Lessons Learned from FEMA’s Initial Response to COVID-19
MEMORANDUM FOR: The Honorable Deanne Criswell
Administrator
Federal Emergency Management Agency

FROM: Joseph V. Cuffari, Ph.D.
Inspector General

SUBJECT: Lessons Learned from FEMA’s Initial Response to COVID-19

Attached for your action is our final report, Lessons Learned from FEMA’s Initial Response to COVID-19. We incorporated the formal comments from the Federal Emergency Management Agency (FEMA) in the final report.

The report contains three recommendations aimed at improving the effectiveness of FEMA’s overall pandemic response. Your office concurred with all three recommendations. Based on information provided in your response to the draft report, we consider the recommendations open and resolved. Once your office has fully implemented the recommendations, please submit a formal closeout letter to us within 30 days so that we may close the recommendations. The memorandum should be accompanied by evidence of completion of agreed-upon corrective actions. Please send your response or closure request to OIGAuditsFollowup@oig.dhs.gov.

Consistent with our responsibility under the Inspector General Act, we will provide copies of our report to congressional committees with oversight and appropriation responsibility over the Department of Homeland Security. We will post the report on our website for public dissemination.

Please call me with any questions, or your staff may contact Bruce Miller, Deputy Inspector General for Audits, at (202) 981-6000.

Attachment
Lessons Learned from FEMA’s Initial Response to COVID-19

What We Found

In response to the COVID-19 pandemic, FEMA worked closely with the U.S. Department of Health and Human Services and other Federal agencies to facilitate the shipment of PPE and ventilators. However, the magnitude of the global event exposed weaknesses in FEMA’s resource request system and allocation processes. Specifically, WebEOC — the system FEMA used to process resource requests including those for PPE and ventilators — contained unreliable data to inform allocation decisions and ensure requests were accurately adjudicated. This occurred because FEMA did not develop controls to validate requests and prevent incomplete, inaccurate, or duplicate data entries; nor did FEMA ensure WebEOC users received training on proper use of the system. In addition, although FEMA developed a process to allocate the limited supply of ventilators, it did not have a similarly documented process for PPE.

Finally, FEMA did not have strategic guidance clearly outlining the roles and responsibilities used to lead the Federal response. FEMA’s decision to prioritize ongoing pandemic response efforts without updating its written guidance and strategic plans hindered FEMA’s coordination efforts.

To its credit, FEMA evaluated its COVID-19 response operations, identifying similar key findings and recommendations aimed at improving current and future responses, including making updates to its WebEOC system.

What We Recommend

We made three recommendations to improve FEMA’s current and future pandemic response operations.

For Further Information:
Contact our Office of Public Affairs at (202) 981-6000, or email us at DHS-OIG.OfficePublicAffairs@oig.dhs.gov
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Abbreviations

ASPR Assistant Secretary for Preparedness and Response
BIA Biological Incident Annex
COVID-19 Novel Coronavirus Disease 2019
FEMA Federal Emergency Management Agency
FIOP Federal Interagency Operational Plan
HHS Department of Health and Human Services
LFA Lead Federal Agency
NRCC National Response Coordination Center
NRF National Response Framework
PanCAP Pandemic Crisis Action Plan
PPE Personal Protective Equipment
RRCC Regional Response Coordination Center
UCG Unified Coordination Group
Background

In December 2019, the World Health Organization identified several cases of viral pneumonia in Wuhan, China, which would later be attributed to the novel coronavirus disease 2019 (COVID-19). The global spread of the disease set off an unprecedented Federal response within the United States. On January 31, 2020, just days after the first national confirmed case of COVID-19, the Secretary for the Department of Health and Human Services (HHS) declared a public health emergency due to the ongoing COVID-19 pandemic. During this time, the Nation and the world faced dramatic shortages of personal protective equipment (PPE) and hospitals experienced unprecedented demand for ventilators — critical lifesaving equipment.

