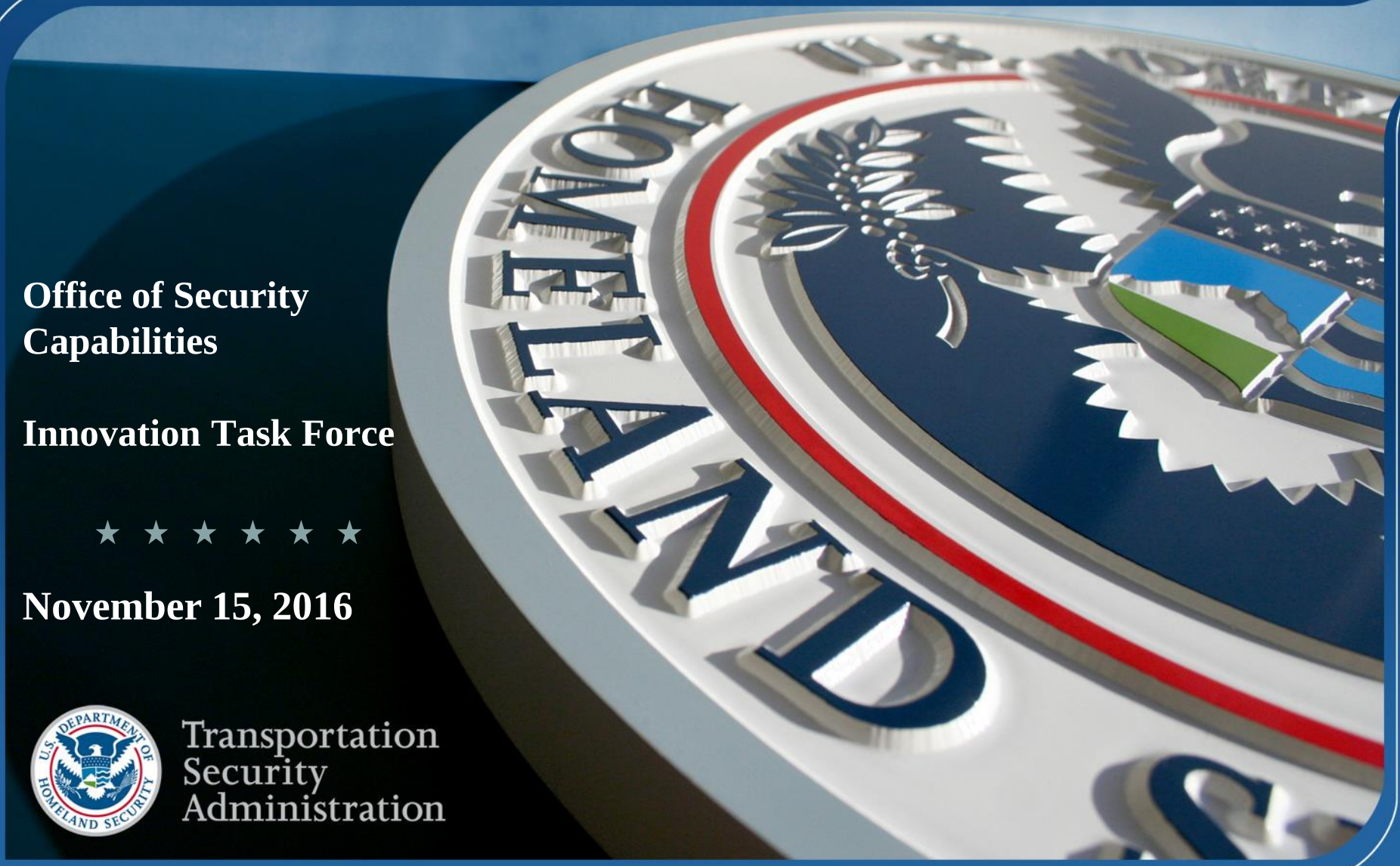
ALERT Conference



Office of Security Capabilities

Innovation Task Force

★ ★ ★ ★ ★ ★

November 15, 2016

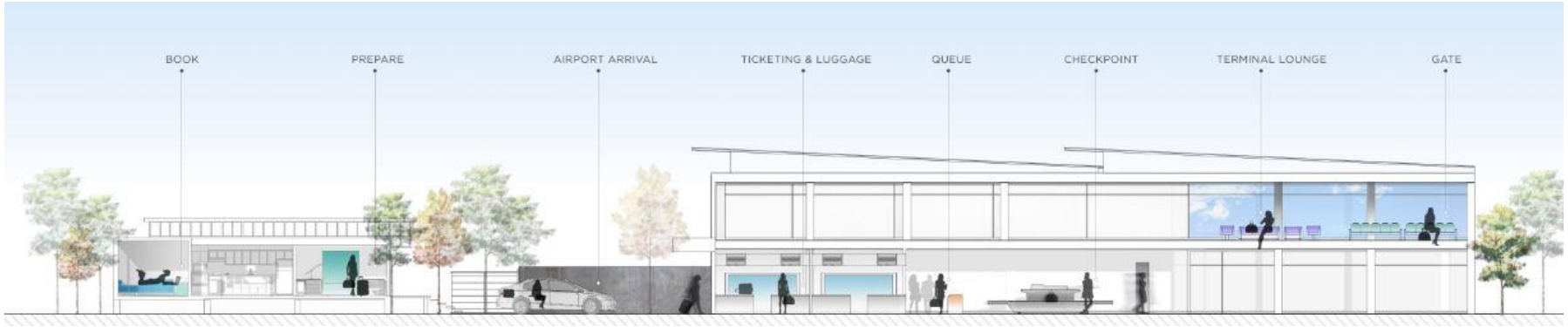
Transportation Security Administration

So What? Who Cares.

- Innovation in the Aviation Ecosystem: A curb to gate approach is needed.
- Creating an Environment in the Transportation Security Administration (TSA) for Innovation
- Technology Demonstrations
  - Driving Knowledge for Future Requirements and Development
- Industry Engagement and Process Impacts

Innovation in the Aviation System

Aviation Security needs a holistic approach to address the threat landscape, improve passenger experience, and deliver the next-generation capability for the future.



TSA is approaching the issue through four key dimensions:

- Security Effectiveness
- Operational Efficiency
- Workforce Management
- Customer Experience

Innovation Task Force Overview

Innovation Task Force (ITF) Mission: Foster innovation by integrating key stakeholders to identify and demonstrate emerging solutions that increase security effectiveness and efficiency, improve passenger experience, and deliver the next-generation curb-to-gate passenger experience.

Primary Objectives

Collaborate

Convene the aviation security ecosystem to identify and demonstrate impactful emerging solutions

Demonstrate

Establish the capability for TSA to quickly demonstrate innovative solutions

