U.S. Department of Veterans Affairs
Climate Action Plan
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Executive Summary

The United States (U.S.) Department of Veterans Affairs' (VA) Climate Action Plan (CAP) outlines VA's response to the projected impacts of climate change to the department with the goal of ensuring sustained operations to support the uninterrupted delivery of benefits and services and VA's "Fourth Mission." VA is generating this plan in response to the requirements in section 211 of Executive Order (EO) 14008, signed January 27, 2021, which places greater emphasis on taking a government wide approach to the climate crisis. VA will continue its effort to identify mission critical functions at risk from the impacts of a changing climate. As impacts are further identified by the best available science, VA will incorporate climate change adaptation and resilience across agency programs and the management of federal procurement, real property, public lands and waters and financial programs. Mitigation of known risks are incorporated into the agency's normal business operations to the extent practicable. This plan draws on VA's ongoing efforts and establishes a pathway for expanding climate adaptation and resilience opportunities across all agency missions and roles. Efforts described in this plan will also be incorporated into the VA governance process. The plan identifies five vulnerabilities tied to management function and decision points, five priority adaptation actions, efforts to enhance climate literacy and actions to enhance climate resilience of facilities, supplies and services. It focuses on VA's physical infrastructure, resources, supply chain and the effects of climate change on the health of VA employees and the Veterans its serves.

Climate Impacts and VA Vulnerabilities

Climate change is driving widespread changes to both natural and human systems. With a broad mission and geographical distribution of facilities, VA expects to be affected by these changes in a variety of ways. VA's primary climate vulnerabilities are those of its built infrastructure and burdens placed on its health care delivery systems, and interruptions in the supply of energy and material. Specific vulnerabilities include:

1. **Threats to VA Facilities and Infrastructure:** Damage to buildings and built infrastructure from water, extreme temperatures, wind, hail, fire or sea level rise.
2. **Negative Public Health Impact:** Increased demand for emergency care and supplies during dangerous natural disasters.
3. **Adverse Financial Impacts:** Interruption of mission critical supply chains to include any network of systems such as transportation, communications, the supply of raw materials or other resources that might impact the agency's mission.
4. **Emergency Response and Continuity of Health care Operations:** Damage to or interruption of the critical resource delivery systems on which VA facilities rely such as electrical, power line failure or water.
5. **Adverse Medical Impact to Veterans and Employees:** Human health impacts by altering exposures to heat waves, floods, droughts and other extreme events like food-, water- and vector-borne diseases, changes in the quality and safety of air, food, water and stresses to mental health.

Response Strategy

VA's strategy balances the need for climate adaptation and resilience with other needs crucial to VA's mission of providing quality care and benefits to Veterans. VA

understands the importance of anticipating and planning for future changes in climate and is working to expand its adaptation efforts to include the full scope of its operations while continuing to deploy its climate adaptation strategy.

Infrastructure Resilience-Building Adaptation Actions

VA is taking actions to decrease vulnerability to physical threats. Priority actions to build resilience against physical threats to VA infrastructure include:

- Generating new and updated design standards and
- Incorporating climate priorities into VA's Strategic Capital Investment Planning Process (SCIP).

Health and Health Care Resilience-Building Adaptation Actions

VA seeks to minimize the negative impacts of climate change driven health outcomes on both its staff and its patients. Currently the focus is on providing crucial knowledge to VA staff and Veterans and monitoring and responding to public health issues made more likely by climate change. Priority actions to address public health impacts of climate change and to prepare Veterans and VA staff for climate change-enabled health impacts include:

- Maintaining critical supply stockpiles;
- Pursuing biosurveillance and epidemiologic investigations; and
- Updating climate change within emergency response planning.

Climate Literacy

VA will build on previous educational efforts through a renewed awareness campaign focused on leadership and management levels within the workforce. VA will target its literacy campaign on promoting climate change awareness to further VA's adaptation actions and support workforce planning.

Climate Ready Sites and Facilities

VA will continue its efforts to transform owned building inventory to climate ready sites and facilities through design and construction. VA is looking to establish a "Climate-Ready Sites and Facilities Working Group" to identify opportunities to enhance climate resilience throughout each of the decision points in facility planning, development and management processes. VA will also supplement and continue to improve existing projects and initiatives related to climate readiness of existing buildings by implementing energy and water conservation and resiliency measures.

Climate Ready Supply of Products and Services

VA's supply of products and services are at risk during disruptions from extreme weather events and long-term changes to the local environment through climate change. VA strictly follows end-to-end acquisition lifecycle and complies with Federal acquisition guidance to address its supply and service's needs. To bolster this effort, VA is establishing Regional Readiness Centers (RRC) to build resiliency into the supply chain and support VA's readiness for local, regional and national pandemic response, thereby minimizing medical supply chain disruptions.

Introduction

Federal Government Actions to Adapt to Climate Change

In general, EO 14008*, Tackling the Climate Crisis at Home and Abroad,* sets forth a government-wide approach to address the climate crisis, and specifically section 211 of the EO requires that each Federal agency develop a CAP. Agencies are instructed to build on prior adaptation plans and generate a streamlined and value-added set of actions that integrate adaptation into mission, programs, management functions and decision points. These plans are the necessary first step to address the objectives outlined in the EO.

About the U.S. Department of Veterans Affairs

VA accomplishes its mission by serving and honoring the men and women who are America's Veterans. As the largest Federal civilian agency, VA employs over 400,000 people and is organized into three Administrations, each with a primary service mission; and departmental staff offices. The three administrations are the Veterans Health Administration (VHA), the Veterans Benefits Administration (VBA) and the National Cemetery Administration (NCA).

VHA is the largest of the three Administrations and oversees the management and delivery of health care services to Veterans. It operates the country's largest integrated health care system, consisting of 170 medical centers and over 1,500 community-based outpatient clinics, community living centers, vet centers and domiciliaries. Together, these health care facilities, and the more than 53,000 independent licensed health care practitioners who work within them, provide comprehensive care to more than 9.3 million enrolled Veterans each year as outlined in the most recent VA Annual Budget Submission. VHA also performs biomedical research related to Veterans' health issues and monitors public health data through VHA patients.

VBA is charged with administering benefits to Veterans, their families and survivors. It provides benefits ranging from service-connected compensation to economic opportunity services such as education benefits, insurance, home loans, employment assistance and pension and fiduciary services. VBA has four district offices and 56 regional offices in the U.S., Puerto Rico and the Philippines.

NCA oversees the 156 national cemeteries that provide interment services for Veterans and eligible family members. NCA cemeteries are located in 42 states and Puerto Rico.

About VA Efforts to Build Resilience to Climate Change

VA incorporates climate resilience into long-term planning, investments, construction and training, in conjunction with other policy and practical imperatives. In 2011, VA conducted an agency-wide study focusing on the risks that climate change poses to critical agency operations, facilities and systems. To complete the *High-Level Analysis of Agency Vulnerabilities,* VA reviewed the relevant climate change science and identified the important impacts threatening VA's core mission, which are summarized in Appendix 1 of VA's 2014 *Climate Change Adaptation Plan*.

In 2012, using the *High-Level Analysis* as a guide, VA developed its climate change policy statement and issued VA Directive 0065, *Climate Change Adaptation Planning.* VA's policy statement established the importance of climate adaptation to successful

achievement of VA's mission. Directive 0065 established responsibilities throughout the agency for implementing the policy. VA's updated *Climate Change Adaptation Policy Statement* is shown in Appendix A. These actions ensure VA's commitment to addressing the impacts of climate change on its assets and operations. VA is currently updating Directive 0065 and it is expected to be complete by the end of the calendar year.

This plan summarizes the planning for climate change adaptation through investing in resilience, protecting assets, monitoring for health impacts and providing essential information to Veterans and their families. This plan also outlines the steps VA will take to stay informed of new climate change information and to expand its efforts to build resilience.

