# U.S. Department of Homeland Security FY 2022-2026 Learning Agenda



# **About this Report**

The Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act) requires that the U.S. Department of Homeland Security (DHS) issue an evidence-building plan (or learning agenda) aligned with the Department's strategic plan describing priority questions and how they will be addressed through the Department's evidence building.

The DHS FY 2022-2026 Learning Agenda describes a subset of the Department's future evidence-building activities that align with strategic priorities and how the results of evidence-building activities will be used. The learning agenda is a plan for the Department's strategic and coordinated investment of resources in evidence building to ensure the best evidence is available for pressing decisions and high-priority functions.

As required, the *DHS FY 2022-2026 Learning Agenda* is published at the <u>DHS public website</u> and at <u>Evaluation.gov</u> with the Department's other Evidence Act plans and reports.

DHS invites feedback on the *DHS FY 2022- 2026 Learning Agenda* and continued collaboration from relevant communities on potential priority questions, data, methods, and analytic approaches that could guide these and future DHS evidence-building activities. Public feedback and input may be submitted to: <a href="mailto:dhslearningagenda@hq.dhs.gov">dhslearningagenda@hq.dhs.gov</a>.

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# Contents

About this Re	porti
Overview	1
Introductio	n1
Learning Ag	genda Development1
Engage E	xternal Stakeholders2
Gather C	omponent Questions2
Identify [	Department Priorities3
Develop	Study Plans4
Publish a	nd Disseminate4
Learning Ager	nda Framework4
Learning Ager	nda Summary6
Study Plans	9
Strategic G	oal 1: Counter Terrorism and Homeland Security Threats9
	In what ways do service interventions funded through violence and domestic prevention grants contribute to DHS goals for reducing individuals radicalizing to violence and terrorism?9
Strategic G	oal 2: Secure U.S. Borders and Approaches10
G2-Q1 increases	What "push" and "pull" factors at the national and local levels predict s/decreases in the numbers of noncitizens arriving at the Southwest Border?10
G2-Q2 migrant e	What effect, if any, have changes in southern land border controls had on encounters at sea?
	How accurate were DHS's estimates of the benefits and costs in the regulatory nalysis for the regulation, "Standards to Prevent, Detect, and Respond to Sexual d Assault in Confinement Facilities"?12
_	What, if any, person and case characteristics predict higher likelihood of specific ion enforcement outcomes and time between border encounter and final?
G2-Q5	What factors, if any, help predict rates and lengths of nonimmigrant s?15
G2-Q6	What, if any, person and case characteristics predict higher likelihood of specific immigration benefits?

	variables among lawful permanent	ics of people who naturalize? What demographic residents are correlated with the likelihood and timing18
	·	eople who online file compared to paper file for19
	_	ce of variability in USCIS utilization and completion SCIS field offices?20
		e data predict adjudications actions sufficiently to d completion or to automate whole processes?21
S	Strategic Goal 3: Secure Cyberspace a	nd Critical Infrastructure23
	communications (EC) products and these products and services add val capabilities, plans, and policies? Wh	ng cyber, critical infrastructure (CI), and emergency services they receive from CISA? To what extent do ue, such as increasing awareness and closing gaps in at factors prevent stakeholders from using cyber/CI/EC
	utility of national convenings as me	orget population participate in and perceive value and chanisms of information exchange about security and et needs, if any, exist?
	and stakeholder communication un maintaining, and deploying a qualifi (COMU) roles in federal, state, local	I-hazards communications unit position-specific training it program enhanced interoperability by (1) creating, ed group of people to fulfill Communications Unit, tribal, and territorial (SLTT) partner organizations and cive, communications planning?
S	Strategic Goal 4. Preserve and Uphold	the Nation's Prosperity and Economic Security27
		ve Transportation Worker Identification Card (TWIC) k?27
	sector (TSS) operators' implementa do TSS operators report as enablers	cant sources of variation in transportation security tion of cyber security technology and processes? What and barriers to implementation, and what gaps/unmet
		of federally managed fishing activity (both inside the earby) occur, by season and species?29
S	Strategic Goal 5. Strengthen Prepared	ness and Resilience30
	G5-Q1 How do individuals' prepa	aredness behaviors change over time?30
	G5-Q2 How do household incom	e and other demographic characteristics influence the

	G5-Q3 delivery	To what extent is FEMA's training and education enterprise providing equitable of curricula to state, local, tribal, and territorial (SLTTs) constituents?	
		What indicators, measures, methods, and data can better support the evaluati land Security Grant Program (HGSP) effectiveness as it pertains to maintaining ang state, local, tribal and territorial (SLTT) and national preparedness?	nd
		What indicators, data, methods, tools, and frameworks can FEMA use to build and address disparities in achieving equitable outcomes across FEMA programs ect federal assistance and grants) across the agency?	
	G5-Q6 social vu	To what extent were COVID Public Assistance obligations align with areas of Inerability and high case rates in socially vulnerable areas?	36
(	Goal 6: Cha	ampion the DHS Workforce and Strengthen the Department	37
	-	Does level of Independent Test Agent (ITA) support throughout the acquisition correlate with the adequacy of an acquisition program's test and evaluation (operational effectiveness, suitability, and resilience)?	
	G6-Q2 given spe	What are the estimated costs and benefits of DHS vehicle fleet electrification ecialized/law enforcement requirements?	38
		What effects has the adoption of maximum telework flexibilities had on the DI and support for the DHS mission? What subgroups of the DHS workforce benefit t/least from telework flexibilities?	
	=	What effects has adoption of a standard utilization rate (UR) of 150 sq. on had on the Department's real property footprint? What factors support and applementation of the 150 sq. ft./person standard?	41
	Outcome	What metrics/indicators can be used to reliably predict cost to maintain mater is requirements for deployed systems in CBP's stated five Enduring Mission Prior es: Combating Transnational Organized Crime, Counter Terrorism, Facilitate Lawrecture the Border, and Facilitate Lawful Trade and Protect Revenue?	ity ful
DH	S Data Prio	orities for Evidence Building	43
A	Administra	tive and Operational Data Systems	44
9	Statistical [	Data and Data Compilation Assets	45
[	OHS Survey	y and Assessment Data Assets	46
(	Other Fede	eral and Non-Federal Data Sets	47
Stu	ıdy Types,	Data Collection Methods, Analytic Approaches for Evidence Building	48
9	Study Type	S	48
[	Data Collec	ction Methods	51
1	Analytic Ar	nnroaches	53

Challenges and Mitigating Strategies for Evidence Building	.54
Common Challenges	. 55
Mitigating Strategies	. 56
Appendix A. List of Abbreviations and Acronyms	. 60

# Overview

# Introduction

The U.S. Department of Homeland Security (DHS) has a diverse and complex mission to prevent attacks and mitigate threats against the United States and our allies, respond to national emergencies of all kinds, and advance American prosperity and economic security. Since DHS was established from its predecessor agencies in 2003, the Department has continued to expand and mature capabilities to use data and analysis in shaping strategy and operations.

DHS has developed this *DHS FY 2022-2026 Learning Agenda* to empower Department decisionmakers to achieve their objectives while fostering organizational learning. The learning agenda supports the Department's implementation of the *Foundations for Evidence Based Policymaking Act of 2018*<sup>1</sup> (Evidence Act) by engaging stakeholders in identifying and prioritizing areas for evidence to improve program or policy effectiveness, assess progress toward outcomes, study pilot initiatives and programmatic adjustments, and inform resource management. Evidence may come from program evaluation, performance measurement, policy analysis, and research or statistics conducted for foundational fact finding.

The DHS FY 2022-2026 Learning Agenda describes a subset of the Department's future evidence-building activities that align with strategic priorities and how the results of evidence-building activities will be used. Except where limitations to public disclosure are noted, DHS intends to disseminate results on its public website to enable broad use in DHS management activities and by external stakeholders. DHS will update the learning agenda annually to reflect progress toward the original priority questions, shifting learning priorities, changing contexts within which the Department operates, and emerging evidence needs for which new questions and plans will be added. DHS invites feedback on the DHS FY 2022-2026 Learning Agenda and continued collaboration from relevant communities to inform these and other evidence-building activities that may be included in annual updates.

# **Learning Agenda Development**

DHS engaged internal and external stakeholders throughout fiscal year (FY) 2021 to develop the learning agenda. Collaboration with stakeholders ensures that the Department's learning agenda addresses questions that are relevant, salient, and meaningful to stakeholders inside and outside the Department, and that the learning that results from evidence building will be timely and useful for their decision making. Stakeholder engagement is described below in the context of each stage of the learning agenda development process, and is ongoing. Exhibit 1 and the sections that follow outline the key stages in the DHS FY 2022-2026 Learning Agenda development process.

<sup>&</sup>lt;sup>1</sup> Pub. L. No. 115-435, 132 Stat. 5529 (2019)

**Exhibit 1. DHS Learning Agenda Development Process** 



# **Engage External Stakeholders**

DHS conducted external stakeholder engagement for the learning agenda using well-established mechanisms and relationships. DHS solicited public input regarding questions or studies that could guide DHS evidence-building activities through two Requests For Information (RFI).<sup>2</sup> Social media campaigns and email outreach to 27,000 private sector partners and committee members representing industry and trade groups, professional associations, nongovernmental organizations, advocacy groups, community groups, and the public invited participation in the RFIs.

Members of the public, industry, research, and state and local government communities submitted 17 responses through the Federal Registry and email. In addition, DHS directly engaged other federal agencies, including the Office of Management and Budget, and reviewed priorities of the Administration and Congress in executive orders and memoranda, Congressional hearings, and Government Accountability Office (GAO) audits.

# **Gather Component Questions**

DHS gathered employee input for the learning agenda through a variety of activities. Annual Strategic Reviews, an internal management process conducted to improve program outcomes, provided the first opportunity to engage senior officials and mission program staff in surfacing learning priorities. Briefings with Component senior leaders on the learning agenda development activities sought their priority questions and invited Components' participation.

DHS Components, led by Component members of the DHS Evaluation Officer Council, planned and conducted Component-specific internal stakeholder engagement activities, using meetings, workshops, working groups, executive taskers, and employee engagement forums to identify and prioritize Components' learning agenda questions and proposals. Their activities considered input from external stakeholder engagement, as well as Administration and Department leadership priorities. The DHS Evaluation Officer provided flexible tools and guidance to support Component efforts and hosted weekly webinars and office hours to promote awareness and workforce engagement in Component-led activities.

The participating Components listed below advanced 122 priority questions and proposals that were considered for this learning agenda. More organizations within DHS will participate in subsequent annual activities to update and amend the learning agenda.

<sup>&</sup>lt;sup>2</sup> See Request for Information: Evidence Building Activities, 85 FR 71353 (DHS, 2019)

<sup>&</sup>lt;sup>3</sup> See Request for Information: Evidence Building Activities, 86 FR 8921 (DHS, 2020)

# **Operational Components**

- U.S. Customs and Border Protection (CBP)
- Cybersecurity and Infrastructure Security Agency (CISA)
- Federal Emergency Management Agency (FEMA)
- U.S. Immigration and Customs Enforcement (ICE)
- Transportation Security Administration (TSA)
- U.S. Citizenship and Immigration Services (USCIS)
- U.S. Coast Guard (USCG)
- U.S. Secret Service (USSS)

# **Support Components and Executive Leadership Offices**

- Countering Weapons of Mass Destruction Office (CWMD)
- Federal Law Enforcement Training Center (FLETC)
- Intelligence and Analysis (I&A)
- Management Directorate (MGMT)
- Office of Strategy, Policy, and Plans (PLCY)
- Science & Technology Directorate (S&T)

# **Identify Department Priorities**

DHS systematically prioritized a set of relevant questions and scientifically rigorous evidence building from Components' proposals. A working group of 13 senior Department officials and technical experts,<sup>4</sup> with responsibilities for enterprise-wide coordination and governance of evidence building and data, conducted multiple rounds of systematic review, deliberation, and prioritization of the Components' priority questions and proposals. The results of a criterion-based review of questions and accompanying proposals submitted by Components served as the basis for the working group's prioritization of questions and proposals with high relevance to Administration priorities and high potential to provide scientifically rigorous, timely evidence for decision making.

The working group recommended 30 priority questions and proposals to the DHS Deputy's Management Action Group for inclusion in the learning agenda. Those 30 priority questions addressed 47 of the 122 Component priority questions when accounting for similar or related questions. The working group has been reconstituted as a coordination body to continually promote collaboration and unity of effort across evidence building activities.

<sup>&</sup>lt;sup>4</sup> The working group includes the DHS Evaluation Officer (who is also the Performance Improvement Officer), the DHS Statistical Official, the DHS Chief Data Officer, the DHS Chief Economist, senior scientific officials from S&T, senior operations research experts, and their deputies.

# **Develop Study Plans**

Component members of the DHS Evaluation Officer Council and question champions identified teams to assist the DHS Evaluation Officer in developing study plans. The teams provided subject matter, evidence-building, and data expertise needed to draft plans for inclusion in the DHS FY 2022-2026 Learning Agenda. Teams considered the Learning Agenda Working Group's feedback in their planning and engaged additional stakeholders as needed.

Twenty-seven (27) study plans were fully developed during this stage. DHS will establish additional teams as needed to plan evidence building that may be proposed in future annual updates of this learning agenda.

## **Publish and Disseminate**

The *DHS FY 2022-2026 Learning Agenda* is published at the DHS public website and evaluation.gov. The DHS public website will host future updates on and findings of the evidence building undertaken from the learning agenda as well as amendments to the learning agenda that reflect evolving needs. DHS intends to release reports, summaries, and key findings that are appropriate and accessible for external stakeholders and the public, except in the few cases for which disclosure limitations are noted in the study plans.

As DHS envisions continual stakeholder engagement on the learning agenda, we invite feedback on the published *DHS FY 2022-2026 Learning Agenda* and continued collaboration from relevant external communities on questions in which data and expertise reside outside DHS, external researchers have interest in supporting DHS evidence building, and questions reflect shared priorities or have broad implications beyond DHS.

# **Learning Agenda Framework**

The *DHS FY 2022-2026 Learning Agenda* is organized according to the strategic goals in the Department's strategic plan.<sup>5</sup> For each goal, the learning agenda identifies priority questions that build evidence and foster organizational learning. The strategic goals are:

- Goal 1: Counter Terrorism and Homeland Security Threats
- Goal 2: Secure U.S. Borders and Approaches
- Goal 3: Secure Cyberspace and Critical Infrastructure
- Goal 4: Preserve and Uphold the Nation's Prosperity and Economic Security
- Goal 5: Strengthen Preparedness and Resilience
- Goal 6: Champion the DHS Workforce and Strengthen the Department

As required by the Evidence Act, the *DHS FY 2022-2026 Learning Agenda* questions consider a broad range of Administration and Department priorities such as domestic terrorism, immigration, cybersecurity, infrastructure, climate, equity, COVID-19, and the federal workforce.

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<sup>&</sup>lt;sup>5</sup> The DHS Strategic Plan Fiscal Years 2020-2024 (DHS, 2020)

The organization of the DHS FY 2022-2026 Learning Agenda is as follows:

The **Learning Agenda Summary** section outlines summary information for each priority question:

- the primary DHS strategic goal and objective number addressed by the question, or crosscutting if multiple goals are addressed;
- the proposed evidence-building activity(s) for each priority question, including foundational fact finding (FFF), policy analysis (PA), performance measurement (PM), and program evaluation (PE);
- the fiscal year in which evidence building will start; and
- the timeframe for expected results, indicated short term (ST) if results are expected FY 2022-2024 and long term (LT) if results are expected in FY 2025-2026, or if the activity is recurring.

The **Study Plans** section is organized by strategic goal and provides plans for each priority question. The study plans describes:

- the strategic or operational background for the priority question and the primary strategic objective addressed;
- the proposed evidence building, including the evidence-building activity(s), data, methods, analysis, and tools needed; and
- the anticipated use and dissemination of findings from evidence building.

Three sections provide additional information about DHS evidence building.

- The **Data Priorities** section describes general data types and named data sets that are proposed for DHS evidence building.
- The Study Types, Data collection Methods, and Analytic Approaches section provides more explanation of commonly used and aspirational aspects of DHS evidence-building activities.
- The **Challenges and Mitigating Strategies** section describes barriers to evidence building that are common across DHS organizations and collective solutions DHS is deploying to overcome such barriers.

The information included in this plan has been collaboratively developed with the Components that are the principal producers and users of the evidence and meets Evidence Act and OMB requirements. The details provided ensure that DHS stakeholders have a clear and collective understanding of what priority evidence building is intended and how it will be used to inform decision making in the next four years.