Assess

Measure solution effectiveness to achieve the optimized future state and provide vendors with data to improve solutions

ITF success depends on the support of and engagement with multiple stakeholders in the aviation security ecosystem for solution identification and demonstration.

ITF Solution Tracks

Near-Term Innovation Track (FY16-17)

- Passenger Experience Improvements
- Automated Screening Lane
- CT Technology

People, Process, and Technology Solutions May Include:

- Automated bag diverter and split lanes
- Automated tracking (RFID bin and coding)
- Mature detection systems
- Biometrics
- Improved recomposure
- Credential Authentication Technology

FY 2016 | FY 2017-2018 | FY 2019 | FY 2020+

Long-Term Innovation Track (FY16-20+)

Requirements Development

Inputs:

- Heathrow
- CATSA
- Schiphol

Design, Develop, and Test

Curb-to-Gate Risk-Based Screening Solution

Solutions Focus:

- System of systems
- Open system architecture
- Seamless passenger experience
- Improved effectiveness
- Posture for future growth
- Evolve to deter and detect an adaptive enemy

Notional – dependent upon airport, airline and vendor agreements and funding

Creation of an Innovation Environment

ITF creates an environment to focus on redefining the security experience through accelerated solution assessments that inform requirements development and have the potential to improve overall passenger satisfaction.

