

Technology Integration and Emerging Technology Trends

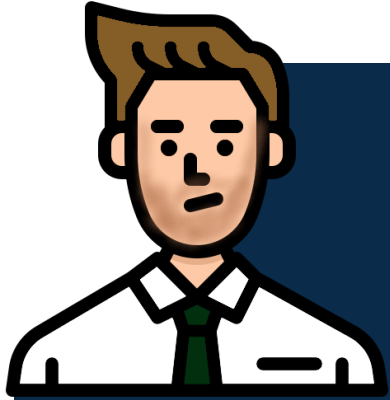
ADSA24

October 4th, 2021

Dan McCoy, Chief Innovation Officer, TSA



Who we are



Daniel McCoy
Chief Innovation Officer
Transportation Security
Administration
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The Chief Innovation Officer sits in the Administrator's Front Office to manage and grow TSA's innovation activities, personnel, knowledge, technology, and capabilities.



Team of detailees from all over TSA interested in leading innovative solutions development, learning new skills such as Agile and HCD, launching new authorities/groups, and becoming entrepreneurial leaders in the agency. Thus far, the team has rotated 3 employees back, all of whom were promoted and now are responsible for innovation implementation in their workstreams.



Local Innovation for TSA (LIFT) Cells are ex-HQ based teams focused on identifying opportunities and problems for Innovation's pipeline. Each team works in coordination with FSD/AFSD leadership to execute autonomously of CINO decision making. *Centralized intent, decentralized execution.* The teams cross-share solutions without need for HQ interaction.

