GOVERNMENT RESPONSE
In one way or another, government response to disasters and emergencies includes most of the USVI government, as well as—in large events—federal partners and other states and territories. In any response effort, the Virgin Islands Territorial Emergency Management Agency (VITEMA) is the lead agency; other participants work with it to coordinate their activities.

During the hurricanes, the entire emergency response system faced a test the likes of which it had not seen in decades. As the hurricanes arrived, VITEMA’s Emergency Operations Centers (EOCs) monitored resources and conditions and directed response activities across multiple emergency support functions, including first responders and public safety. First responders from five different agencies worked to meet the basic emergency needs of the Territory’s residents after the worst of the storms had passed and conditions were safe enough for the responders to go out, carrying out search and rescue, doing welfare checks, fighting fires, and engaging in property protection and commodity distribution. Federal partners led by Federal Emergency Management Agency (FEMA) provided assistance that VITEMA and other parts of the USVI government requested; help also arrived from other states and territories via the Emergency Management Assistance Compact (EMAC). Response was made difficult by damaged and blocked roadways, damaged vehicles, limited fuel resources, and damaged communications infrastructure.

As with any response effort, the hurricanes revealed areas that could be improved upon. As the Territory prepares for future disasters, a more robust and resilient response system will include better coordination between all the different response players within the EOCs (including through the creation of a single territorial EOC to guide and direct island EOCs); enhanced preparedness of fire, police, Emergency Medical Services (EMS), and volunteer search and rescue groups (including through using Virgin Islands Fire Service [VIFS] stations and staff in EMS activities); much-strengthened emergency planning and pre-storm preparation across all government agencies; hardening critical response assets against weather impacts (including rebuilding the St. Croix EOC); and enhancing communications infrastructure to survive future storms.

VITEMA is the lead emergency management agency in the US Virgin Islands. Before emergencies, VITEMA’s director prepares response plans; during emergencies, the director runs response operations, allocates funding, and requests help from federal and state governments in his or her capacity as the Territorial Coordinating Officer (TCO). Beyond VITEMA, the four additional emergency response participants are the Virgin Islands Police Department (VIPD), which maintains public order and enforces the curfew, the Virgin Islands Department of Health Emergency Medical Service (VIDOH EMS), which provides EMS services, the VIFS, which provides fire and hazardous materials protection, and four separate volunteer rescue groups, which provide search and rescue as well as some basic EMS service. The USVI Executive Branch also plays a role in that it suspends or waives statutes, rules, ordinances, and orders to the extent permitted by law if needed to assist in the response operations. Another participant is the Virgin Islands National Guard (VING), a function of the USVI government, that, while not a first responder per se, provides critical support with transportation, logistics management, resource support, external affairs, off-island support, military police, and air operations.

“Government response” could be defined broadly to mean the activities of all branches of government that have to do with responding to hurricane consequences or, more narrowly, to mean the activities of those agencies that have to do with the more immediate response needs mainly having to do with people’s safety. As the entirety of this report addresses the response of different branches of government overall, this section focuses on the latter, more narrow definition.
Federal support, when needed, comes from FEMA, which coordinates support that comes in from other parts of the federal government, including the US Army Corps of Engineers, which provides resources such as generators, construction, public works projects, and engineering management. Support from other states arrives via the EMAC.

**VITEMA: emergency response plans**

VITEMA develops advance plans for many possible emergencies, primarily through its Territorial Emergency Operations Plan (TEOP). The TEOP includes guidance on setting up Emergency Operations Centers (EOCs; see in next column), defines agency roles and responsibilities to prevent overlap and eliminate gaps in service, and establishes initial operating procedures for first responders. When the Governor declares an emergency, the declaration triggers the TEOP and emergency response coordination across all relevant USVI agencies; the threshold for activating the TEOP for a hurricane is a Category 3 storm. VITEMA’s last revised and updated TEOP was published in December 2016;¹ when it was published, many of the required annexes to it were yet to be developed. The Vigilant Guard exercise in May 2017 exposed many gaps in the existing plans that highlighted areas in the TEOP that need to be corrected.

**VITEMA: Emergency Operations Centers**

VITEMA manages response operations via three EOCs: one on St. Thomas, one on St. John, and one on St. Croix, each of which is run by a VITEMA Deputy Director (also playing the role of TCO Representative). Once activated either by the Governor or VITEMA Director, EOCs perform several functions:

- **Serve as the place where all the different response players are physically present**: as part of regular planning, individual government agencies select Emergency Support Coordinators (ESCs) from within their staff to represent each agency at each of the three EOCs; other (nongovernmental) response players may also be present (see chart: Emergency response hierarchy)

- **Inform the public**: before a storm, EOCs tell the public where they can access information on AM and FM radio stations and on the Internet; after a storm, EOCs provide updates on the situation

- **Distribute resources**: EOCs distribute commodities and supplies either previously stockpiled or received from various organizations outside of the Territory to meet emergency needs

- **Coordinate with the federal government**: each EOC coordinates with FEMA and other federal partners for response and recovery support. Support ranges from tasking agencies and first responders to managing and staging supplies, equipment, and personnel provided by federal agencies or the Department of Defense

- **Coordinate with state governments**: EOCs are in charge of requesting assistance from other states via the Emergency Management Assistance Compact (see below for details)

EOCs are organized according to what is known as Emergency Support Functions (ESFs). US Department of Homeland Security’s National Response Framework defines 15 ESFs; of those, nine are represented in the EOC. Each ESF is covered by a territorial agency (see table: Emergency support functions in the EOCs).

The three physical EOCs in the USVI have varying degrees of fitness for the purpose. On St. Thomas, the EOC is a hardened facility that opened in 2010 and is configured for disaster operations, but is overdue for updates to communications systems, IT infrastructure,

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and software. On St. Croix, VITEMA offices and EOC occupy a rented building in Christiansted with limited space that cannot handle the number of personnel necessary to facilitate incident response. The EOC is also not in a hardened portion of the building and is thus vulnerable to damage from severe weather. Similarly on St. John, the facility occupies the first floor of a two-story building that is not hardened against hurricanes.

All three facilities run WebEOC, which is a software package used throughout the FEMA system and in numerous state and local emergency management facilities. The program allows agencies to track items that need to be acted upon and also makes possible a very detailed, sequential review of all activities by emergency support function that took place in an incident, which helps with after-action reports. The system was set up with the vendor’s standard format and still needs to be customized to meet VITEMA’s needs.

VITEMA: 911 call center

The Territory has two 911/Emergency Communications Centers (ECCs), one each on St. Thomas and St. Croix. VITEMA runs them and works with all public safety agencies (VIPD, VIFS, EMS, Rescue, and others) to define the methods and procedures for how calls will be handled. The ECCs’ addressing capacities are in need of an upgrade—the dispatch center currently relies on memory of road layouts and other identifying landmarks to direct first responders to the incident scene, but a new Computer Aided Dispatch (CAD)/Records Management (RM) system is being procured. Addressing for the Territory is also under way via a project being coordinated by the Lt. Governor’s office.