ITF solutions **are**…

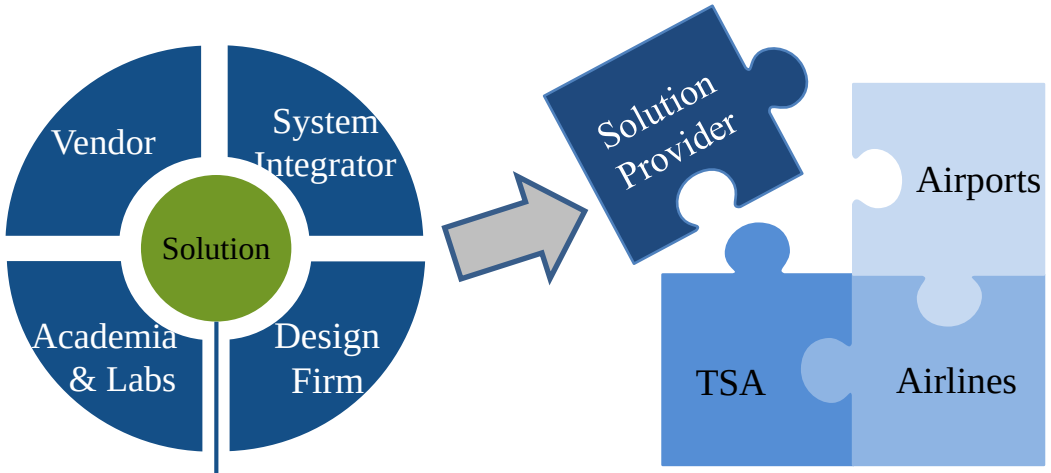
- ✓ Technological, automated, ergonomic, environmental, or aesthetic improvements
- ✓ Enhancements to detection or passenger satisfaction
- ✓ Inserted for a finite amount of time at existing checkpoints, to conduct technical and operational assessments
- ✓ Future-focused

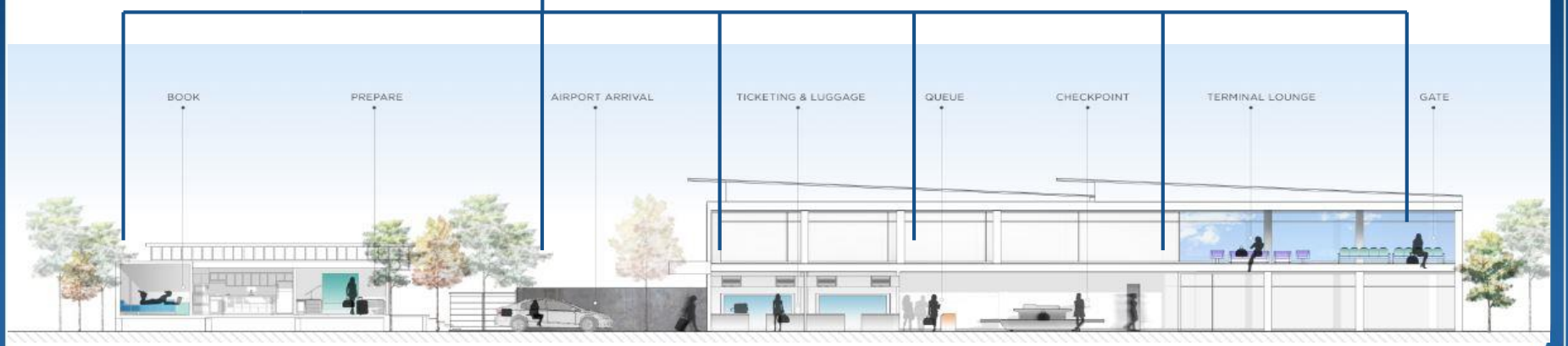
ITF solutions **are not**…

- ✗ Operational tests included in the formal Testing and Evaluation (T&E) process
- ✗ Initially a permanent deployment solution
- ✗ An obligation from TSA to procure solutions in the future
- ✗ Surge responses to targeted needs
- ✗ Local optimization efforts