At the onset of the pandemic, HHS was designated the Lead Federal Agency (LFA) in accordance with the Biological Incident Annex to the Response and Recovery Federal Interagency Operational Plans, Final (January 2017) and the Pandemic Crisis Action Plan of January 2018 (PanCAP). As the LFA, according to the PanCAP, HHS was responsible for all Federal response actions to leverage available public health and medical resources to prepare for, respond to, and recover from the pandemic. However, on March 13, 2020, the President declared the ongoing COVID-19 pandemic of sufficient severity and magnitude to warrant a nationwide emergency declaration. This unprecedented declaration applied to all states, tribes, territories, and the District of Columbia pursuant to section 501 (b) of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 United States Code (U.S.C.) §§ 5121-5207 (Stafford Act).

Under this Stafford Act declaration, the Federal Emergency Management Agency (FEMA) was responsible for preparing for, protecting against, and responding to the COVID-19 pandemic. On March 19, 2020, FEMA was tasked with leading the Federal response in combating COVID-19 and playing the central role in coordinating Federal support for that response, thereby

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1 “Emergency” means any occasion or instance when the President determines Federal assistance is needed. Emergency Declarations supplement state and local efforts in providing emergency services, such as the protection of lives, property, public health, and safety, or to lessen or avert the threat of a catastrophe in any part of the United States. 42 U.S.C. § 5122(1). See https://www.fema.gov/sites/default/files/2020-03/stafford-act_2019.pdf (as of April 2021).
increasing FEMA’s role in the response efforts.³ See Figure 1 for a timeline of events.

**Figure 1. Pandemic and Federal Response**

![Timeline of events](https://www.oig.dhs.gov/sites/default/files/2020-03/stafford-act_2019.pdf)


As the LFA, FEMA was tasked with coordinating Federal response efforts among HHS and other agencies across the United States and its territories to combat COVID-19. In doing so, FEMA followed an approach similar to its traditional disaster response — locally executed, state managed, and federally supported. Eventually, all 50 states, the District of Columbia, 5 territories, and 3 tribes were approved for major disaster declarations.⁴

³ The PanCAP Adapted, U.S. Government COVID-19 Response Plan (PanCAP-A), dated March 13, 2020, did not address the changes that ensued when FEMA was designated to lead the Federal response. This report uses the term Lead Federal Agency (LFA) to refer to FEMA’s role from the March 19, 2020 decision onward.

⁴ “Major disaster” means any natural catastrophe (including any hurricane, tornado, storm, high water, wind driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought) or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. 42 U.S.C. § 5122(2). See [https://www.fema.gov/sites/default/files/2020-03/stafford-act_2019.pdf](https://www.fema.gov/sites/default/files/2020-03/stafford-act_2019.pdf) (as of April 2021).
Responding to disasters and emergencies requires the cooperation of a variety of organizations. To provide a foundation for coordinating, integrating, and unifying these organizational responses, the Federal Government based its response to the COVID-19 pandemic on existing guidance, such as the National Response Framework (NRF), the Biological Incident Annex to the Response and Recovery Federal Interagency Operational Plans, Final and the PanCAP. HHS and FEMA refined the PanCAP to respond to the specific threats of COVID-19 in their PanCAP Adapted, U.S. Government COVID-19 Response Plan (March 13, 2020) (PanCAP-A). See Appendix C for the Federal guidance and a brief description of each document.

Additionally, HHS and FEMA have issued reports about the Federal Government’s ability to respond to pandemic events, including COVID-19. Each report provides examples of successes and challenges of the Federal pandemic response. The HHS report, the Crimson Contagion 2019 Functional Exercise After-Action Report prepared in January 2020, evaluated and provided feedback on the Nation’s ability to respond to a large-scale outbreak of a highly transmissible virus around the world and across the Nation. This internal report included findings and recommendations aimed at HHS, FEMA, and other Federal agencies improving statutory authorities and policies, planning, operational coordination, situational assessment, resource management, and public information and risk communications. Specifically, the report recommended that HHS and FEMA work together to ensure strategic plans capture key roles and responsibilities during a pandemic response.


