

USCG Innovation Expo

Innovations in Government Panel

DHS Science and Technology Innovation Portfolio Overview

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Homeland
Security

DHS S&T Investment Portfolio

Balance of Risk, Cost, Impact, and Time to Delivery

<p>Product Transition (0-3 yrs)</p> <ul style="list-style-type: none">▪ Focused on delivering near-term products/enhancements to acquisition▪ Customer IPT controlled▪ Cost, schedule, capability metrics	<p>Innovative Capabilities (1-5 yrs)</p> <ul style="list-style-type: none">▪ High-risk/High payoff▪ “Game changer/Leap ahead”▪ Prototype, Test and Deploy▪ HSARPA
<p>Basic Research (>8 yrs)</p> <ul style="list-style-type: none">▪ Enables future paradigm changes▪ University fundamental research▪ Gov’t lab discovery and invention	<p>Other (0-8+ yrs)</p> <ul style="list-style-type: none">▪ Test & Evaluation and Standards▪ Laboratory Operations & Construction▪ Required by Administration (HSPDs)▪ Congressional direction/law

Customer Focused, Output Oriented



**Homeland
Security**

Homeland Security Act of 2002

HSARPA shall....

“Support basic and applied homeland Security research to promote *revolutionary* changes in technologies; advance the development, testing and evaluation, and deployment of critical homeland security technologies; and accelerate the prototyping and deployment of technologies that would address homeland security vulnerabilities”

**EVERY
TRULY
GREAT
ACCOMPLISHMENT
IS AT FIRST
IMPOSSIBLE!**

(FORTUNE COOKIE)



Homeland
Security

HIPS and HITS

Homeland Innovative Prototypical Solutions (HIPS), which are designed to deliver prototype-level demonstrations of game-changing technologies in two to five years. These projects are moderate to high risk, with high payoff

High Impact Technology Solutions (HITS), which are designed to provide proof-of-concept answers within one to three years that could result in high-payoff technology breakthroughs. These projects have considerable risk of failure, however they also offer the potential for significant gains in capability

Homeland Innovative Prototypical Solutions (HIPS)

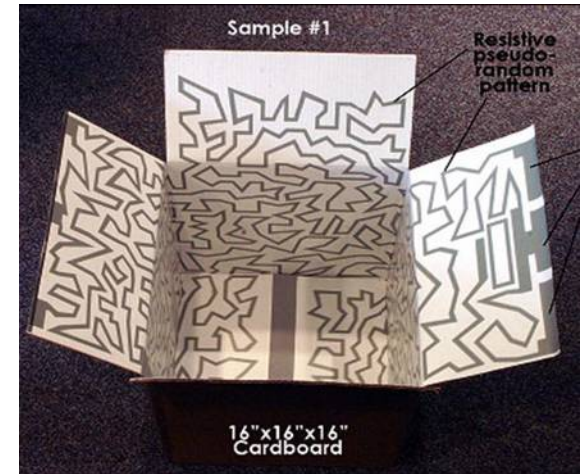
Explosives	Chem/Bio	Command, Control & Interoperability	Borders/ Maritime	Human Factors	Infrastructure/ Geophysical
<p>Project Chloe- High altitude aerial platform existing above civil aviation Counter-MANPADS</p> <p>SENSIT – System to identify numerous liquids in baggage</p> <p>IED Defeat / APE VBIED Defeat – Detection/prevention and mitigation technologies to counter IEDs</p>		<p>SCOPE (Scalable Common Operational Picture Experiment) – Leverages Global Observer JCTD</p>	<p>Scalable Composite Vessel Prototype (SCVP) – Lightweight, composite material with high speed hull</p> <p>SAFECON – 90 second container screening device</p>	<p>FAST M2 (Future Attribute Screening Technology Mobile Module) – Relocatable Lab capable of testing for behavioral/ physiological cues of “hostile intent”</p> <p>Double or triple wide trailer tested at various sites around the country</p>	<p>Resilient Electric Grid – System that will prevent cascading effects of power surge on electrical grids</p> <p>Levee Strengthening and Rapid Repair - rapidly stop a breach in a levee</p> <p>Storm Surge and Hurricane Mitigation</p>

High Impact Technology Solutions (HITS)

	<p>Real Time Bio Detection and Identify</p> <p>Cell-All - Ubiquitous Chem/Bio/agent detector</p>	<p>First Net - First Responder Reliable Relay Link</p> <p>Phone Home – Inter-operative and inexpensive hand-held radios</p>	<p>Tunnel Detect – Ability to detect, identify, and confirm illegal and clandestine underground border structures and activities</p>	<p>Document Validator –High proficiency scanner that can identify fraudulent docs</p> <p>Leverage USSS system</p> <p>Biometric Detector – High proficiency small biometric scanner</p>	<p>Wide Area Surveillance/ Change Detection for Critical Infrastructure</p> <p>Resilient Tunnel– Tunnel Protection/Blast Mitigation</p>
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DHS SBIR Program

- Increases participation of innovative and creative small businesses in Federal research and development programs
- Challenges small businesses to bring innovative homeland security solutions to reality
- Focuses on near-term commercialization and delivery of operational prototypes
- Over 324 contracts awarded
- Funded by S&T Directorate and DNDO
- Implemented Cost Match to motivate commercialization





Homeland Security



www.hsarpabaa.com

For S&T Broad Agency Announcements and more

www.sbir.dhs.gov

For SBIR solicitation information

FedBizOpps.gov

Federal Business Opportunities

S&T-Innovation@dhs.gov

To contact S&T innovation



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