Official Responsible for Plan Implementation

VA is designating the Executive Director of the Office of Asset Enterprise Management, in his/her role as the Department's Chief Sustainability Officer (CSO), as the senior agency official to carry out the climate adaptation management activities described in this CAP. Additionally, the Secretary of VA has designated the CSO to perform the required duties specified in Section 211 of EO 14008. VA's CSO has the necessary level of oversight, authority and influence across the agency's top priorities and roles to implement management work for climate adaptation. In implementing the CAP, VA's CSO will leverage the support of VA's Climate Change Task Force and coordinate with VA Administrations and staff offices, White House and other agency officials, as appropriate, to plan, implement and report VA actions.

Updated Climate Vulnerability Assessment

Building on prior adaptation actions and climate vulnerability assessments, VA updated its assessment of climate vulnerabilities using its Department-level risk register and guidance from the Fourth National Climate Assessment and identified five vulnerabilities tied to management functions and decision points.

Vulnerability 1: Threats to VA Facilities and Infrastructure from Climate Change

VA has facilities in every state and several territories and countries. VA owns over 6,000 buildings and leases additional buildings exceeding 170 million square feet. Physical threats identified in VA's *High-Level Analysis of Agency Vulnerabilities* include inland flooding from extreme precipitation, coastal flooding from sea level rise (SLR) and SLR-enhanced storm surge. Flooding and other structural damage is possible due to increasing frequency of intense storms and hurricanes. Interconnected elements of infrastructure, such as energy and water supply systems, are also vulnerable. In water-constrained regions, droughts may threaten water-intensive operations. Natural gas and electric power supply may become more vulnerable to disruption. Grid reliability issues are possible.

Impact: VA has identified a variety of climate change impacts to existing VA facilities. These include: (1) Inundation due to sea-level rise; (2) Increased inland flooding due to severe precipitation events; (3) Increased wildfire activity; (4) Increased severe storm and hurricane activity; (5) Increased risk of drought-related water shortages; (6) Increased risk of power disruptions; (7) Increased fuel disruption; (8) Increase in water

disruption and availability of adequate quality; (9) Increased extreme temperatures in summer and winter and; (10) Facility access interruptions.

These threats are also considered in the planning process for new VA facilities.

Adaptation: VA will review the potential of standing up a facilities-related Climate Resilience Adaptation Program (the Program). The Program would be responsible for evaluating threats to select VA facilities, with the potential of evaluating all VA facilities. In addition to performing facilities evaluations, the Program would also develop remediation project proposals and track progress and costs for all remediation efforts.

VA will review its policies for incorporating climate change impacts into the design and construction and major renovations of new facilities. In addition, VA will review its design standards to ensure the design of new facilities and major renovations incorporate the latest in climate resilience science.

Timeline: The Program would be a multi-year effort, lasting up to 10 years. VA will integrate the Program with the existing standards development. It will establish policies and procedures within 12 months and begin facility evaluations in the second year. Project development would begin as soon as the third year of the effort, with project funding requests on-going thereafter. VA would expect the first remediation projects to begin approximately four years after the start of the Program, depending on each project's scope and funding source.

The effort to update design criteria has begun with an evaluation of vulnerabilities underway. A gap analysis will be conducted to identify opportunities to revise design and construction criteria within twelve months. In the absence of existing codes and standards, the creation of new criteria could take up to two additional years.

Resources: VA will integrate climate change requirements into ongoing facility standards updates and will initiate risk-based facility assessments. Based upon the results of the risk assessments, VA will request funding beginning in FY 2024 for climate change remediation projects. VA will simultaneously establish a program office for risk assessment oversite and seek program office sustainment funding in FY 2024 in conjunction with project execution.

In considering new facilities, the review of policies and standards will most likely be completed in-house. VA may need to hire a specialized consultant firm to assist with this work. In addition to the cost of updating policies and standards, future design and construction budgets will also be impacted by higher costs. While VA updates its policies and standards, it will estimate and track the financial impact of each new standard to ensure VA understands the financial impact of climate-ready design. These additional costs can then be added to future construction budget submissions.

Disclosure: As the new program office identifies threats and develops projects, VA will consolidate the total budgeted costs of those projects. This data will be used to continually monitor the total cost of a threat. Upon completion of all facility evaluations and project development, VA will have a better understanding of its financial risk from climate change impacts on sites and facilities and will report this data to the Office of Management (OMB) and Budget on an ongoing basis.

Once the estimated cost of climate resilience for new facilities and major renovations is established, VA will be able to clearly indicate this cost in design and construction budget requests.

Vulnerability 2: Negative Public Health Impacts Due to Climate Change

Impact: Higher temperatures driven by climate change are associated with public health risks, including increased risk of vector-borne, water-borne and food-borne diseases. As winters grow milder, mosquito populations are expected to grow, potentially allowing diseases endemic to tropical climates to spread northward. Higher temperatures are also more favorable to many food-borne and water-borne diseases; and excessive heat can exacerbate medical conditions and cause increased mortality in high-risk populations, including the elderly. Additional climate-related public health impacts include degraded air quality and increased allergen loads, as shown by the U.S. EPA.

Adaptation: To support the impact of climate change on public health, VA will invest in a biosurveillance system to assist with early identification of symptoms and/or disease. VA's biosurveillance system will update the existing data exchange with the U.S. Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) to include new data elements such as health care information generated by VHA and social determinants of health from VHA and VBA. VA will also incorporate external data on air quality, temperature, heat index and weather into its biosurveillance system.

Timeline: Preparation and deployment of a system to conduct surveillance on conditions and symptoms associated with climate change will be in place by fiscal year (FY) 2022.

Resources: Minimal resources are required to establish leadership, coordination and oversight of the preparation and response to the health impacts of climate change.

Disclosure: VA will conduct internal and external disclosures as required by law. Internally, VA will publish ongoing information on the types of conditions and the populations at risk for leadership review and action. Externally, VA will share information with local public health authorities and other Federal agencies.

Vulnerability 3: Adverse Financial Impacts of Climate Change to VA

There are six major sources of adverse financial impacts of climate change to VA. Each source is identified below with specific characteristics.

Impact:

1. Repairing or replacing damaged and destroyed facilities: Given the wide distribution of VA facilities throughout the U.S. and its territories, VA facilities are impacted by most major natural disasters. VA will continue to incur additional costs as un-remediated facilities are more-frequently damaged or destroyed due to increased severe storm activity and sea level rise. While difficult to predict the cost of this impact into the future and to clearly show partial or full attribution of past storms and flooding to climate change, VA's recent experiences with severe storm damage indicate the potential cost of this risk.

In 2005, Hurricane Katrina caused extensive damage to the VA Medical Center (VAMC) in New Orleans, Louisiana. The cost to replace the VAMC was $1.2 billion. Hurricane Katrina also caused extensive damage to the Gulfport VAMC, requiring $369 million in funding. Then, in 2012, Hurricane Sandy caused severe damage to the Manhattan VAMC, with repair costs expected to total $381 million. Accounting for cost escalation, VA may require more than $2 billion of emergency funding every 7 to 10 years to repair or replace severely damaged facilities. In addition, VA facilities frequently experience storm damage and flooding that do not exceed the Major Construction funding threshold of $20 million. VA does not currently track the costs of minor repairs resulting from storm damage.

Based on estimates from Climate.gov, the U.S. can expect average temperature increases from 1.1 to 5.4 degrees Celsius by the year 2100 and more extreme hourly temperatures. The National Oceanic and Atmospheric Administration predicts that, for every two degrees Celsius increase in temperature, tropical cyclone rainfall will increase by 10% to 15% and strength will increase from 1% to 10%. Using worst-case projections, and assuming a direct relationship between storm strength and damage costs, VA projects storm-related facility repair costs will increase by 0.2% per year.

2. Identifying and remediating risks to existing facilities: VA has an unknown amount of financial risk associated with climate risks to existing facilities.

3. Hardening new construction and renovations to be climate-ready: As VA updates its design and construction standards to support climate resilience, it will require an undetermined additional cost for future design and construction activities, as well as higher operations and maintenance costs for more climate-resilient systems.

4. Interrupted operations: VA has an unknown impact from interruptions to operations stemming from climate change-related events. Impacts include shutdowns due to power outages, water shortages, severe storms, wildfires and other severe weather events.

5. Increased adverse health impacts: VA expects an increase in various adverse health impacts from climate change. These impacts include increased vector-borne diseases, heat-related injuries and malnutrition, among others.

