Terrorism
threats via immigrants from specific countries/regions (e.g., Syria, Somalia, etc.). LE interaction with illegal aliens.

4. Climate Change – the lack of a good understanding as to where climate change is likely to lead in terms of natural disasters, rising sea levels, population movements and societal breakdown. The expected increase in the number and intensity of natural disasters that the country will face (from extreme drought and water shortages to hurricanes, tornadoes, etc.). Ensuring continued food supplies in the wake of longer droughts or weather damage to crops (domestically and internationally).


6. Demands on Global Natural Resources – disruption to the global supply of oil (e.g., via blocking the Strait of Hormuz) will still be critical (shale oil deposits in the US notwithstanding). Rare Earths, etc. Land purchases by China affecting food security/sovereignty in the developing world. North American energy security as a “game changer.”

7. Emerging Technologies – relating to the emerging “digital class” that lives in a world without borders (defined not by wealth, but by connectivity and a common belief system). Nanotechnology developments, especially in the field of biotechnology (will extend life, changes concepts of age and ageing, and create new categories of have and have-nots).

8. WMD Proliferation – another low probability but high-consequence threat, particularly in terms of chemical weapons and technology (e.g., fears of Syrian chemical weapons reaching global Jihadi groups and/or Hizbullah).

9. Extremist Ideologies and Terrorism - will continue to be a low probability but high consequence threat. Most law enforcement entities are not doing enough to understand the nexus between criminal activity and terrorism and to investigate even some low-level criminal activity in the context of that activity possibly being designed to fund terrorism. Also, growing links between terrorist organizations and street gangs or other criminal enterprises. Increased radicalization in the US, on the right and left fringes as well as within the Muslim community. The absence of a national counterterrorism doctrine and standardization in counterterrorism training. Greater insider threat problems (also relates to the long wolf category). Iran/Hizbullah threat.

10. Public Health Threats –

   a. The introduction of novel infectious agents via global travel and population mobility. Global Screening and Surveillance is currently ineffective.

   b. Introduction of novel diseases due to the destruction of animal habitats and climate change.

   c. Bioterrorism.

   d. Biotechnology Advancements – research laboratories are not necessarily secure and information is shared on internet forums and via peer-reviewed journals. New strains of bacteria and viruses can pose a threat absent human resistance.

   e. Water safety – vulnerabilities in water treatment and distribution systems and in biosurveillance of water sources and systems.
f. Food safety and security – gaps “from farm to fork” due to global production, processing and supply-chain issues.

g. Strategic Communications – lack of effective provision of public health information to the public (including culturally-appropriate messaging to different populations).

11. **Lone Wolf/Active Shooter Threats** – this impacts school security, security of non LE first responders, the security of public events and public venues. Hysteria-producing sniper attacks. Arson attacks at malls, schools and churches.

12. **Organizational/Budgetary Issues** – The Homeland Security enterprise is too diverse to hold together and not cost-effective enough. Many institutions were created haphazardly in the wake of 9/11 and will need to be re-conceptualized. There is a need to be able to effectively measure Homeland Security policy performance – this issue related both to the ability to determine which policies are effective as well as to the justification for continued funding. Grant funding methodologies.

13. **Transnational Crime** – particular in the context of criminal organizations with access to advanced weaponry and the ability to undermine social stability in urban areas or along the border with Mexico (for example, with drug cartels in Mexico emerging as pseudo-governing authorities). Growing lawlessness in Puerto Rico and other Caribbean dependencies. Rise in kidnapping for ransom. Greater cyberwarfare capabilities. Cartel movement of money and weapons into Mexico.

14. **Critical Infrastructure Protection** – vulnerabilities to these systems were graphically demonstrated during the Japanese Tsunami, Superstorm Sandy, etc. Absence of continuity of operations plans (COOPs) in some sectors. Fragile power grid. Aging interstate highway system.

15. **The Merging of Homeland Security with National Security** – As domestic and foreign threats run together, it is not clear whether it makes sense to view these as separate issues. Also, increasing numbers of National Security issues (such as global trade, migration/travel, climate change, pandemic threats, access to natural resources, etc.) relate directly to Homeland Security issues. Geography will become less viable as a concept (in terms of threats, attacks, etc.). American tourists and diplomats may be threatened overseas.

16. **Public-Private Partnership** – the need for better integrating the private sector into efforts such as counterterrorism, emergency planning, resilience, etc.

17. **Homeland Security Theory** - the discipline lacks a body of theory to hold it together and to support academic research.

18. **Big Data and Complexity** - understanding the impact of Big Data and Complexity on ideas, paradigms and organizations as well as the impact of Big Data on key policy decisions.

In addition, respondents identified a number of process-related issues having to do with skill sets needed for higher education in homeland security.

1. **Leadership Development and Strategy/Problem Solving** – Better preparation for existing and future homeland security leaders in terms of strategic thinking and policymaking. Superwicked problems.
Looking for opportunities rather than threats. Using a systems perspective to frame homeland security issues.

2. **Critical Thinking, Analytical Skills, and Higher Level Reasoning** – all courses should focus on developing these skills as they are applicable to all HS decision-making.

3. **Exposure to People and Ideas from Other Disciplines** – continued respondent support for mixing HS sub-disciplines in the educational setting and for instruction coming from people with varied disciplinary backgrounds.

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