Virgin Islands Fire Service

The Virgin Islands Fire Service (VIFS) is responsible for all activities related to firefighting, including fires on land (buildings, brush, vehicles) and water (boats), as well as hazardous material incidents during emergencies. The VIFS also assists volunteer search and rescue teams but does not normally perform independent search and rescue functions itself. VIFS carries out its duties with trained full-time firefighters and has begun conducting Emergency Medical Technician (EMT) training (under the direction of VIDOH EMS) for their new recruits. Currently, VIFS does not respond to initial EMS calls but will assist when requested by EMS to do so.

The VIFS has fire stations on each island: St. Croix’s four stations are located in Frederiksted, Grove Place, Christiansted, and Cotton Valley; St. Thomas’ four stations can be found in Fortuna/Bordeaux, Charlotte Amalie, Tutu, and Dorothea; St. John’s two stations are located in Coral Bay and Cruz Bay. Fire Administration is located on St. Croix in Orange Grove. Only one of these 10 stations is in a hardened facility (Charlotte Amalie).

VIDOH: Emergency Medical Service

The Virgin Islands Department of Health (VIDOH) is responsible for Emergency Medical Service (EMS) operations. EMS is in charge of emergency health and response operations, as well as Mobile Integrated Health Services for St. Croix, St. Thomas, and St. John using full-time EMTs (Basic and Intermediate) and Paramedics. Volunteer rescue squads support VIDOH EMS when asked.

Virgin Islands Police Department

The Virgin Islands Police Department (VIPD) is the Territory’s lead law enforcement agency during emergencies. It is supported by other territorial law enforcement agencies, federal law enforcement agencies, as well as off-island state and local law enforcement agencies supplied via the EMAC process. VIPD also enforces curfew for which VITEMA develops policies and procedures.

Search and Rescue squads

St. Croix, St. Thomas, St. John, and Water Island each has volunteer search and rescue (SAR) squads to support the VIFS and EMS; Water Island Search and Rescue is the only first responder on the island. The rescue squads are trained to perform EMT, search and rescue, and vehicle extrication operations. The squads typically respond to incidents when called by the 911 Emergency Call Center (ECC), but can also respond independently, when requested by the EOC or directly from EMS, fire, or police.
Virgin Islands National Guard

Virgin Islands National Guard supports the Territory with transportation, logistics management and resource support, and external affairs functions during Territory-wide emergencies. VING obtains their directions from the Governor or VITEMA and can request National Guard resources from other states.

FEMA

FEMA is the lead federal agency that responds to disasters. Prior to an emergency, FEMA deploys an Incident Management Assistance Team (IMAT) to identify potential problem areas and provide federal assistance, as well as to coordinate and integrate the federal response supporting the US Virgin Islands. FEMA IMATs serve as the federal government’s early presence at an incident and integrate FEMA’s response capabilities into VITEMA’s existing emergency management functions. In any emergency, VITEMA remains the lead.

Emergency Management Assistance Compact

Emergency Management Assistance Compact (EMAC) is an agreement that allows states and territories to request and share personnel, supplies, and equipment in times of disaster. VITEMA administers the process for all territorial governmental entities. The agency used the EMAC process for the first time during the 2017 hurricanes.

Communications

Emergency response operations in the Territory rely on three methods of communication: a dedicated public safety radio system, amateur radio, and—when needed—commercial communications. The dedicated system is known as the Land Mobile Radio (LMR) network; it is the main communications method used by the Territory’s first responders. The network has reached the end of its useful life and is due for a replacement (see Communications: Public Sector section of this report for more details). Amateur radio provides a backup: the Territory has three amateur radio clubs (ARCs,) one on each of the main islands, that have created a network of four radio repeaters across the Territory with their own funds. In a severe emergency, ARC volunteers operate out of VITEMA EOCs on St. John and St. Croix to support emergency communications. Finally, commercial communications—whether regular cell phones or satellite phones—may also be used.

### Function | Lead agency
---|---
ESF-1 Transportation | Department of Property and Procurement (DPP)
ESF-2 Communication | Bureau of Information Technology (BIT)
ESF-3 Public Works and Engineering | Department of Public Works (DPW)
ESF-4 Firefighting | VI Fire Service (VIFS)
ESF-5 Emergency Management | VITEMA
ESF-6 Mass Care, Emergency Assistance, Housing, and Human Services | The Virgin Islands Department of Human Services (VIDHS)
ESF-7 Logistics Management and Resource Support | Department of Property and Procurement (DPP)
ESF-8 Public Health and Medical Support | Department of Health (VIDOH)
ESF-9 Search and Rescue | VI Fire Service (VIFS)
GOVERNMENT RESPONSE DURING THE HURRICANES

During the hurricanes, the government response system faced a test the likes of which it had not seen in decades. VITEMA, VIPD, VIFS, EMS, and rescue squads worked together in the face of facility damage, 911 outages, lack of staff, and communications damage. Resources and help came from VING, FEMA, and other states and territories via the EMAC system.

VITEMA EOCs

VITEMA did a partial activation of its three EOCs—one on each island—72 hours prior to Hurricane Irma’s landfall. A full activation then took place 24 hours prior to landfall, and the EOCs remained active throughout Hurricane Maria. The EOCs monitored resources and conditions and directed response activities across 14 different emergency support functions, including first responders and public safety.

All EOCs faced problems with facilities and processes. On St. John, the EOC building suffered severe roof damage during Hurricane Irma, but there was no alternate space, so the EOC was forced to continue operations in the damaged facility. In all three EOCs, one common issue was ensuring that all essential agencies were represented by a staff member with the authority to make decisions for their agency. In some cases, agencies were represented that did not have a role in response operations, and in others, critical agencies were not represented because of staff shortages. A number of agencies had assigned senior-level staff as ESCs and expected them to perform response and recovery duties for their agencies. As these senior personnel serve essential functions within their agencies, they were limited in their ability to perform their additional ESC responsibilities; as a result, many of those agencies were not represented in the EOC except during update briefings, which impacted response and recovery coordination.

911 call center

Storm damage to cellular and landline phone communications systems meant callers could not reach the 911 call center. Part of the issue was related to the overall widespread damage to the communications lines throughout the Territory: communications and landline telephone cables attached to Virgin Islands Water and Power Authority (WAPA) poles—or otherwise reliant on aerial attachments—failed almost universally; cellular communications also failed as a result of damaged towers and destroyed or misaligned communications cables, antennas, and radio links.

There were problems specific to the call centers, too: telephone cable connections to the 911 call centers from the local phone company, Viya, were not buried at the St. Croix call center, so service to this facility was down for over 36 hours. Communications lines connecting the St. Thomas-St. John 911 center were buried, so its loss of service was the result of damage to communications infrastructure throughout the district. The Territory’s LMR system also sustained major damage, which hindered the ability of the 911 public safety dispatchers to communicate with and dispatch first responders to calls. While this was not a long-term outage, service was diminished for several days until the damaged system could be repaired.

VIPD

One of VIPD’s main tasks after the hurricanes was to enforce the curfews that were initiated by the Governor eight hours before landfall in September and were cancelled in December. VIPD also provided security in shelters housing elderly and non-violent individuals. While performing these and other duties, the agency experienced challenges with its integration into the response process, vehicles, and staffing.