# Learning Agenda Summary

Exhibit 2 provides a summary of the learning agenda's evidence-building questions and plans.

**Exhibit 2. Summary of DHS Evidence Building Questions and Plans** 

Question ID	Priority Question	Strategic Objective	Evidence Building	Planned Start	Expected Results		
Strategic Goal 1: Counter Terrorism and Homeland Security Threats							
G1-Q1	In what ways do service interventions funded through violence and domestic terrorism prevention grants contribute to DHS goals for reducing individuals radicalizing to targeted violence and terrorism?	1.2	PM, PE	FY22	LT		
Strategic Go	Strategic Goal 2: Secure U.S. Borders and Approaches						
G2-Q1	What "push" and "pull" factors at the national and local levels predict increases/decreases in the numbers of noncitizens arriving at the Southwest Border?	2.1	FFF	FY22	LT		
G2-Q2	What effect, if any, have changes in southern land border controls had on migrant encounters at sea?	2.1	FFF	FY22	LT		
G2-Q3	How accurate were DHS's estimates of the benefits and costs in the regulatory impact analysis for the regulation, "Standards to Prevent, Detect, and Respond to Sexual Abuse and Assault in Confinement Facilities"?	2.3	PE	FY22	ST		
G2-Q4	What, if any, person and case characteristics predict higher likelihood of specific immigration enforcement outcomes and time between border encounter and final outcome?	2.3	FFF	FY22	LT		
G2-Q5	What factors, if any, help predict rates and lengths of nonimmigrant overstays?	2.3	FFF	FY22	LT		
G2-Q6	What, if any, person and case characteristics predict higher likelihood of receiving specific immigration benefits?	2.4	FFF	FY22	LT		
G2-Q7	What are the characteristics of people who naturalize? What demographic variables among lawful permanent residents are correlated with the likelihood and timing of naturalization?	2.4	FFF	FY22	LT		
G2-Q8	What are the characteristics of people who online file compared to paper file for immigration benefits?	2.4	FFF	FY22	ST		
G2-Q9	What is the degree and source of variability in USCIS utilization and completion rates, across adjudicative staff, at USCIS field offices?	2.4	FFF	FY22	ST		
G2-Q10	To what extent can available data predict adjudications actions sufficiently to warrant automation of steps toward completion or to automate whole processes?	2.4	FFF	FY22	ST		

Note: Evidence building includes the following: FFF is foundational fact finding, PA is policy analysis, PM is performance measurement, and PE is program evaluation. Expected results includes the following: short term (ST) if results are expected FY 2022-2024 and long term (LT) if results are expected in FY 2025-2026, or if the activity is recurring.

Question ID	Priority Question	Strategic Objective	Evidence Building	Planned Start	Expected Results	
Strategic Goal 3: Secure Cyberspace and Critical Infrastructure						
G3-Q1	How are stakeholders using cyber, critical infrastructure (CI), and emergency communications (EC) products and services they receive from CISA? To what extent do these products and services add value, such as increasing awareness and closing gaps in capabilities, plans, and policies? What factors prevent stakeholders from using cyber/CI/EC products they receive?	3.2	PM, PE	FY22	ST	
G3-Q2	Do all subgroups of the target population participate in and perceive value and utility of national convenings as mechanisms of information exchange about security and risk resilience? What gaps and unmet needs, if any, exist?	3.2	PE	FY23	ST	
G3-Q3	To what extent has the all-hazards communications unit position-specific training and stakeholder communication unit program enhanced interoperability by (1) creating, maintaining, and deploying a qualified group of people to fulfill Communications Unit (COMU) roles in federal, state, local, tribal, and territorial (SLTT) partner organizations and (2) enhancing integrated, collaborative, communications planning?	3.2	PM, PE	FY23	ST	
Strategic Go	oal 4: Preserve and Uphold the Nation's Prosperity and Eco	nomic Secui	rity			
G4-Q1	Which facilities should have Transportation Worker Identification Card (TWIC) readers to appropriately manage risk?	4.2	FFF, PA	FY22	ST	
G4-Q2	What are the most significant sources of variation in transportation security sector (TSS) operators' implementation of cyber security technology and processes? What do TSS operators report as enablers and barriers to implementation, and what gaps/unmet needs could TSA address?	4.2	FFF	FY22	ST	
G4-Q3	Where does the majority of federally managed fishing activity (both inside the U.S. EEZ and nearby) occur, by season and species?	4.3	FFF	FY22	LT	
Goal 5: Strengthen Preparedness and Resilience						
G5-Q1	How do individuals' preparedness behaviors change over time?	5.1	FFF	FY22	LT	
G5-Q2	How do household income and other demographic characteristics influence the decision to purchase flood insurance?	5.1	FFF	FY22	LT	
G5-Q3	To what extent is FEMA's training and education enterprise providing equitable delivery of curricula to state, local, tribal and territorial (SLTT) constituents?	5.1	FFF	FY22	LT	
Note: Evidence building includes the following: FFF is foundational fact finding. PA is policy analysis. PM is						

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Question ID	Priority Question	Strategic Objective	Evidence Building	Planned Start	Expected Results
G5-Q4	What indicators, measures, methods, and data can better support the evaluation of Homeland Security Grants Program (HGSP) effectiveness as it pertains to maintaining and improving state, local, tribal and territorial (SLTT) and national preparedness?	5.1	РМ	FY22	ST
G5-Q5	What indicators, data, methods, tools and frameworks can FEMA use to build evidence and address disparities in achieving equitable outcomes across FEMA programs (e.g., direct federal assistance and grants) across the agency?	5.3	FFF, PM	FY22	LT
G5-Q6	To what extent were COVID Public Assistance obligations distributed to areas of social vulnerability and high case rates in socially vulnerable areas?	5.3	PE	FY22	LT
Goal 6: Cha	ampion the DHS Workforce and Strengthen the Department				
G6-Q1	Does level of Independent Test Agent (ITA) support throughout the acquisition lifecycle correlate with the adequacy of an acquisition program's test and evaluation outputs (operational effectiveness, suitability, and resilience)?	6.1	PE	FY23	LT
G6-Q2	What are the estimated costs and benefits of DHS vehicle fleet electrification given specialized/law enforcement requirements?	6.3	PA	FY22	ST
G6-Q3	What effects has the adoption of maximum telework flexibilities had on the DHS mission and support for the DHS mission? What sub-groups benefit most/least from telework flexibilities?	6.3	PE	FY22	ST
G6-Q4	What effects has adoption of a standard utilization rate (UR) of 150 sq. ft./person had on the Department's real property footprint? What factors support and hinder implementation of the 150 sq. ft./person standard?	6.3	PE	FY22	ST
G6-Q5	What metrics/indicators can be used to reliably predict cost to maintain materiel readiness requirements for deployed systems in CBP's stated five Enduring Mission Priority Outcomes: Combating Transnational Organized Crime, Counter Terrorism, Facilitate Lawful Travel, Secure the Border, and Facilitate Lawful Trade and Protect Revenue?	6.3	PM	FY22	LT

Note: Evidence building includes the following: FFF is foundational fact finding, PA is policy analysis, PM is performance measurement, and PE is program evaluation. Expected results includes the following: short term (ST) if results are expected FY 2022-2024 and long term (LT) if results are expected in FY 2025-2026, or if the activity is recurring.

# **Study Plans**

# **Strategic Goal 1: Counter Terrorism and Homeland Security Threats**

G1-Q1 In what ways do service interventions funded through violence and domestic terrorism prevention grants contribute to DHS goals for reducing individuals radicalizing to targeted violence and terrorism?

**DHS Strategic Objective:** 1.2 Detect and Disrupt Threats

Timing of Activities: FY 2022-2024

# **Strategy or Operation Background**

Individuals radicalizing to targeted violence and terrorism are a national problem that presents in different ways among individuals. The DHS Targeted Violence and Terrorism Prevention (TVTP) program provides federal support for whole-of-society, locally-based initiatives aimed at preventing radicalization, recruitment, and recidivism through the provision of educational, technical, and financial assistance. The intended result of these services is preventing individuals from radicalizing to violence and providing "off ramps" for individuals that are radicalized to reduce the likelihood of mobilizing to violence. The short period of time that these programs have operated, combined with many factors that influence the radicalization to violence among individuals, leaves this effort open for the development of more robust performance measurement and evaluation efforts.

# **Evidence Building**

Performance Measurement activities will enhance existing grant performance management with new DHS-developed performance indicators and measures for short- to long-term outcomes that contribute to TVTP program goals and objectives. Program Evaluation includes primarily nonexperimental outcome evaluation, but may include impact evaluation, supplemented with case study analysis of completed TVTP grant projects to determine the extent to which and in what ways grants have (1) strengthened community resilience through adaptive social capabilities, (2) improved likelihood of referral and self-referrals to community-based interventions prior to criminal conduct, and (3) prevented recruitment and deradicalization of atrisk individuals.

Non-Disaster Grants system contain data on grant services and products, participation, partnerships, networking, and project-defined outcomes. New data to collect through performance measures, quantitative surveys, qualitative interviews/focus groups, or observations (during site visits) may include information from federal grant recipients and their stakeholders related to DHS-required TVTP program outcomes and new performance measures. Analytic approaches may include descriptive and inferential statistics for quantitative data, qualitative data analysis, and case study analysis. Third-party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding the effectiveness of targeted violence and terrorism prevention practices on outcomes will allow DHS, its federal partners, and grant recipients to better shape policies and programs to implement the national strategic terrorism and targeted prevention strategy consistent with the Constitution and other applicable law and policy. This effort constitutes a first step to establish a comprehensive evaluation approach for the broader Center for Prevention Programs and Partnerships (CP3) portfolio.

Evidence building may engage or be used by CP3, the DHS Science & Technology (S&T) Center of Excellence for National Counterterrorism Innovation, Technology, and Education researchers, DHS S&T Social Science Technology Center researchers, CP3 Regional Prevention Coordinators, FEMA grant recipients, and state and local prevention stakeholders.

# **Strategic Goal 2: Secure U.S. Borders and Approaches**

G2-Q1 What "push" and "pull" factors at the national and local levels predict increases/decreases in the numbers of noncitizens arriving at the Southwest Border?

**DHS Strategic Objective**: 2.1 Secure and Manage Air, Land, and Maritime Borders

Timing of Activities: FY 2022-2026

# **Strategy or Operation Background**

Secure, well-managed borders are needed to protect the U.S. against threats from abroad and to safeguard and expedite the flow of lawful trade and travel. DHS employs near real-time trend analysis to produce operational planning profiles that inform short-term staffing requirements, but the Department lacks a long-term model of the underlying social, economic, security, U.S. policy, and demographic factors that influence immigration.

# **Evidence Building**

Foundational Fact Finding begins with an evidence review of scholarly research publications and other reports to assist researchers in identifying potential country- and local-level factors and data to include in the statistical analysis. Relevant data will be acquired and integrated so that statistical analysis can be conducted to (1) examine relationships among noncitizen border encounters at the Southwest Border (SWB), noncitizens' residence, and country- and local-level factors and (2) develop a model that accurately forecasts land-based SWB encounters.

Critical data systems include the U.S. Border Patrol (USBP) E3 System and the Office of Field Operations (OFO) Unified Secondary system. These and other administrative/operational data include historic land border encounters and noncitizens' prior residence (i.e., country, state, city) before encounter. New data to acquire are country- and local-level economic, security, and environmental conditions from researchers and other federal agencies (e.g., U.S. Department of State (DOS) and U.S. Agency for International Development) through open data and data sharing

agreements. Analytic approaches may include descriptive and inferential statistics as well as advanced data mining and analytics. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding and anticipating the numbers of expected encounters at the SWB is critical for appropriately resourcing DHS operations and coordinating partnerships to reduce unauthorized flows. Understanding factors that influence migration to the SWB, including root causes like economic and security conditions as well as dislocation associated with environmental change and natural disasters, may inform other DHS strategic program efforts, such as interventions within noncitizens' communities of residence.

Evidence building may engage or be used by the DHS Office of Policy, the CBP Planning, Analysis, and Requirements Evaluation Directorate, ICE Enforcement and Removal Operations, ICE Strategy and Operations Analysis unit, ICE Office of the Principal Legal Advisor, DHS Intelligence and Analysis, USCG Marine Law Enforcement, USCIS Refugee and Asylum and International Operations division, and other federal partners at Department of Justice, Department of Health and Human Services, DOS, U.S. Agency for International Development, and the National Security Council.

# G2-Q2 What effect, if any, have changes in southern land border controls had on migrant encounters at sea?

**DHS Strategic Objective**: 2.1 Secure and Manage Air, Land, and Maritime Borders

**Timing of Activities:** FY 2022-2026

# **Strategy or Operation Background**

Sophisticated smuggling enterprises, border tunnels, go-fast vessels, and other elusive travel methods allow noncitizens and human smugglers to evade border security at designated ports of entry. DHS deploys a combination of people, technology, infrastructure, and aviation and marine assets across U.S. land and sea borders and approaches between designated ports of entry. These assets improve situational awareness of the people, vehicles, aircraft and marine vessels approaching U.S. land and sea borders and interdiction, as needed, to thwart attempts at unlawful entry through maritime pathways. Annually reported performance measures include migrant interdiction effectiveness in the maritime environment and, separately, rate of interdiction effectiveness along the SWB between ports of entry.<sup>6</sup>

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<sup>&</sup>lt;sup>6</sup> See <a href="http://www.dhs.gov/performance-accountability">http://www.dhs.gov/performance-accountability</a>

# **Evidence Building**

**Foundational Fact Finding** includes integration of relevant data and statistical analysis to examine relationships among noncitizen at-sea encounters, land border encounters, and land border controls. The activity will also attempt to build a predictive model for at-sea encounters, or a comprehensive land-marine model of migrant total flow.

USCG Marine Law Enforcement, USBP E3, and OFO Unified Secondary systems include administrative/operational data for historic at-sea encounters, land border encounters, and land border controls and, for some data, include state, local, and international law enforcement partner reporting. Analytic approaches may include descriptive and inferential statistics and advanced data mining and analytics. This effort may leverage the USCG's planned Surveyor data aggregation system and tools, or their successors. Given the dependence on evidence and models in priority question G2-Q1, the start and completion of this work may be delayed.

## **Evidence Use and Dissemination**

Understanding whether and how maritime migration flow changes with stronger or weaker land border controls and interdiction rates allows DHS to optimize its allocation and positioning of maritime patrol assets to maximize interdictions of noncitizens and human smugglers attempting unlawful entry to the U.S.

Evidence building may engage or be used by USCG Office of Maritime Law Enforcement; CBP Air and Marine Operations, CBP Office of Field Operations, U.S. Border Patrol, ICE Enforcement and Removal Operations, ICE Homeland Security Investigations, USCIS, DOS Bureau of Population, Refugees, and Migration, DOS Office to Monitor and Combat Trafficking in Persons, Department of Defense, Drug Enforcement Agency, Federal Bureau of Investigation, Southern California and Florida Regional Coordinating Mechanisms, state and local law enforcement, and international partners.

G2-Q3 How accurate were DHS's estimates of the benefits and costs in the regulatory impact analysis for the regulation, "Standards to Prevent, Detect, and Respond to Sexual Abuse and Assault in Confinement Facilities"?

**DHS Strategic Objective:** 2.3 Enforce U.S. Immigration Laws

Timing of Activities: FY 2022-2023

# **Strategy or Operation Background**

Executive Order (E.O.) 12866 of September 30, 1993, Regulatory Planning and Review, begins with the premise, "The American people deserve a regulatory system that works for them ... and improves the performance of the economy without imposing unacceptable or unreasonable costs on society ... regulations that are effective, consistent, sensible, and understandable." It is with these and related societal goals in mind that an assessment of both the potential costs and benefits of the intended regulation is generally performed by Federal regulatory agencies when they propose new regulations. E.O. 12866 directs that agencies shall assess both the costs and the benefits of intended regulations "and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs." It further advises that such decisions should be based on "the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation." The Executive Order recognizes that reasoned prediction of the benefits and costs of an intended regulation is generally, challenging. Accordingly, it is useful for agencies to analyze costs and benefits retrospectively in order to determine how accurate their predictions have been by examining the actual costs and benefits of their regulations.