Innovating Across the Curb-to-Gate Passenger Journey

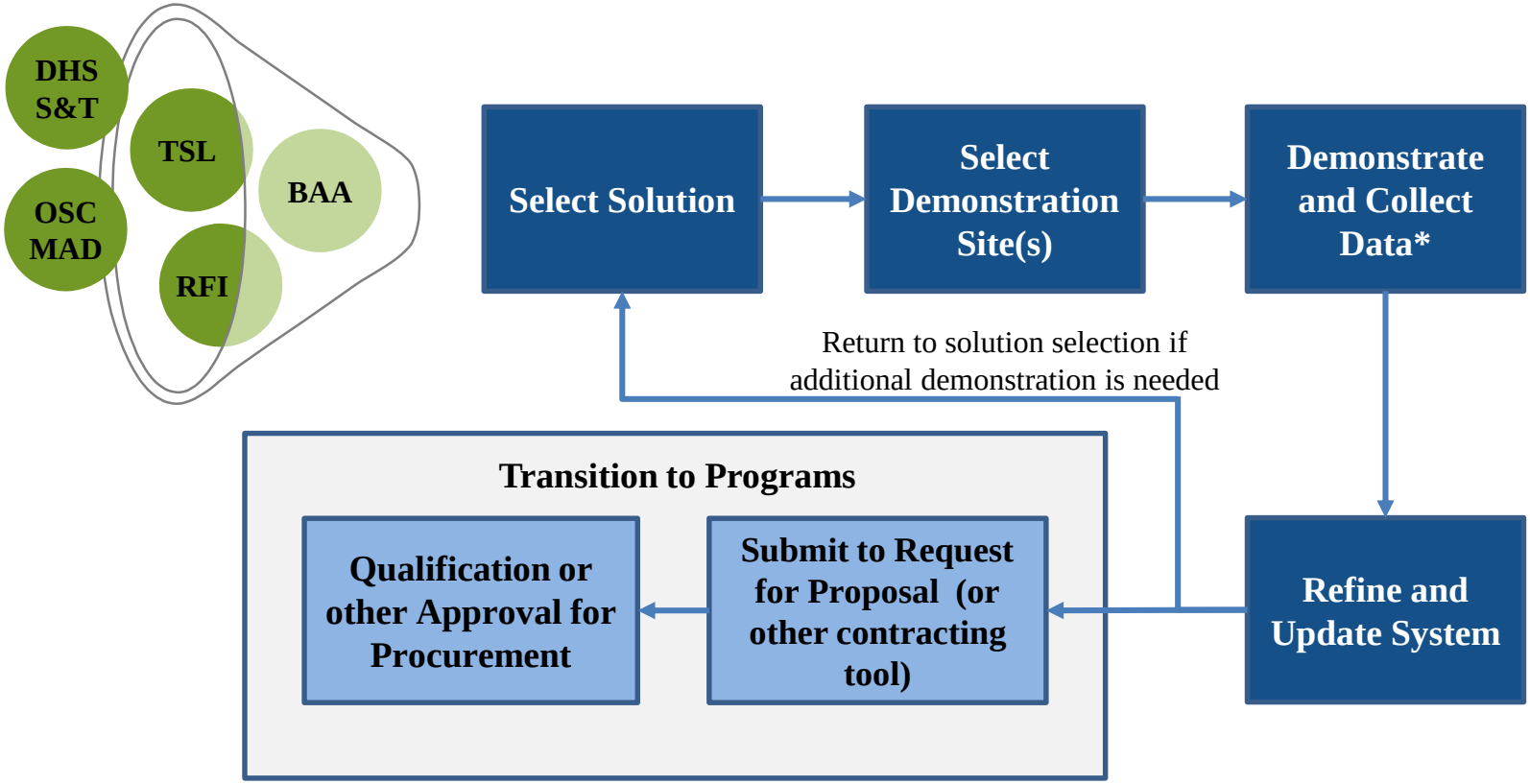
ITF seeks solutions across the full curb-to-gate screening journey and encourages vendors to work collaboratively to develop solutions that achieve an ideal future state.