The agency’s integration into the response process differed on St. Croix and on St. Thomas. On St. Croix, the St. Croix EOC provided daily updates to the Police Chief; the information was then passed down the line to ensure the St. Croix VIPD knew what was happening and had the plan of action—although, in some instances, VIPD response was delayed because the St. Croix VIPD ESC was not authorized to make decisions and needed to seek approval from the Assistant Chief or Police Chief before initiating action. On St. Thomas, VIPD was not able to provide a regular ESC in the EOC, which disrupted its ability to receive timely updates. On top of that, St. Thomas VIPD did not anticipate requests to guard both public and
private assets and thus was not prepared to dispatch personnel to guard WAPA, Viya, and AT&T facilities. In some cases, rescue squad members were approved by VIPD to supply armed security services. This security assignment stopped once private security personnel were hired.

Vehicles were a problem as well: the police department was already struggling with a vehicle shortage before the storms, and many existing vehicles were damaged during the storm. VIPD made temporary arrangements with the USVI Department of Property and Procurement (DPP) to borrow unused loaner vehicles from other agencies until those agencies could return to work. The motor pool inventory did not include spare tires, making it difficult to obtain replacements for tires damaged by debris and damaged roadways.

Another constraint was staffing: VIPD was understaffed by at least 100 officers prior to the storm, which created problems during post-storm operations. Many personnel also resigned or retired after the storms, which further exacerbated the problem. Funding appears to be the key issue with hiring and retaining quality personnel, and time will tell if the post-hurricane increases in pay for starting officers, as well as pay increases for some current officers, will help with this issue.

VIFS

In addition to its regular fire response duties, VIFS conducted welfare checks and assisted various SAR organizations with their missions. The VIFS’ sole fuel truck was also pressed into service for a variety of non-first responder and non-VIFS services. Staffing was expanded by activating double shifts (fire personnel normally work 24 hours and are off for 72 hours; in a double shift, they are working for 48 hours and are off for 48 hours). The double shift activation helped deal with the hurricanes’ consequences but also created hardships for firefighters in that they had limited time to deal with storm-related damage to their personal homes and property.

VIFS facilities on St. Croix were damaged, but temporary repairs allowed for their continued use. Fire facilities on St. Thomas mostly survived with minor damage except for the Fortuna location, which suffered the loss of one portable building that had been used as living quarters. On St. John, the Coral Bay fire station was damaged enough—lost doors and windows and a leaking roof—that operations had to be moved to the Calabash Boom Community Center complex. The Cruz Bay fire station suffered water damage from a damaged roof and water running into the building due to excessive runoff from the surrounding areas. The crews needed to relocate to temporary living quarters across the street while repairs were made to the building.

On St. John, storm damage also rendered communication between the Coral Bay fire station and the Cruz Bay fire station impossible: the Coral Bay station had no radio communication, poor cell phone connection, and no landline phone service. Several groups tried to provide the Fire Service with a stopgap communication solution with limited success. In the months after the storms, the Coral Bay Fire Station had a satellite phone that worked approximately 80 percent of the time, and WiFi calling that worked about 10 percent of the time. The lack of radio communication with the Coral Bay Fire Station meant that the 911 ECC had to call the Coral Bay Station satellite phone to pass on emergency calls. A temporary solution for radio communications to the station was in place as of May 2018.

St. John firefighters meeting

K.C. Wilsey/FEMA
Despite the facilities damage, the response activities of VIFS were not negatively impacted to any significant extent. Other than the quantity of the assignments being much higher than at non-disaster times, and issues dealing with passage onroadways, radio communications issues, and issues related to resupply and the procurement process, the VIFS was able to meet its mission assignments.

**EMS**

EMS responders were in high demand between the storms and following Hurricane Maria: in addition to typical calls, EMS was also called upon to transport patients to their homes from hospitals when released, transport non-injured yet infirm evacuees to shelters from damaged homes, coordinate and facilitate the opening of community pharmacies, coordinate donated medicine and medical supplies, transport deceased evacuees returned to the Territory for burial, and provide support to emergency shelters. EMS resources were spread thin as a result of this expanded use.

Staffing was an issue already before the storms and became more so immediately afterwards (see table: EMS staffing by district). On St. Croix, EMS did not have sufficient staff to support the high call volume in the post-storm response. In the St. Thomas-St. John district, EMS personnel could not immediately reach St. John and had to rely on volunteers and rescue squads until the ports were safe enough to use.

The lack of staffing required the use of EMAC EMS resources from New Jersey and Arkansas. The New Jersey EMS personnel were sent to St. Thomas on three separate occasions to provide additional manpower and assistance. The Arkansas EMS crews from Pafford EMS arrived on St. Croix in October and stayed until June 2018. In addition to responding to emergency calls, Pafford EMS crews, working together with VIDOH EMS and nursing personnel, implemented the Mobile Integrated Health program that visited residents in their homes to provide basic health care services like wound care, checking blood pressure, making sure prescribed medicines were being taken, and providing health care education. This allowed residents to avoid going to temporary hospital facilities that were set up after regular hospitals were destroyed in the storms and also freed up EMS personnel staffing ambulances for addressing true emergency situations.

**SAR squads**

On St. Thomas, St. Thomas Rescue initiated Search and Rescue (SAR) operations on its own in the wake of Hurricane Irma; the squad also coordinated with and assisted FEMA SAR teams, including by helping them navigate the island.

On St. John, St. John Rescue was the only on-island first responder group in the first days following Hurricane Irma. The group’s tasks expanded beyond its usual scope to include general population evacuation (in partnership with another local group, Love City Strong), medical evacuations, generator support, fuel delivery (including the restoration of the Caneel Bay fuel dock), and communication (for which the squad initially served as the primary source in place of the destroyed communications infrastructure).

On St. Croix, St. Croix Rescue performed missions such as extensive chainsaw operations to clear roadways in remote locations, as well as some VIPD-approved security missions to secure critical infrastructure. The group’s training tower structure on St. Croix was damaged during the hurricanes and must be repaired.

**EMS staffing by district**

<table>
<thead>
<tr>
<th>District</th>
<th>Authorized EMS strength</th>
<th>Personnel available pre-hurricane</th>
<th>Personnel available after impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Croix</td>
<td>22</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>St. Thomas-St. John</td>
<td>33</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>

New Jersey EMS transport patients back to Sea View Nursing from Red Cross shelter

Jocelyn Augustino/FEMA
VING

VING assisted the Territory with security, evacuation operations, delivery and distribution of relief supplies, medical and life-saving activities, route and airport clearing, external communications, and general support services. Several issues arose during the response effort. The first one had to do with communications: a VING representative was present in one of the EOCs, but there were delays with information reaching VING because of communications issues (on St. Thomas, satellite phones were the only means of communication available). The second one had to do with contracting for meals, emergency supplies, and equipment: a workaround had to be created for the normal process with FEMA’s help. The third issue was the response on St. John: VING does not have any units on the island, and no units could be sent from St. Thomas immediately, which delayed the response effort.