Different regulatory agencies face their own unique challenges in performing analyses of costs and benefits due to the characteristics of their subject areas. DHS's regulations involving the management of confinement facilities belongs to a unique subject area that warrants special consideration in the development of regulatory analyses at DHS. By retrospectively assessing costs and benefits performed for a recent regulation in this area, DHS will be able to learn more about the efficacy of its predictive analytical methods, which will better enable DHS to perform more accurate benefit-cost analyses in this subject area moving forward. For this purpose, DHS chose the analysis for a significant, relatively recent regulation for which the prediction of benefits and costs were challenging: Standards to Prevent, Detect, and Respond to Sexual Abuse and Assault in Confinement Facilities.<sup>8</sup>

# **Evidence Building**

**Program Evaluation** activities include a summative economic analysis, or evaluation, to determine actual benefits and costs of the rule, compared with the original projection of costs and benefits. Existing data may include all of the data that DHS used in developing the original regulatory analysis (for example, data on costs of personnel, training, documentation, and audits and industry estimates of unit avoidance values for sexual abuse), plus any other, more-recent data from the same sources. An evidence review, such as a literature review, may provide

<sup>&</sup>lt;sup>7</sup> Executive Order (E.O.) 12866 of September 30, 1993, Regulatory Planning and Review (Executive Office of the President, 1993)

<sup>&</sup>lt;sup>8</sup> Standards to Prevent, Detect, and Respond to Sexual Abuse and Assault in Confinement Facilities: Final Rule 79 Fed. Reg. 13.099 (DHS, 2014)

alternative sources of related information from scholarly research publications, research and analysis reports of other federal agencies, or other federal staff with subject matter expertise in the topic area of the regulation. Analytic approaches may include descriptive and inferential statistics, benefit-cost or break-even analysis, and qualitative data analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Comparing actual benefits and costs of the rule with the original analysis baseline and projected estimates, and how critical assumptions informed those estimates, will provide valuable lessons for improving DHS regulatory analyses. Recommendations on how DHS assessments of costs and benefits could be improved, as suggested from findings, will be shared among DHS regulatory economists who work in related areas so that their own assessments of costs and benefits may benefit from these recommendations in the future.

Evidence building may engage or be used by ICE Office of Regulatory Affairs and Policy, DHS Office of the General Counsel Regulatory Affairs Law Division, regulatory agencies within DHS, and regulatory agencies in other Departments that perform similar work.

G2-Q4 What, if any, person and case characteristics predict higher likelihood of specific immigration enforcement outcomes and time between border encounter and final outcome?

DHS Strategic Objective: 2.3 Enforce U.S. Immigration Laws

Timing of Activities: FY 2022-2026

# **Strategy or Operation Background**

The U.S. immigration enforcement system is the most complex of the Department's interagency missions and until recently data systems have hindered analysis of individuals' history across the enforcement lifecycle. DHS established and continues to mature an immigration data domain to standardize immigration data collection and link records across the Department, though a Department-wide approach to collecting critical individual data needed to identify individuals from underserved groups such as race, ethnicity, sexual orientation and gender identity (SOGI), and disability is still needed. One intended result is improved analysis of structural factors and individual characteristics that influence enforcement outcomes and end-to-end processing times, including disparate outcomes in immigration enforcement. DHS summarizes immigration enforcement in the *Immigration Enforcement Actions Annual Flow Report*, and the annual *Enforcement Lifecycle Report* describes final or most current outcomes associated with previous SWB encounters.

<sup>&</sup>lt;sup>9</sup> See https://www.dhs.gov/immigration-statistics/enforcement-actions

<sup>&</sup>lt;sup>10</sup> See https://www.dhs.gov/immigration-statistics/special-reports/enforcement-lifecycle

# **Evidence Building**

Foundational Fact Finding includes continued data integration and then statistical analysis to examine specific relationships between noncitizen individual factors and enforcement outcomes, individual factors and end-to-end processing times, case factors and enforcement outcomes, and case factors and end-to-end processing times. Individual characteristics are citizenship and country's willingness to accept deportees, statelessness, sex, language, age, family status, immigration status at time of arrest, and criminality. Case factors include initial disposition, arrest location, detention center, basis of claim, transfers, Alternatives to Detention enrollment, legal representation, court location, and immigration judge. Enforcement outcomes include positive credible/fear determinations, removals, removals in absentia, unexecuted removals, and relief from return.

The Office of Immigration Statistics (OIS) Statistical Immigration System of Record contains most of the information needed on individual characteristics, case factors, outcomes, and processing times. Additional DHS administrative data that may support evidence building include ICE Alternatives to Detention data, DHS Prison Rape Elimination Act data, other data collected by the Immigration Detention Ombudsman and Office for Civil Rights and Civil Liberties (CRCL). New data to collect or acquire include race, ethnicity, SOGI status, and disability from certain noncitizens. DHS will attempt to access these data from other federal statistical data (e.g., U.S. Census data) through restricted use data licenses and data linking. Alternatively, DHS may consider creating new, standardized form fields for collecting these data across the immigration data domain. Analytic approaches may include descriptive and inferential statistics. Third party research support is not anticipated.

# **Evidence Use and Dissemination**

Understanding how individual characteristics and case-related factors influence enforcement outcomes and processing times can help DHS identify issues that warrant further analysis and evaluation, improve enforcement processes and enforcement priorities, reduce litigation risk, and mitigate disparate enforcement outcomes. Evidence building may engage or be used by the DHS Office of Policy, Office of the Immigration Detention Ombudsman, CRCL, the CBP Planning, Analysis, and Requirements Evaluation Directorate, ICE Enforcement and Removal Operations, ICE Office of the Principal Legal Advisor, the Department of Justice Executive Office for Immigration Review, the Department of Health and Human Services Office of Refugee Resettlement, organizations providing legal orientation programs, and numerous external immigration research and advocacy organizations.

G2-Q5 What factors, if any, help predict rates and lengths of nonimmigrant overstays?

DHS Strategic Objective: 2.3 Enforce U.S. Immigration Laws

Timing of Activities: FY 2022-2026

# **Strategy or Operation Background**

While only a small percentage of nonimmigrant visitors overstay their authorized period of admission, overstayers make up 40-50 percent of the total U.S. unauthorized immigrant population. DHS has instituted various initiatives to proactively prevent overstay violations, such as direct notifications to nonimmigrant visitors, outreach, and education programs. Yet the Department has only recently developed reliable data on certain nonimmigrant exits, and data on overstayers is contingent on the Department's still-evolving ability to track nonimmigrant adjustments of status and departures through land ports of entry. Each fiscal year, DHS publishes an annual *Entry/Exit Overstay Report*<sup>11</sup> that provides country-by-country overstay rates for a subset of air and sea nonimmigrant classes of admission.

# **Evidence Building**

**Foundational Fact Finding** includes data integration, additional data validation, and then statistical analysis to examine relationships among individual factors, visa type/class of admission, likelihood of overstay, and length of overstay. These data will be incorporated into the OIS Statistical Immigration System of Record to improve statistics reported in OIS's Estimates of the Unauthorized Immigrant Population Residing in the United States.

Existing data from the OIS Statistical Immigration System of Record and CBP Arrival and Departure Information System provide information on nonimmigrant individual characteristics (such as country of birth, sex, race, ethnicity, language), citizenship, visa type/class of admission, inflow-outflow, and overstay resolutions. Additional research and data on visa issuance and overstays may be acquired from the DOS. Analytic approaches may include descriptive and inferential statistics. Third party research support is not anticipated.

# **Evidence Use and Dissemination**

Understanding whether and what factors predict future visa overstays can inform DHS and DOS policies about visa issuance and admissions, improve preventative measures to deter violations, and ensure appropriate resourcing for DHS visa overstay enforcement operations. The OIS will also use available data on overstay lengths to strengthen its estimates of the resident unauthorized population. Evidence building may engage or be used by DHS Office of Policy, CBP Office of Field Operations, ICE Homeland Security Investigations, and the Department of State Offices of Consular Affairs and Fraud Prevention.

# G2-Q6 What, if any, person and case characteristics predict higher likelihood of receiving specific immigration benefits?

**DHS Strategic Objective**: 2.4 Administer Immigration Benefits to Advance the Security and Prosperity of the Nation

<sup>&</sup>lt;sup>11</sup> See <a href="https://www.dhs.gov/publication/entryexit-overstay-report">https://www.dhs.gov/publication/entryexit-overstay-report</a>

# Timing of Activities: FY 2022-2025

# **Strategy or Operation Background**

DHS adjudicates about eight million requests for immigration benefits a year; however, until recently, data systems have hindered analysis of individuals' history across the benefits lifecycle, including the pathways noncitizens follow in transitioning from temporary nonimmigrants to lawful permanent residents to naturalized citizens. DHS established and continues to mature an immigration data domain to standardize immigration data collection and practices and link records across the Department. A Department-wide approach to collecting critical individual characteristics such as race, ethnicity, and SOGI is still needed.

DHS currently summarizes immigration benefits in separate annual reports: *U.S. Nonimmigrant Admissions*, <sup>12</sup> *Refugees and Asylees*, <sup>13</sup> *U.S. Lawful Permanent Residents* (LPRs), <sup>14</sup> and *U.S. Naturalizations*. <sup>15</sup> This study would serve as the basis of a future Immigration Benefits Lifecycle Report that maps non-citizens' pathways across different nonimmigrant statuses and identifies case- and individual-level factors that are associated with different application rates and results, including potential disparities in benefits outcomes.

# **Evidence Building**

**Foundational Fact Finding** includes data integration and then statistical analysis to examine relationships among case- and individual-level factors and benefit applications and outcomes for each application type.

Critical data systems for evidence building include the OIS Statistical Immigration System of Record and USCIS Electronic Immigration System, USCIS Computer Linked Application Information Management System, and Central Index System. These existing data provide information on individual characteristics, case factors, adjudicator characteristics, application/form, and benefit outcomes. Individual characteristics are country of birth, country of nationality, sex, education, occupation, and limited data on race, ethnicity, and language. Case factor data includes nonimmigrant and LPR class of admission, relationship to US sponsor, and adjudicator. Key benefit outcomes include nonimmigrant visa renewal, adjustment to LPR status, and naturalization. New data to collect or acquire include race, ethnicity, SOGI, education, language, occupation, and English language proficiency for some noncitizens. DHS will attempt to access these data from other federal statistical data (e.g., U.S. Census data) through restricted use data licenses for data linking to DHS data; alternatively, DHS may consider creating new, standardized form fields for collecting these data across the immigration data domain. Analytic

<sup>&</sup>lt;sup>12</sup> See https://www.dhs.gov/immigration-statistics/nonimmigrant

<sup>&</sup>lt;sup>13</sup> See https://www.dhs.gov/immigration-statistics/refugees-asylees

<sup>&</sup>lt;sup>14</sup> See <a href="https://www.dhs.gov/immigration-statistics/lawful-permanent-residents">https://www.dhs.gov/immigration-statistics/lawful-permanent-residents</a>

<sup>&</sup>lt;sup>15</sup> See https://www.dhs.gov/immigration-statistics/naturalizations

approaches may include descriptive and inferential statistics. Third party research support is not anticipated.

#### **Evidence Use and Dissemination**

Understanding how noncitizen individual characteristics and case-related factors influence specific outcomes enables DHS to identify issues that warrant further analysis and evaluation, improve immigration benefits processes and programs, reduce DHS litigation risk, and mitigate disparate outcomes in the benefits system. Evidence building may engage or be used by the DHS Office of Policy, CRCL, USCIS Field Operations Directorate, USCIS Ombudsman, USCIS Office of Citizenship, USCIS Office of Policy, and numerous external immigration research and advocacy organizations.

G2-Q7 What are the characteristics of people who naturalize? What demographic variables among lawful permanent residents are correlated with the likelihood and timing of naturalization?

**DHS Strategic Objective**: 2.4 Administer Immigration Benefits to Advance the Security and Prosperity of the Nation

Timing of Activities: FY 2022-2025

# **Strategy or Operation Background**

The U.S. immigration system must be responsive to the flow of demand from around the world while safeguarding security and prosperity of the Nation. DHS provides customer-oriented immigration benefits and information services at home and abroad that promote rights, responsibilities, and importance of citizenship. A seven-agency Interagency Working Group is currently developing a comprehensive national strategy to promote naturalization for qualified noncitizens. The intended result is more noncitizens lawfully reaching their potential in the U.S. through naturalization.

On a periodic basis, DHS reports on characteristics of people who naturalized,<sup>16</sup> describing demographic and socio-economic characteristics of lawful permanent residents (LPR) that naturalized in a particular timespan (typically, five years). DHS also reports trends in naturalization rates<sup>17</sup> describing naturalization for immigrants who obtained LPR status by immigrant cohort, region and country of birth, and class of admission. The statistics produced from this priority question will support future updates and provide new information for expanding these reports.

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<sup>&</sup>lt;sup>16</sup> Characteristics of People Who Naturalized Between FY 2015 and FY 2019 (DHS, 2021)

<sup>&</sup>lt;sup>17</sup> Trends in Naturalization Rates: FY 2018 Update (DHS, 2021)

# **Evidence Building**

**Foundational Fact Finding** involves statistical analysis to describe group characteristics of people who naturalize and statistical comparison of characteristics and outcomes of different LPR cohorts. An analysis of time-to-event (event being naturalization) will estimate and describe the naturalization-eligible population and identify factors that increase probability to naturalize.

Data from the USCIS Electronic Immigration System, USCIS Computer Linked Application Information Management System, and Central Index System data, mainly collected in I-485 and N-400s forms, provide information on individual, socioeconomic, and case characteristics. Individual and socioeconomic characteristics include region and country of birth, age, gender, marital status, education attainment, and income. Case characteristics includes years in LPR status and class of admission. No new data collection is anticipated. Analytic approaches may include descriptive and inferential statistics. Third party research support is not anticipated.

## **Evidence Use and Dissemination**

Understanding trends in the characteristics of people who naturalize, factors that increase probability of naturalization, and projected future naturalization volume enables DHS to better promote naturalization through national and community-level outreach efforts, support workload planning for efficient naturalization request processing, and inform rulemaking for naturalization fees.

Evidence building may engage or be used by USCIS' Office of Citizenship, Field Operations Directorate, Office of Performance and Quality, and Office of the Chief Financial Officer, as well as the Interagency Working Group on Promoting Naturalization, which includes Departments of Labor, Health and Human Services, Education, and others. Organizations preparing lawful permanent residents for citizenship or conducting outreach to lawful permanent residents about citizenship would also benefit from understanding existing naturalization trends to tailor services.

# **G2-Q8** What are characteristics of people who online file compared to paper file for immigration benefits?

**DHS Strategic Objective**: 2.4 Administer Immigration Benefits to Advance the Security and Prosperity of the Nation

Timing of Activities: FY 2022-2024

# **Strategy or Operation Background**

The U.S. immigration system must be responsive to the flow of demand from around the world while safeguarding security and prosperity of the Nation. DHS has established electronic filing procedures for a select number of application and petitions for immigration benefits that provides information needed to make immigration decisions to appropriate agencies electronically and in real-time, yet only 30-60 percent of those applications are filed online. Increasing

the proportion of online filers improves public access to government information and services, and government efficiency in adjudication of applications and petitions for immigration benefits.

# **Evidence Building**

**Foundational Fact Finding** involves statistical analysis to describe group characteristics and statistical comparison of people who do and do not online file.

Critical data systems include USCIS Electronic Immigration System, USCIS Computer Linked Application Information Management System, and Enterprise Citizenship and Immigration Services Centralized Operational Repository (eCISCOR). These existing administrative/operational data contain information on individual and socioeconomic characteristics and application or petition type. Individual and socioeconomic characteristics include region and country of birth, age, gender, marital status, education, and income. Although new data collection is not anticipated, the results of evidence building may inform future research and related data collection to better understand benefits, deterrents, and challenges of online filing from program customers. Analytic approaches may include descriptive and inferential statistics. Third party research support is not anticipated.

#### **Evidence Use and Dissemination**

Understanding trends in the characteristics of applicants and petitioners that do and do not online file could assist DHS in identifying potential inequities among the two populations. Further, factors that correlate to filing behaviors may indicate whether or not the service is accessible and usable by everyone who needs it and may shed additional light on barriers to entry for use of these services. These new understandings may help DHS improve the online filing process to better address customer needs and identify where additional analysis or evaluation is needed.

Evidence building may engage or be used by USCIS' Office of Performance and Quality, Citizenship and Applicant Information Services, Office of Information Technology, Office of Information and Document Production, Office of Policy and Strategy, External Affairs Directorate, Public Affairs, and multiple other USCIS offices and directorates responsible for immigration services. Immigrant stakeholder groups and researchers may also benefit from this research.

