Synthesis of Climate Change Vulnerabilities and Research Needs Based on the 2014 Federal Agency Climate Change Adaptation Plans (CCAPs)

Background on Federal Agency Climate Change Adaptation Plans

Executive Order (EO) 13514, "Federal Leadership in Environmental, Energy, and Economic Performance," signed by President Obama in October 2009, stipulated that each Federal Agency develop a Climate Change Adaptation Plan (CCAP), outlining strategies to reduce the vulnerability of Federal programs, assets, and investments to the impacts of climate change. After review by the Office of Management and Budget (OMB) and the Council on Environmental Quality (CEQ), the first set of CCAPs were released for public comment in February 2013.

In June 2013, the Obama Administration released The President's Climate Action Plan, which highlights three main preparedness and resilience themes 1) Building Stronger and Safer Communities and Infrastructure; 2) Protecting our Economy and Natural Resources; and 3) Using Sound Science to Manage Climate Impacts. In November 2013, President Obama signed EO 13653, "Preparing the United States for the Impacts of Climate Change," which emphasizes that Federal Agencies should build upon their adaptation planning efforts. As a result, the first update of CCAPs was due within 120 days of the signing of EO 13653, with subsequent updates due "not later than 1 year after the publication of each quadrennial National Climate Assessment report" (NCA), completed by the U.S. Global Change Research Program (USGCRP).

2014 Federal Agency Climate Change Adaptation Plan Assessment

USGCRP's Adaptation Science Interagency Working Group (ASIWG) **conducted an assessment of the thirty-eight** Federal Agency Climate Change Adaptation Plans (CCAPs)* **released in October 2014**. An update to ASIWG's review of the FY2013 Federal Agency Adaptation Plans, this assessment aims to identify common vulnerabilities and research needs amongst the Federal Agencies, in an effort to **inform the USGCRP research agenda, facilitate the production of usable science, and encourage interagency collaboration to enhance adaptation and resilience efforts across the federal government.** The assessment is composed of two sections, one focused specifically on common climate change vulnerabilities, and the other on research and information needs.

**See Appendix I. for a list of the 38 Federal Agencies included in this Assessment (by name and acronym).*

Organization of the Assessment

Based upon an initial review of the vulnerabilities and research needs described in the thirty-eight 2014 CCAPs, along with consideration of the preparedness and resilience themes of the President's Climate Action Plan, ASIWG established the following categories to structure the assessment:

1) **Infrastructure (Buildings, Supply Chains, Transportation, etc.)**
2) **Continuity of Operations**
3) **Human Health & Safety**
4) **Water Resources and Aquatic & Coastal Environments**
5) **Energy Supply & Demand**
6) **Telecommunication Infrastructure**
7) **Terrestrial Ecosystems & Resources**
8) **Environmental Justice**
9) **Global Economy**
10) **National Security**
11) **Agriculture & Food Supply**
12) **Cultural Resources**

It should be noted, due to the compilation of vulnerabilities and research needs from the thirty-eight plans, the inclusion of an agency under a category does not signify that the Agency identified the vulnerability or research need *in its entirety*; in some cases, only a portion of the vulnerability or research need is relevant to a specific Agency (e.g. "vulnerabilities in energy supply" would be placed under the Energy Supply & Demand category, even if "energy demand" was not listed as a vulnerability by the Agency).

Synthesis of Climate Change Vulnerabilities

The following is a synthesis of common climate change vulnerabilities identified in the 2014 CCAPs. Vulnerabilities are grouped according to their relevance to a specific vulnerability category (mentioned above), highlighting similarities across the agencies. According to the 2014 National Climate Assessment, the various climate stressors that increase vulnerability include changing conditions such as: more frequent and intense storms; increased precipitation and flooding; spread of vector-borne diseases; higher temperatures; loss of snowpack; more frequent heat waves, drought, and wildfire; and sea level rise and storm surge.