FEMA

Before Hurricane Irma, FEMA deployed two Incident Management Assistance Teams (IMAT) teams in the Territory: one on St. Thomas and St. John and one on St. Croix. FEMA’s teams then worked together to pre-position a stock of water and meals ready-to-eat (MREs) on St. Croix and St. Thomas to support initial response operations. In view of the damage on St. Thomas from Hurricane Irma, VITEMA transferred a portion of the commodities from St. Croix to St. Thomas to sustain operations until additional supplies could be flown in. Unfortunately, the impact of Hurricane Maria on St. Croix was not—-and could not be—anticipated, and the reallocation of supplies meant St. Croix did not have a deep supply on which to rely. The Territory lacks hardened climate controlled structures on each island to store disaster commodities prior to a storm or during response operations, which limits the amount of pre-storm staging VITEMA and FEMA can do.

After the storms, FEMA was fully integrated into the Territory’s response operations and worked alongside VITEMA out of the three EOCs. Among other tasks, the agency distributed water to the population in the aftermath of water outages and in the absence of a local process for setting up bulk water distribution sites. FEMA also coordinated with the US Army Corps of Engineers (USACE) to provide generators to support initial temporary power requirements on St. Thomas and St. John after Hurricane Irma, and then on St. Croix following Hurricane Maria. Generator requirements exceeded availability, requiring a prioritization and management process that VITEMA oversaw.

EMAC requests

EMAC resources requested included law enforcement, health care, emergency medical services, aviation, communications, facility repair, logistics, agriculture, and numerous health services functions. The support included civilian and National Guard resources from 27 states, adding up to 69 completed missions, 1,970 personnel involved, and nearly $65 million in costs that were covered by FEMA. Because of a lack of staff trained to use the EMAC system, VITEMA and other agencies experienced some delays with getting their requests filled until FEMA EMAC specialists could help with the process.

Communications

The hurricanes heavily damaged radio, cellular, and landline phone systems that government responders use for communications. The LMR network on which first responders rely the most was only partially available, and cell phone availability was down to 10-20 percent for several weeks after the storms (see Communications: Public Sector section of this report for details on the
LMR system and Communications: Private Sector section for details on cell phone availability). As a result, first responders in the field had trouble communicating with dispatchers, and EOCs faced challenges contacting government agencies, as well as WAPA and the Waste Management Authority (WMA), for situation updates and even resorted to sending messengers to exchange information.

The island of St. John was hit particularly hard: public safety radio and landline communications infrastructure between Cruz Bay and Coral Bay were destroyed, the former when the sole tower serving the LMR network on Bordeaux Mountain collapsed and the latter when Viya’s wired facilities came down with WAPA poles in high winds. The radio and LMR network was restored when the tower company installed two separate 100-foot temporary towers on November 17 until a replacement tower could be reinstalled. The replacement activity was due to be completed by August 2018.

The full restoration of service on all islands took many months; as the systems recovered, amateur radio resources provided crucial assistance to government responders, especially for communication between islands.

**Fuel issues**

Following Hurricane Maria, St. Thomas experienced diesel fuel shortages that threatened to shut down critical facilities supporting response operations. Demand for fuel was higher than usual: government agencies, businesses, and residents were operating generators for extended periods as a result of the more than three month-long, island-wide WAPA power outage. Supply, though, was constrained for two major reasons. First, fuel shipments from Puerto Rico (on which the island normally depends) were suspended for as long as three months for some of the St. Thomas fuel companies as a result of Maria’s damage to the island. Second, hurricane damage rendered the St. Thomas Total (commercial fuel depot) facility unable to immediately access and distribute the fuel in its storage tanks.

Several fuel distributors and various government agency personnel established an impromptu Fuel Task Force in response. The Fuel Task Force was composed of personnel on St. Thomas from VITEMA, the Governor’s Fuel Representative, FEMA IMAT, the federal ESF-12 representative, and local fuel suppliers and distributors. The purpose of the Fuel Task Force was to prioritize distribution of available diesel fuel to critical facilities, monitor fuel levels, monitor fuel shipment status, identify options for bringing in fuel supplies, and work with suppliers to bring their facilities back online. To
help address the supply problem, the Limetree Bay Terminal on St. Croix supplied stored fuel (gasoline, diesel, jet) to barges sent from St. Thomas with tanker trucks between September 23 and November 20. By the time regular fuel supplies recovered, the work of the Task Force had averted a shutdown of critical facilities and services essential to the response effort, although the St. Thomas district was—on several occasions—down to less than a day’s fuel supply.

Communication with the public

Public Service Announcements (PSAs) and press conferences broadcast on the Territory’s public radio stations and WTJX (USVI PBS station) kept the public partially informed, although outages of both radio and television, especially in the days following the storm, made the information flow constrained. Even when broadcasts were restored, many people still came to VITEMA for information because they did not have a portable radio on which to hear the PSAs and press conferences. On St. John, response personnel held daily open-air town halls to keep the public informed.

IMPROVE INTERAGENCY RESPONSE STRUCTURES AND PROCEDURES

The first and most important thing that can be done to improve government response is to improve how different agencies work together, especially within EOCs. Initiatives in this group will strengthen the EOC structure and processes and train participating staff to follow them.

Initiative 1

Establish a Territory-level EOC

At present, the Territory has three EOCs (one each on St. Thomas, St. Croix, and St. John), but no single EOC above them to coordinate and support their work. VITEMA will work with USVI agencies to establish a Territory-level EOC. The new EOC would not duplicate the work of the existing ones; rather, its two primary tasks would be to support executive-level coordination between the three island EOCs and serve as the main point of communication with the public.

Initiative 2

Codify emergency command structure and decision-making authority

In the 2017 response, in some circumstances, a primary contact person for an agency was not available and it was not clear who the succeeding representative was. Other times, agency personnel were assigned to the EOCs but were not authorized to make decisions in place of their agency head, which created the need to send requests for decisions out of an EOC and back to the agencies. Both issues delayed decisions and compromised response activities.

VITEMA will work with territorial agencies to codify emergency command structure by creating a hierarchical chart of individuals assigned to each EOC and clarifying what decisions they are authorized to make without the approval of their agency head.

INITIATIVES FOR INCREASING RESILIENCE IN GOVERNMENT RESPONSE

The extreme challenges presented by the damage of Hurricanes Irma and Maria offer VITEMA and all emergency response agencies the opportunity to review what worked, as well as where and how emergency response operations were hindered. VITEMA will work with all relevant territorial government agencies, as well as volunteer groups, to improve interagency response structures and procedures, build on current capabilities, improve response plans and pre-storm preparation, harden emergency response assets and infrastructure against weather and climate damage, and enhance backup communications solutions.
Initiative 3
Train responders in management tools

Emergency response relies heavily on the use of management tools to keep track of complex processes that involve many participants. The three most important tools are FEMA’s Incident Command System (ICS), VITEMA’s WebEOC, and EMAC. For the former two, some ESC members were familiar with both, but some were not, which made it difficult for them to participate in the response operations and for others to work with them. For the latter, VITEMA did not have enough staff familiar with the system, which required waiting for help from FEMA before requests could be put in.

VITEMA will work with the agencies represented in the EOCs to ensure that each ESC member is trained in using these emergency response tools. It will also train its own staff in using EMAC.