G2-Q9 What is the degree and source of variability in USCIS utilization and completion rates, across adjudicative staff, at USCIS field offices?

**DHS Strategic Objective**: 2.4 Administer Immigration Benefits to Advance the Security and Prosperity of the Nation

Timing of Activities: FY 2022

# **Strategy or Operation Background**

DHS adjudicates about eight million requests for immigration benefits a year, and variability exists across adjudicative staff, at DHS (USCIS) field offices and Service Centers, and across workload streams. DHS regularly assesses adjudication efficiency metrics such as the utilization rate (the percentage of officer work time devoted to adjudication) and completion rate (the time it takes to adjudicate each benefit type, on average). This information is critical for determining optimal agency staffing, staffing needed to address the backlog, and new or changing workloads.

# **Evidence Building**

**Foundational Fact Finding** includes statistical analysis of benefit adjudication to include a comparison of utilization and completion rates across adjudicative staff and field offices by application/petition form types. Adjudication milestones and workload effort will also be reviewed to understand variation in efficiency metrics and correlation with other operational factors that may affect these rates.

Critical data systems include the USCIS Electronic Immigration System, USCIS Computer Linked Application Information Management System, and eSTAT. Existing data includes the aggregated efficiency metrics used in annual performance measures, but the analysis relies on detailed and comprehensive information on milestones, history action codes, process time stamps, and officer case histories. Existing data are sufficient for form types that have already transitioned into the USCIS Electronic Immigration System (ELIS). Data from forms that are not yet in ELIS may be less comprehensive. Policy, guidance, and other information will be gathered and reviewed as needed to identify relevant operational factors, such as individual-level data entry practices or office-level management practices that may be needed to fully understand sources of variability. Analytic approaches may include descriptive and inferential statistics and advanced data mining and analytics. Third party research support is not anticipated.

## **Evidence Use and Dissemination**

Understanding trends in adjudication between officers and offices will help DHS to identify best practices for efficiency, optimize interview scheduling, and help to reduce case backlogs. The analysis will improve the accuracy and utility of the efficiency metrics that are key inputs to staffing allocation models. If successful, the analysis will be scaled to include the USCIS Service Center Operations Directorate. Evidence building may engage or be used by USCIS operational directorates, Field Operations Directorate, Project Management Office, Office of Performance and Quality, and the Office of the Chief Financial Officer. Disclosure of findings will be limited to DHS.

G2-Q10 To what extent can available data predict adjudications actions sufficiently to warrant automation of steps toward completion or to automate whole processes?

**DHS Strategic Objective**: 2.4 Administer Immigration Benefits to Advance the Security and Prosperity of the Nation

Timing of Activities: FY 2022-2023

# **Strategy or Operation Background**

The eight million requests for immigration benefits received by DHS annually arrive unevenly across the year, creating surges that challenge the inelasticity of DHS workforce, facilities, and budgets. DHS is working towards greater transparency in its operations, reductions in application backlogs, and revised methods of estimating completion times for all application types. Automating adjudication processes across the immigration benefits portfolio would allow DHS to be more responsive to customer demand. These improvements would provide applicants, employers, and communities a much-needed sense of economic and social stability. Automation could result in reallocation of resources to more valuable workloads, or, for example, prevent need for increasing costs while simultaneously decreasing the length of time an applicant waits for their results, thus reducing barriers to immigration.

# **Evidence Building**

**Foundational Fact Finding** includes statistical analysis to examine which factors, if any, in the immigration benefit life cycle can be used as the basis of a model for predicting case approvals, specifically. An assumption in this research is that denials should be handled by humans.

The analysis will use only those data which affect the legal evaluation of a case. For example, individual characteristics such as country of birth are valid because they are required to know if a visa is available for entry, whereas data on race or eye color are not relevant. Critical administrative/operational data include case factors (such as preference category or relationship to US sponsor) and contextual factors such as risk indicators (such as Treasury Enforcement Communication System hits or known association with fraud). The evidence building aims to test if currently available data and analytical systems are sufficient to perform the research; thus, no new data collection is anticipated. Analytic approaches may include descriptive and inferential statistics, advanced data mining and analytics, and network analysis. Third party research support is not anticipated.

## **Evidence Use and Dissemination**

Several preceding learning agenda questions provide foundational analyses about sources of variation in immigration benefit processes and outcomes to help identify conditions under which automation is most needed and appropriate. In this research, understanding what variables can be used to assess or index case complexity will help to properly identify cases for which automated application processing is appropriate. Further, understanding the extent to which current cases can undergo automated processing helps DHS to better align its staffing resources. A meaningful derivative use of the data, for example, is that if DHS can precisely predict outcomes in processes, the same data may support workload forecasting.

Evidence building may engage or be used by USCIS' Office of Performance and Quality, Office of the Chief Data Officer, Field Operations Directorate, Fraud Detection and National Security, Service Center Operations, Office of Performance and Quality, Office of the Chief Financial Officer, multiple USCIS offices and directorates responsible for immigration services, and the DHS OIS. Disclosure of findings will be limited to DHS.

# Strategic Goal 3: Secure Cyberspace and Critical Infrastructure

G3-Q1 How are stakeholders using cyber, critical infrastructure (CI), and emergency communications (EC) products and services they receive from CISA? To what extent do these products and services add value, such as increasing awareness and closing gaps in capabilities, plans, and policies? What factors prevent stakeholders from using cyber/CI/EC products they receive?

DHS Strategic Objective: 3.2 Strengthen the Security and Resilience of Critical Infrastructure

**Timing of Activities: FY 2022** 

# **Strategy or Operation Background**

Critical infrastructure supports our Nation's national security, public health and safety and economic growth. These vital services must be protected against an increasing set of digital, physical, man-made and natural threats to avoid devastating disruptions to the economic security, health, and well-being of all Americans. Critical infrastructure is susceptible to cyberattacks and natural disasters. To strengthen the security and resilience of critical infrastructure, DHS works with federal, state, local, tribal, and territorial (SLTT) and private sector stakeholders through national programs. Through these programs, which are primarily voluntary, DHS conducts vulnerability and consequence assessments, supports exercises, and provides information and solutions for countering emerging threats and hazards.

# **Evidence Building**

**Program Evaluation** includes non-experimental outcome evaluations of CISA's High Value Assets (HVA) and National Exercises programs. The evaluations may address process evaluation questions but will primarily examine the extent to which participating stakeholders access, understand, and use cyber, CI, and EC products and services to take risk-mitigating corrective actions. The findings of the program evaluation may inform new **performance measure development** or revision of existing measures.

Existing data include stakeholder satisfaction and short-term stakeholder corrective actions from the HVA Assessment database, National Exercises After Action Reports, and customer satisfaction surveys, such as from the HVA Survey administered by the U.S. Office of Personnel Management. New data to collect through quantitative surveys and qualitative interviews/focus groups include CISA stakeholders' views of the value and utility of CISA products and services,

the long-term corrective actions taken, factors that influence stakeholders' use of CISA products and services, the benefits and unintended consequences of use, and unmet needs that could be addressed by improving HVA, Exercises, or other CISA programs. Analytic approaches may include descriptive statistics and qualitative data analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding stakeholders' use of products and services and the factors that influence voluntary compliance, enables DHS to more effectively serve its stakeholders. This information helps DHS identify priority areas for improvement and, in response, refine the portfolio of products and services to secure high rates of compliance with standards and guidelines.

Evidence building will engage, or be used by, CISA's operational divisions charged with developing and executing products and services (Cybersecurity, Infrastructure Security, Emergency Communications, Integrated Operations, Stakeholder Engagement, and the National Risk Management Center). Evidence may also be used by external stakeholder governance and coordinating councils, and the target stakeholder populations for CISA services and products.

G3-Q2 Do all subgroups of the target population participate in and perceive value and utility of national convenings as mechanisms of information exchange about security and risk resilience? What gaps and unmet needs, if any, exist?

**DHS Strategic Objective**: 3.2 Strengthen the Security and Resilience of Critical Infrastructure

**Timing of Activities: FY 2023** 

# **Strategy or Operation Background**

Critical infrastructure supports our Nation's security, public health, safety, and economic growth. These vital services must be protected against an increasing set of digital, physical, man-made and natural threats to avoid devastating disruptions to the economic security, health, and well-being of all Americans. To strengthen the security and resilience of critical infrastructure, DHS works with federal, SLTT, and private sector stakeholders through national programs. National convenings, including councils (Federal Senior Leadership Council and SLTT Government Coordination Councils), committees, and informal sector management forums, enable information exchange between DHS and its stakeholders.

# **Evidence Building**

**Program Evaluation** includes non-experimental outcome evaluation of CISA's national convenings. The evaluation may include process evaluation questions but will primarily examine the extent to which DHS staff and participating stakeholders believe that the national convenings (1) provide information that is meaningful, practical, and specific and (2) offer unique opportunities to exchange information across sectors.

Existing administrative/operational data contain information on delivered convenings, stakeholder participation in convenings, and stakeholder satisfaction; these data will expand with the administration of new Paperwork Reduction Act-approved questions that are not yet in use. New data to collect or acquire may include in-depth information from DHS staff and stakeholders through quantitative surveys and qualitative interviews/focus groups about the value and utility of national convenings as mechanisms for relationship-building and information exchange across sectors, how information obtained from the convenings has been used to improve DHS programs to mitigate risk, and unmet needs that could be addressed with improvement to the convenings or other CISA programs. Analytic approaches may include descriptive statistics and qualitative data analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Developing a better understanding of the extent to which national convenings offer meaningful information exchange between CISA and its stakeholders will enable improvements to CISA products and services. Specifically, the evaluation will be used to identify areas for improvement in how CISA collaborates and interacts with stakeholders and, in response to prioritized practices that best support information exchange for infrastructure security and risk resiliency.

Evidence building may engage and/or be used by CISA's Stakeholder Engagement Division, operational divisions (Cybersecurity, Infrastructure Security, Emergency Communications, Integrated Operations), and the target stakeholder populations for the convenings.

G3-Q3 To what extent has the all-hazards communications unit position-specific training and stakeholder communication unit program enhanced interoperability by (1) creating, maintaining, and deploying a qualified group of people to fulfill Communications Unit (COMU) roles in federal, state, local, tribal, and territorial (SLTT) partner organizations and (2) enhancing integrated, collaborative, communications planning?

**DHS Strategic Objective**: 3.2 Strengthen the Security and Resilience of Critical Infrastructure

**Timing of Activities: FY 2023** 

# **Strategy or Operation Background**

Information exchange, situational awareness, and resource prioritization among emergency managers, first responders, and across public and private sectors is vital during catastrophic incidents and events. DHS provides targeted training, technical assistance, and strategic advice and guidance to prepare and support a diverse cadre to fill a variety of critical emergency communications response roles in federal and SLTT partner organizations. The intended result of these efforts is a qualified cadre of COMU-credentialed responders that can enable continuity of communications during a catastrophic incident or event. Other research and reporting from the Nationwide Communications Baseline Assessments and SAFECOM Nationwide Surveys help DHS

to identify evolving capability needs and gaps, major market shifts, and progress toward establishing and sustaining emergency response communications.

## **Evidence Building**

**Performance Measurement** includes the development of new incident measures for emergency communications and State Interoperability Markers. Current measures include (1) communications leader training and adoption and (2) communications exercise objectives. All state measures are self-assessed and scored by states as one of three levels: defined, initial, or optimized. New measures may indicate the rate of accomplishing national emergency goals, number of jurisdictional conflicts, and rates of backup power, overlapping coverage, and route diversity. **Program Evaluation** will consist of a non-experimental outcome evaluation with embedded process evaluation questions to determine COMU role-specific training effectiveness and areas for improvement.

Existing data, such as number and type of COMU-credentialed responders support performance measurement and program evaluation. New data to collect for program evaluation may include information on satisfaction and self-reported learning from trainees through quantitative surveys and qualitative interviews and focus groups. Incident communications position utilization, activities performed, and communications and IT management structure for incidents and planned events will be gathered through Incident Communications Activity Reports. Analytic approaches may include descriptive statistics and qualitative data analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding availability, readiness, and use of trainees for specific types of COMU roles and how they enrich communications planning in Federal and SLTT partner organizations enables DHS to update training products and services, recommend improvements to the National Incident Management System and Incident Command Systems architecture, and better assist partner organizations in prioritizing and addressing COMU gaps.

CISA's Emergency Communications Division (ECD) leads these efforts on behalf of the Department to assure vital information exchange, situational awareness, and resource prioritization among emergency managers, first responders, and across public and private sectors is both reliable and resilient during catastrophic incidents and events. Evidence-building would be used by the CISA Emergency Communications Division to engage FEMA, Federal, and SLTT partners, and technical assistance providers to improve plans that build and sustain capabilities to maintain readiness.

External stakeholder governance and coordinating councils, such as SAFECOM and the National Council of Statewide Interoperability Coordinators (NCSWIC), will also benefit from the evidence. SAFECOM is a stakeholder-supported public safety communications program administered by CISA working with federal government entities to improve emergency response providers' inter-

jurisdictional and interdisciplinary emergency communications interoperability across regional, SLTT, and international borders. NCSWIC is comprised of Statewide Interoperability Coordinators and their alternates from the 56 States and territories. NCSWIC works with public safety responders in their respective regions, state, or territory to create governance structures that promote and enhance interoperable communications.

# Strategic Goal 4. Preserve and Uphold the Nation's Prosperity and Economic Security

G4-Q1 Which facilities should have Transportation Worker Identification Card (TWIC) readers to appropriately manage risk?

DHS Strategic Objective: 4.2 Safeguard the U.S. Transportation System

Timing of Activities: FY 2022-2024

# **Strategy or Operation Background**

Critical maritime infrastructure security requires protecting facilities from unauthorized access that occurs when established security measures are circumvented, eluded, or violated. Installation of Transportation Worker Identification Card (TWIC) readers at maritime facilities regulated under the Maritime Transportation Security Act could be used to integrate perimeter security, access control, and personnel security. TWIC readers could be a cost-effective approach to detecting threats of and reducing risks posed by unauthorized access to or within specific maritime facilities.

# **Evidence Building**

**Foundational Fact Finding** includes ongoing research to develop an assessment methodology that assigns a quantitative risk level to select appropriate maritime facilities. **Policy Analysis** includes formative economic analysis that will use the developed risk model to assess costs and benefits (benefit-cost analysis) of TWIC at certain high-risk facilities.

CISA Chemical Facility Anti-Terrorism Standards and marine facility Risk Management Plans data provide information about maritime facility chemicals of interest inventory, personnel, vulnerability, site security, management plans, and security breaches at high-risk maritime facilities. New data to be collected or acquired include marine facility risk-related threats and consequences through a quantitative survey of maritime facilities and total costs of TWIC Readers from industry data. Analytic approaches may include descriptive and inferential statistics as well as benefit-cost or break- even analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding the relative costs and risk-reduction benefits of TWIC readers at specific maritime facilities allows DHS to determine whether and for which facilities new or revised rulemaking

should mandate TWIC reader installation. DHS must report the assessment to Congress under the Maritime Transportation Security Act.

Evidence building may engage or be used by USCG Office of Standards Evaluation and Development, USCG Office of Port and Facility Compliance, CISA Risk and Data Analysis Section, USCG Office of Regulatory and Administrative Law, DHS Office of General Counsel Regulatory Affairs Law Division, TSA Enrollments Services and Vetting Program, and industry.

G4-Q2 What are the most significant sources of variation in transportation security sector (TSS) operators' implementation of cyber security technology and processes? What do TSS operators report as enablers and barriers to implementation, and what gaps/unmet needs could TSA address?

DHS Strategic Objective: 4.2 Safeguard the U.S Transportation System

Timing of Activities: FY 2022

# **Strategy or Operation Background**

The U.S. transportation system's cyber environment and infrastructure are vulnerable to a wide range of continuously evolving risks stemming from both cyber and physical threats and hazards. DHS assesses and provides security and mitigation guidance through several outreach and information sharing activities. The intended result is that transportation systems sector (TSS) owners and operators mitigate the most significant cyber risks to transportation infrastructure that could impact national security, public health and safety, and economic security and improve the resiliency of the TSS. DHS monitors how TSS owners and operators implement risk mitigation in accordance with the *National Institute of Standards and Technology (NIST) Cybersecurity Framework*. DHS is currently building measures to monitor cybersecurity incidents that have an actual or potential operational impact and has issued three security directives and three national security program amendments, which require owners and operators of certain pipeline, railroad, public transit, and aviation sectors to report cybersecurity incidents to DHS.