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5 Organizations can include all levels of government and businesses, voluntary organizations, and other elements of the private sector that provide essential services that must be restored following an incident.
Results of Audit

In response to the COVID-19 pandemic, FEMA worked closely with HHS and other Federal agencies to facilitate the shipment of PPE and ventilators. However, the magnitude of the global event exposed weaknesses in FEMA’s resource request system and allocation processes. Specifically, WebEOC — the system FEMA used to process resource requests including those for PPE and ventilators — contained unreliable data to inform allocation decisions and ensure requests were accurately adjudicated. This occurred because FEMA did not develop controls to validate requests and prevent incomplete, inaccurate, or duplicate data entries; nor did FEMA ensure WebEOC users received training on proper use of the system. In addition, although FEMA developed a process to allocate the limited supply of ventilators, it did not have a similarly documented process for PPE.

Finally, FEMA did not have strategic guidance clearly outlining the roles and responsibilities used to lead the Federal response. FEMA’s decision to prioritize ongoing pandemic response efforts without updating its written guidance and strategic plans hindered FEMA’s coordination efforts.

To its credit, FEMA evaluated its COVID-19 response operations, identifying similar key findings and recommendations aimed at improving current and future responses, including making updates to its WebEOC system.

**FEMA Coordinated with Stakeholders to Provide PPE and Ventilators, but Faced Challenges with Its Resource Request System and Allocation Processes**

As the LFA, FEMA has a responsibility to communicate and support engagement with the community of stakeholders engaged in the COVID-19 response; this may include Federal, state, local, and private entities. In addition, best practices and standards of internal control dictate that Federal agencies document their decision-making methodologies to ensure processes are repeatable and results are consistent. However, data reliability issues in FEMA’s system of record for resource requests and FEMA’s reliance on undocumented and unclear decision-making processes for allocating limited PPE supplies reduced its overall effectiveness.
FEMA worked closely with HHS and other Federal agencies to facilitate the shipment of PPE (shown in Figure 2) and ventilators to support state, territorial, and tribal governments (stakeholders) during the COVID-19 pandemic. Specifically, at the onset of the pandemic, while HHS was the LFA, FEMA provided significant logistical support to these stakeholders to fulfill resource requests for PPE and ventilators. FEMA supported HHS through:

- interagency coordination, including providing liaisons or incident management teams to aid senior HHS leadership in anticipation of potential problems;
- information sharing, including obtaining and sharing information with state, local, territorial, and tribal governments;
- coordination through its Regional Response Coordination Centers (RRCC); and
- repatriation assistance.

After the Stafford Act declaration, FEMA took further action to coordinate the whole of government Federal response by activating and establishing the National Response Coordination Center (NRCC), RRCCs, and with HHS established the Unified Coordination Group (UCG). Specifically:

- NRCC is responsible for continuously monitoring the event to support first responders and disaster survivors.
- RRCCs are multiagency centers that FEMA operates in each of its 10 regional offices and are the focal points for regional resource coordination. FEMA activated its RRCCs to assist in the communication between the NRCC and state, territorial, and tribal governments. See Appendix D for a map of the FEMA regions.
- UCG is responsible for ensuring all levels of government work together to achieve unity of effort in response to COVID-19. It consists of the FEMA Administrator, the HHS Assistant Secretary for Preparedness and Response (ASPR) Incident Manager, the HHS Assistant Secretary for

Figure 2. PPE Types

![Figure 2: PPE Types](cd.gov/COVID19)

Source: CDC
Health, and the HHS Centers for Disease Control and Prevention (CDC) Lead.

**FEMA Did Not Have Reliable Data to Inform Allocation Decisions and Ensure Accurate Adjudication of Resource Requests**

The dramatic increase in requests for PPE and ventilators far exceeded available quantities, forcing FEMA to make unprecedented allocation decisions.

FEMA utilizes WebEOC, the system of record for the entire resource request and fulfillment process. All FEMA staff uses this system to receive, source, order, and track resource requests and their associated resources.  