6. Increased threats to homes financed through VA's home loan program: VA's home loan program includes loans made, insured or guaranteed to make homeownership more affordable to Veteran borrowers across the U.S. and territories. The program includes direct home loans for Native American Veterans to purchase homes on trust lands, and grants to assist eligible Veterans with certain service-connected disabilities to construct or adapt their home to accommodate their needs. The program also manages and sells properties acquired by VA from foreclosures and manages direct loans for purchase of real estate owned properties. The primary concerns for VA are the potential indirect impacts resulting from newly constructed or existing homes in and around the U.S. coastline where sea level rise can pose a threat or areas where wildfires are common due to drought conditions.

Adaptation:

1. Repairing or replacing damaged and destroyed facilities: Unless VA can identify at-risk facilities and remediate those facilities prior to severe events, VA must continue absorbing the cost of this impact. To avoid recurrences at these facilities requiring repair or replacement, VA will utilize its most-current climate resilience standards to analyze

the most effective and suitable method to repair, improve or replace. VA will perform feasibility analyses to assess if the cost to replace, improve or repair is financially advisable, taking into account the suitability of the site including climate related risks. If VA can determine its current financial exposure to climate-related storm damage, the Department will begin to request additional funds in its budget requests for minor repairs resulting from increased storm activity. Funding for major construction efforts resulting from storm events will be requested on an as-needed basis.

2. Identifying and remediating risks to existing facilities: VA is investigating the possibility of conducting climate risk assessments at all existing facilities via a newly established Climate Resilience Adaptation Program. The cost for these activities is currently unknown and will be developed.

3. Hardening new construction and renovations to be climate-ready: As VA updates its design and construction standards to enhance climate resilience, the effort will include a determination of estimated costs for the additional enhancements. These estimates will then be added to budget requests for future design and construction activities.

4. Interrupted operations: VA will investigate options for determining the financial risk of climate change-related operational interruptions.

5. Increased adverse health impacts: VA will investigate the potential health impacts of climate change and forecast potential budget increases resulting from those impacts.

6. Increased threats to homes financed through VA home loan program: VA will continue to consider approaches to better integrate climate-related financial risk into underwriting standards, loan terms and conditions, and asset management and servicing procedures, as related to housing policies and programs. The local government and planning authorities are ultimately responsible for infrastructure and development of the Veteran housing supported by VA loans. The Energy Efficient Mortgage program allows for a loan to be increased by up to $6,000 over and above the established reasonable value of a property, and provides a valuable incentive for borrowers to adopt sustainable best practices, improve the value of their property and mitigate climate risk. Additionally, VA recognizes that an energy-efficient home will have lower operating costs, making homeownership more affordable for Veteran borrowers. VA is evaluating whether changes to the program are warranted and if increases to the $6,000 cap will require statutory amendments.

Timeline:

1. Repairing or replacing damaged and destroyed facilities: This effort is ongoing.

2. Identifying and remediating risks to existing facilities: If funded, VA expects to fully review its existing facility portfolio over the span of ten years. With additional funding, that review may be reduced to five years, or less. Development of remediation project packages may also require up to ten years to accomplish, by which time VA expects to have a clear understanding of its full exposure to facility climate risk. Development, funding and execution of all identified remediation projects may require an additional ten years.

3. Hardening new construction and renovations to be climate-ready: This effort will parallel VA's update of design and construction standards for climate resilience, which VA expects to complete by the end of FY 2022 or FY 2023.

4. Interrupted operations: This investigation may require approximately twelve months to complete.

5. Increased adverse health impacts: This activity may require up to twenty-four months from the date of approval and/or funding.

6. Increased threats to homes financed through VA home loan program: Beginning in FY 2022, VA will collect and analyze data and information to assess any potential for increased threats to the VA home loan program.

Resources:

1. Repairing or replacing damaged and destroyed facilities: The additional cost exposure due to increases in storm activity and flooding is not currently included in VA's budget estimates. VA cannot currently predict this impact but expects an increase in non-recurring maintenance, repairs and minor construction budget requests to address climate-related damages in the future. VA also projects it will execute more than $2 billion in emergency funding for repair or replacement of damaged or destroyed facilities every seven to ten years.

2. Identifying and remediating risks to existing facilities: VA does not currently have funding to undertake the necessary facility evaluations, or the resulting projects. VA will request funding for facility evaluations at the first opportunity and will request funding for remediation projects on an as-needed basis.

3. Hardening new construction and renovations to be climate-ready: VA may be able to develop these cost estimates in-house, depending on workload and staff expertise. If a consultant firm is required to do this work, VA may require annual additional funding.

4. Interrupted operations: VA will execute this activity using in-house staff but may require external technical expertise and will request funding, as needed.

5. Increased adverse health impacts: While VA may have the staff necessary to complete this investigation, external technical experts may be needed to assist. Funding will be requested, as needed.

6. Increased threats to homes financed through VA home loan program: VA will use existing resources to begin necessary assessments to determine costs associated with increased climate threats. If additional resources are required, VA will request funding through the budget process.

Disclosure:

1. Repairing or replacing damaged and destroyed facilities: Funding for climate-related minor damage will be added to future budget requests. Funding for major repair/replacement projects will be submitted on an as-needed basis.

2. Identifying and remediating risks to existing facilities: VA's financial risk associated with climate risks to existing facilities is unknown. Conducting climate risk assessments would allow VA to better quantify and disclose these risks.

3. Hardening new construction and renovations to be climate-ready: Additional costs for complying with climate resilience standards will be disclosed in future budget requests for design and construction efforts.

4. Interrupted operations: Once VA has determined a mechanism for identifying the cost of operational disruptions due to climate change, it will begin reporting these additional costs in its budget submissions.

5. Increased adverse health impacts: Once budget increases are forecasted for the adverse health impacts of climate change, VA will begin including the additional funding in annual budget requests.

6. Increased threats to homes financed through VA home loan program: Once VA identifies potential costs associated with increased threats to homes financed through the VA home loan program, it will disclose them in annual agency financial reporting.

Vulnerability 4: Emergency Response and Continuity of Health care Operations

Climate change has contributed to increased severity of weather events and storms across the U.S. as well as wildland fire conditions along wildland urban interfaces throughout the nation. This increased frequency and severity of extreme weather events will continue to strain VA's ability to raise readiness to provide access to facilities and services, and to protect people and assets continuously as well as in times of crisis/emergency.

Impact: Impacts of a continually changing climate include threats to building and supporting infrastructure, burdens placed on the health care delivery systems and interruptions in energy and material supply. Specific vulnerabilities include:

1. Physical Damage: Damage to buildings and supporting infrastructure (roads, bridges, utilities) from water, extreme temperatures, storms, fire or SLR.
2. Resource Dependence: Damage to or interruption of the critical resource delivery systems on which VA facilities rely, such as electrical generation and distribution systems, fuel and medical gas production, storage and potable or wastewater facilities.
3. Supply Chain Interruption: Interruption of mission-critical supply chains and any network of systems such as staff, transportation, communications, the supply of raw materials or other resources that might impact the agency's mission.

Health and health care access and delivery vulnerabilities focus on:

1. Emergency Management Activities: Efforts include mitigation such as increasing resilience of buildings and operating systems, preparedness of Veterans and employees as well as facilities and resources to support effective response and recovery.
2. Health care Services: Traditional and virtual methods of providing care to meet increased demand may be compromised by disruption of electrical power distribution due to disasters.
3. Public Health: Changing background health, including increased risk of heat stress, new and emerging disease risks.

Adaptation: Emergency management-related adaptation actions include non-structural and structural mitigation to VA health care buildings and operating systems, preparedness of staff and patients, predictive analysis and warning, protective actions (curtailment of service, shelter-in-place, patient movement), outreach to vulnerable patients, emergency operations supporting the provision of health care in alternate care sites (Disaster Emergency Medical Personnel System and Critical Deployable Resources) and the use of telehealth when required expertise is not available physically.