Solution Demonstration Lifecycle

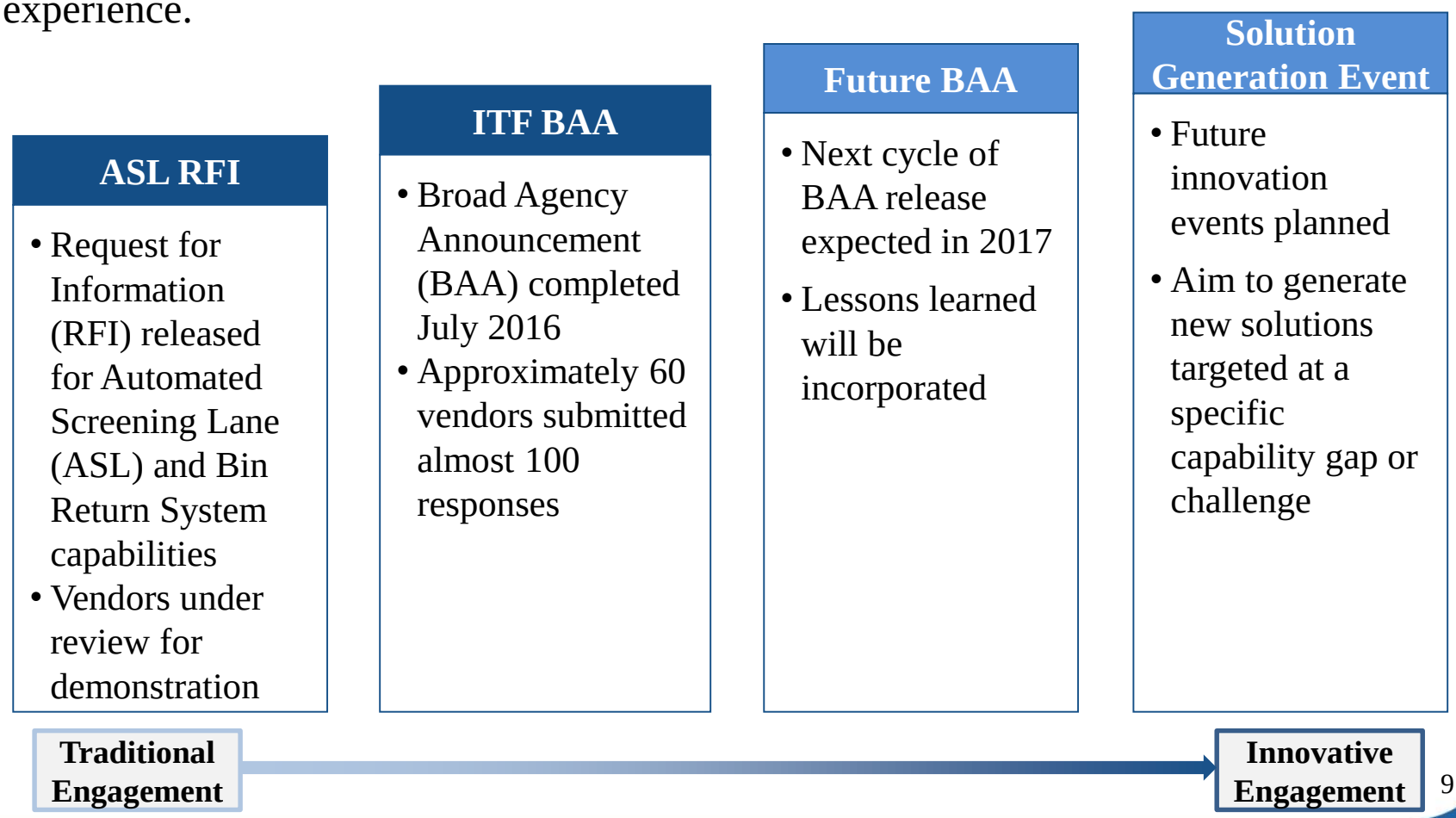
ITF's solution demonstration lifecycle allows vendors to demonstrate their solutions in the field, capture operational data, and then refine their solution for potential future engagement with TSA.



***Note:** Solution is mature and certified at this point, but not necessarily "perfect"

Industry Engagement

ITF seeks to engage emerging capabilities to mature available solutions and refine TSA requirements and possibilities as they relate to security effectiveness and passenger experience.



Innovation for Aviation Security BAA

ITF's BAA for Innovation in Aviation Security is one of multiple channels used to engage the vendor community and identify solutions for demonstration.