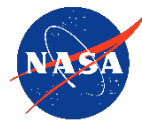
Innovation Partners



**Innovation Task
Force (ITF)**

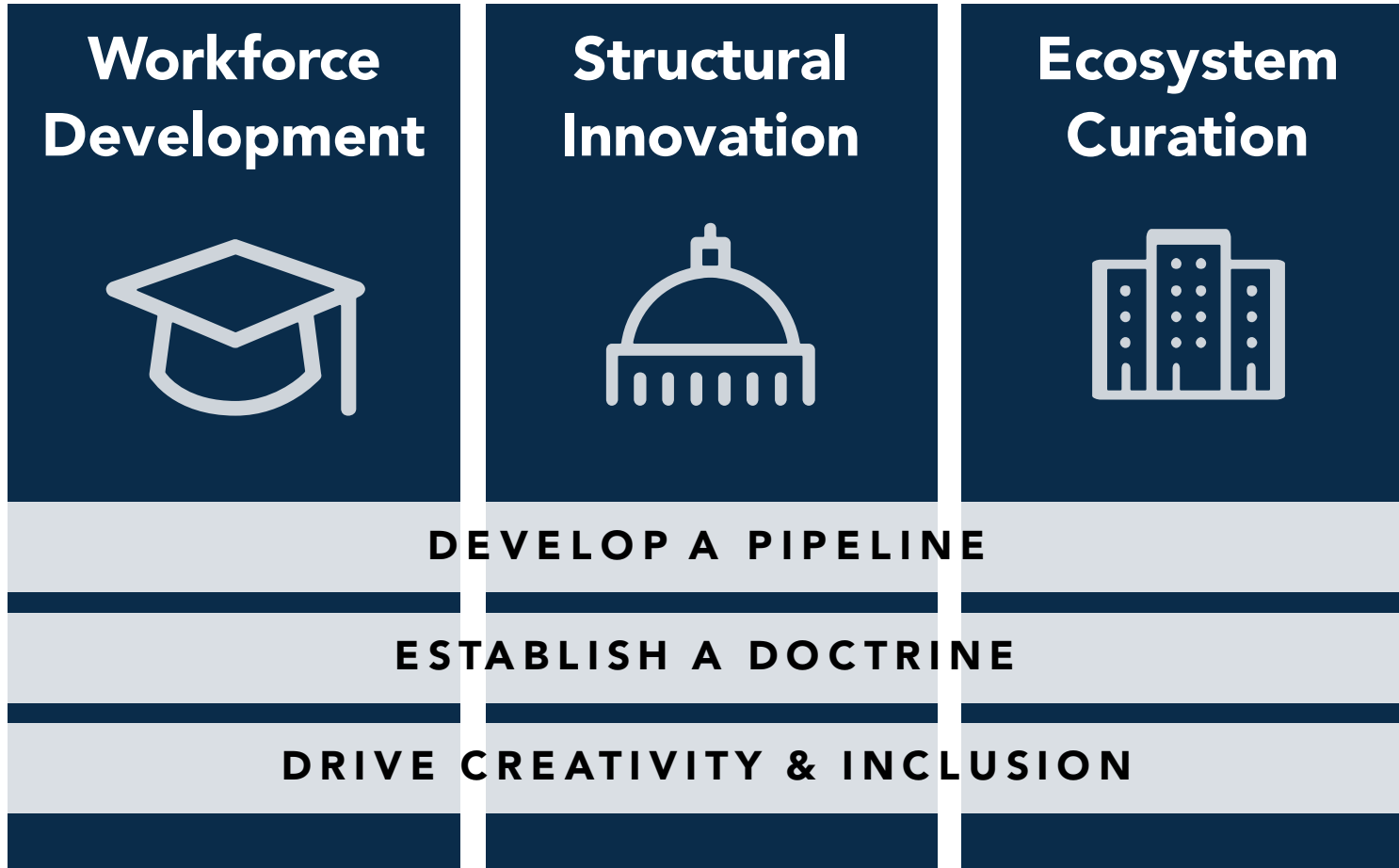


**Flexible Agile
Scalable Teams
(FAST)**



How we focus

Our high-level structure CONOPs serves as a reminder on who we serve, the agency. Innovation has no goal in and of itself. The focus is to drive employee creativity, security outcomes, and new value.



“Act in TSA's best interest”

TSA's Lifecycle

Source

Collect ideas & Opportunities

Curate

Assess & Prioritize problems

Discover

Test hypotheses to validate solutions

Incubate

Build repeatable, scalable solutions

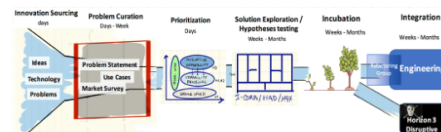
Transition

Turn solutions into sustained capabilities

An Innovation Pipeline

That solves the Red Queen Problem

Requires a **disciplined, evidence-based, data-driven**, process for **connecting** innovation activities into an **accountable** system that **rapidly** delivers solutions to hard problems



How we work

Listen

“Rule No. 1: There Are No Facts Inside Your Building, So Get Outside.”

Steve Blank
Entrepreneur
Stanford Professor

- Lead calls with TSA offices, including field representatives, to understand challenges and opportunities to support
- Integrate with intra-governmental groups to compare authorities, leverage relationships, and build together
- Always connect challenges back to our core mission and our principle value to accelerate action.

Learn

“If you haven't read hundreds of books, you are functionally illiterate, and will be incompetent, because your personal experiences alone aren't broad enough to sustain you.”

General James Mattis
Secretary
Department of Defense

- Continue the Innovation Book club.
- Assess new tools to increase our velocity of tasks and pipeline churn.
- Complete Design Thinking Training and others to improve creative thought and innovative methods.
- Share new knowledge and solutions ACROSS TSA, not just our team.

Lead

“In today's era of volatility ... The only sustainable advantage you can have over others is agility, that's it.”

Dr. Will Roper
Assistant Secretary
Air Force

- Incubate solutions in partnership with end-users and develop refactoring plan.
- Operate inter-DHS opportunities to share funding streams for TSA's benefit.
- Identify areas of growth in TSA and drive support without ego.
- Provide candid feedback always.
- Know you have our trust.

So What? Who Cares?

Immediate Problem Statements for Solution Deployment

Based on conversations directly with the Administrator, Secretary, Federal Security Directors, and Officers. The solutions have at hand, dual use solutions in the market.

Staying Ahead of the Threat & Innovation Curve

Position TSA through early engagement, policy discussions, and investment to ensure the most positive outcomes for security in the transportation ecosystem.

Rapid 3rd Party AI/ML Integration in Traditional Equipment

Computer Vision for Surface Transportation

Staff Scheduling & Planning

Ending Bloc Replacement of Kit

Ex-Airport Screening Operations

Sensor Fusion to Remove Traditional Equipment and Improve the Passenger Experience

Securing Vertiports & Advanced Air Mobility

Protecting the De-Carbonized Transportation Sector

Defend Against Domestic/Lone Wolf Radicals