Timeline: VHA Office of Emergency Management (OEM), in partnership with other VHA Program Offices operating under the context of the VHA Emergency Management Coordination Cell has provided policy, guidance, technical assistance, funding and oversight to Veterans Integrated Service Networks for Continuity of Health care, Critical Deployable Resources, Dual-Use Vehicles, National Incident Management System, Resilient High-Frequency Radio Network, VHA Participation in Federal Patient Movement and the Disaster Emergency Management Personnel System on an on-going basis.

Resources: Major improvements to the Critical Deployable Resources have been made during COVID-19 and additional investments and program improvements are planned for FYs 2022 and 2023.

Disclosure: VHA OEM has integrated continuity of health care operations into VHA's Enterprise Risk Management Process.

Vulnerability 5: Adverse Medical Impacts of Climate Change to Veterans and VA Employees

Impact: Climate change threatens the health of Veterans and staff, as well as their families and communities. VA serves 7.2 million unique patients, providing 126.5 million outpatient consultations, and employs a civilian staff of over 400,000. VA has identified several areas where Veterans and staff health may be affected by climate change including increased risk of serious complications from extreme temperatures; increased food-borne, water-borne and vector-borne disease and increased flooding; wildfires; and extreme storms that will challenge the local community with short and potentially long-term complications. Worsening air quality will affect individuals with cardiopulmonary disease, and those with allergies may suffer from increased mold and pollen.

Adaptation: VA will approach the impact on Veteran and staff health through several public health strategies. First, VA will develop and disseminate educational materials and programs for staff and Veterans to prepare them for changes in their environment. Second, where possible, VA will design, implement and monitor prevention strategies designed to minimize Veteran and staff risks due to climate change. As an example, VA's Emergency Alerting and Accountability System allows for sending critical information to employees, contractors and affiliates in times of an emergency or safety event. Third, VA will work to establish a full data exchange with CDC to enhance surveillance and analytics.

Timeline: Educational programs and tools will be developed on an ad hoc basis in preparation for and expansion of existing disease or the arrival of a new issue to an area of the country. Prevention strategies would be planned and made available for

implementation involving diseases or environmental changes impacting health, as climate models predict their appearance.

Resources: Creating educational materials will be required and new prevention strategies may require initial and sustaining funds over several years.

Disclosure: Internally, VA will publish for leadership review and action ongoing information on the types of conditions and the populations at risk. Externally, VA will share information, as appropriate, with local public health authorities and other Federal agencies.

Streamlined Action Plan

Priority Adaptation Action 1: New and Updated Design Standards and Guidance

This action includes five steps, each identified below with specific characteristics that comprise the adaptation action.

Action Description:

1. Reinstate rescinded standards: VA will reinstate climate resilience standards rescinded in 2017. This is a new action.

2. Develop Risk List: The Office of Construction and Facilities Management (CFM), as the lead office, in coordination with various VA Administrations and staff offices, will evaluate available information to determine climate change-related risks affecting VA-owned sites and facilities. The results will be used to develop a “climate change risk list.” This list will be used for evaluating VA’s design standards and identifying gaps. This is a new action.

3. Review and update climate-resilience standards for sites and facilities: VA will review all VA design and construction standards to determine the adequacy of climate change risk reduction. This review will include evaluating industry standards and those created by other Departments/Agencies. VA standards will be updated, deleted and/or created, as necessary. This action will include standards for all VA-owned facilities, including standards for information and communications technology, information security, building automation systems and other buildings and operations systems. In addition, VA will estimate the additional cost to future design and construction projects for compliance with the new/updated standards as compared to cost impact of status quo so VA can better determine the financial risk and budget requirements posed by climate change. One of the goals of this effort will be to ensure new standards tie a cost analysis to a risk analysis, allowing VA decision-makers to determine whether to apply a standard to a specific project. This is a continuation and expansion of actions taken in 2014, 2016 and March 2021.

4. Review facility sustainability certification requirements: VA will review its requirements for sustainable facility certification within VA Directive 0056, *VA Sustainable Buildings Program*, and the adequacy of those requirements to support climate resilience mandates, and will update them as necessary. This is a new action.

5. Further improve facility efficiency to support resilience efforts: Improve energy efficiency, water efficiency and carbon free distributed energy generation and storage capability to support facility resilience. Continue to perform quadrennial energy and

water evaluations of all covered facilities to identify opportunities for further efficiency and resiliency. Through combined capital investment and energy performance contracting, VA will implement all lifecycle cost effective energy and water conservation measures. VA will explore opportunities and pursue technologies and building management practices to increase building and operations resiliency to climate change risk. VA will explore ways to reduce overall facility energy and water consumption to reduce the impact on resilience requirements for extending facility usage during major utility disruptions, including hardening energy infrastructure, and evaluation of critical systems efficiency and standby power equipment. This is a continuation of work VA currently implements to improve facility efficiency.

Action Goal:

1. Reinstate rescinded standards: The goal for this action is for VA to re-publish rescinded climate resilience standards.

2. Develop Risk List: The goal for this action is to have a master list of facility climate change risks.

3. Review and update climate-resilience standards for sites and facilities: This step has eight phases with unique goals: VA will: (1) Use the “risk list” to determine which risks can be mitigated by implementation of design and/or construction standards; (2) Identify all standards that already reduce facility climate risk; (3) Publish a list of extant climate resilience-related standards to VA’s Technical Information Library (TIL) for simplified reference by designers; (4) Review the adequacy of existing standards and internal controls; (5) Update standards determined to be inadequate; (6) Identify remaining gaps in climate resilience-related standards and conduct lifecycle cost analysis to prioritize changes; (7) Develop standards to fill gaps; and (8) Update the list of climate-risk standards on the TIL.

4. Review facility sustainability certification requirements: This step has five phases with unique goals: VA will: (1) Identify all climate resilience mandates from laws, executive actions and regulations; (2) Identify current sustainable facilities certification requirements; (3) Determine adequacy of existing policies to meet requirements and update, as necessary; (4) Issue a VA Policy Memo requiring sustainable facilities certification; and (5) Update Design Standards to support new certification policy (including Design Manuals, Master Specifications, and so forth).

5. Further improve facility efficiency to support resilience efforts: VA will update design and construction standards, as necessary, to enhance efficiency and resiliency. VA will fully implement 42 U.S.C. § 8253 requirements and ensure that quadrennial evaluations are comprehensive and factor climate risk and resilience into lifecycle cost analysis. VA will continue to implement energy and water savings measures.

Agency Lead: CFM will be the agency lead for these actions.

Risk or Opportunity:

1. Reinstate rescinded standards: This step addresses consideration of climate change adaptation during design and construction of VA facilities.

2. Develop Risk List: This step will establish the foundation for evaluating and prioritizing climate change risks and weaknesses to VA sites and facilities. It will support future actions to address a wide range of climate risks to VA sites and facilities. Climate

change risks or opportunities that escalate to the enterprise level will be submitted to the agency's Enterprise Risk Register in accordance with OMB Circular No. A-123, Management's Responsibility for Enterprise Risk Management and Internal Control.

3. Review and update climate-resilience standards for sites and facilities: This step will support identifying site and facility risks, as well as opportunities to reduce those risks.

4. Review facility sustainability certification requirements: This step will support identifying site and facility risks, as well as opportunities to reduce those risks.

5. Further improve facility efficiency to support resilience efforts: This step will support reducing risk from energy and water scarcity or utility disruptions caused by climate change-enhanced risks.

Scale: All steps of this action will be implemented on a national scale.

Timeframe:

1. Reinstate rescinded standards: VA began this effort in March 2021 and moved quickly to complete it by April 2021.

2. Develop Risk List: VA expects this action will take no more than three months and will likely be completed by August 2021.

3. Review and update climate-resilience standards for sites and facilities: VA expects this effort to be completed by the end of FY 2023 if consultants are needed, or by the end of FY 2022 if work can be completed using in-house staff.

4. Review facility sustainability certification requirements: VA expects to complete this action no later than the end of FY 2024.

5. Further improve facility efficiency to support resilience efforts: VA expects to complete this action no later than the end of FY 2025.

Implementation Methods:

1. Reinstate rescinded standards: VA re-published previous climate resilience standards. The reinstated standards were expanded to include specific design requirements for climate resilience, including site evaluation, SLR design and wildfire risk.