Process

Release BAA → **Technical Review** → **Panel Review** → **Request CDPs*** → **CDP Review & Selection** → **Demonstrate**

Scope

Solutions Sought:

Solution Types:

- Individual Solution or Process
- Integration of Systems

Solution Goals:

- Aligns to TSA's mission
- Improves Passenger Experience
- Addresses Capability Gaps

"TSA seeks input to develop innovative and holistic solutions to address the threat landscape, improve the passenger screening experience, and deliver the next-generation curb-to-gate screening capability."

*Capability Demonstration Proposal

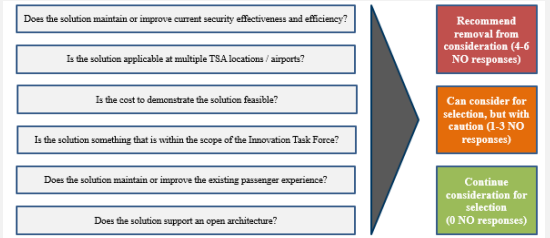
BAA Panel Review Process

Multiple activities layered in evaluation and data to establish a top quadrant of desirable solutions for ITF and next steps to capitalize on the market research.

Plot 1: BAA Portfolio Composition

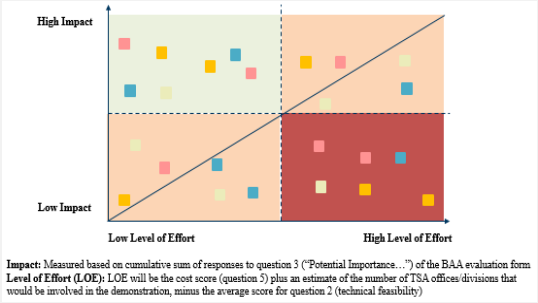
Identify **solution type** and applicable **location** in the curb-to-gate passenger journey

Plot 2: Solution Filtering



Plot 3: Solution Value Analysis

Measure the expected **impact** of each solution against the expected **Level of Effort (LOE)**



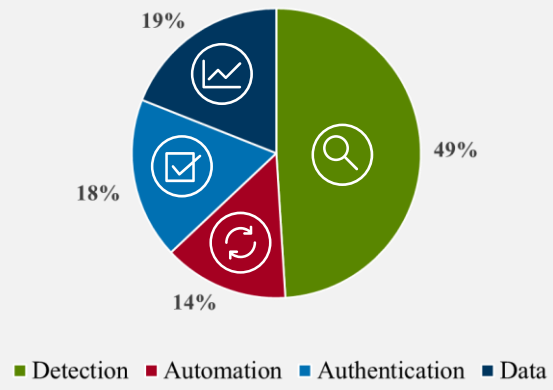
Results from the three plotting exercises, combined with technical reviewer feedback, informed the next step for each white paper submission.

BAA Results and Next Steps

ITF took action on over 80% of ITF BAA submissions by requesting a proposal/demonstration brief or referring the solution to another TSA office.

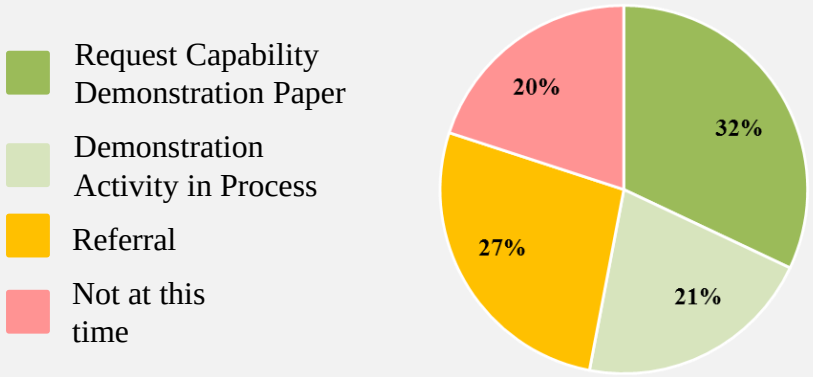
TSA categorized solutions as Data, Detection, Automation and Authentication.