Initiative 4
Train agencies to improve EOC integration

EOCs run best according to pre-established roles and protocols. In the USVI, those are established by the Emergency Management Council (EMC), which is the body that brings together VITEMA, the USVI Attorney General, VING, 14 different agencies and organizations of the USVI government, and some private sector partners to help coordinate planning, set goals and objectives for implementing the TEOP, and establish standards for response. However, not all agency representatives are familiar with the roles and protocols that EMC has established.

VITEMA will conduct quarterly trainings and exercises for EOC agency representatives on adhering to the established roles and protocols. The agency will also conduct quarterly EMC meetings and require updates from council members on their preparedness activities. Executive-level participation from every EMC member will be essential for success; to ensure that it takes place, VITEMA will report on attendance by agency and distribute the information to agency directors and commissioners.

Initiative 5
Train agencies to improve knowledge of relief funding

In a major disaster, most funding for recovery will come from the federal government—however, getting that funding requires being familiar with the requirements attached to it. VITEMA will identify types of information that should be gathered to procure disaster relief funding—including FEMA requirements—during and after a major disaster event and create a packet of essential information and training that agencies could use.

Initiative 6
Review and adhere to information sharing protocols

In a disaster, consistent public communication is one of the most important things to get right. VITEMA already has a Joint Information Center communications plan, but it will work to strengthen it, including by updating information provided to each media channel throughout storm events and training personnel on adhering to established information sharing protocols. VITEMA will also establish a protocol to ensure that each EOC appoints a single person as a Public Information Officer (PIO) to be responsible for listening to each government press conference and taking notes to share with their respective EOC leaders. This will ensure that the latest information will be delivered to key people in the EOC. Further, the PIO will be prepared to answer questions or educate VITEMA staff to answer questions from members of the public who come to VITEMA facilities for information.

Initiative 7
Work with FEMA to get VITEMA access to Resource Request Form process

Resource Request Form (RRF) is a FEMA process for requesting resources from the federal government that is separate from the territorial process used by the Department of Planning and Procurement (DPP). When an agency needs to request resources, it goes to VITEMA for assistance. VITEMA then fills out a paper form and forwards it to FEMA, which enters the information into a database and begins the process of acquiring the requested materials if approved. VITEMA has no access
FUEL SUPPLY: LIMETREE BAY TERMINAL

The Limetree Bay Terminal (LBT) on St. Croix is a bulk storage facility for various petrochemical products in the USVI, with a 22 million barrel (924 million gallon) capacity. The terminal accepts fuels from large cargo ships and can then transfer them to 9,000 gallon tanker trucks for distribution to 26 service stations on St. Croix. In non-disaster times, LBT fuel only supplies St. Croix: fuel distribution for St. Thomas is handled under an arrangement with Puerto Rico, and St. John is supplied with barges from St. Thomas. After the 2017 storms, LBT did not have problems accepting or distributing fuel: supply ships did not encounter any challenges getting into the port and tanker trucks could arrive as scheduled. The terminal has an agreement with the USVI government to ensure that there is always a 30-day supply of gasoline and diesel fuel available for distribution, and there was more than that available at all times after the storms—which meant that St. Croix did not have any supply problems. St. Thomas and St. John did have problems though: once Hurricane Maria hit Puerto Rico, the islands were not receiving their regular fuel shipments. To meet the fuel needs of the two islands, the Governor’s Office requested that a barge/tote arrangement be set up to supply them from LBT. Since a similar process was already in place for St. John (receiving their fuel supply from St. Thomas via barge), that process was replicated and amplified to meet the needs for St. Thomas and St. John both. During daytime hours, LBT handled distribution needs for St. Croix as usual; in the evening/nighttime hours, barges with tanker trucks from St. Thomas would arrive at the St. Croix container port, dive to LBT, receive fuel, reload onto the barges, then head back to St. Thomas to deliver the products.

The operation was in place on September 22 at noon, two days after Hurricane Maria, even though there had been no pre-disaster plan for it. It continued until November 20, and, as a result, St. Thomas and St. John did not suffer a loss of supply—even if distribution of the fuel to the individual retail outlets on all islands was at times impacted due to impassable roads, lack of commercial power to the retail locations, and lack of personnel to staff the stores.

In future storms, LBT and its infrastructure could be an important recovery and resilience asset. The terminal fully supports its infrastructure needs by itself: it has its own power generation capabilities, water supply, and internal communications. LBT does connect with Viya for external communications, but even this connection is via a buried line to ensure survivability during an emergency. The terminal also possesses tugboats, which it provided at no cost after the 2017 storms to help facilitate the delivery of disaster relief supplies and equipment into the container port on St. Croix. During and after the 2017 storms, the terminal held up well: it did not experience injuries to any personnel nor did it face any loss of power. Although LBT did lose communications occasionally when buried Viya lines were hit by restoration contractors, staff had satellite phones they could rely on until regular service resumed.

Integrating LBT into government response operations after the 2017 storms was, however, a challenge. The terminal did establish a line of communications with the USVI Governor’s Office, which is how the improvised barge operation was created. However, the terminal could not interact with VITEMA except for occasional connections via the Marine Band Radio: no planning had been in place to allow for that, and LBT disaster plans were not included in the Territorial Emergency Operating Plan (TEOP) annexes. In the future, integrating LBT into existing government response structure instead of improvising solutions on the go would help get the most out of the terminal’s capacities and help secure fuel supply for the Territory. Initiative 24 in the initiatives section of this section proposes measures to better incorporate LBT into future response efforts.
to the FEMA system to check on the status of the RRF request. This process inherently slows down the overall process for obtaining the needed federal resources. VITEMA will work with FEMA to obtain access to the RRF system.

**ENHANCE PREPAREDNESS OF EXISTING EMERGENCY RESPONDERS**

The Territory’s existing emergency responders face shortages of staff and equipment. These initiatives aim to address these shortages—especially in the case of EMS and search and rescue squads—as well as improve the way some of them organize their work.

*Initiative 8*

**Launch unified recruitment campaign for first responders**

All first responder organizations in the USVI are facing staffing shortages; VIPD and EMS have the greatest need. VITEMA will work with all the different first responder agencies to coordinate a unified hiring campaign in all first responder organizations, including the 911 Emergency Communications Center and volunteer rescue squads.

*Initiative 9*

**Strengthen VIPD’s ability to evaluate disaster situations**

After a disaster, quick evaluation of the situation—building damage, fires, mass casualties, and damage to critical infrastructure—is essential, but it requires large numbers of people who can move around the Territory. Of all the territorial agencies, VIPD is best positioned to play such a role.

VITEMA will work with VIPD to assess the department’s ability to perform quick evaluations of disaster situations and train all operational personnel to understand what resources are available for disasters and how to operate in these situations. In the event of building damage, VIPD should provide an immediate assessment of buildings destroyed or in imminent state of collapse where people may be trapped. In the event of fire, VIPD should be able to quickly assess the extent of a fire, what or whom it affects (people, hazardous materials, etc.), and its danger of spreading. In the case of a mass casualty incident, VIPD should be prepared to make quick assessments of the extent and number of casualties. If critical infrastructure is damaged, VIPD should quickly provide an assessment on the damage to key infrastructure facilities (power lines down, water mains broken, or communications towers toppled). In all of these cases, VIPD will relay information gathered to the dispatcher/EOC for assignment of appropriate resources.