Climate Change Vulnerabilities (in order of the number of Agencies that identified a vulnerability relevant to that category):

1) **Infrastructure (Buildings, Supply Chains, Transportation, etc.)**
   AFRH, BBG, DOC, DoD, ED, DOE, HHS, DHS, HUD, DOJ, DOL, State, DOI, Treasury, DOT, VA, EPA, FCA, GSA, NASA, NARA, NCPC, PC, RRB, SBA, SSA, TVA, USPS, USAID, USACE, USDA (31/38)

   Common Vulnerabilities
   A vulnerability comparison for the Infrastructure (Buildings, Supply Chains, Transportation, etc.) category reveals the following most frequently mentioned vulnerabilities:
   - Increased vulnerability, damage or deterioration of facilities, buildings infrastructure, land, and equipment, thereby impacting activities such as usage, access, maintenance, operation, or repair (30 agencies)
   - Impacts to surface and marine transportation infrastructure (highways, railways, runways, roads, bridges, waterways, port channels), thereby impacting activities such as take-offs and landings, navigation, surveillance and reconnaissance, and modes of transport (shifting from one mode to another) (12 agencies)
   - Impacts or damage to utility infrastructure (water, wastewater, electricity, gas, etc.) that supports the operation of real property (12 agencies)
   - Increased need for maintenance and repair of facilities, buildings, transportation infrastructure, and equipment (6 agencies)
   - Changes in availability of materials, resources, equipment, or supplies (i.e. impacts to supply chains) (6 agencies)
   - Impacts to future facility site selection, development, construction, or redevelopment (4 agencies)
   - Disruption to transit systems or public transportation (2 agencies)

2) **Continuity of Operations**
   BBG, CNCS, DOC, DoD, DOE, HHS, DHS, HUD, DOJ, DOL, State, DOI, Treasury, VA, EPA, FCA, FTC, GSA, NASA, NARA, NCPC, NRC, OPM, PC, RRB, SBA, TVA, USPS, USAID, USACE, USDA (31/38)

   Common Vulnerabilities
   A vulnerability comparison for the Continuity of Operations category reveals the following most frequently mentioned vulnerabilities:
   - Damage or disruption to building, energy, water supply, transportation, and communication/IT infrastructure may threaten access to facilities, continuity of operations, delivery of services, and ability to carry out the agency mission (20 agencies)
   - Impacts to operational capacity and the ability to operate programs and provide logistical support may impact the continuity of operations (16 agencies)
   - Impacts to employee health and quality of life may cause reduced productivity and threaten continuity of operations, delivery of services, and ability to carry out the agency mission (11 agencies)

- Impacts to the ability to plan and manage emergency/hazard response operations (8 agencies)
- Increased number of applications, cases, etc., as well as diversion or constraints on funding and/or staff resources may lead to increased workloads and demand for general agency services, affecting the ability to carry out the agency mission (8 agencies)
- Impacts to aquatic and terrestrial ecosystems and resources may threaten continuity of operations, delivery of services, and ability to carry out the agency mission (5 agencies)
- Impacts to research development, capacity, and activities (4 agencies)
- Impacts to operation timing windows and training and testing locations (1 agency)

3) Human Health & Safety

AFRH, BBG, DoD, ED, DOE, HHS, DHS, HUD, DOJ, DOL, State, DOI, Treasury, DOT, VA, EPA, FCA, GSA, NASA, NARA, NCPC, OPM, PC, SBA, SSA, TVA, USPS, USAID, USACE, USDA (30/38)

Common Vulnerabilities

A vulnerability comparison for the Human Health & Safety category reveals the following most frequently mentioned vulnerabilities:

- Increased risks to staff, employee, and volunteer health and safety, leading to impacts such as increased absences (23 agencies)
- Increased risk of physical injuries and health care emergencies, leading to increased demand for healthcare and emergency services (including shelter), disease management, response and recovery, as well as increased interruption of healthcare services (15 agencies)
- Increased risk of respiratory diseases (allergies, asthma, diminished lung function, bronchitis), cardiovascular problems, impacts to behavioral/psychological health, heat-related illness, stroke, and premature death (14 agencies)
- Impacts to and changing distribution of water-borne, vector-borne, food-borne, and infectious disease transmission and outbreaks, with increased exposure to new illnesses (12 agencies)
- Increased impacts to infrastructure, property, communities, livelihoods, and economies, including flooding and other hazards (11 agencies)
- Increased stress to water systems, water purification, wastewater systems; increased risk of contaminant and hazardous waste release; and, reduced availability and potential contamination of water and food supplies (leading to increased need for disaster relief) (7 agencies)
- Increased stress and public health risks to vulnerable populations, including young, elderly, and socioeconomically disadvantaged groups (7 agencies)
- Impacts to mass transit and road safety, including increased risk of motor vehicle crashes (2 agencies)
- Shifts in animal and pest populations may lead to increased encounters with wildlife in populated areas, potentially increasing disease transmission among wildlife, livestock, and people (1 agency)