# **Evidence Building**

**Foundational Fact Finding** includes a needs assessment that examines the needs of the target populations that, when addressed, result in improved implementation of risk-mitigating critical cybersecurity technology and processes across TSS operator characteristics. The assessment will explore the nature and causes of those needs, set priorities for the future, and consider what adjustments in the Department's approach could better support TSS operators in advancing resilience of the TSS.

<sup>&</sup>lt;sup>18</sup> NIST Cybersecurity Framework Version 1.1 (NIST, 2018)

Critical data for evidence building come from the TSS NIST Cybersecurity Framework Survey and Validated Architecture Design Reviews (VADRs).<sup>19</sup> These existing data include TSS operator characteristics (sector, size, ownership), security posture, and number and nature of recommended risk mitigation activities undertaken. Collectively these data may provide initial insights to challenges of adopting the NIST Cybersecurity Framework, 20 including mitigation activities, and serve as the foundation of case studies. New data to collect from TSS operators through a quantitative survey and qualitative interviews/focus groups include barriers and challenges to implementation of risk mitigation. Analytic approaches may include descriptive and inferential statistics, qualitative data analysis, and case study analysis. Third party research support is anticipated.

## **Evidence Use and Dissemination**

Understanding factors that influence implementation of risk mitigation across different sectors and operators will enable DHS to improve its approach (including exercising its statutory and regulatory authorities in different ways and to the extent necessary) for ensuring the resilience of the transportation security sector. Evidence building may engage or be used by TSA Security Operations and Operation Support directorates, CISA's Vulnerability Management, National Risk Management Center, Stakeholder Engagement, and Cybersecurity Division. Results could also be used by sector risk management agencies, policy makers, industry partners and higher education centers to inform decision making and further research.

# G4-Q3 Where does the majority of federally managed fishing activity (both inside the U.S. Exclusive Economic Zone and nearby) occur, by season and species?

DHS Strategic Objective: 4.3 Maintain U.S. Waterways and Maritime Resources

Timing of Activities: FY 2022

# **Strategy or Operation Background**

The U.S. has the largest Exclusive Economic Zone (EEZ) in the world, encompassing over 2.25 million square miles and 90,000 miles of coastline. DHS, in partnership with the National Oceanographic and Atmospheric Administration (NOAA), provides at-sea enforcement of applicable fisheries regulations. The intended result is achieving national goals for living marine resource conservation and management, including protection of marine mammals and endangered species.

<sup>&</sup>lt;sup>19</sup> In 2021, TSA conducted over 50 VDARs on pipelines. In 2022, TSA has leveraged contracted support to make Cyber Security Evaluation Tool (CSET®) available to all surface transportation owner/operators to perform selfevaluations. CSET® is a stand-alone desktop application that guides asset owners and operators through a systematic process of evaluating Operational Technology and Information Technology.

<sup>&</sup>lt;sup>20</sup> NIST Cybersecurity Framework Version 1.1 (NIST, 2018)

# **Evidence Building**

**Foundational Fact Finding** includes data integration and statistical analysis to establish a dynamic, auto-updating, visual-spatial model (e.g., heat map) for predicting levels of expected fishing activity in and near the U.S. EEZ.

USCG Automatic Identification System and Marine Law Enforcement, NOAA Vessel Monitoring System, NOAA Commercial Fisheries Landings, and NOAA Alaska Region Catch in Area provide critical data for evidence building. These include information on fishing vessel positions, fisheries boardings, activities at boarding, regulation compliance, and interdiction of foreign fishing vessels violating U.S. waters. New data to collect or acquire may include fish stock location, migration, and seasonality as well as landings and catch data from other federal agency regional scientific data sets. Non-federal data on fishing activity, fisheries management, and coastal and marine geographic information system data may be acquired from non-federal, industry data sources and sets. Analytic approaches may include descriptive and inferential statistics and advanced data mining and analytics. Third-party research support is not anticipated.

## **Evidence Use and Dissemination**

Understanding historical fishing activities and landings of federally managed fisheries enables DHS to direct its limited at-sea air and marine patrol assets to where they are most needed to catch violators and protect natural resources. In addition, the question could inform other organizations that establish fisheries regulations and management plans based on best available fisheries science. Evidence building may engage or be used by USCG Maritime Law Enforcement, NOAA National Marine Fisheries Service, NOAA Office of Law Enforcement, Regional Fisheries Management Councils, SLTT fish and wildlife agencies, and other fishing management organizations. Disclosure of data and some findings will be limited to U.S. Government.

# Strategic Goal 5. Strengthen Preparedness and Resilience

G5-Q1 How do individuals' preparedness behaviors change over time?

**DHS Strategic Objective**: 5.1 Build a National Culture of Preparedness

**Timing of Activities:** FY 2022-2026

# **Strategy or Operation Background**

The prevalence of disaster declarations and recovery costs over the last decade demonstrate the need for everyone—at the individual, community, SLTT and federal levels—to improve their preparedness for predictable natural events. DHS conducts research on preparedness, such as the National Household Survey (NHS), and uses that research to inform awareness initiatives that encourage the public to take steps to prepare. Annually DHS fields, analyzes, and publishes statistics from the NHS, which includes a nationally representative sample of 5,000-7,000

individuals' self-perceptions of their own preparedness with respect to a stages of change model. Findings from this research, including how preparedness changes over time, enable DHS to identify strategies to craft preparedness messaging aimed at improving public awareness and self-efficacy, and motivating preparedness behavior change. Yet, more research is needed to understand preparedness of individuals from historically underserved communities.<sup>21</sup>

#### **Evidence Building**

**Foundational Fact Finding** involves annual statistical analysis of nationally representative quantitative survey research data on individuals' preparedness based on the stages of change model, including new data on individuals of nine historically underserved communities starting in FY 2022. As part of this effort, FEMA will pilot online, self-administered surveys and conduct analysis on survey results, response rates, and other indicators of response quality compared with interviewer-mediated telephone surveys to determine how to field the survey in future years. Qualitative behavioral research, consisting of cognitive interviews and focus groups with a subset of the survey sample, will examine what messages motivate preparedness behaviors based on individuals' preparedness stage. Analytic approaches may include descriptive and inferential statistics and qualitative data analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Understanding diverse individuals' stages of preparedness, how preparedness behaviors change over time, and which messages motivate individuals based on their preparedness stage is critical for identifying gaps in the DHS/national strategy for preparedness, informing specific awareness programs, and targeting messaging to individuals and communities in ways that promote equity in preparedness. Evidence building may engage or be used by FEMA Individual and Community Preparedness Division, FEMA regional offices, SLTT partners, and other federal and non-government entities that support or study risk mitigation initiatives.

## G5-Q2 How do household income and other demographic characteristics influence the decision to purchase flood insurance?

**DHS Strategic Objective**: 5.1 Build a National Culture of Preparedness

**Timing of Activities:** FY 2022-2025

#### **Strategy or Operation Background**

Economically vulnerable communities historically experience slower recovery rates from flooding and mitigation for future flood loss. DHS is exploring cost-effective strategies that would increase

<sup>&</sup>lt;sup>21</sup> Executive Order (E.O.) 13985 of January 20, 2021, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (Executive Office of the President, 2021)

affordability of and accessibility to flood insurance, such as reduced-price flood insurance products and alternative mechanisms to advertise and deliver these products. Foundational research to identify factors that correlate with flood insurance purchase will support those efforts. Increasing flood insurance coverage rates and less Stafford Act disaster payouts are important indicators of improved resilience in economically vulnerable communities.

#### **Evidence Building**

**Foundational Fact Finding** includes linking and statistical analysis of flood insurance purchase data and quantitative survey research data to examine relationships among policyholder attributes, household demographics, and flood insurance purchases.

FEMA's National Flood Insurance Program administrative/operational data include information on household demographic and flood insurance purchases. Other federal statistical data, such as U.S. Department of Commerce American Housing Survey data and U.S. Census data, will be acquired to provide information on household demographics, insurance policies, and self-reported flood risk. Geospatial datasets provide community-level data that help to identify and offer additional context about economically vulnerable communities. Analytic approaches may include descriptive and inferential statistics, advanced data mining and analytics, and, potentially, benefit-cost analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Understanding enrollment in and payouts from reduced-price flood insurance products as well as factors that motivate and enable enrollment by historically underserved groups can inform equitable changes in National Flood Insurance Program policies, improved communication about flood risk, and market mitigation products to better address the needs of individuals of economically vulnerable communities.

Evidence building may engage or be used by FEMA Federal Insurance Mitigation Administration, FEMA Flood Insurance Directorate, FEMA Risk Management Directorate, FEMA Office of Equal Rights, other federal and non-government entities that support or study risk mitigation, resilience, and social justice initiatives, and the public.

## G5-Q3 To what extent is FEMA's training and education enterprise providing equitable delivery of curricula to state, local, tribal, and territorial (SLTTs) constituents?

**DHS Strategic Objective**: 5.1 Build a National Culture of Preparedness

Timing of Activities: FY 2022-2026

#### **Strategy or Operation Background**

National readiness depends on our ability to sustain capabilities and address gaps in capabilities of the disaster workforce that is trained to prevent, protect, mitigate, respond to, and support recovery from all hazards. DHS applies contextualized data to assess community and national

threats, hazards, capability targets and gaps, and inform policy that drives agency program activities. Training and educating the nation's emergency managers, first responders, and other whole community partners requires the contextualized data to design and develop curriculum that builds and sustains the right capabilities and reduces risk. Delivering the curriculum to students in an equitable approach is key, with demographic, risk, social vulnerability, and employment data applied in curriculum delivery strategies to ensure the right student in the right course at the right investment for the right outcome.

#### **Evidence Building**

**Foundational Fact Finding** includes ongoing research to develop an assessment methodology through testing which community demographic, risk, social vulnerability, and emergency management workforce parameters and analytic algorithms provide the best means to determine equitable distribution of national preparedness education and training courses across the country geographically.

Existing data collected with the FEMA Resilience Analysis and Planning Tool and the National Risk and Capability Assessment include information on local infrastructure, hazards, risks and resilience indicators. New data to collect or acquire may include community resilience estimates and employment data from other federal statistical data, such as the Community Resilience Estimates and Local Employment Dynamics from the U.S. Census Bureau and U.S. Current Employment Statistics from Bureau of Labor Statistics. Analytic approaches may include descriptive and inferential statistics, advanced data mining and analytics, and network analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

When curated to describe various aspects of readiness and resilience, community and national demographic, risk, social vulnerability, and employment data can inform FEMA and DHS training and education policy and priorities, and guide FEMA training and education delivery planning and decision making. Evidence building may engage or be used by FEMA National Training and Education Division, Center for Domestic Preparedness, the Emergency Management Institute, and the Training Partners Program.

G5-Q4 What indicators, measures, methods, and data can better support the evaluation of Homeland Security Grant Program (HGSP) effectiveness as it pertains to maintaining and improving state, local, tribal and territorial (SLTT) and national preparedness?

DHS Strategic Objective: 5.1 Build a National Culture of Preparedness

Timing of Activities: FY 2022-2023

#### **Strategy or Operation Background**

DHS provides grants to SLTT governments that support preparation for threats and hazards that pose the greatest risk to the security of the United States, including catastrophic events at the nexus of preventing, preparing for, protecting against, and responding to terrorism. Through its investments, DHS endeavors to identify promising practices and build the evidence upon which grant program decisions are made. Previously, DHS conducted pilot studies and an outcome evaluation to test methods of determining the investment benefits of the Homeland Security Grant Program (HSGP) without requisite data. Additionally, in FY 2020 DHS solicited information from stakeholders through a public Request for Information to identify other existing data and evidence for HSGP's influence on SLTT preparedness outcomes.

#### **Evidence Building**

**Performance Measurement** includes enhancement of existing grant performance measurement with new indicators and related data collections that support monitoring and evaluation of HSGP goals and objectives. The activity involves new performance measure development, pilot testing data collections with grantees, and refining data collections before seeking OMB approval under the Paperwork Reduction Act.

Critical administrative/operational data are contained in Threat and Hazard Identification and Risk Assessments (THIRA), Stakeholder Preparedness Reviews (SPR), grant recipient Biannual Strategic Implementation Reports, FEMA investment justifications, and Homeland Security Exercise and Evaluation Program documentation. These existing data include information on SLTT priority setting mechanisms, alignment of investments to SLTT and national priorities, expenditures of funds, and contributions to the building and sustainment of SLTT capabilities from administrative/operational data. New data to collect or acquire may include project-level output performance measures, project service area, and project outcomes derived from THIRA/SPR target and capability statements. Pilot testing may use simple spreadsheet tools to determine the feasibility of collecting form field data for outcome measures before integrating data collection into existing systems for grant application and monitoring. Analytic approaches may include descriptive and inferential statistics and qualitative data analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Developing enhanced measures for understanding the effectiveness of HSGP funds in reducing the risk of terrorism will enable DHS to allocate funds to emerging priorities, communicate contributions to stakeholders and policymakers, and improve the Nation's resilience against terrorism. Evidence building may engage or be used by FEMA National Preparedness Assessments, FEMA Grant Programs Directorate, FEMA Office of Enterprise Grant Services, multiple DHS Components (i.e., CISA, TSA, USCG, CWMD, S&T), and SLTT Emergency Management Practitioners.

G5-Q5 What indicators, data, methods, tools, and frameworks can FEMA use to build evidence and address disparities in achieving equitable outcomes across FEMA programs (e.g., direct federal assistance and grants) across the agency?

**DHS Strategic Objective**: 5.3 Support Outcome-Driven Community Recovery

Timing of Activities: FY 2022-2026

#### **Strategy or Operation Background**

Communities and individuals deserve consistent and systematic, fair, just, and impartial access to and benefit from programs that support their preparedness for and recovery from disasters of all kinds. Increased federal attention on equity provides DHS with an unparalleled opportunity to identify and reduce barriers encountered by underserved and historically marginalized communities and individuals when accessing DHS services, benefits, and opportunities that may create or perpetuate disparities in disaster preparedness and recovery. DHS seeks to understand how to best measure equitable access and outcomes across the different programs, policies, and activities in the FEMA portfolio and assess progress over time. The intended result is improvement in the equitable delivery of services, benefits, and opportunities with reduced or altogether eliminated disparities in preparedness and recovery outcomes.

#### **Evidence Building**

Foundational Fact Finding includes statistical analysis of quantitative survey research and qualitative interview/focus group research from FEMA's 2021 National Corrective Action Program priority to understand and improve reach of disaster assistance services to underserved populations experiencing disasters. An evidence review may be conducted to identify existing evidence on equity-related issues from the U.S. Government Accountability Office reports and scholarly research publications. Audits and assessments of existing administrative data will be conducted to examine existing data sources, data gaps, and research needs to monitor and evaluate future equity efforts. Informed by findings and recommendations, Performance Measurement includes new performance measures/dashboard development and modifications to relevant data collections to track equity issues related to FEMA programs. This activity will iteratively develop, pilot test, refine, and seek OMB Paperwork Reduction Act approval for a system of indicators and measures aligned to FEMA's equity-related program goals and objectives, broadly inclusive of operating contexts, access, delivery, participation, outcomes, and adverse effects.

Existing administrative/operational data include information on applications, eligibility and awards, and some demographic data. New data to collect include comprehensive demographic data from disaster survivors, applicants, and recipients of financial assistance. U.S. Census data may be acquired for data linking with administrative data sets to fill demographic and

socioeconomic data gaps. Analytic approaches may include descriptive statistics and qualitative data analysis. Third party research support is not anticipated.

#### **Evidence Use and Dissemination**

Understanding which and how equity indicators should be measured to identify disparities faced by underserved communities and individuals will enable accountability to long-term equity-related program improvements. Evidence building may engage or be used by FEMA programs and activities, FEMA Office of Equal Rights, FEMA Equity Enterprise Steering Group, DHS Equity Working Group, Recovery and Support Function Leadership Group, FEMA regional offices, and SLTT assistance and grant recipients.

## G5-Q6 To what extent were COVID Public Assistance obligations align with areas of social vulnerability and high case rates in socially vulnerable areas?