*Initiative 10*

**Use VIFS facilities and staff for EMS activities**

The Territory’s current EMS response suffers from a lack of staff and from the fact that ambulances are not spread throughout each island, which means that more remote communities can wait a while for help to arrive. One way to remedy both problems is to use the capacities of VIFS: ambulances could be located in the VIFS stations that are distributed relatively evenly throughout the Territory and at least some firefighters could be trained as EMTs (emergency medical technicians). If this were to be done, EMS could either remain part of VIDOH or be transferred fully to VIFS. Other parts of the US do it both ways: some communities run their EMS out of their fire departments and some have stand-alone organizations.

In the immediate term, VIFS and VIDOH/EMS will work together to train VIFS staff to perform basic EMT skills and to secure equipment to support the staff so trained. When accomplished, VIFS personnel could be sent on EMS calls located close to their stations until ambulance crews could arrive. In the medium term, VIDOH EMS will analyze emergency call data and begin allocating ambulances to fire stations based on that data as well as work with VIFS to expand training to make sure that at least one paramedic-level firefighter is assigned to every fire station on every shift. The two agencies, working with the Governor’s Office, will determine which organizational setup—merging EMS into VIFS or keeping it with VIDOH—will best serve the purposes of service improvement.

*Initiative 11*

**Strengthen EMS staffing and equipment**

VIDOH/EMS may not have enough staff and equipment to provide the level of care that is available elsewhere in the US.
When it comes to staffing, the agency will assess call data to evaluate whether their staffing levels are adequate and determine the mix of EMT levels needed per shift (Basic, Intermediate, Paramedic). One recommendation could be to bring the total staffing level to 70 from the current 39 (see table: Potential EMS staffing levels).

When it comes to equipment, VIDOH/EMS and rescue squads need to procure mini ambulances and ASAP (Alternative Support Apparatus) vehicles to operate on the Territory’s steep and narrow roads instead of using existing ambulances that are only designed to operate on standard width, hard surface roads. EMS has identified a need for five of the mini ambulances, with two each on St. Croix and St. Thomas and one on St. John and has begun the process of ordering one vehicle for each island. VIDOH will also work to enhance the existing integrated mobile health care services function in order to eliminate needless calls for emergency care and support, which will free up emergency response personnel and equipment for genuine emergencies.

**Potential EMS staffing levels**

<table>
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<tr>
<th>EMTs</th>
<th>St. Croix (30)</th>
<th>St. Thomas–St. John (40)</th>
<th>Total = 70</th>
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<tr>
<td><strong>Paramedic</strong></td>
<td>12</td>
<td>15</td>
<td>27</td>
</tr>
<tr>
<td>(3 supervisory personnel)</td>
<td></td>
<td>(3 supervisory personnel)</td>
<td></td>
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<tr>
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<td>12</td>
<td>22</td>
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<td></td>
</tr>
<tr>
<td><strong>Boat Mate</strong></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

**Initiative 12**

**Develop protocols for sending the right response resources for specific incident types**

In any incident requiring emergency response, it is important for the dispatch center to be able to send the resources that the incident requires. In the recent storms, many calls required the resources of rescue teams and/or fire personnel in addition to EMS and VIPD; however, no standard protocol was in place to dispatch the appropriate resources on every type of call. The new records management/CAD dispatching system being installed in the Territory’s ECCs will have this capability—but first responders will need to develop the protocols to use it.

VITEMA will work with first responder agencies to determine what resources should be sent to what types of calls and when those resources should be dispatched.

**Initiative 13**

**Work with rescue squads to develop a territorial search and rescue plan**

The Territory does not have a comprehensive search and rescue (SAR) plan to address SAR operations for each island, understand the capacities that are available, and coordinate territorial and federal resources. The situation is made more complicated by the fact that each island is unique and service delivery not the same; organizational structure, quantity of trained personnel, standard operating policies/procedures, and facilities for housing equipment and training also differ widely.

VIFS will work with USVI rescue squads to assess the current rescue squad organizational and response structures, identify best practices, and establish standards to enact a more responsive and efficient system. VITEMA will also work with VIFS and rescue squads to develop agreements and procedures for calling out and employing rescue squads, which will include a definition of the squads’ formal roles and responsibilities. These procedures will include specific plans for disaster response, muster points, and coordination with other agencies; they will be regularly reviewed and updated, with training events taking place at least twice per year.
Initiative 14
Assist St. John and St. Croix rescue groups with equipment needs

The St. John Search and Rescue squad is in need of support and equipment, including additional search and rescue training and specially trained personnel such as a public safety diver, staff to handle medical evacuations, an emergency medical technician, and a paramedic. The squad’s boat needs to be upgraded to support personnel and equipment transport between Cruz Bay and Coral Bay. The squad also needs a general-purpose four-wheel-drive (4WD) vehicle and a 4WD pickup truck for cargo transportation. The squad’s smaller gear needs include medical equipment and supplies, as well as extrication gear and airbags for lifting.

The St. Croix rescue group needs a review of all existing equipment and vehicles to assess their needs. Further, they need support with the repair of their training tower that was damaged in the hurricanes, which will allow them to continue to train the Territory’s first responders instead of sending them off island.

Funding for both groups would come via fund-raisers organized by the groups themselves as well as money provided by VITEMA, with the specifics depending on the eventual role the groups would be expected to play in future emergency response.

Initiative 15
Review and update government agencies’ emergency plans

Many agencies have their own emergency operations plans, but they need to be updated and streamlined. Most agencies also face challenges in supporting sufficient staff trained to develop and maintain their plans. VITEMA will coordinate with the appropriate agencies and organizations to review and update plans, as well as create new plans to address gaps in service.

Initiative 16
Develop execution checklists for disaster response

The actions that each government agency needs to take before a major storm—reposition vehicles, inspect and fuel generators, account for staff—are entirely predictable and need to be included in a checklist that VITEMA can verify through WebEOC. At present, however, only a few agencies have such checklists—and VITEMA has no way of easily tracking them. VITEMA will work with each agency and organization within the Government Response sector to develop execution checklists addressing essential tasks in support of disaster response operations. These will be included in annexes to the TEOP. VITEMA will also define the template for the checklist to ensure standardization and ease of integration into WebEOC.

Initiative 17
Annually review and test emergency management plans and procedures

In addition to completing the TEOP annexes, each first responder agency will review its emergency management and response plans every year. Agencies will schedule plans to be tested twice a year, with at least one of these events focused on cross-functional/interdepartmental level training activities, including the dispatcher and amateur radio organizations. Agencies will assess current gaps and report their findings to VITEMA, which will work with the agencies to fulfill identified needs.
**Initiative 18**

**Review and improve the process for issuing curfew passes**

In a hurricane, the Governor issues a curfew to make sure that citizens do not move around in the dark when it is not safe to do so. People who need to move around after the curfew to perform their duties are issued curfew passes in advance. The current process, however, needs to be reviewed to make sure that it is adequate and that it pays sufficient attention to the needs of response personnel in the private sector—which was an issue during the 2017 storms.