4) Water Resources and Aquatic & Coastal Environments

BBG, CNCS, DOC, DoD, ED, DOE, DHS, HUD, DOI, Treasury, DOT, EPA, NASA, NARA, PC, RRB, SSA, TVA, USAID, USACE, USDA (21/38)

Common Vulnerabilities

A vulnerability comparison for the Water Resources and Aquatic & Coastal Environments category reveals the following most frequently mentioned vulnerabilities:

- Impacts to availability, reliability, access, and quality of potable and non-potable water supplies (13 agencies)
- Increased demand, competition, and stress on water supplies and infrastructure (including drinking water and wastewater systems) (8 agencies)

- Impacts to marine and coastal ecosystems, including increased stress on coral reefs, coastal wetlands, etc., leading to challenges for coastal infrastructure and natural resource management (6 agencies)
- Increased demand for protection and recovery of threatened and endangered species, ecosystems, and aquatic and terrestrial resources, including need for the development of new policies and regulations (5 agencies)
- Impacts to aquatic ecosystems and species, including floodplains, lakes, streams, and cold water fisheries (4 agencies)
- Reduced availability of water for energy production, wastewater systems, transportation (3 agencies)
- Impacts to water resources management and emergency planning (3 agencies)
- Human population migration and shifting demand to alternative sources and areas with more reliable water supplies (2 agencies)

5) Energy Supply & Demand

BBG, DOC, DoD, DOE, DHS, HUD, DOI, Treasury, DOT, VA, NASA, NARA, NRC, RRB, SSA, TVA, USAID, USACE, USDA (19/38)

Common Vulnerabilities

A vulnerability comparison for the Energy Supply and Demand category reveals the following most frequently mentioned vulnerabilities:

- Impacts to access, availability, and competition for affordable and reliable electricity, including blackouts and brownouts (affecting operations and business continuity) (12 agencies)
- Changing energy demands, and increased electricity, fuel, and cooling needs (9 agencies)
- Increased stress to energy infrastructure (power lines, below grade systems, etc.) (6 agencies)
- Impacts to [cool] water access for electricity production/hydropower generation (4 agencies)
- Changing generating capacity/transmission system efficiency (2 agencies)
- Impacts to ability to extract and transport offshore fossil fuel (1 agency)
- Changing fuel supply availability for long-term generator use (1 agency)
- Increased need for energy-efficient construction (1 agency)

6) Telecommunication Infrastructure

AFRH, BBG, DHS, DOL, Treasury, EPA, NASA, NARA, PC, USAID, USACE, USDA (12/38)

Common Vulnerabilities

A vulnerability comparison for the Telecommunication Infrastructure category reveals the following most frequently mentioned vulnerabilities:

- Increased vulnerability and damage to communications infrastructure and information technology (IT) systems (including telecommunications equipment, antenna fields, cell phone towers/telephone poles, wireless, radio, or satellite), as well as utility infrastructure needed to supply electricity and telecommunications, thereby impacting the viability of transmission zones, communication operations, emergency response, security, and access to information/data recall (12 agencies)
- Impacts to future transmission site selection (1 agency)

7) Terrestrial Ecosystems & Resources

DOC, DoD, DHS, DOI, EPA, NASA, PC, TVA, USAID, USACE, USDA (11/38)

Common Vulnerabilities

A vulnerability comparison for the Terrestrial Ecosystems & Resources category reveals the following most frequently mentioned vulnerabilities:

- Impacts to threatened and endangered species and terrestrial ecosystems (forest, grassland, etc.), causing challenges for natural resource management and impacting communities that rely on their ecosystem services (7 agencies)
- Increased demand for protection and recovery of threatened and endangered species, ecosystems, and aquatic and terrestrial resources, including need for the development of new policies and regulations (5 agencies)
- Increased and more severe wildland fires and fire seasons, altering ecosystems and threatening species (3 agencies)
- Increased potential for landslides due to oversaturated soils (compounded by heavy deforestation and vegetative cover loss) (1 agency)

8) Environmental Justice
DOE, HUD, DOI, GSA, USDA (5/38)

Common Vulnerabilities
A vulnerability comparison for the Environmental Justice category reveals the following most frequently mentioned vulnerabilities:

