Silicon Valley Innovation Program (SVIP)

HOMELAND SECURITY
#SciTechSVIP
SILICON VALLEY INNOVATION PROGRAM

Market Validation

Amplify Your Reach

Mentorship

Equity-Free

Follow-On Funding

Network

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Department of Homeland Security

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WILLIE
McCOOL

From our orbital vantage point
we observe an Earth without borders,
full of peaceful beauty and magnificence;
and we pray that humanity as a whole
can imagine a borderless world as we see it
and strive to live as one in peace.

Willie McCool
January 29, 2003

16 MINUTES
FROM HOME

So What/Who Cares

- CBP is interested in the technologies being developed by innovative start-up companies
- S&T started the SVIP to leverage and adapt those commercial technologies and deliver to operational use
- Actively working with our components to start new topics/projects
- We are interested in hearing about new technologies
- We have funding

* DHS Other Transaction Authority was reinstituted with the President signing the Border Supplemental Bill on 1 July

Our Current Portfolio

Internet of Things Security
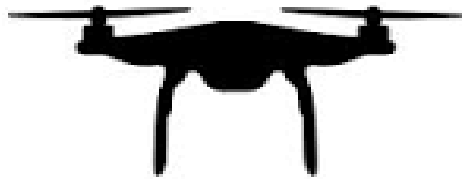
Big Data

Identity and Anti-Spoofing

Fintech Cybersecurity
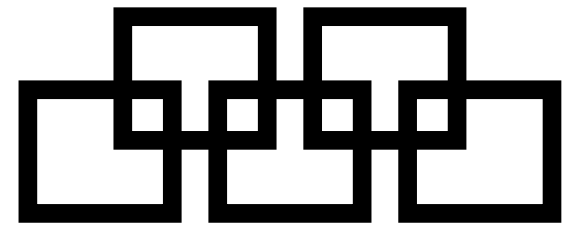
Aviation Security

Seamless Travel

Drones/sUAS

K9 Wearables

First Responder Tech

Blockchain

SVIP Projects supporting OFO

Counting and Measuring: Capture passenger queue lengths and wait times for each step of the international arrivals process in the air environment in a highly precise and granular manner, with lane level fidelity, in a cost-effective manner

Wayfinding: Provide international travelers with real-time information on how to efficiently navigate the Federal Inspection Station area and receive a tailored CBP inspection process based on the traveler admissibility status

Passenger Processing: Remote Interview and identity verification solutions to increase security while reducing the time CBP officers undertake to process 300,000+ international passengers per day

SVIP Projects supporting OFO, cont.

Enhancements to the Global Travel Assessment System (GTAS): Automates data analysis, entity resolution and predictive modeling at enterprise-level scale and speed and with a high-level of accuracy for CBP-created open source global traveler risk assessment system

Preventing Forgery & Counterfeiting of Certificates and Licenses: Use Blockchain/Distributed Ledger technologies to:
- Enhance the ability to provide supply chain security and intellectual property rights enforcement
- Validating the point of origin for raw materials and confirm they don't fund criminal or terrorist organizations
- Improve the current manual and complex process for tracking the evidence of the flow of oil through pipeline and refinement between the US and Canada

How SVIP Funds

- Topic "calls" released and open typically for 1 year describe problem set
- 10-page Applications reviewed quarterly
- If invited to pitch (15 mins oral), funding decision made within 24 hrs
- OTA awarded on average 45 days from date of notification

Potential for $800K; Up to 24 months

Performance-based funding steps			
Phase 1	$50-200K	3-6 months	Proof of concept demo (MVP)
Phase 2	$50-200K	3-6 months	Demo pilot-ready prototype
Phase 3	$50-200K	3-6 months	Pilot test prototype in operations
Phase 4	$50-200K	3-6 months	Test in various operational scenarios

Contact Info

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Back-ups

SVIP Goals

- *Leverage and adapt commercial technology and deliver to operational use to meet DHS needs*
- *Promote economic development through start-up/small business growth*

What SVIP Does

To keep pace with the innovation community and tackle the hard problems faced by DHS's operational missions, we use the other transaction authority of DHS to:

EDUCATE

Help investors and entrepreneurs understand DHS's capability needs

FUND

Provide accelerated non-dilutive funding (up to $800K US) for product development to address DHS's needs

TEST

Provide test environments and pilot opportunities

Public-Private Partnership

- Leverage early stage startup tech receiving accelerator/seed/angel investments (generally through Series B)

- Intersection of commercial investment and DHS/HSE application

- DHS funds product development – dual-use features applicable to homeland security

- Do NOT want startups trying to pivot; must be able to maintain commercial roadmap