**DHS Strategic Objective**: 5.3 Support Outcome-Driven Community Recovery

Timing of Activities: FY 2022-2026

#### **Strategy or Operation Background**

The COVID-19 pandemic created widespread need for state, local, tribal, and territorial (SLTT) government entities and certain nonprofit organizations to undertake emergency measures that addressed the evolving public threats of COVID-19. Socially vulnerable counties, including counties in less urban areas and with higher percentages of racial and ethnic minority residents and people living in crowded housing conditions, had persistently high COVID-19 incidence. Under the Coronavirus Response and Relief Supplemental Appropriations Act of 2021 and the American Rescue Plan Act (ARP) of 2021, DHS provides funding for COVID-19 relief to ease some of the financial stress and burden caused by the virus. This funding supports, among other things, medical care, purchase and distribution of food and certain supplies, non-congregate medical sheltering, and operation of emergency operations centers. The Administration and DHS are committed to equitable delivery of assistance to support the resilience of socially vulnerable communities.

#### **Evidence Building**

**Program Evaluation** includes outcome evaluation to understand the extent of COVID-19 Public Assistance obligations to areas of social vulnerability and high case rates in those areas, the range and frequency of activities supported, and what gaps and barriers may still exist to inform improvements in the program administration.

Administrative/operational data from Public Assistance applications include information about SLTTs and organizations seeking assistance, descriptions of activities and associated costs, obligated Public Assistance or other direct federal assistance rendered. Centers for Disease Control (CDC) Social Vulnerability Index data and COVID-19 case data will be acquired for data linking with administrative data sets to fill demographic and socioeconomic data gaps and case

rates in affected applicant counties. Analytic approaches may include descriptive and inferential statistics and advanced data mining and analytics.

#### **Evidence Use and Dissemination**

Understanding the extent to which COVID-19 Public Assistance obligations align with socially vulnerable and high case communities, the range and frequency of needs addressed, and what unmet needs and gaps remain can help FEMA improve its communication and outreach to vulnerable communities and application processing to ensure equitable awareness and access.

Evidence building may engage or be used by FEMA disaster assistance programs and activities, CDC, FEMA Office of Equal Rights, Office of Disability Integration and Coordination, FEMA Equity Enterprise Steering Group, DHS Equity Working Group, Recovery and Support Function Leadership Group, the White House ARP Implementation Team and public assistance recipients.

## **Goal 6: Champion the DHS Workforce and Strengthen the Department**

G6-Q1 Does level of Independent Test Agent (ITA) support throughout the acquisition lifecycle correlate with the adequacy of an acquisition program's test and evaluation outputs (operational effectiveness, suitability, and resilience)?

**DHS Strategic Objective**: 6.1 Strengthen Departmental Governance and Management

Timing of Activities: FY 2023-2026

#### **Strategy or Operation Background**

Major acquisition programs are susceptible to programmatic, financial, schedule, technical, and operational risks. In 2017, DHS implemented the Independent Test Agent (ITA) initiative, in which ITAs are assigned to lead a series of "test and evaluation" (T&E) activities throughout each major acquisition's life cycle. The test and evaluation activities focus on measuring progress of solution development, and the effectiveness, suitability, and resilience of the developed solutions. These measurements are intended to reduce acquisition risks and improve the likelihood of positive acquisition outcomes, such as cost, schedule, and performance.

#### **Evidence Building**

**Program Evaluation** includes non-experimental outcome evaluation to examine the quantitative correlation and the strength of the relationship between implemented levels of ITA support and the T&E outputs, specifically, "adequacy" of major acquisition programs' T&E. In this context, adequacy is the determination that the T&E conducted was of sufficient rigor and objectivity to provide acquisition program leadership with a valid, reliable analysis of the status of the acquisition product. A comparative qualitative case study design may complement the quantitative outcome evaluation by examining how and why outcomes were achieved and other context factors that influence ITA implementation and acquisition outcomes.

Procurement data captured in the Unified View of Investments, S&T Directorate Signed Program Document Library, and Program Accountability and Risk Management Major Acquisition Oversight sets include information on documented ITA participation at critical milestones, test and evaluation plans, letters of assessment, as well as cost, schedule, and performance outcomes from procurement records.

New data to collect include attributes that describe the level of ITA support to individual acquisition programs. These may be collected through quantitative surveys or qualitative interviews/focus groups with ITAs and other project staff. Analytic approaches may include descriptive and inferential statistics for quantitative data, qualitative data analysis, and case study analysis. Third party research support is not anticipated.

#### **Evidence Use and Dissemination**

Understanding whether and how ITA participation across the acquisition life cycle correlates with the adequacy of test and evaluation to inform acquisition outcomes will inform allocation of resources and other improvements to ITA implementation across DHS. Evidence building may engage or be used by the S&T Test & Evaluation Division, the DHS Office of the Chief Acquisition Officer, Component Acquisition Executive Offices, the DHS Joint Requirements Council, the DHS Program Accountability and Risk Management Office, and ITAs.

## G6-Q2 What are the estimated costs and benefits of DHS vehicle fleet electrification given specialized/law enforcement requirements?

**DHS Strategic Objective**: 6.3 Optimize Support to Mission Operations

Timing of Activities: FY 2022-2023

#### **Strategy or Operation Background**

Section 205 "Federal Clean Electricity and Vehicle Procurement Strategy" of the *Executive Order* 14009 of January 27, 2021, Tackling the Climate Crisis at Home and Abroad, <sup>22</sup> calls for clean and zero-emission vehicles for federal and SLTT government fleets. DHS is developing a 10-year plan to electrify a portion of the Department's vehicle fleet and must consider goals, strategies, and performance measures for its motor vehicle fleet, fuel procurement, and related sustainability and environmental programs. Motor vehicle fleet electrification is intended to improve sustainability and reduce environmental impact; however, the full extent of the costs and benefits of this policy are currently unknown, especially for vehicles that must meet specialized law enforcement requirements.

<sup>&</sup>lt;sup>22</sup> Executive Order 14009 of January 27, 2021, Tackling the Climate Crisis at Home and Abroad (Executive Office of the President, 2021)

#### **Evidence Building**

Policy Analysis includes formative economic analysis, specifically benefit-cost analysis, of fleet vehicle electrification as an alternative to combustion vehicles, including costs of ownership, petroleum fuel use, hazardous waste disposal, building/facility energy efficiency, and disposal requirements for vehicles that meet specialized law enforcement requirements. Market research will be conducted as needed to estimate total cost of ownership, determine charging requirements, and understand hazardous waste and vehicle disposal for electric vehicles that meet specialized law enforcement requirements.

Critical data sets include the Department's Asset Management Data Warehouse, Consolidated Asset Portfolio, and Sustainability Information System and the General Services Administration Federal Automotive Statistical Tool. These data include information on DHS combustion engine motor vehicle fleet characteristics, cost of ownership, petroleum fuel use, and building energy efficiency. New data to collect or acquire from industry or federal research and reports may include the estimated total cost of ownership, hazardous waste and vehicle disposal requirements, specialized/law enforcement requirements for vehicles, and charging requirements. Analytic approaches may include descriptive and inferential statistics, benefit-cost analysis, and qualitative data analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Understanding the costs and benefits of DHS vehicle fleet electrification will enable DHS to determine long-term bulk fuel requirements; identify strategies to offset impacts of vehicle fleet electrification on building energy use; and set goals, strategy and performance measures for both fleet electrification and building/facility sustainability. Evidence building may engage or be used by DHS Office of the Chief Readiness Officer's Assets and Logistics and Sustainability and Environmental Programs, DHS Components' Motor Vehicles and Sustainability and Environmental Programs, General Services Administration, Council on Environmental Quality, Department of Energy Federal Energy Management Program, other federal agencies affected by the order, and vehicle and charging station manufacturers.

G6-Q3 What effects has the adoption of maximum telework flexibilities had on the DHS mission and support for the DHS mission? What subgroups of the DHS workforce benefit the most/least from telework flexibilities?

**DHS Strategic Objective**: 6.3 Optimize Support to Mission Operations

Timing of Activities: FY 2022-2025

#### **Strategy or Operation Background**

The *Telework Enhancement Act of 2010*<sup>23</sup> calls for federal agencies to establish and implement a policy under which employees shall be authorized to telework. The arrival of the COVID-19 pandemic ushered in a new reality for DHS work, workforce, and workplace with the adoption of maximum telework flexibilities. Adopting this policy ensured continuity of DHS operations and operations support with maximal workforce safety; however, the full extent of the costs and effects of this policy are currently unknown.

Much of DHS' mission must be carried out in person or on site. Approximately 65 percent of the Department's employees work in such an environment, including TSA screeners, Customs and Border Protection officers, Border Patrol agents, ICE Detention and Removal officers, Homeland Security Investigations special agents, and U.S. Secret Service special agents. Examining the effects of the Telework Enhancement Act Policy and expanding telework flexibilities should not be done in a vacuum, and DHS must take into consideration a Component's mission, its workforce populations, occupation series, and whether an employee is in a DHS-specific Priority Mission Critical Occupation (PMCO). The Departments PMCOs are those occupations that most directly affect mission achievement and are identified as having the greatest impact to the Department's goals and objectives, such as FEMA Emergency Management specialists, ICE Homeland Security Investigations criminal investigators, ICE Enforcement and Removal Operations deportation officers, and USSS Uniformed Division officers and special agents.

#### **Evidence Building**

**Program Evaluation** may include non-experimental outcome evaluation or quasi-experimental impact evaluation to understand the effects of maximum telework flexibilities on DHS work, workforce, and workplace, considering how effects varied by subgroups, such as organization and job series. Evaluation may include process evaluation questions to explore enablers, barriers, and unintended consequences of participating in telework. Prior to evaluation, an evaluability assessment will be conducted to identify key evaluation questions and determine the most suitable approach for evaluating the program.

Existing data may include information technology and real property costs from financial/cost data available from the Future Years Homeland Security Program and Real Property Capital data; organization and workforce telework participation from administrative/operational data; employee COVID-19/telework experience, engagement, and satisfaction from the 2020 and 2021 Federal Employee Viewpoint and the 2020 Federal Managers Surveys; human capital and operational performance data and reports from aggregate personnel performance data and DHS Annual Performance Plans and Reports, Quarterly Performance Reviews, and Strategic Reviews. New data to collect through quantitative surveys or qualitative interviews/focus groups with the DHS workforce include enablers, barriers, and unintended consequences of participating in

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<sup>&</sup>lt;sup>23</sup> Public Law (P.L.) 111-292 (2010)

telework. Analytic approaches may include descriptive and inferential statistics and qualitative data analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Understanding the quantitative and qualitative effects of maximum telework flexibilities on DHS work, workforce, and workplace during the pandemic will enable DHS to refine telework, physical infrastructure, and human capital strategies, policies, and agency performance measures.

Evidence building may engage or be used by the Offices of the DHS Chief Readiness Support, Information, Procurement, Human Capital, Security and Financial Officers. The equivalent Component-level offices will also support data collection and subsequent policy formulation and implementation. External stakeholders such as the Office of Personnel Management, OMB, and the Government Accountability Office would also benefit from the data, information, and insights gained from the telework policy evaluation.

G6-Q4 What effects has adoption of a standard utilization rate (UR) of 150 sq. ft./person had on the Department's real property footprint? What factors support and hinder implementation of the 150 sq. ft./person standard?

**DHS Strategic Objective**: 6.3 Optimize Support to Mission Operations

Timing of Activities: FY 2022-2023

#### **Strategy or Operation Background**

The Department's real property portfolio accounts for about \$7.5 Billion of the Department's annual spending. In 2015, DHS adopted a standard utilization rate (UR) of 150 sq. ft./person for the Department's real property portfolio based on number of "assigned" full time equivalents (a metric that equates total labor hours to full-time employees). The intended result of adopting a standard UR is to right-size the Department's real estate for its workforce while minimizing underused facilities. The effect on the Department's real estate footprint has been slow and uneven due to (1) reductions occurring primarily when long lease terms expire, which creates opportunities for co-location and consolidations of space, and (2) Congressionally mandated programs and statutory mission requirements across the Department that drive growth, offsetting these reductions. The Department aims to revise this standard using new methods that account for alternative work arrangements, such as telework and remote work. Multiple initiatives are currently underway to gather better information on utilization and space programming requirements.

#### **Evidence Building**

**Program Evaluation** includes non-experimental outcome evaluation to determine effects of the UR standard on the Department's real property footprint and other unintended consequences. Additionally, the evaluation will examine FY 15-FY 20 costs, feasibility, and acceptability, including enablers and barriers, of implementing the UR standard. The study design must account for

partial applicability of the standard to administrative spaces only, co-mingling of administrative and mission spaces resulting in implementation of higher mission space utilization rates, key context factors that limit adoption (e.g., expiration of long lease terms), and long returns on investment. Prior to evaluation, an evaluability assessment will be conducted to identify key evaluation questions and determine the most suitable approach for evaluating the program.

Existing administrative/operational data include information on costs, utilization, occupancy, and workforce location (e.g., from IT network access, physical access, and self-reported workforce location data). New data to acquire includes DHS employee workplace satisfaction from the U.S. General Services Administration (GSA) Tenant Satisfaction Surveys. In addition, the evaluation will collect workforce perspectives on enablers, barriers, and unintended effects of implementing the UR standard through DHS-specific quantitative surveys and qualitative interviews/focus groups. Analytic approaches may include descriptive and inferential statistics and qualitative data analysis. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Understanding the implementation and effects of the current UR adoption rate as well as enablers and barriers of adoption are critical to informing future UR standards, strategies that reduce barriers to and enable implementation of UR standards, and performance goals for adoption of UR standards. Evidence building may engage or be used by the DHS Office of the Chief Readiness Officer Assets and Logistics and Real Property Programs, the Office of the Chief Financial Officer, and Components' Chief Administrative Officers and Real Property Directors. External federal partners include GSA, OMB, other agency stakeholders of the Federal Real Property Council and Federal Facilities Council, and The House Committee on Transportation and Infrastructure.

G6-Q5 What metrics/indicators can be used to reliably predict cost to maintain materiel readiness requirements for deployed systems in CBP's stated five Enduring Mission Priority Outcomes: Combating Transnational Organized Crime, Counter Terrorism, Facilitate Lawful Travel, Secure the Border, and Facilitate Lawful Trade and Protect Revenue?

**DHS Strategic Objective**: 6.3 Optimize Support to Mission Operations

Timing of Activities: FY 2022-2026

#### **Strategy or Operation Background**

Secure, well-managed borders are needed to protect the U.S. against threats from abroad and to safeguard and expedite the flow of lawful trade and travel. A modernized and efficient border management mission requires a combination of trained workforce and operational materiel (technology, systems, assets) that are deployed at and between designated ports of entry along the U.S. land and coastal borders. Operational readiness of materiel must enable the trained

workforce to successfully meet the strategic, operational, and tactical requirements of the DHS border management mission. Optimizing the materiel's reliability and the materiel's supply chain downtime performance outcomes provide for the most cost-efficient materiel readiness.

#### **Evidence Building**

**Performance Measurement** includes performance measures/dashboards development and annual/semi-annual review processes to assess and track performance outcome indicators for availability, reliability, downtime, and ownership cost of materiel against known requirements for 43 individual programs of record and four broader enterprise cross-cutting materiel portfolios (as of February 2022).

Existing administrative/operational data include information on baseline status and user requirements for program- or portfolio-specific materiel availability, reliability, downtime, and cost indicators. In the future, administrative/operational data will also support mission-driven updates to materiel readiness outcome requirements, informed by evolving threats, technology capabilities, maintenance improvements, and operating plans.

Analytic approaches such as activity/flow modeling and failure modes and effects analysis may be used to predict readiness needs and associated cost drivers. This project anticipates deploying an agency-wide Asset Management Tool and a custom dashboard that monitors current status, tracks progress toward achieving outcome requirements, and provides predictive ability for decision makers to prioritize budgets against material life cycle readiness requirements. Third party research support is anticipated.

#### **Evidence Use and Dissemination**

Establishing outcome measures for achieving and sustaining materiel life cycle readiness requirements at best cost and understanding shortfalls in meeting those requirements can inform the alignment of resources needed to address those shortfalls. Tracking progress toward outcome measures provides the discipline and data-driven analytical rigor needed for executive level decision making confidence. Evidence building will engage external stakeholders such as the Department of Defense, Department of Energy, Government Accountability Office, DHS Inspector General, and industry partners. Evidence users include DHS Deputy Undersecretary for Management, DHS Joint Requirements Council, DHS Chief Readiness Support Officer, CBP Deputy Commissioner, six CBP Executive Assistant Commissioners, and seven CBP Portfolio Acquisition Executives. Disclosure of findings will be limited to DHS.

## **DHS Data Priorities for Evidence Building**

Reliable and relevant data are the foundation of all evidence building. DHS establishes and manages a broad range of programs, policies, and regulations to ensure the security of the Homeland. To know which of these is working well and to inform decision making, DHS must have high quality data and contextual evidence. In this regard, data are strategic assets.