- Increased threats to livelihood of Alaska Native, Pacific and Caribbean Island, and other indigenous/tribal communities, including increased psychological stress, threats to infrastructure, land and natural resources (e.g. melting permafrost, increased fire risk, risk to watershed, fisheries, and plant and animal species), requiring the relocation of communities with limited resources or adaptive capacity (4 agencies)
- Increased vulnerability of areas bordering tribal lands, complicating partnerships and coordination with tribal governments, & management of land and resources (2 agencies)
- Impacts to livelihoods, health, and safety of low-income individuals, racial and ethnic minorities, and persons with limited English proficiency (2 agencies)

9) Global Economy
HUD, DOI, DOT, EPA, USDA 5/38)

Common Vulnerabilities
A vulnerability comparison for the Global Economy category reveals the following most frequently mentioned vulnerabilities:

- Impacts to livelihoods, homes and businesses, as well as employees, volunteers, recreational opportunities, etc., may affect local employment and economies (2 agencies)
- Changes to management costs and production may affect viability of agriculturally-dependent communities and import and export markets (2 agencies)
- Impacts to aquatic and agricultural resources may threaten the economy of rural and tribal communities (2 agencies)
- Shifts in location of agricultural production may lead to changes in settlement patterns and economic activity (1 agency)

10) National Security
DoD, DHS, State, VA, USAID (5/38)

Common Vulnerabilities
A vulnerability comparison for the National Security category reveals the following most frequently mentioned vulnerabilities:

- Aggravation of stressors abroad (poverty, environmental degradation, social tensions, impacts to agriculture, energy, economic sectors, etc.), causing conditions that could enable terrorist activity, violence, and mass migration (i.e. threat multiplier) (4 agencies)
- Increased demand for disaster relief and humanitarian assistance abroad, national defense, reconstruction, and stabilization missions, etc., to ensure security and protect populations domestically and abroad (3 agencies)

- Increased migration across the U.S. border (legal and illegal), leading to potential increases in drug trafficking, human smuggling, transnational criminal organization activity, as well as legal or ethical issues for the recognition of "environmentally-induced migrants" (1 agency)

11) Agriculture & Food Supply
DHS, EPA, FCA, USAID, USDA (5/38)

Common Vulnerabilities
A vulnerability comparison for the Agriculture & Food Supply category reveals the following most frequently mentioned vulnerabilities:

- Changes in crop yields, livestock production, and increased production costs may cause food insecurity, increased need for food assistance, and affect regulations and natural resource management of land (4 agencies)
- Impacts may cause shifts in crop production areas and timing, leading to increased pest and disease pressures and increased use of agricultural chemicals (2 agencies)
- Shifts in animal and pest populations into new or expanded habitats may result in increased spread of disease and encounters with wildlife in populated areas, potentially increasing disease transmission among wildlife, livestock, and people (1 agency)

12) Cultural Resources
DOE, DOI, EPA, NCPC (4/38)

Common Vulnerabilities
A vulnerability comparison for the Cultural Resources category reveals the following most frequently mentioned vulnerabilities:

- Impacts to species, ecosystems (e.g. aquatic habitat), and infrastructure from inundation, fire, etc., may threaten or destroy cultural and heritage resources, as well as economic and cultural practices of tribal communities (3 agencies)
- Increased vulnerability of many federally owned properties (parkland, military installations, museums, agency headquarters, etc.), impacting the preservation of historic and cultural resources (2 agencies)

Synthesis of Research & Information Needs

The following is a synthesis of research and information needs identified *directly or indirectly* in the CCAPs. **It is important to recognize that Federal Agencies were not required to specify research needs in their CCAPs; as a result, it is very likely that this list of research and information needs is not comprehensive, and/or that needs have evolved since the release of the CCAPs in 2014.** For consistency throughout the assessment, ASIWG placed research needs identified in the plans (either explicit or implicit) into the vulnerability categories mentioned in the previous section. It is noteworthy that despite the many vulnerabilities identified in the CCAPs, relatively few of the research or information needs identified are relevant to the vulnerability categories listed above. The following categories are represented:

1) **Water Resources and Aquatic & Coastal Environments**
2) **Infrastructure (Buildings, Supply Chains, Transportation, etc.)**
3) **Terrestrial Ecosystems & Resources**
4) **Continuity of Operations**
5) **Human Health and Safety**
6) **Energy Supply & Demand**
7) **Agriculture & Food Supply**