2. Develop Risk List: VA will develop a draft list based on publicly available information, then host several discussion groups to gather feedback from VA Administrations and staff offices as to which risk areas apply to VA sites and facilities.

3. Review and update climate-resilience standards for sites and facilities: Subject matter experts (SME) in CFM will lead this effort in coordination with various VA Administrations and staff offices. VA must determine whether this effort will require external support from a consultant team or if all the work can be completed in-house.

4. Review facility sustainability certification requirements: SMEs in CFM will lead this effort in coordination with various VA Administrations and staff offices.

5. Further improve facility efficiency to support resilience efforts: SMEs in CFM will lead this effort in coordination with various VA Administrations and staff offices.

Performance:

1. Reinstate rescinded standards: Percentage of affected standards reinstated.

2. Develop Risk List: List Complete/In Progress.

3. Review and update climate-resilience standards for sites and facilities: Each Phase has unique performance metrics outlined below:

- Identify Risk Reduction Areas: Complete/In Progress.
- Identify Existing Standards: Percentage Complete.
- Publish Climate-Ready Standards List to TIL: Complete/In Progress.
- Existing Standards Adequacy Review: Percentage Complete.
- Update Inadequate Standards: Percentage Complete.
- Identify Remaining Gaps: Complete/In Progress.
- Develop Standards to Fill Gaps: Percentage Complete.
- Update and Republish Climate-Ready Standards List to TIL: Complete/In Progress.

4. Review facility sustainability certification requirements: Percentage Complete.

5. Further improve facility efficiency to support resilience efforts: Standards created/ updated: Quantity and Percentage.

Intergovernmental Coordination: VA may need to reach out to SMEs throughout numerous government agencies but expects most information to be readily available.

Resource Implications: VA expects to perform much of this work in-house. For any necessary external technical expertise, VA will determine funding requirements and request funding, as required.

Challenges/Further Considerations: At this time, VA has not identified challenges or further considerations.

Highlights of Accomplishments to Date: In March 2021, VA's Facilities Standards Service within CFM reviewed the past standards and determined that they would be most appropriate for inclusion in the VA Site Design Manual. VA updated the Site Design Manual in March 2021 and published it on the TIL in April 2021. The standards will be further reviewed during the standards review process.

VA completed an adaptive climatology standard in 2016 and used the data to update its Heating Ventilation and Air Conditioning Design Manual in 2017.

Priority Adaptation Action 2: Critical Supply Stockpiles

Action Description: VA is taking steps to prepare for the impact of climate change on human health, such as the linkages of climate change, the environment and those living in affected areas discussed in analysis by the U.S. Environmental Protection Agency.

Over the past decade, VA has maintained stockpiles of critical medical supplies and pharmaceuticals to be used in response to natural disasters including floods, hurricanes, wildfires, tornados, earthquakes, high consequence infections such as pandemics and terrorist attacks. One component of this plan, referred to as the All-Hazards Emergency Cache (AHEC), provides short-term coverage for the initial 24-48 hours of the emergency and complements the contents of the U.S. Strategic National

Stockpile (SNS) managed by HHS Public Health Emergency Medical Countermeasures Enterprise (PHEMCE). Increases in temperatures and precipitation extremes are projected to result in extreme weather events that will stress local supplies on hand and potentially interrupt supply chain activities.

Action Goal: Prepare VA to respond to the impact of surges in the demand for supplies and to mitigate novel high consequence infections.

Agency Lead: VHA Office of Population Health per VHA Directive 1047 *All-Hazards Emergency Cache Program*.

Risk or Opportunity: Climate change poses a risk to Veterans and employee health. The AHEC program can be designed to mitigate the most likely threat due to a high consequence infection or natural disaster. Additional risk exists where VA is unable to control actions taking place in the local community or, if applicable, country-wide policy not tailored to VA's capabilities. For example, throughout the COVID-19 pandemic, the most successful infection prevention, control and mitigation plans have included practicing social distancing, wearing face masks and increasing hand washing. Although VA can deploy such measures through VA-wide policy, Veterans and VA staff live in their own local communities where similar infection prevention or control measures may not be required or, if established, not monitored to ensure compliance. VA's ability to play a lead role in combatting the spread of infection outside of the VA health care system is thus inherently compromised.

Scale: The AHEC program is an enterprise-wide asset and is integral to local community response plans where VA participates in regional disaster planning and response. This asset is also available for VA "Fourth Mission" activities under the Stafford Act (42 U.S.C. Ch. 68).

Timeframe: Oversight and management of the AHEC program is a continuous process with routine updates to the items or formulary contained in the AHEC. When changes are required, significant time is required to procure large quantities of a product, distribute and train staff on the use of the new items as needed.

Implementation: The AHEC program is active and continually updating.

Performance: The AHEC program includes several activities designed to assess the effectiveness of each local AHEC program against known and possible emergencies. These activities include: (1) periodic review of AHEC contents; (2) annual inspection to determine readiness to activate and deploy; (3) review of inspection results for significant variation in compliance and trends that indicate need for policy update; and (4) annual exercise that uses the AHEC.

Intergovernmental Coordination: VA coordinates with HHS PHEMCE to align the VA AHEC formulary for pharmaceuticals and supplies with the SNS. In addition, each local VHA facility develops an emergency response plan with their community and state partners. These local response plans include the use of the AHEC to respond to a local disaster.

Resource Implications: Changes to the formulary in the AHEC can be expensive. VA actively participates in the Department of Defense (DoD)/Food and Drug Administration Shelf Life Extension Program to evaluate high cost items for expiration date extensions. This program has been successfully used to extend the use of over $150 million in

pharmaceuticals. Expanding this program secondary to climate change could require additional funds at the facilities (construction) and for oversight activities (inspections, Office of Information and Technology tracking solutions).

Challenges/Further Considerations: The COVID-19 pandemic brought significant risk as global, just-in-time supply chain activities for equipment and supplies were unable to meet demand. VA is planning to expand the types and amount of supplies it reserves for surge and emergency use across the enterprise. Adjustments to the items and stock levels in the AHEC will be made once this new national resource is activated.

Highlights of Accomplishments to Date: The AHEC program has been functional for the past decade and has been activated to address local outbreaks of influenza and a rare case of exposure to radioactive material. VA policy was revised in April 2020 and plans are in place to update the inspection program in FY 2022.

Priority Adaptation Action 3: Biosurveillance and Epidemiologic Investigations

Action Description: Climate change is expected to increase food-borne, water-borne and vector-borne disease and Veterans and staff may be exposed and develop symptoms and associated diseases. VA should be prepared to treat and manage these illnesses in Veterans under its care and should have systems in place to monitor for these symptoms and conditions. Currently, VA SMEs develop algorithms and use natural language processing and artificial intelligence to data mine VA electronic health record system for diagnosis, organisms and syndromes indicative of a high consequence infection. This proactive, ongoing act of biosurveillance is paired with epidemiologic investigations to validate the existence of an event of concern, determine the magnitude and potential direction of the disease and collect information to inform response decision-making activities. This information is packaged into dashboards and reports that assist VA leadership with monitoring the current state and to identify outliers and variation in outcomes. For example, ongoing biosurveillance and epidemiologic investigations identify cases of interest seen in urgent care/emergency room, track critical resources including testing supplies, caseloads, bed space, personnel protective equipment, critical equipment (such as ventilators), treatments and vaccines. Data collected during this work is presented in aggregate on VA websites and shared through established agreements with CDC.

Action Goal: Create a robust biosurveillance system and epidemiologic investigation program to proactively surveil for high consequence infections in Veterans receiving care from VA.

Agency Lead: VHA Office of Population Health.

Risk or Opportunity: Increased rates of food-borne, water-borne and vector-borne disease will require increased vigilance by VA to prevent and monitor for associated symptoms and diseases. Biosurveillance activities will provide VA an opportunity to identify these diseases earlier and activate plans to treat and mitigate the effects of these diseases. Conducting epidemiologic investigations on clusters of disease identified by biosurveillance activities may stem the spread of disease and therefore the impact on other Veterans and staff.

Scale: A biosurveillance and epidemiologic investigation program in VA is an enterprise-wide initiative that includes collaborations with state and regional public health authorities and other Federal agencies.