**Initiative 19**

**Develop contingency plan if Puerto Rico is impacted simultaneously**

A lot of the USVI’s response plans assume, implicitly or explicitly, that Puerto Rico can be relied upon to participate in any response—including, for example, by serving as a logistics hub for the storage and transportation of supplies. Should a simultaneous event occur in the future as happened in September 2017, the USVI must be prepared to shoulder more of the support burden by itself. VITEMA will develop a way to reduce or eliminate dependence on Puerto Rico for response activities, including by stocking increased levels of materials in secure, air conditioned facilities and developing alternative supply arrangements.

**Initiative 20**

**Explore the possibility of entering into a mutual disaster assistance pact with other Caribbean governments**

Most disaster planning in the USVI centers on relationships with the rest of the United States. However, strengthening relationships with other islands in the Caribbean should also be considered. VITEMA is in contact with the Caribbean Disaster Emergency Management Agency (CDEMA) on a regular basis. This organization is comprised of several Caribbean governments that share disaster related information for preparing for a variety of disaster events in the region. While there is no formal mutual aid pact between CDEMA and the VITEMA, they are in regular discussions regarding planning and response activities for Caribbean disaster events. VITEMA, working with the Governor’s Office, will explore the possibility and desirability of deepening inter-Caribbean disaster response collaboration, whether through CDEMA or any other vehicle. Any formal mutual aid pacts would need to be coordinated with the US Department of Interior (US DOI) as foreign governments would be involved.

**IMPROVE PRE-STORM PREPARATION**

These initiatives will position vehicles and commodities before hurricane events in such a way as to be better prepared to face the eventual impacts.

**Initiative 21**

**Secure and disperse vehicles**

In the recent storms, many government vehicles were damaged and a few were destroyed. Several organizations reported problems with tire damage and lack of replacement tires and wheels in inventory pre-storm. VITEMA will work with all government agencies to establish protocols to evaluate all vehicles for response activities, including by stocking increased levels of materials in secure, air conditioned facilities and developing alternative supply arrangements.

**Initiative 22**

**Pre-stage commodities across the Territory**

Emergency response tends to require the same type of commodities—water, food, tarps—and ample supplies of these need to be on hand and not out of date. VITEMA, through the EOCs, will pre-stage these commodities in multiple locations, maintain an inventory of them, and develop a resupply process to make sure that the levels of these commodities remain adequate.
**Initiative 23**

**Pre-stage equipment and supplies in St. John’s Coral Bay**

Without either a port or an airport, St. John is the most isolated of the three big islands; within St. John, the areas surrounding Coral Bay in the eastern part of the island are more isolated yet. These areas need to be able to support emergency response with local resources for at least a week until logistics and transportation can be restored following major storms. VITEMA will work with the relevant government agencies to pre-stage equipment, supplies, emergency commodities, and fuel in Coral Bay to support response operations by VIPD, VIFS, EMS, and rescue organizations for a minimum of seven days. VITEMA will also coordinate with relevant agencies to develop maritime options for transporting equipment, personnel, and supplies to Coral Bay.

**DEVELOP PLANS FOR RESPONSE AREAS NOT CURRENTLY COVERED**

Several areas of response do not have set plans in place; response efforts had to be improvised. These initiatives will develop plans for three particularly important areas: fueling, route clearance, and bulk water distribution.

**Initiative 24**

**Integrate Limetree Bay Terminal into response process**

Limetree Bay Terminal (LBT) on St. Croix controls large amounts of stored fuel that proved critical during the response effort when St. Thomas was facing fuel shortages. LBT, however, is not integrated into the Territory’s response activities—it is, for example, not part of the response plans, it does not have a connection to WebEOC, and it does not take part in disaster drills as an active participant. VITEMA will work with LBT to integrate it into the TEOP, provide it with a connection to WebEOC, and incorporate it in future disaster drills as an active participant.

**Initiative 25**

**Streamline and improve the fueling process for first responder vehicles**

Current fueling of government vehicles depends on fuel coupons, which are not accepted at very many commercial gas stations. VITEMA will work with the Governor’s Office to retire the fuel coupons and institute a fuel card process in which cards are assigned to individual vehicles. Fuel cards were already being used on St. Thomas as a trial program when the hurricanes occurred, and their use should be adopted throughout the Territory. Arranging fuel depots at key government locations using card access should also be considered.

**Initiative 26**

**Develop route clearance team and procedures**

After the 2017 hurricanes, one of the common concerns from all first responder agencies was the inability to get to citizens in need due to a lack of process for dealing with roads that the storms had made impassable. An ad hoc process was implemented to try and deal with this issue, but creating a team in advance with appropriate resources and with the key transportation routes prioritized before the disaster event will greatly assist first response efforts in future disasters. VITEMA will work with the appropriate agencies to identify emergency response routes and contingency plans (particularly for St. John). The agency will also lead the effort to create multi-agency route assessment teams on each island that can deploy quickly after a hurricane to evaluate routes and conduct initial route clearance; teams should include, at a minimum, representatives from the Department of Public Works (DPW), VIFS, VIPD, and WAPA. Teams will be strategically staged pre-landfall in order to deploy as soon as it is safe to do so and will be equipped to conduct initial route clearance operations and to do minor tire repairs.
Initiative 27

Develop a bulk water distribution plan

The Territory currently does not have a bulk water distribution plan and, after the damage to the water system in the 2017 hurricanes, had to rely instead on limited distribution of bottled water by FEMA. VITEMA, in partnership with WAPA and the DPP, will develop a bulk water distribution plan and process for each island that includes both static and mobile distribution sites. Part of this initiative will include the procurement of an economical bulk water distribution system that can be quickly set up but easily stored when not needed.

ADDRESS FUNDING, CONTRACTING, AND PROCUREMENT ISSUES

Procurement and contracts were an issue during the hurricane response in that they often slowed down a process that was already difficult and complicated. These initiatives will aim to remove as many of these difficulties as possible.

Initiative 28

Add budget line to fund emergency activation of VING

In the USVI budget, there are no defined processes for allocating funds for an emergency activation of VING. The Governor’s Office will work with the USVI Legislature and VING to add a budget line item that funds the emergency activation of VING.

Initiative 29

Develop a standardized process for agencies to access cash

After the hurricanes, response agencies like VIDOH found it difficult to acquire goods like adult diapers or diabetic testing kits that were needed for the response effort. Local businesses were unable to accept credit cards due to power and telecommunication outages and as a result, agency staff had to use personal funds. The Governor’s Office, working with the Department of Finance, will develop a standardized process for responder agencies to access cash in emergency situations.

Initiative 30

Educate agencies on emergency procurement procedures

During response and recovery after the 2017 hurricanes, many agencies did not appear to know how to work the local, territorial, or regional procurement process before asking for assistance. Department of Property and Procurement (DPP) has an emergency procurement process in place, but multiple agencies were not aware of it. When it came to working with the federal government, territorial budget shortfalls led territorial agencies to view FEMA as the primary source of funding and to assume that requested resources would be available immediately, when it often took weeks.