Several research and information needs identified are instead relevant to a specific agency capability impacted by climate change. As a result, ASIWG developed the following capability categories to organize the remaining research and information needs captured in the plans:

A) Downscaled/Regional Data
B) Risk/Vulnerability Assessment & Management
C) Climate & Atmospheric Research
D) Resilience and Adaptation Decision Support & Guidance
E) Economics of Climate Change/Cost-Benefit Analysis
F) Capacity Building (education, training, and skills development)
G) Disaster Preparedness, Response, & Recovery
H) Monitoring and Evaluation
I) *Carbon Research & Management*

Research Needs by Vulnerability Category (in order of the number of Agencies that identified a research or information need relevant to that category)

1) **Water Resources and Aquatic & Coastal Environments**
BBG, CNCS, DOC, EPA, FCA (5/38)

Research and Information Needs

- Water resources management:
  - Understand the location of adequate supplies of water to sustain operations
  - Monitor shifts in water quality in watersheds, as well as methods for incorporating such changes into water quality programs

- Hydrology:
  - Characterize local impacts to precipitation and hydrology for use in planning long-lived water infrastructure

- Aquatic and coastal environments:
  - Understand the effects of climate change on multi-pollutant interactions in ecosystems
  - Establish a coordinated US ocean observing system to track climate change

2) **Infrastructure (Buildings, Supply Chains, Transportation, etc.)**
BBG, DHS, FCA, NRC (4/38)

Research and Information Needs

- Identify ways to protect infrastructure from damage (e.g. such as large antenna systems and satellite dishes), as well as ways to handle increased stormwater runoff
- Understand and evaluate adverse impacts to building services (water and electricity)
- Establish a methodology to assess exposure of properties and facilities to potential flood risk and flood risk impacts

3) **Terrestrial Ecosystems & Resources**
EPA, USAID, USDA (3/38)

Common Research and Information Needs

- Study the effects of climate change on multi-pollutant interactions in ecosystems
- Develop a “national risk map” for underserved and other stakeholders in order to reduce wildfire risks
- Consider the relevance of tenure governance and property rights when conducting vulnerability assessments and adaptation planning, particularly as they relate to the most vulnerable

4) **Continuity of Operations**
FCA, NRC (2/38)

Common Research and Information Needs
- Understand and evaluate adverse impacts to operations, mission, or employees

5) **Human Health and Safety**
EPA

Common Research and Information Needs
- Research site-specific impacts of climate change on Brownfields, Corrective Action Facilities under the Resource Conservation and Recovery Act (RCRA), Superfund sites, RCRA Treatment, Storage and Disposal (TSD) facilities, non-hazardous solid waste facilities, and Leaking Underground Storage Tanks

6) **Energy Supply & Demand**
EPA

Common Research and Information Needs
- Understand the effect of climate change on energy efficiency programs given changes in energy supply and demand

7) **Agriculture & Food Supply**
EPA

Research and Information Needs
- Characterize climate-related trends in chemical use (e.g., changing patterns of pesticide use and new chemical exposures to people and the environment), and implications for the review process for new chemicals or the registration process for new pesticides

Research Needs by Agency Capability (in order of the number of Agencies that identified a research or information need relevant to that capability category)

A) *Downscaled/Regional Data*
NARA, OPM, Smithsonian, USAID, USDA (5/38)

Research and Information Needs
- Provide localized/regional climate data and projections:
  - to better understand and respond in an informed manner to changes in the pattern and intensity of extreme weather events
  - to better determine risk and prepare for climate change at each facility (e.g. in order to provide appropriate margin for error to protect priceless/irreplaceable documents and artifacts)
  - that are relevant and appropriate to decision-making (e.g. to inform investments in climate-smart agriculture, infrastructure, and risk reduction activities related to disaster preparedness)
- Provide outreach and education materials, and additional data and information on location-specific climate-related risk

B) *Risk/Vulnerability Assessment & Management*
CFTC, EPA, PBGC, USAID, USDA (5/38)

Research and Information Needs
- Conduct risk assessment of climate change impacts

- Consider the relevance of tenure governance and property rights when conducting vulnerability assessments and adaptation planning, particularly as they relate to the most vulnerable
- Develop a "national risk map" for underserved and other stakeholders in order to reduce wildfire risks
- Research site-specific impacts of climate change on Brownfields, Corrective Action Facilities under the Resource Conservation and Recovery Act (RCRA), Superfund sites, RCRA Treatment, Storage and Disposal (TSD) facilities, non-hazardous solid waste facilities, and Leaking Underground Storage Tanks