Timeframe: Limited biosurveillance activities have been in place during the COVID-19 pandemic while VHA facilities conducted extensive epidemiologic investigations related to local disease clusters and outbreaks. Additional work is required to expand biosurveillance, coordinate activities between programs and increase data sharing with external partners including the Department of Homeland Security (DHS) and HHS. That work will be initiated in FY 2021 and carry on through FY 2022.

Implementation: Core elements of the biosurveillance and epidemiologic investigations initiatives exist and will require additional development and resources in FYs 2021 and 2022 to scope out and implement a comprehensive, enterprise model. For biosurveillance, data dashboards for specific high consequence infections (such as COVID-19 disease) and syndromic surveillance (such as influenza-like illnesses) will be built out and provided to VA leadership and stakeholders within VA.

Performance: Development, testing and deployment of deliverables will be evaluated for adherence to and deviation from agreed upon timelines. Additional assessments will be made on early versions of data dashboards and reports to allow lessons learned and improvements in report quality and efficiency.

Intergovernmental Coordination: Select data collected by the biosurveillance tools will be provided to Federal partners under existing and new interagency agreements. Additional agreements may be required for data sharing with local public health entities as part of a regional biosurveillance plan.

Resource Implications: The creation and expansion of VA biosurveillance and epidemiologic investigations will be standardized and streamlined to limit impact on resources. Some of the work under this initiative for climate change is also required for several EOs addressing COVID-19 disease and should gain from economies of scale and other resource streams.

Challenges/Further Considerations: Addressing climate change may require other Federal agencies to modify their plans to monitor the U.S. food-, water- and vector-borne disease. These changes may require VA to modify its approach to data collection, analysis, sharing and reporting to these agencies.

Highlights of Accomplishments to Date: VA has developed a national surveillance tool that has been deployed through most of VA's response to the COVID-19 pandemic. VA has successfully transferred surveillance data to CDC through several initiatives over the past six years including CDC's BioSense and VHA's Healthcare Associated Infections Surveillance System.

Priority Adaptation Action 4: Incorporating Climate Priorities into VA's Strategic Capital Investment Planning Process

Action Description: VA created the Strategic Capital Investment Planning process for determining the optimal path for prioritizing capital program appropriations among multiple, competing goals. SCIP achieves this goal across the entire agency using data-driven methods to produce a prioritized 10-year strategic capital plan supporting VA's annual capital budget request. Each year, projects submitted in SCIP for current budget

year consideration are scored and ranked using Veteran-centric decision criteria and weights that evaluate how well they address data-driven performance gaps in VA's infrastructure. The gaps are measurable representations of critical needs for VA. Historically, VA has included the following "green" gaps: energy efficiency, water efficiency, renewable energy consumption, sustainable buildings and greenhouse gas emissions. The most recent sustainability targets as represented in SCIP 2022 and established in calendar year 2017 (as part of the SCIP 2019 process), include: (a) 40% reduction of energy use intensity from the 2003 baseline; (b) 36% reduction of potable water use intensity from the 2007 baseline; (c) 30% renewable annual electricity consumption; and (d) 25% of eligible buildings qualifying as sustainable by FY 2032. These gaps and targets may be refined to align with Administration priorities, or additional gaps may be added. Additionally, VA will ensure that projects that close sustainability, energy and water gaps also close, to the extent possible, other gaps in the SCIP framework so that projects receive the maximum possible scoring and likelihood of funding. Going forward, VA will begin taking the necessary steps to comprehensively address climate change adaptation goals through the SCIP process. As VA continues to develop a greater understanding of its facility-level climate vulnerabilities, the need to build climate resilience comprehensively by prioritizing adaptive investments in conjunction with other mission-critical capital expenditures will grow.

Action Goal: A goal of SCIP is to ensure that VA allocates its appropriations to the areas of greatest importance and need. Future revisions to SCIP criteria, performance gap data and targets to ensure compliance with the latest executive and legislative requirements and policies will include updates to ensure climate priorities requiring capital funding are best situated to receive that funding. Aligning with the SCIP process also provides greater transparency into the needed funding to meet Administration climate goals, and legislative energy and water conservation requirements.

Agency Lead: Office of Asset Enterprise Management.

Risk or Opportunity: Climate change poses multivariate risks to VA operations. Flooding is a risk because of SLR, increased precipitation and more frequent and severe storm activity, which can also cause damage to VA facilities and information technology (IT) infrastructure. Increased heating and cooling days will stress VA environmental infrastructures, raise operating costs and may lead to adverse health outcomes for Veterans. Disruptions to the power supply will increase due to storm activity, but also because of increased load in the demand sector. Localized water scarcity could directly impact VA's ability to perform its primary missions safely. In any of these situations, VA needs to be able to serve its "Fourth Mission" as a community resource. The impact of these actions will align VA capital planning with long-term climate risk to ensure that necessary energy and water efficiency and carbon impact reductions are achieved in ways that maximize efficacy and minimize disruption to the mission.

Scale: SCIP is a Department-wide resource, supporting VA-owned buildings nationwide.

Timeframe: Gaps already established in SCIP can be updated to reflect Administration priorities as part of the Budget Year 2022 (SCIP 2024) cycle. Newly identified gap data, targets and guidance can be fully integrated into future Budget Years (SCIP 2025 and

beyond) based on availability of facility gap data and performance standards. The timelines will vary for actions requiring additional data gathering or new specifications to be written and approved.

Implementation: Once all climate action priorities are known, SCIP guidance for climate action related projects will be developed and distributed to VA staff for consideration and inclusion in SCIP project submissions. For infrastructure performance gaps and targets that already exist in SCIP, these changes can be made as early as August 2021 for consideration in the FY 2024 SCIP cycle. Once further guidance is received from the Administration on accounting for the social cost of greenhouse gas emissions, that guidance will also be incorporated into required feasibility studies and financial analyses for SCIP projects. By August 2022, to the extent feasible, VA will update its SCIP gaps and targets to align with all climate action priorities and goals.

Updates to SCIP to ensure existing climate priorities are adequately represented will require reviewing decision criteria and weights used to rank/prioritize projects. For climate priorities not currently identified in SCIP, data-driven performance gap data, targets and evaluation criteria will need to be developed as follows:

- Establish design standards that existing and new VA facilities must meet;
- Establish enterprise level facility measurement processes to determine compliance with standards;
- Develop gap data and plan targets for implementation in SCIP, and establish corporate gap data to be updated annually and implemented in SCIP; and
- Develop/implement decision criteria by reviewing/updating SCIP decision criteria to ensure new priorities are adequately represented such that project scores reflect consideration.

Performance: SCIP uses quantitative information to make data-driven, defensible decisions. Facility-level performance data is already used to make decisions for renewable energy, energy efficiency, water efficiency and greenhouse gas reduction objectives.

For new or revised SCIP targets and gaps, VA-enterprise standards will be reviewed and developed for new and existing construction. Upon availability of sound standards, surveys will be conducted of existing facilities and performance gaps. Targets for resolution through SCIP will be established, resulting in sound, actionable project plans.

Intergovernmental Coordination: To the extent necessary, VA will work with the Council on Environmental Quality and the Department of Energy to develop the goals, gaps and necessary measurements to include in the SCIP process.

Resource Implications: To meet new climate action requirements, even where gaps are adjusted and reprioritized, additional funding will be needed. Additional staff or contractor support will be required to perform initial data analysis, contract for additional infrastructure work and potentially to oversee the construction and operation of the projects.

Challenges/Further Considerations: In addition to climate change, VA must address challenges related to demographics, medical and IT, health care delivery standards and methods, facility condition issues and others. VA’s SCIP process is intended to support

an optimal path for prioritizing investments among multiple, competing goals in VA's resource constrained capital funding environment.

To better explain the challenges VA faces with its infrastructure, the SCIP process has continuously and consistently identified VA's infrastructure gaps and costs ($62-$76 billion in 2021 SCIP process) to modernize, right size, and maintain its facilities in a defensible manner; however, resourcing for those needs is not able to keep up with requirements. On average, VA buildings are more than 60 years old while approximately 30% of VA-owned space is considered historic and in need of major repair. The maintenance backlog of VA facilities continues to escalate.