The data identified in the preceding Study Plan section were selected to align with the evidence-building objectives, research questions, and study designs described. Before embarking on evidence building, DHS will examine existing data—of the Department, other Federal agencies, SLTT and industry partners, the academic research community, and others—to determine whether they are adequate to address a priority question. In cases where data are insufficient for evidence building, DHS may collect or acquire new data.

The sections that follow describe multiple types of data assets and specific examples from DHS Components and other data owners that were identified in the preceding study plans. These data priorities will benefit from further collaboration with DHS, Component, and other federal agencies' Chief Data Officers to ensure data quality, data access, and data information sharing agreements are sufficient to enable evidence building. The Chief Privacy Officer, relevant Component Privacy Officers, and the Chief Civil Rights and Civil Liberties Officer will support the Department's compliance with relevant legal authorities and privacy, civil rights, and civil liberties protections and the appropriate privacy compliance and other documentation required, such as information sharing agreements, is in place, as appropriate.

## Administrative and Operational Data Systems

DHS generates administrative and operational data in the conduct of its mission. These data are an essential resource for many of the evidence-building activities described in this learning agenda. For the purpose of this document, 'administrative/operational data' includes an array of administrative, regulatory, law enforcement, adjudicatory, financial and other data held by DHS to carry out the administration and operations related to its mission.

Several strengths of administrative/operational data make it valuable for evidence building, including that it

- offers comprehensive data on populations served and affected by DHS programs, which supports a range of study designs and may contain information about important but relatively rare events;
- can have longitudinal structure that enables researchers to follow individuals over time to address societally important questions with long-term horizons;
- may be less likely to have high rates of nonresponse, attrition, and underreporting than survey research and other voluntary data collection directly from individuals, groups, and organizations; and
- allows DHS to conduct in-house studies to examine its strategies and operations.

The following data systems and datasets that have been proposed for use in evidence building are listed in Exhibit 3.

**Exhibit 3. DHS Administrative and Operational Data Assets** 

DHS Component	Administrative and Operational Data
Cybersecurity and Infrastructure Security Agency	Exercises After Action Reports High Value Asset Assessment Database Incident Communications Activity Reports National Council of Statewide Interoperability Coordinators State Interoperability Markers data
Federal Emergency Management Agency	National Flood Insurance Program Pivot System Non-Disaster Grants Management System Grants Reporting Tool
Management Directorate	Asset Management Data Warehouse Consolidated Asset Portfolio and Sustainability Information System Program Accountability and Requirements Management Major Acquisition Oversight System Unified View of Investments
Science & Technology Directorate	S&T Signed Program Document Library
U.S. Citizenship and Immigration Services	Central Index System Enterprise Citizenship and Immigration Services Centralized Operational Repository eSTAT USCIS Computer Linked Application Information Management System USCIS Electronic Immigration System USCIS Global
U.S. Coast Guard	Marine Law Enforcement Automatic Identification System
U.S. Customs and Border Protection	Arrival and Departure Information System Office of Field Operations Unified Secondary System U.S. Border Patrol E3 System Prison Rape Elimination Act data
U.S. Immigration and Customs Enforcement	Alternatives to Detention Program enrollment data ICE Enforcement Integrated Database Prison Rape Elimination Act data

## **Statistical Data and Data Compilation Assets**

While DHS does not have a designated federal statistical agency, the Office of Immigration Statistics and other DHS program offices produce statistics, data compilation products, and interactive visualizations from verified and validated administrative and operational data. These data products support resource allocation, priorities setting, and planning for Departmental and intergovernmental functions, as well as build evidence to support program operations. They are publicly available for use by DHS partners and stakeholders. Statistical data and data compilations that may be relevant to evidence-building activities in this learning agenda are listed in Exhibit 4.

**Exhibit 4. DHS Statistical Data and Data Compilation Assets** 

DHS Component	Statistical Data and Data Compilations
DHS-wide	DHS Annual Performance Report and Performance Measures
Cybersecurity and Infrastructure Security Agency	Chemical Facility Anti-Terrorism Standards (CFATS) Statistics
Federal Emergency Management Agency	Disaster Housing Assistance Disaster Declarations for States and Counties Disaster Declarations for Tribal Nations Fire Incidents for States and Counties Historic Flood Risk and Costs Resilience Analysis and Planning Tool Public Assistance Program Summary of Obligations
Office of Immigration Statistics	OIS Statistical Immigration System of Record Entry/Exit Overstay Immigration Enforcement Actions Flow Enforcement Lifecycle Lawful Permanent Residents Population Residing in U.S. Naturalizations Nonimmigrant Admissions Nonimmigrant Population Residing in U.S. Refugees and Asylees Unauthorized Immigrant Population Residing in U.S.
U.S. Citizenship and Immigration Services	Historic and Current Case Processing Times Semi-monthly Credible Fear and Reasonable Fear Receipts and Decisions
U.S. Customs and Border Protection	CBP Border Enforcement Statistics Southwest Land Border Encounter Statistics Custody Transfer Statistics
U.S. Immigration and Customs Enforcement	Enforcement and Removal Operations Annual Report and Local Statistics

## **DHS Survey and Assessment Data Assets**

Preparedness surveys funded by DHS represent a crucial part of the nation's preparedness data infrastructure. These surveys gather information from nationally representative samples or panels of individuals to measure the public's degree of preparedness for hazards they are likely to face; awareness, attitudes, and experiences that can motivate actions to prepare; successful mechanisms for enhancing preparedness; and areas that need improvement.

DHS (FEMA) Child Safeguarding Guidelines do not allow data collection from children directly. To mitigate this, DHS collects parents' and curriculum instructors' perceptions of the motivators and barriers to youth preparedness, household preparedness and actions taken, ageappropriate youth contributions, and perceived effectiveness of aspects of preparedness programs on motivating youth preparedness.

DHS also conducts numerous large-scale voluntary surveys of Federal, SLTT, and private sector critical infrastructure sector operators to collect data that provide DHS and its SLTT and private sector partners with operational awareness as to the readiness and risk resilience of these systems.

Examples of DHS survey data assets that may support learning agenda priorities are listed in Exhibit 5.

**Exhibit 5. DHS Survey Data Assets** 

DHS Component	Survey Data
Cybersecurity and Infrastructure Security Agency	SAFECOM Nationwide Survey
Federal Emergency Management Agency	Financial Preparedness Survey National Household Survey Pandemic One Year Later Survey
Transportation Security Administration	Transportation Systems Sector NIST Cybersecurity Framework Survey

To fulfill core mission requirements, DHS administers assessments that measure risks, capabilities, and gaps in security and resilience across the nation through standardized and coordinated processes. While these assessments intend to help operators, communities, and sectors understand risk and prioritize mitigation, the data produced are a rich resource for the Department's evidence building and use in decision making. Examples of DHS assessment data assets cited in evidence building plans are listed in Exhibit 6.

**Exhibit 6. DHS Assessment Data Assets** 

DHS Component	Assessment Data
Cybersecurity and Infrastructure Security Agency	Chemical Security Assessment Tool National Risk and Capability Assessment Nationwide Communications Baseline Assessment
Federal Emergency Management Agency	PrepToolkit (Homeland Security Exercise and Evaluation Program) Stakeholder Preparedness Review Tool Threat and Hazard Identification and Risk Assessment
Transportation Security Administration	Baseline Assessment for Security Enhancement Corporate Security Review

#### Other Federal and Non-Federal Data Sets

DHS evidence building may rely on other non-DHS data from Federal, international, or SLTT agencies and partners, private sector industry, and research communities. In some cases, DHS will attempt to link its administrative data with the administrative or statistical data of other

agencies to leverage individual, household, or community demographics and socioeconomic characteristics that DHS does not collect.

Federal administrative and statistical data that may be useful in answering the Department's priority questions include data assets listed in Exhibit 7.

**Exhibit 7. Federal Data Assets** 

Federal Department or Agency	Data System or Sets
National Oceanographic and Atmospheric Administration	Vessel Monitoring System Commercial Fisheries Landings data Alaska Region Catch in Area data
U.S. Census Bureau	American Housing Survey U.S. Census data Community Resilience Estimates Local Employment Dynamics
U.S. Department of Labor	Current Employment Statistics
U.S. Department of State	Bureau of Consular Affairs Visa Issuance Office of Fraud Prevention Overstayers
U.S. General Services Administration	Tenant Satisfaction Survey Federal Automotive Statistical Tool
U.S. Government Accountability Office	2020 Federal Managers Survey
U.S. Office of Personnel Management	Federal Employee Viewpoint Survey (FEVs) High Value Asset Survey

# Study Types, Data Collection Methods, Analytic Approaches for Evidence Building

The Evidence Act requires learning agendas to include detailed methodologies for evidence building. Here we describe the types of studies and efforts undertaken in foundational fact finding, policy analysis, performance measurement, and program evaluation, as well as the common methods of data collection and analytic approaches used in Department evidence building. Since many data collection and analysis methods may trigger privacy compliance or other compliance requirements, methodologies will be coordinated with relevant privacy offices for privacy compliance and other compliance offices, as appropriate.

## **Study Types**

This section describes common study types and efforts that are used in DHS foundational fact finding, policy analysis, performance measurement, and program evaluation. Here we describe the purpose and characteristics of study types. Each relies on a combination of data collection methods and analysis approaches described in subsequent sections.

#### Needs Assessment

DHS conducts needs assessments for formative purposes to systematically assess the needs of its potential or actual customers and beneficiaries, examine the nature and causes of those needs, set priorities for the future, and consider the approaches and resources required for programs to achieve intended goals.

#### • Evidence Reviews

DHS evidence reviews summarize the state of knowledge in a research area based on secondary sources such as scholarly research publications and reports. Literature reviews include substantive findings and theoretical and methodological contributions to a topic, and thus serve as the foundation for many studies. Systematic reviews are a type of literature review that seek to identify, appraise, and synthesize all research evidence on a given topic or question.

#### Statistical Analysis

Although methods and techniques of statistics are used across all evidence-building activities, this learning agenda uses 'statistical analysis' to indicate when federal statistical data, federal administrative/operational data, quantitative survey research data, or combinations of those, are primarily used in quantitative measurements, calculations, models, classifications, and/or sampling methods to describe, estimate, or predict one or more conditions, outcomes, variables, or the relationships between them for groups (not individuals).

#### • Economic Analysis or Evaluation

DHS uses theory-guided analytic methods of economics when results of interest are expressed in terms of economic metrics such as costs, benefits, transfer payments, distributional impacts, and return on investment. Common analysis includes break-even analysis, benefit-cost analysis, cost-effectiveness analysis, economic consequence analysis, and economic impact analysis. Economic analysis can be used for formative purposes to estimate future results and costs to achieve them such as when conducting policy analysis or regulatory impact analysis to inform new policies and regulations. Economic analysis can be used for summative purposes in evaluations to determine actual results and costs, typically compared to alternatives approaches for programs, policies, and regulations.

#### • Performance Measures or Dashboard Development

Performance measures typically use administrative or operational data tabulated in specific ways to support regular, periodic measurement of key indicators of performance in support of progress monitoring and early intervention to improve operations, service delivery, and results. Although DHS has a robust performance measurement system, learning agenda priority questions that indicate performance measurement often intend to develop and deploy new performance measures or dashboards that better enable use of performance information.

#### • Grant Performance Measurement

Grant performance measurement is a systematic way of tracking the characteristics and performance of federal grants. Recent updates to Federal regulations<sup>24</sup> require that Federal agencies' grant performance measurement include agency-specified goals, indicators, targets, baseline data, data collections, expected outcomes, and timelines for accomplishments. These measures allow DHS to show achievement of program goals and objectives, evaluation the effectiveness of grant programs, improve program outcomes, share lessons learned, and foster adoption of promising practices.

#### • Evaluability Assessment

Evaluability assessments are a systematic pre-evaluation examination of the extent to which a program, policy, regulation, or organization can be evaluated in a reliable and credible fashion or to which an evaluation is worthwhile based on the evaluation's likely benefits, costs, and outcomes. It can help answer the questions, "Is the program and its parent organization ready for evaluation," "What type of evaluation is most suitable to assess the program," and "What changes are needed to increase readiness before an evaluation takes place?"

#### • Formative Evaluation

Formative evaluation assesses whether a program, policy, regulation, or organization approach (or some aspect of these) is feasible, appropriate, and acceptable before it is fully implemented. It may include process and/or outcome measures. However, it focuses on learning and improvement and does not aim to answer questions of overall effectiveness. It can help answer the questions, "Is the program, policy, regulation, or organization appropriate for this context," "Does it feasibly address the identified needs," and "Can it be implemented as designed?" Although there are no current learning agenda questions that intend to use formative evaluations, we anticipate conducting formative evaluation in studies that are added to the learning agenda in the future.

#### Process/Implementation Evaluation

Process/implementation evaluation assesses the extent to which essential elements of a program, policy, regulation, or operation are in place; conform to requirements, program design, professional standards, or customer expectations; and are capable of delivering positive outcomes. It can help answer the questions, "Was the program, policy, regulation, or organization implemented as intended?" or "How is it operating in practice?" In the learning agenda, several evaluations study process-related questions to understand underlying mechanisms of outcomes achievement.

#### Outcome Evaluation

Outcome evaluation assesses the extent to which a program, policy, regulation, or operation has achieved certain objectives, and how it achieved these objectives. Outcome evaluations use non-experimental designs characterized by the absence of a control or comparison group. Unlike

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<sup>&</sup>lt;sup>24</sup> 2 CFR § 200.301, Performance Measurement (2021)

impact evaluation, outcome evaluation cannot discern that outcomes result from or are a causal effect of the program. It can help answer the question "Were the intended outcomes achieved?"

#### • Impact Evaluation

Impact evaluation assesses the causal effect or impact of an implemented program, policy, regulation, or operation on outcomes by estimating what would have happened in its absence. This estimation requires the use of experimental (or randomized control trial, RCT) designs or quasi-experimental designs (QED) in which another group is compared to program participants. Experimental/RCT designs randomly assign (e.g., lottery draw) persons to either a treatment group that receives the program or policy intervention or to a control group that does not. Quasi-experimental groups identify a program or policy intervention group and comparison group from pre-existing or self-selected groups (not through random assignment). Impact evaluation can help answer the question, "Does the program, policy, regulation, or organization work, or did it lead to the observed outcomes?"

#### • Behaviorally Informed Innovation

This quantitative method uses a behavioral intervention such as a nudge, default choice, or availability of clear and relevant information, that is studied within a randomized control trial or quasi-experimental study design to determine and quantify the intervention's effectiveness in encouraging positive, helpful decisions and behaviors. Although there are no current learning agenda questions that use behaviorally informed innovation, we anticipate use of this aspirational evidence building in future amendments of the learning agenda.

### **Data Collection Methods**

Data collection methods are the techniques used to gather the information needed to answer the priority questions. When selecting methods for data collection, DHS considers which method is

- more likely to secure the information needed;
- more appropriate given who is being asked to provide the information;
- least disruptive to the program and target populations; and
- most feasible given the available resources.

Common methods DHS uses to collect information directly from people for the primary purpose of evidence building include quantitative surveys, qualitative interviews and focus groups, and observations. DHS uses other methods such as open or public use data access, restricted use data licensing, and data sharing agreements for acquiring existing data sets from non-DHS sources. These methods are described below.

#### Quantitative Surveys

Surveys are predetermined sets of questions, often with set response options, administered to samples or panels of respondents to cost-effectively compile statistical information about

individuals, households, and organizations. DHS uses surveys in different ways. DHS uses surveys to track variables of longer-term interest, as well as to obtain reliable information about conditions through shorter-term studies. DHS conducts low-burden customer satisfaction surveys to gather near real-time impressions of customers' touchpoint(s) or transaction(s) with a government service in terms of trust, overall satisfaction, and experience drivers (e.g., service quality, process, and people, when applicable). DHS also uses surveys of participants in program evaluations to determine their baseline conditions and subsequent outcomes.

#### Qualitative Interviews and Focus Groups

These qualitative data collections use primarily open-ended questions to converse with an individual respondent or with a small group of respondents simultaneously to collect narrative information about a subject, circumstance, or event. DHS uses this method across evidence-building activities to understand the way people think, their motivation, and their attitudes toward the topic or experience. Although qualitative interviews/focus groups cannot be used to infer causality or to measure effectiveness, they are often valuable tools for theory building and developing awareness of factors that affect outcomes. As such they often complement other evidence building such as surveys, economic analysis, and different types of program evaluation.