C) *Climate & Atmospheric Research*
AFRH, EPA, FCA, NRC (4/38)

Research and Information Needs
- Monitor changes in the climate
- Gather lessons learned from previous extreme weather events
- Research interactions between climate and the stratospheric ozone layer

D) *Resilience and Adaptation Decision Support & Guidance*
EPA, GSA, NARA, OPM (4/38)

Research and Information Needs
- Develop decision-support tools and resources to better understand and respond to changes in the pattern and intensity of extreme weather events
- Provide guidance that translates the science of climate change to enable effective climate risk-management decision-making
- Identify priority research needs related to climate change adaptation in order to produce research results that benefit end users
- Consider scientific insights and cultural and social considerations when incorporating effects of climate change in decision-making (e.g. there is a need for the public, technical experts, and decision-makers to engage in mutual shared learning and shared production of relevant knowledge)

E) *Economics of Climate Change/Cost-Benefit Analysis*
DHS, GSA, OPM (3/38)

Research and Information Needs
- Build stronger "business case" tools and resources to help stakeholders make the economic case for change required for financing resilient investments
- Conduct a cost and benefit analysis of adaptation and resilience efforts
- Determine costs of incremental climate change and variability (e.g. persistent drought, insect infestation, human health impacts, etc.)

F) *Capacity Building (education, training, and skills development)*
GSA, Smithsonian, USAID (3/38)

Research and Information Needs
- Provide outreach and educational materials, and additional data and information on location-specific, climate-related risk
- Provide credible, readily available, and practical information about climate risks to inform climate risk management decision-making (e.g. for evaluating the cost, benefit, and most effective timing of adaptation options)
- Develop greater capacity to understand and address climate change risks and opportunities (e.g. vulnerability assessments and adaptation strategy

development and implementation require scientific, technical, planning, financial, and coordination capacity)

G) *Disaster Preparedness, Response, & Recovery*
EPA

Research and Information Needs

- Research potential impact of more intense weather events on disaster response planning efforts
- Research site-specific impacts of climate change on Brownfields, Corrective Action Facilities under the Resource Conservation and Recovery Act (RCRA), Superfund sites, RCRA Treatment, Storage and Disposal (TSD) facilities, non-hazardous solid waste facilities, and Leaking Underground Storage Tanks

H) *Monitoring and Evaluation*
DOC

Research and Information Needs

- Provide consistent guidance and approaches for incorporating climate information into federal planning and evaluation under National Environmental Policy Act (NEPA) and other cross agency planning guidance

I) *Carbon Research & Management*
DOC

Research and Information Needs

- Develop science-based protocols for estimating carbon storage (e.g. to better inform valuation of coastal carbon sequestration and investment in coastal habitat restoration)

Appendix I.

Federal Agency	Acronym
Armed Forces Retirement Home	AFRH
Broadcasting Board of Governors	BBG
Commodity Futures Trading Commission	CFTC
Corporation for National and Community Service	CNCS
Department of Commerce	DOC
Department of Defense	DoD
Department of Education	ED
Department of Energy	DOE
Department of Health & Human Services	HHS
Department of Homeland Security	DHS
Department of Housing & Urban Development	HUD
Department of Justice	DOJ
Department of Labor	DOL
Department of State	State
Department of the Interior	DOI
Department of the Treasury	Treasury
Department of Transportation	DOT
Department of Veterans Affairs	VA
Environmental Protection Agency	EPA
Farm Credit Administration	FCA
Federal Trade Commission	FTC
General Services Administration	GSA
National Aeronautics & Space Administration	NASA
National Archives & Records Administration	NARA
National Capital Planning Commission	NCPC
Nuclear Regulatory Commission	NRC
Office of Personnel Management	OPM
Peace Corps	PC
Pension Benefit Guaranty Corporation	PBGC
Railroad Retirement Board	RRB
Small Business Administration	SBA
Smithsonian Institute	Smithsonian
Social Security Administration	SSA
Tennessee Valley Authority	TVA
US Postal Service	USPS
US Agency for International Development	USAID
US Army Corps of Engineers	USACE
US Department of Agriculture	USDA