Proposals per Category



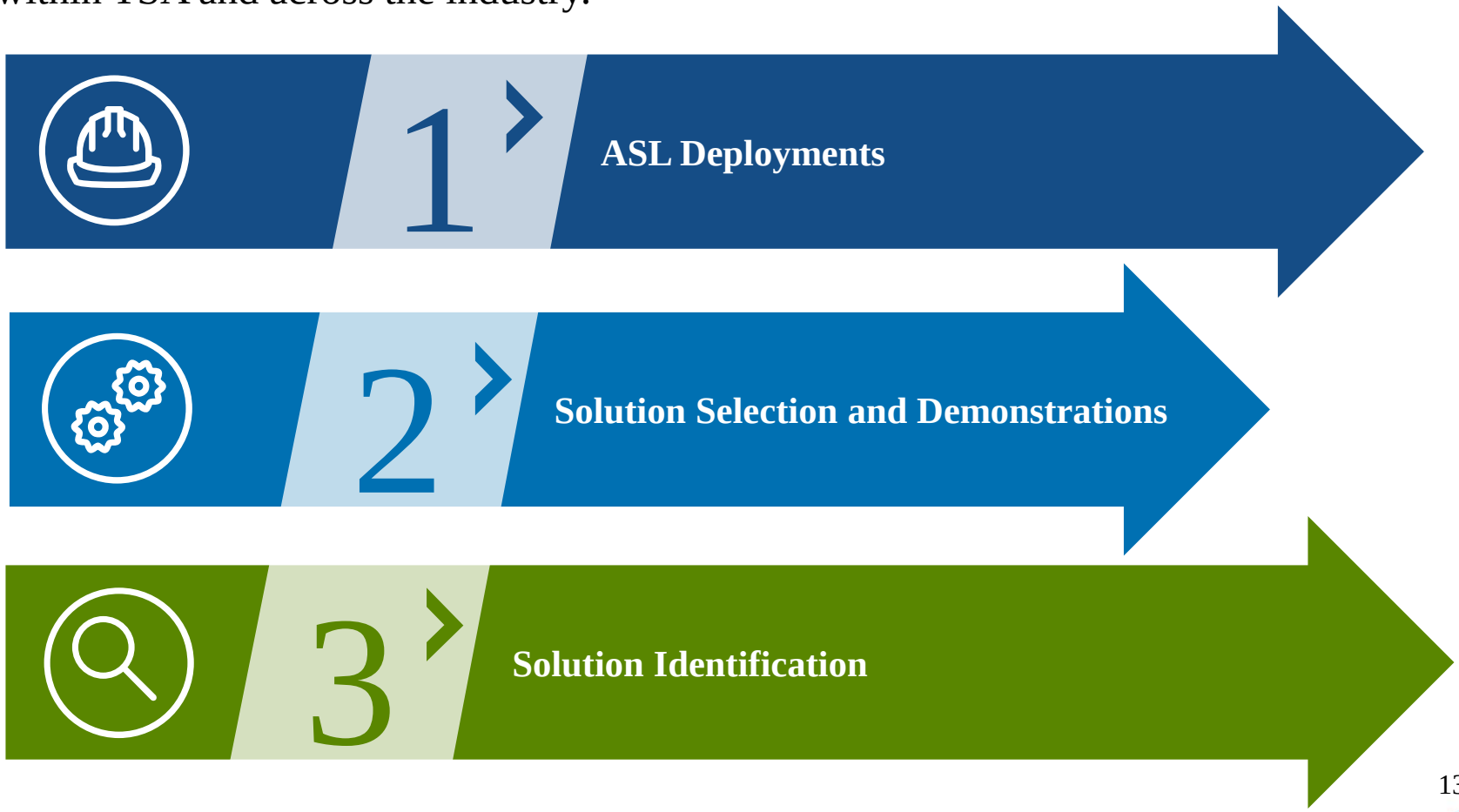
TSA made one of four decisions on each BAA white paper response:

Proposals per Recommendation Type



ITF Next Steps

ITF is focused on continuing ASL deployment activities, demonstrating Computed Tomography and other solutions from the BAA, and identifying new solutions from within TSA and across the industry.



Questions and Contact Information

Jose Bonilla
TSA ITF Director

Mara Winn
TSA ITF Lead Program Manager

InnovationTaskForce@tsa.dhs.gov