#### Observation

Observation is an immersive qualitative method for collecting data about people, processes, and cultures, but may be entirely or partially structured (quantitative) or unstructured (qualitative). Structured observations systematically classify behaviors into distinct categories to describe a characteristic or use of a scale to measure behavior intensity. Unstructured observation records all relevant behavior without a system of categorization.

#### Open or public use data access

Open data is freely available, easily discoverable and accessible, and published in ways that allow it to be used by people other than those that originally collected the data. Public-use data is the name often used for Federal statistical survey data that have been anonymized with the individually identifiable information having been recoded or deleted to protect the confidentiality of the survey respondents. DHS uses open or public use data access as one means of acquiring existing data that may be relevant to evidence building.

#### Restricted Use Data Licensing and Data Linkage

Restricted use data licensing is a mechanism for making more detailed data available to qualified researchers. Restricted-use data have a higher level of detail in the data compared to public-use data files. These data typically contain subject data, or individually identifiable information about respondents. DHS may use restricted use data licensing to access other Federal statistical and administrative data for linkage to DHS administrative/operational data. Data linkage means that records from two or more datasets that refer to the same entity are joined. DHS uses this technique to fill important data gaps needed to answer DHS questions that require individual,

household, or community demographics and socioeconomic characteristics that DHS does not collect.

#### Data Sharing Agreements

DHS establishes data sharing agreements when data are being shared across organizations. The agreements typically establish authority, provisions for acceptable data use, confidentiality and other conditions for subsequent release of information, and time limits. DHS increasingly uses data sharing agreements with partner agencies to avoid duplicative collections of mission critical data and to leverage its partners' data collection authorities and assets that are distinct from but relevant to the Department.

## **Analytic Approaches**

Analytic approaches are the techniques used to characterize and understand the interrelations of information and data to answer the priority questions. Analysis is broad in scope, but the following analytic approaches are commonly used at DHS.

#### Descriptive Statistics

Nearly all DHS evidence building uses methods to tabulate summary statistics that characterize cases in a sample data set. Descriptive statistics often focus on quantifying the proportions of various characteristics, major subgroups in the sample, and the shape of the distribution.

#### Inferential Statistics

Some DHS learning agenda studies use inferential statistics to draw conclusions that extend beyond simply summarizing the characteristics of the immediate data. Inferential statistics may specify under what circumstances a sample represents a broader population. Inferential statistics may also be used to identify statistical relationships by testing hypotheses to determine if differences between two or more groups, changes over time, or associations between two or more variables are not likely to occur randomly. Regression models are a common type of inferential statistical analysis used to identify and understand relationships between variables of interest, such as to infer how much of an outcome measure is explained by program participation or other factors of interest.

#### Advanced Data Mining and Analytics

DHS uses artificial intelligence and machine learning techniques applied to structured and/or unstructured data (such as content in natural language text) to detect and visualize hidden patterns in large datasets or use algorithms to build predictive and prescriptive models that allow problems to be anticipated and addressed proactively.

#### Network Analysis

Network analysis is a specific advanced data analytic method that includes techniques for collection, statistical analysis, and visualization of input data—typically from designed surveys or from communication and collaboration systems data—to quantitatively and qualitatively

characterize patterns in a whole system of relationships and parts of a network, such as people or groups of an organization or community. Network analysis can help us to understand the strength, frequency, and nature of interactions, including flows of information, resources, and work.

#### • Benefit-Cost, Cost Effectiveness, and Break-Even Analysis

These methods are common in DHS economic analysis and evaluation for programs, policies, and regulations. Benefit-cost analysis aims to identify and compare relevant quantitative and qualitative costs and benefits associated with an activity, usually expressed in monetary terms. Cost effectiveness analysis estimates the cost of achieving a single goal, nonmonetary outcome, or objective, which can be used to identify the least costly alternatives for meeting that goal. Break-even analysis identifies the point at which estimated total costs and total gains are equal—that is, it answers the question, "How small could the value of the non-quantified benefits be (or how large would the value of non-quantified costs need to be) before the rule would yield zero net benefits?"

#### Qualitative Data Analysis

Qualitative data analysis uses a flexible set of approaches to examine patterns in communicated information. Content analysis may focus on the presence and frequency of concepts—typically words, phrases, or images— or show how concepts are related to each other and the context in which they exist. Thematic framework analysis identifies patterns of meaning, or themes. Themes may be determined deductively (themes selected from existing research or theory) or inductively (themes built from the data) to develop patterns. The analysis may examine explicit content of data or examine subtext or assumptions from the data. DHS uses qualitative data analysis when analyzing different kind of textual secondary data and data from interviews/focus groups and observations.

#### Case Studies

A case study provides an in-depth, qualitative analysis of a single subject or small group of subjects, such as an individual, group (e.g., organization, community, or "site"), or event. The analysis integrates data collected through several methods, such as quantitative surveys, qualitative interviews/focus groups, and observations and documents, to draw conclusions only about the studied subject(s) and within the given context. Although case studies cannot be used to infer causation or to measure effectiveness in achieving outcomes, they are often valuable for building theory and developing awareness of factors that affect outcomes.

## **Challenges and Mitigating Strategies for Evidence Building**

Although each learning agenda priority question may be subject to a unique combination of challenges and mitigating strategies, some of which are discussed in Strategy or Operation Background sections, there are also a number of common challenges and recommended mitigating strategies that we describe in the sections that follow.

## **Common Challenges**

### Complexity of coordinating evidence building

DHS has a complex mission and evidence building often requires coordination of knowledge, expertise, and effort that span organizations, subject matter, technical, data, and analytic silos. In addition, some Department evidence building relies on the data it collects from or shared by Federal, SLTT, industry, and other partners.

#### Gaps in data access or quality

Gaps in sufficiently detailed, accurate, and complete data, or lack of existing data or lack of measures for all relevant indicators to answer a question are common in evidence building. Such gaps result for many reasons. Most common is that legacy data collections were initially designed to support operations not specific evidence-building activities or indicators, like equity. Some data may not be collected, or when collected, they may have high non-response or restrictions on use. In some cases, gaps can be mitigated by updating System of Record Notices (SORNs) to allow data to be used for evidence building. Often, gaps in data access or quality often require new collections or revisions to existing data collections. The Paperwork Reduction Act requires federal agencies to obtain approval for such information collections from the Office of Management and Budget, which generally consists of a public comment period and OMB review of the survey instrument to be administered to more than nine respondents. This process can also introduce substantial delays of data collection efforts.

#### • Evaluability of strategies or operations

To evaluate whether a strategy (program, policy, regulation, or some combination of them) or operation achieves its outcomes it must be *evaluable*—that is, we must clarify what the desired outcomes are, how activities are logically linked to those outcomes, and what indicators and measures provide data to assess them. DHS programs are complex constellations of activities that may be conducted through multiple touchpoints over time and in different settings and locations. Among the more challenging cases of evaluability, grant programs do not prescribe an activity; rather these programs provide grantees discretion to pursue many eligible activities that collectively contribute to the achievement of program outcomes.

#### Insufficient or variable resources for evidence building

The DHS Capacity Assessment indicates inconsistent and relatively low levels of resources set aside for evidence building, especially program evaluation and other evaluation-related activities. Few Components have set aside budgets to support independent, third-party research, analysis, and evaluation. Furthermore, the DHS Capacity Assessment indicates there is uneven staffing and expertise available to design and conduct scientifically rigorous internal studies or to architect procurement requirements and external expert teams that will yield high quality study designs and results.

#### • Lag time for rigorous evaluation

Carefully structured evaluations can require considerable resources and multiple years to design and complete. In some cases, sustained intervention and measurement over many years is needed to produce and assess effectiveness in achieving mid- and long-term outcomes or societal impacts. In other cases lengthy internal and OMB approval processes for direct data collection efforts delay data collection. The lag time to results is a key criticism of the utility of evaluation at DHS and requires exploration of creative solutions, including solutions that reduce barriers to direct data collections that are vital to evaluation and using study designs with administrative data that will allow for low-cost, timely evaluations where possible.

#### Constraints on methods

Randomized control trials and quasi-experimental designs that also study comparison groups are often not feasible for DHS programs and policies. Furthermore, the Department's recent capacity assessment suggests DHS makes limited use of more advanced quantitative methods, such as inferential statistics, time series, and economic analysis. Thus, evaluative questions about "effects", "impacts" and "effectiveness" of DHS programs, policies, and regulations may be difficult to answer with definitive statements about causality or attribution.

#### Pandemic, disaster, and other emergent interruptions

Ongoing government response to pandemic, disasters, and other emergent issues (e.g., mass migration, cybersecurity threats) can result in shifts in government operations and workforce appropriately to address them, which sometimes interferes with planned evidence-building activities.

## **Mitigating Strategies**

#### • In-house and interagency research collaborations

A number of proposals are envisioned as in-house research, including within- and between-Component collaboration for data integration and/or analysis. In-house research collaborations can be facilitated through coordination among existing DHS councils, communities of practice, and working groups. For example, the DHS Evaluation Officer Council, Data Governance Council, Performance Improvement Community of Practice, Agency Equity Working Group, and multiple communities of interest (e.g., operations research, modeling and simulation, and artificial intelligence/machine learning) can advance cross-cutting evidence building.

Other questions pose opportunities for mutually beneficial interagency research collaborations. For these questions, the Department can leverage existing interagency councils and working groups, such as the National Security Council, CFO Act Evaluation Officers' Council and Data Governance Council, the Interagency Council on Statistical Policy, or other topic-specific groups that support interagency collaboration.

#### Engaging external expertise

The DHS Science & Technology Directorate has existing contracts, grants, and other agreements to support the DHS research and development enterprise. These partnerships with academic institutions (e.g., Centers of Excellence, Technology Centers), private sector (e.g., Federally Funded Research and Development Centers), National Laboratories, and other federal agencies can provide a source of expertise for technical consultations to study design or for the conduct of studies that address learning agenda priorities. In addition, The DHS Joint Duty Program and government-wide Intergovernmental Personnel Act (IPA) Mobility Programs enable feasible and convenient exchange of skilled personnel between government and non-government institutions, respectively.

#### • Data governance and enterprise data management

Aligning data ownership, authorities, responsibilities, and resources with identified data priorities has the potential to pose challenges across the Department. The DHS Chief Data Officer supports collaboration across Components and data domains. Over time, the learning agenda will benefit from ongoing efforts to establish domain-specific data standards and governance, establish a comprehensive DHS data inventory, and improve data access and governance for evidence building across the enterprise.

#### Ongoing efforts to improve data sharing

The DHS Chief Data Officer's Data Sharing Agreements Working Group is working to establish and implement unified policy, procedures, samples, and ongoing technical assistance for data sharing with DHS partners. Generally, these efforts aim to improve the efficiency and effectiveness of data sharing efforts, and the learning agenda may indicate what data sharing agreements may be priorities to ensure data are available for evidence building as planned.

#### Using and linking other federal agency and statistical data

Using and linking DHS administrative data with other federal agency and statistical data (e.g., U.S. Census data and American Household Survey data) may be a cost-effective strategy for filling important data gaps needed to answer questions, such as those relating to individual, household, or community demographics and socioeconomic characteristics that DHS does not collect.

#### Evaluability assessment

Evaluability assessments can help determine whether programs are ready for meaningful evaluation and whether an evaluation is likely to provide useful information. Evaluability assessments analyze and draw conclusions about program design, implementation, operating context, existing measures, and data. They recommend appropriate evaluation designs and programmatic improvements that are needed before conducting the evaluation. The DHS Evaluation Officer encourages evaluability assessments be conducted by a qualified third-party evaluator when no prior evaluations have been conducted and as tool for building program and organizational evaluation capacity.

#### • Ongoing efforts to improve grant performance measurement

Across DHS, concerted effort is underway to improve grant performance measurement in response to recent regulatory requirements for the administration of federal awards<sup>25</sup> These changes have included calls to articulate program theory or logic frameworks, identify outcome indicators and measures for tracking grants' contributions to program goals and objectives, and establish other valid and reliable measures of cost-effectiveness for these portfolios. These improvements will enable results-oriented grant management and ensure valuable data that can be harnessed for program management, reporting to stakeholders, and program evaluation.

#### Ongoing efforts to measure and advance equity

Executive Order 13985 created an unparalleled opportunity to consider data assets that are needed to disaggregate analysis by race, ethnicity, gender, disability, income, veteran status, and other key demographic characteristics describing underserved communities as well as a broader range of data collection methods to help us better understand barriers that affect underserved communities' access to, participation in, and outcomes of DHS services, benefits, and opportunities.

#### • Financing the learning agenda

The DHS Evaluation Officer's funding for evaluation and evidence building can provide a small source of funds for securing external expertise for addressing learning agenda priorities. The DHS Evaluation Officer will prioritize evaluation and evaluation-related activities (e.g., needs assessments, evaluability assessments, capacity building efforts) but may co-sponsor select non-evaluation projects that have the potential to improve a program's readiness for future evaluation. It will not be feasible for DHS to address all priority questions in the learning agenda without strong commitment of Components to fund and manage studies for learning priorities that are most relevant to their missions. It is OMB's expectation that Components use direct appropriations and authorities to use a portion of program or activity funds for third-party evaluation or other evidence-building activities.

#### Assessing and increasing evidence-building capacity

The Evidence Act's requirements to assess the Department's capacity to plan, build, and use evidence to strengthen policy and practice have the potential to strongly complement the strategic evidence-building direction of a learning agenda by describing the foundation and needed enhancements for effectively using the evidence. The capacity assessment will help the Department senior officials to determine where new or different investment of resources are needed to ensure evidence building described in the Department's learning agendas and annual evaluation plans is successful. It is OMB's expectation that Components will hire or develop dedicated staff with the necessary skills to carry out technical evaluation or other evidence-building activities.

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<sup>&</sup>lt;sup>25</sup> 2 CFR § 200.301Performance Measurement (2021)

#### • Proliferation of learning agendas and annual evaluation plans

Some DHS organizations and programs are in the process of establishing their own learning agenda and annual evaluation plans to identify, prioritize, and coordinate a more comprehensive set of evidence-building activities to support local decision-making over time. As learning agendas and evaluation plans proliferate across the Department, more evidence about the context, delivery, and outcomes of the DHS mission will be available to support organizational learning, strategic and program management, performance improvement, and accountability to the public.

## Appendix A. List of Abbreviations and Acronyms

CBP - U.S. Customs and Border Protection

CFO - Chief Financial Officer

CI – Critical Infrastructure

CISA – Cybersecurity and Infrastructure Security Agency

COMU - Communications Unit

COVID-19 - Coronavirus Disease 2019

CRCL- Office for Civil Rights and Civil Liberties

CWMD – Countering Weapons of Mass Destruction

DHS – U.S. Department of Homeland Security

DOS – U.S. Department of State

EC – Emergency Communications

EEZ - Exclusive Economic Zone

ELIS – Electronic Immigration System

FEMA – Federal Emergency Management Agency

FFF - Foundational Fact Finding

FIMA – Federal Insurance and Mitigation Administration

FY - Fiscal Year

HSGP - Homeland Security Grant Program

HVA – High Value Assets

 $\label{eq:continuous} \mbox{ICE-U.S. Immigration and Customs}$ 

Enforcement

ITA – Independent Test Agent

MGMT – DHS Management Directorate

NCSWIC – National Council of Statewide

Interoperability Coordinators

NHS – National Household Survey

NIST – National Institute of Standards and Technology

NOAA – National Oceanographic and Atmospheric Administration

OFO - Office of Field Operations

OIS – Office of Immigration Statistics

OMB – U.S. Office of Management and Budget

PA – Policy Analysis

PE - Program Evaluation

PM – Performance Measurement

QED – Quasi-Experimental Design

RCT - Randomized Control Trial

RFI – Request for Information

RIA - Regulatory Impact Analysis

SLTT – state, local, tribal, and territorial

SPR – Stakeholder Preparedness Reviews

S&T – DHS Science & Technology

Directorate

STEP – Student Tools for Emergency

Planning

SWB - Southwest Border

THIRA – Threat and Hazard Identification

and Risk Assessments

TSA – Transportation Security Administration

TSS – Transportation system sector

TVTP – Targeted Violence and Terrorism Prevention

TWIC – Transportation Worker Identification Card

UR – Utilization Rate

USBP - U.S. Border Patrol

USCIS – U.S. Citizenship and Immigration Services

USCG - U.S. Coast Guard

USSS—U.S. Secret Service