- Not taking equity, not taking IP
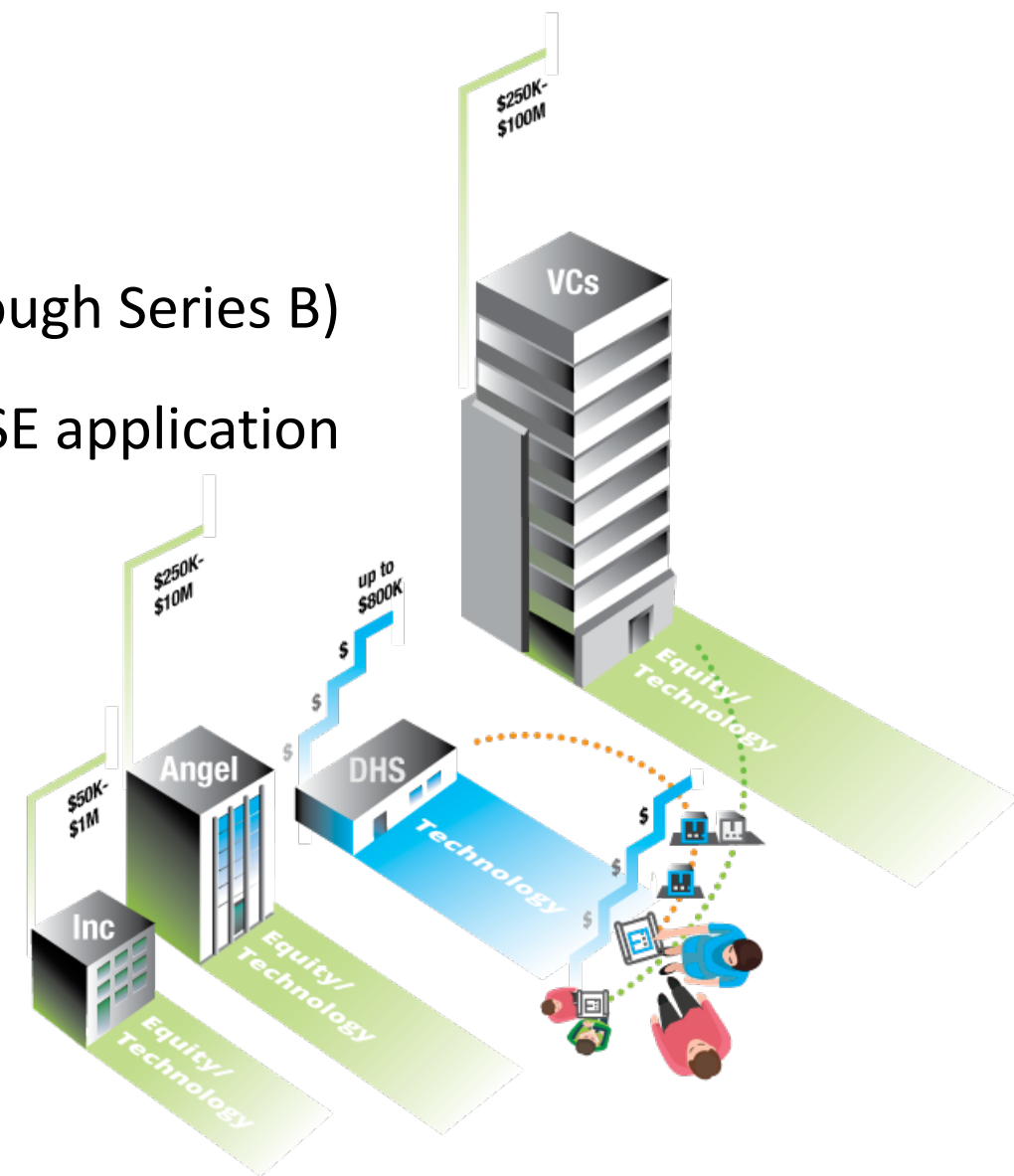
Transitioning to DHS Operations

In ≤ 24 months from initial award, 4 startups have entered into transition stages with CBP

Startup	Technology	DHS Customer/End User	Transition Stage
Echodyne Kirkland, WA	high performance, low cost radars for detecting people and vehicles	CBP – U.S. Border Patrol	Initial acquisition by CBP
Tamr Cambridge, MA	machine learning automates data analysis and entity resolution at enterprise-level scale and speed and with a high-level of accuracy	CBP – Targeting & Analysis Systems Programs Directorate	Incorporated into CBP Global Traveler Assessment System (GTAS)
DataRobot McLean, VA	predictive model engine that performs real time risk assessment with statistical and machine learning models	CBP – Targeting & Analysis Systems Programs Directorate	Licenses acquired by CBP
Factom Austin, TX	blockchain-based technology to secure IoT device data, specifically from sensors and cameras to ensure that CBP and other law enforcement cameras are tamper-proof	CBP – U.S. Border Patrol	Tech integrated into camera and ground sensors used by USBP (in controlled environment)