VITEMA will work with the Department of Property and Procurement (DPP) to develop an education process for first responder agencies on how the existing emergency procurement process is to be utilized in a disaster situation, with a particular focus on how to obtain items when there is no access to electronic procurement systems because of power or communication failures. To strengthen the process, DPP will solicit input from all departments and agencies (especially first responder organizations) to understand needs and develop an appropriate education program to meet those needs during and after emergencies.

Initiative 31

Establish pre-disaster emergency contracts

Some items and services that are needed in emergencies are predictable—water, food, batteries, health care—and contracts for those can be put in place in advance. DPP will work with agencies and potential vendors in the Territory to develop such contracts, including for bulk water distribution as described above.
HARDEN CRITICAL EMERGENCY RESPONSE ASSETS

As with every sector, some amount of asset hardening will be necessary for government response—especially for EOC and EMS facilities, many of which were severely damaged in the storms.

**Initiative 32**

**Build a new EOC facility on St. Croix**

The St. Croix building that was housing the St. Croix EOC was not built to do so and was damaged in the hurricanes. VITEMA will build a new facility that will support an EOC and 911 dispatching/ECC functions on St. Croix at the old Herman Hill site. The facility will be constructed to withstand Category 5 hurricanes and will include climate-controlled storage space for disaster response equipment and supplies. Dual critical infrastructure feeds for power and communications will be incorporated into the design as well.

**Initiative 33**

**Repair and harden EOC facility on St. John**

The St. John facility, just like the one on St. Croix, was damaged in the hurricanes. Unlike on St. Croix, where the leased EOC building is wholly inadequate to the task in size, location, and strength of construction, St. John EOC is housed in a government-owned, solid concrete building the only disadvantage of which is a very weak roof that can, however, be fixed. VITEMA will repair and harden the facility, including acquiring and renovating the building’s second floor space to improve operations and support for the island. The agency will also incorporate redundant power and telecommunication feeds into the facility design.

**Initiative 34**

**Build co-use facilities to support response operations**

Many of the first responder agencies need similar facilities to support the storage of equipment, supplies, and vehicles, as well as provide a workspace and dormitory areas. Operating individual facilities for all of them would not be cost-effective, so VITEMA will work with individual agencies to build strategically located co-use facilities on each island to support EMS, VIFS, VIPD, and rescue operations.
**Initiative 35**

**Rebuild EMS facilities**

Before the storms, EMS facilities were located on all three islands in annexes to the main buildings of Schneider Regional Medical Center, Juan Luis Hospital, and Charles Harwood Memorial Complex. All of the EMS facilities were condemned as a result of storm damage, and VIDOH is working with FEMA to construct temporary modular units for EMS personnel on St. Thomas and St. Croix. The units will have space for sleeping quarters, training and radio rooms, and work space. Once these are set up, VIDOH will begin work on designing a new state-of-the-art Health Department building that will include space for EMS as well. In the future, joint use facilities potentially shared with VIFS may become an important solution for more resilient facilities for EMS equipment and personnel.

**Initiative 36**

**Procure, maintain, and regularly test emergency generators**

Although WAPA is going to be investing major resources into strengthening the electricity grid, some outages in future storms are still likely—and when those outages occur, emergency generators need to be filled with fuel and ready to go. VITEMA will work with government agencies to identify critical facilities in need of backup generators and will develop a procurement and installation plan. The agency will also help develop fueling plans and ongoing maintenance programs, with priority given to obtaining the services of companies that specialize in the maintenance of this kind of equipment.

**Initiative 37**

**Strengthen communication links of 911 call centers**

The call centers in the Territory are not connected to the local phone provider, Viya, in a resilient manner. The St. Thomas ECC has only one communication connection to Viya; the connection is buried and performed well during the recent hurricanes, but it is only a matter of time before the single connection is damaged or cut, impacting calls to the 911 call center. The St. Croix ECC has only a single aerial connection to the Viya network; that connection was destroyed in the storms. On St. Thomas, VITEMA will work with Viya to plan and construct a second route from the ECC and ensure it is routed to the central switching center via a diverse buried route. On St. Croix, VITEMA will work with Viya to immediately bury the aerial connection and install a second buried diverse route to Viya’s switching center.

**Initiative 38**

**Improve government’s access to satellite phones**

In the aftermath of the 2017 hurricanes, satellite phones were often the only somewhat reliable means of communication for first responders—but not enough of them were available. VITEMA will coordinate with first responder agencies to ensure that each agency has several portable satellite phones that are activated, tested, and ready to use. Further, VITEMA will work to upgrade the satellite phones in the EOCs to stationary versions that allow use from inside the facilities.

**Initiative 39**

**Integrate amateur radio networks into response planning**

With most regular communications down and satellite phones scarce, amateur radio networks provided a vital communications channel for the Territory’s first responders. VITEMA and BIT, together with first responder agencies, will work with the Territory’s Amateur Radio Clubs (ARCs) to assess their networks for operational readiness. This is currently routinely performed within the amateur radio system; VITEMA and BIT will develop an interagency process to test the system as a whole, so capabilities and processes are clear. A new amateur radio repeater network is already being installed.
Initiative 40
Switch to plain language for emergency communications

The Territory’s first responders currently use so-called 10-codes to communicate through the LMR system (see sidebar: 10-codes in emergency communications). These codes, while familiar to users in the Territory, are completely unfamiliar to any first responders who arrive from elsewhere, creating confusion and making it more difficult for different responders to work together. VITEMA will work with VIPD, VIFS, EMS, and rescue groups to switch over to plain language in emergency communications.

Initiative 41
Review and enforce rules for using first responder communication channels

The radio system that first responders use has multiple channels, each to be used for a different purpose. However, the system’s users generally ignore the channel designations and use only the main channel instead, which can create confusion during important events. VITEMA will work with VIPD, VIFS, VIDOH EMS, and search and rescue squads to develop the rules for how the radio channels will be used. For example, the dispatch channel would only be used for dispatch and for routine communications by the VIPD, and if the VIPD has a special incident (SWAT event, hostages, homicide, etc.), the department would move its communications to an assigned tactical channel. VIFS may move all communications to a “Fire Ground” channel for all working fires, and VIDOH EMS may use the “major event” channel in a mass casualty incident. In a large-scale single event, all communications for all agencies could be directed to one or more major event channels for a more unified communications effort.

10-CODES IN EMERGENCY COMMUNICATIONS

10-codes are verbal shortcuts that are often used in public safety voice communications. These codes started in 1937 to allow “brevity” and standardization of message traffic, but—ironically—there is no standardized list of them, so they vary in meaning from one agency to another (so “10-55” might mean “intoxicated driver” in one location and something completely different in another location). The Association of Public Safety Communications Officials (APCO), which sets the industry standards, has recommended eliminating these codes in favor of plain language. However, they are still used in the Territory, which causes significant communications issues when other agencies (federal or mainland mutual aid agencies) come to work with USVI first responders, as the outside agencies are entirely unfamiliar with the Territory’s specific codes. Since 2006, FEMA has required the use of plain language as part of its Incident Command System (ICS) for multi-agency events, and federal preparedness grant funding is contingent on using plain language in any incidents requiring aid from other agencies or jurisdictions.