Highlights of Accomplishments to Date: VA's SCIP process has supported funding of projects that have contributed to VA's 11.6% renewable electricity achievement, 27.8% reduction in energy use intensity from a 2003 baseline, 36.1% reduction in water use intensity from a 2007 baseline and 34.8% sustainable buildings, while balancing the capital priorities of a substantial increase in patient load, as shown in VA's FY 2020 OMB Scorecard.

Priority Adaptation Action 5: Updating Climate Change Considerations within Emergency Response Planning

Action Description: Challenges posed by climate change, such as more intense storms, frequent heavy precipitation, heat waves, drought, extreme flooding and higher sea levels could significantly alter the types and magnitudes of hazards faced by communities and the emergency management professionals serving them.

VA's mission is to take care of Veterans and their families. VA employees across the Nation are dedicated to serving Veterans, Service members, caregivers and their families, as well as the larger public with health care, benefits and memorial services. VA also has a "Fourth Mission", which is to improve the Nation's preparedness for response to war, terrorism, national emergencies and natural disasters by developing plans and taking actions to ensure continued service to Veterans; and to support national, tribal, state, local and DoD emergency management, public health, safety and homeland security efforts.

Emergency response and recovery is a key component of organizational resilience and anticipating climate change impacts and the risks they pose to VA employees and operations is essential for VA to successfully deliver on its mission. Currently, VA-wide planning efforts focus on continuous delivery of benefits and services to Veterans and their beneficiaries as well as support to the Nation in accordance with the National Preparedness Frameworks. VA maintains readiness sites and ensures all Federal Emergency Response Officials are ready to manage any disaster and to continue providing services to Veterans even during the COVID-19 Pandemic.

Action Goal: To ensure an enterprise-wide strategic approach to preparedness, VA will develop a capabilities-based framework by which risks to mission, workforce and people are assessed and enterprise-wide strategies to address these risks are developed. The framework will include an assessment process focused on changing risks of future incidents with the desired end-state of enhancing capabilities and strengthening organizational resilience. As a part of the framework, planning guidance will be integrated into VA administration and staff office organizational plans. To maintain strategic oversight of the preparedness and resilience framework, an Intra-agency

Policy Committee (IPC) will include senior executives who represent the various portfolios that together comprise the Department's preparedness and resilience functions as shown in Figure 1 below.

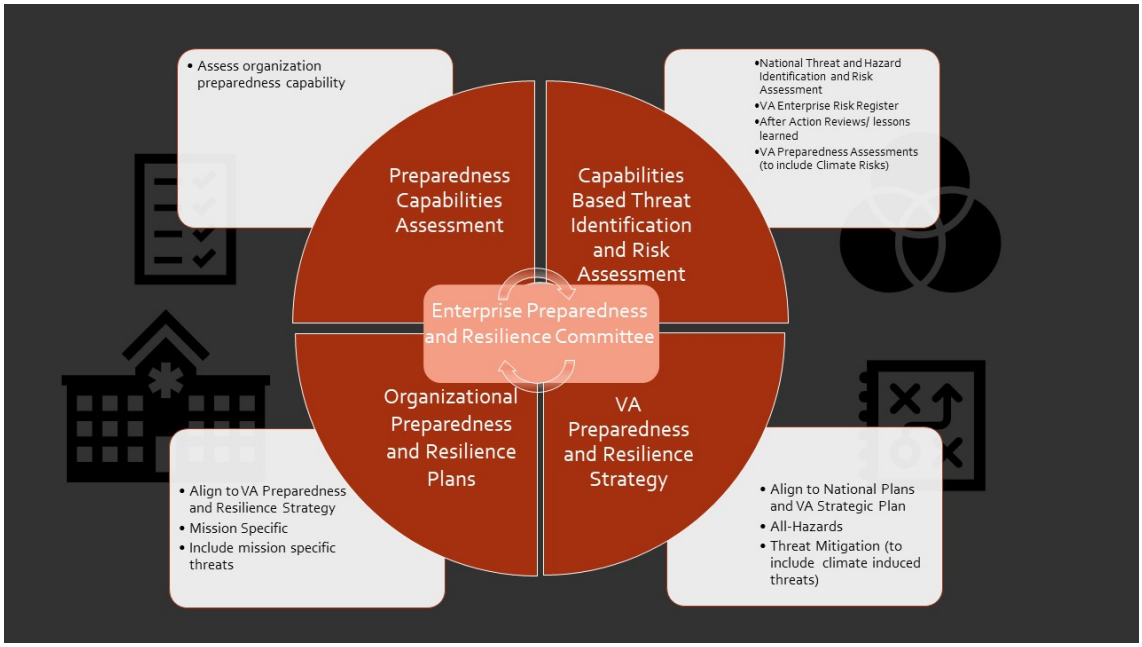


Figure 1. Intra-agency Policy Committee

The framework will improve the effectiveness and unity of effort for strategic direction through executive leadership and promotes decision-making in advance of, during and after disasters. This will ensure the Department is poised to continue delivering critical services to Veterans and beneficiaries and promote timely sharing of information on matters of mutual interest between VA Administrations and staff offices to include examining the changing nature of disasters as weather events intensify and diseases spread to new climates.

Agency Lead: The Office of Human Resources and Administration / Operations, Security and Preparedness.

Risk or Opportunity: The preparedness and resilience IPC will establish and maintain an enterprise strategy that addresses preparedness and resilience at the strategic level and makes risk-informed decisions based on identified threats. This is an opportunity to conduct long-term planning to address the changing risks of future disasters.

Scale: The preparedness and resilience framework will be at the strategic level with cascading guidance.

Timeframe: Framework implementation will begin by the end of FY 2021. An initial Preparedness and Resilience Strategy will be drafted by the second quarter of FY 2022.

Implementation: Framework implementation will begin by the end of FY 2021 and is a cyclical process.

Performance: VA will complete an annual capabilities and threat assessment and annual review and validation of the Preparedness and Resilience Strategy.

Intergovernmental Coordination: VA collaborates frequently with interagency partners on preparedness and resilience to include the Federal Emergency Management Agency, Occupational Safety and Health Administration, DoD, HHS and DHS.

Resource Implications: None.

Challenges/Further Considerations: As the Nation's largest integrated health care system, VA has had a robust and far-reaching response to the COVID-19 pandemic. VA implemented an aggressive public health response to protect and care for Veterans, their families, health care providers and staff in the face of this emerging health risk.

Highlights of Accomplishments to Date: VA has a series of emergency management and disaster response plans and developed a *Disaster Response During A Pandemic* planning document that supports an all-hazards response during the COVID-19 pandemic, with a focus on hurricanes. The plan emphasizes VA's health care preparedness and response to a hurricane complicated by the COVID-19 global pandemic and focused on protecting Veterans, their families and caregivers and VA staff members. VHA updated the Comprehensive Emergency Management Program (CEMP) policy in June 2020. CEMP is defined as the ability to maintain mission critical business operations and regular health care services, ensuring health security despite the effects of a disaster or emergency with the outcome of enhanced resiliency. Additionally, CFM supports disaster response by providing a Disaster Assessment Team to evaluate facilities following major disasters.

Efforts to Enhance Climate Literacy in VA's Management Workforce

VA will build on previous educational efforts through a renewed awareness campaign focused on leadership and management within the workforce. This campaign revolves around climate literacy, with the goal of accelerating VA's adaptation towards preparedness and resilience to the climate crisis. In consideration of the five adaptation stages identified in the Fourth National Climate Assessment, VA will initially target its literacy campaign on the awareness stage to enhance engagement at all levels of the organization and encourage a cohesive push through the remaining stages.

The core awareness messaging for this literacy campaign includes:

1. Understanding VA's climate vulnerabilities focusing on those included in this plan;
2. Understanding the five priority adaptation actions within this plan; and
3. Understanding the benefits of enhanced climate literacy within VA's management workforce.

The need for, and benefits of, climate literacy span across VA Administrations and staff offices. As such, each VA organization will identify the leadership and functional teams that possess oversight or responsibility in managing procurement, real property, public lands and waters and financial programs. Members of the management workforce within those functional teams will be the target audience for literacy efforts under this plan. More detailed messaging and a deployment plan will be developed in conjunction with each organization or office. Literacy will focus on the risks posed by climate change in general, as well as the vulnerabilities and adaptation actions specific to each target audience within VA. Workforce planning will be a component of these discussions.

Development and deployment of literacy training materials is expected to occur over a twelve-month period. The goal is for awareness to further VA's adaptation actions and support workforce planning. The successful implementation and evaluation activities inherent within each adaptation action will be used to evaluate and identify gaps in the literacy campaign.

Actions to Enhance Climate Resilience

Actions for Climate-Ready Sites and Facilities

VA issued Directive 0065, *Climate Change Adaptation Planning*, in 2012 to initiate integration of adaptation considerations and planning into existing decision-making processes and activities. VA's 2014 Climate Change Adaptation Plan and 2016 Climate Change Adaptation, Preparedness, and Resilience Plan involved an intra-agency process with all Administrations and staff offices that drove changes to VA's management functions and decision points for supporting climate-ready sites and facilities. For instance, VA issued climate-related design criteria in its *VA Sustainable Design Manual* in 2014 and published detailed SLR design criteria in 2015. VA requires all design and construction projects to follow VA design and construction criteria, including for maintenance, repair and minor construction.

VA rescinded climate change-related criteria in 2017 in response to the issuance of EO 13783, Promoting Energy Independence and Economic Growth. Upon issuing EO 13990, Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis, in January 2021, VA reissued its climate-related standards as part of the *VA Site Design Manual,* covering such topics as designing for SLR, selecting low-climate-risk sites and designing for wildland fire threats.

VA established a senior-level Climate Change Task Force (CCTF) in March 2021 to reinvigorate climate change discussions across VA, and to support the requirements of EO 14008. The CCTF is responsible for identifying opportunities to integrate climate readiness into VA's facilities and operations. To expand on the work of the CCTF, VA will establish a Climate-Ready Sites and Facilities Working Group chaired by CFM. The Working Group will conduct a deep dive into all of VA's site and facility decision processes and will identify opportunities to enhance climate resilience throughout each of the decision points in those processes. At a minimum, the Working Group will review: (1) project determination; (2) project development; (3) low-level project approval; (4) high-level project approval; (5) project selection and funding; (6) site selection; and (7) project design and construction.

VA will continue to expand on its design criteria work by reviewing and updating, as necessary, all climate risk-related criteria. VA will develop and maintain a master list of all climate-ready criteria to allow design and construction professionals to more-easily locate the criteria that exists throughout various documents.

VA maintains design criteria that reduces facility impact on the local environment, thus reducing environmental risks and increasing benefits to local communities. As an example, VA's *Site Design Manual* requires integration of mass transit considerations into site selection and facility design which reduces local traffic congestion and emissions. In addition, VA has been augmenting its vehicle fleet with electric vehicles as they become available from The General Services Administration, further reducing air

pollution on local communities. VA also follows the National Environmental Protection Act process while designing and constructing projects. As part of that process, VA identifies environmental risks and benefits to vulnerable communities, and opportunities for improvement.

VA regularly reviews its building portfolio to identify significant opportunities to improve climate readiness and adaptation. VA has implemented specific standards to integrate adaptation considerations into the design and construction of VA facilities, such as design standards for the location of facilities and critical equipment within the buildings. Further, systems are designed to operate autonomously such that a loss in fuel, water and electricity will not inhibit the facility from conducting business.

In addition to design standards, VA continues to pursue efficiency efforts to reduce facility reliance on the power grid. VA evaluates energy and water efficiency opportunities primarily through audits conducted at all major medical centers on a four-year recurring cycle, as required by law. Projects addressing energy and water conservation are submitted into the SCIP process. Through its SCIP process, VA prioritizes funding based on the extent to which a project addresses various mission needs, including those that enhance energy efficiency, water efficiency, building sustainability and/or renewable energy generation. By reducing overall demand and generating power on-site, VA facilities reduce their reliance on the grid. VA also implements the Guiding Principles for Federal Building Sustainability, to the extent practicable. Through VA's energy and water conservation projects, VA is supporting the creation of jobs in energy efficiency, clean energy, manufacturing, building trade and construction, many of these jobs being with small, disadvantaged and Veteran-owned businesses.

Actions to Ensure a Climate-Ready Supply of Products and Services

VA is focused on the end-to-end acquisition lifecycle and compliance with the Federal and VA Acquisition Regulation and related guidance. VA also develops standardized internal VA procedures, guidance and instructions when necessary to assure VA addresses acquisition needs and aligns with sustainability requirements such as those related to climate change.

VA considers its five most critical or highest priority supplies and services that are at risk due to disruption by acute extreme weather events or long-term climatic change to be:

1. Medical supplies;
2. Medical equipment;
3. Pharmaceuticals;
4. Medical services to Veterans; and
5. Medical services to the public during a national emergency.

VHA is establishing RRCs to build resiliency into the supply chain and support VA readiness for local, regional and national pandemic response, thereby minimizing medical supply chain disruptions. In the long term, RRCs will support VA preparedness for regional and national public health emergencies, including those secondary to natural disasters (such as hurricane, flood, pandemics and other disasters). Once the RRCs are at full operating capacity, they will utilize an integrated readiness approach with enterprise visibility of the readiness posture, including the ability to support VHA emergency caches.

THE SECRETARY OF VETERANS AFFAIRS
WASHINGTON

May 26, 2021

U.S. Department of Veterans Affairs (VA) Policy Statement on Climate Change Resilience and Adaptation

Purpose. VA's policy is to make climate change resilience and adaptation an integral part of its ongoing mission. VA leverages resilience and adaptation that ensures uninterrupted service and as opportunities to continually improve its service to Veterans and their families. VA operates using the four fundamental principles of advocacy, access, outcomes and excellence.

Background. On January 27, 2021, the President issued Executive Order (EO) 14008, Tackling the Climate Crisis at Home and Abroad. This EO requires all Federal agencies to develop a Climate Action Plan describing the ways to bolster adaptation and increase the resilience of facilities and operations to the impacts of climate change. Agencies were directed to build on prior adaptation planning to generate actions for integrating climate change resilience and adaptation into their missions, programs, management functions and decision points.

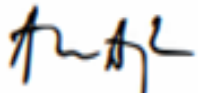
Vision. VA makes risk-informed decisions, adaptively learns through experiences, and works with agencies and organizations across all levels of government. VA continually evaluates the risks and challenges posed by climate change to its mission, operations and programs and adjusts accordingly. VA's missions include the delivery of quality care, services and benefits to Veterans, providing health care education and training to health care professionals, advancing medical research and development, providing dignified burial services for Veterans and eligible family members, and assisting the Nation in times of emergencies and disasters. VA will take steps to prevent mission impacts due to climate change affecting VA infrastructure, health care and related clinical and non-clinical requirements, and the safety of Veterans, their families and VA employees.

VA's update to its 2021 Climate Action Plan includes strategies that enhance preparedness and resiliency to the climate crisis as part of regular business practices for the Veterans Health Administration, Veterans Benefits Administration, National Cemetery Administration and VA Staff Offices. Management of and updates to VA's Climate Action Plan will be incorporated into VA's governance structure. VA's update and follow-on actions will:

- Analyze existing and emerging climate change scientific data;
- Conduct annual reviews that evaluate risks and vulnerabilities to infrastructure, benefits and services;
- Assess VA's organizational capacity to adapt to short- and long-term climate threats and develop responses, where possible;
- Evaluate periodically the risks that short- and long-term climate threats pose to providing quality health care and related clinical and non-clinical requirements;

- Prioritize and implement responses based on threat severity;
- Integrate resilience and adaptation considerations and planning into existing decision-making processes and procedures;
- Enhance the climate literacy of its management workforce; and
- Support climate mitigation efforts that also advance environmental justice.

Conclusion. The VA Climate Action Plan is a living document. VA is continuously improving the integration of resilience, adaptation and sustainability into all aspects of its mission. VA will build on previous experiences as it adapts to changing climate conditions. Above all, VA will continue to provide high-quality care and services to Veterans and their families and protect the safety of its employees.



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