Source: Resource Request and Fulfillment Guide

FEMA’s Crisis Management System, WebEOC, is the primary system FEMA uses for Stafford Act incidents and is the system of record for the resource request and fulfillment process. As it does in traditional disasters, FEMA used WebEOC throughout the COVID-19 pandemic to manage resource requests including those for PPE and ventilators. We identified numerous instances of incomplete, inaccurate, and duplicate information for PPE and ventilator requests made through WebEOC between January 27 and April 19, 2020. For example, our analysis of WebEOC showed:

- WebEOC did not have the capacity to document partially fulfilled requests. On March 28, 2020, a state submitted a resource request for 6 million N95 masks. According to WebEOC, FEMA approved 4.5 million for procurement and documented partial fulfillment and delivery of 1.4 million. However, WebEOC did not have documentation of the state’s agreement, a request to cancel, or fulfillment of the remainder of the request. Therefore, FEMA NRCC officials were unable to tell us whether the request had been overtaken by events and FEMA notified the state of its cancellation, or if FEMA ultimately fulfilled the remainder of the request.

- The *Requestor Organization* type was inaccurately identified as “Other” for 87 percent (258 of 298) of entities requesting resources in our analysis rather than as a state or tribe. This identification is important because it increases FEMA’s awareness of the types of entities requesting and receiving limited resources.

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• Requestors incorrectly classified at least 25,000 N95 masks, 10,000 gowns, and 15,000 coveralls as “Other” in WebEOC’s Resource Category type rather than as “PPE.” Without accurate type classifications, FEMA was unable to track or report precise quantities of limited resources requested and provided, which reduced FEMA’s knowledge about available resources.

• There were identified duplicate request numbers and quantities of ventilators and PPE in FEMA provided data from the system. For example, there were 4,280 resource requests between January and March 2020, but only 3,994 request numbers; 9 percent (384 of 4,280) of resource requests were repeated in the system (duplicate identification numbers and requested quantities). Duplicate requests artificially inflate the number of resources needed by stakeholders.

These data weaknesses occurred because FEMA officials in the Operations Capabilities Office, the office responsible for maintaining and operating WebEOC, did not include sufficient controls in the system. WebEOC did not have a validation process preventing potential errors or incomplete fields during the manual entry process, nor did the system have a built-in mechanism blocking duplicated resource requests. Additionally, WebEOC was not suitable for clearly identifying the different types of resources stakeholders required, such as different sizes or materials for gloves or types of masks.

We also attribute these data issues to new internal and external WebEOC users not being properly trained and submitting resource requests incorrectly. FEMA’s Operations Capabilities Office did not train the significant number of new WebEOC users as a result of the COVID-19 pandemic. Prior to October 2019, there were 16,026 WebEOC users. By October 2020, WebEOC users increased 17 percent to 18,681. According to FEMA’s Initial Assessment Report, FEMA personnel did not always receive formal training and relied on ad hoc guidance from coworkers. Additionally, some states had not submitted a resource request in as many as 5 years and faced a steep learning curve. Lastly, a FEMA official within the Operations Capabilities Office stated, and WebEOC data confirmed, an inundation of resource requests initially overwhelmed the existing resource request system and responsible staff. Figure 3 shows the dramatic increase in WebEOC users and resource requests from fiscal years 2017 to 2020.
These internal control weaknesses presented multiple challenges that affected FEMA’s ability to accurately understand, adjudicate, and respond to stakeholders’ needs. The incomplete, inaccurate, and duplicative requests required FEMA Regional officials to engage in follow-up inquiries with stakeholders and to perform time-consuming manual updates to the requests, which often created additional data issues.

As a result of the data reliability issues, FEMA could not easily use the WebEOC information for its decision-making and reporting purposes. Instead, FEMA staff were tasked with “cleaning” the WebEOC data, which, according to a FEMA Resource Support Section official, involved staff members spending an inordinate amount of time updating incomplete and inaccurate requests while removing duplicate resource requests.\(^8\) Next, FEMA staff incorporated this “cleaned” data into PowerBI, a data visualization tool.

UCG officials used the PowerBI reports for situational awareness, decision support, and to identify resource gaps. However, a FEMA official in the Analytics Branch responsible for cleaning data was unable to provide us with the steps taken to remove the incomplete, inaccurate, and duplicative information from the data, so we were unable to validate the accuracy of the “clean” data. As such, we could neither validate the WebEOC data nor the

\(^8\) According to a FEMA official, this process initially required 2 staff members, 12 hours per day, 6 days a week for 2 weeks.
PowerBI reported information, and we noted that the PowerBI data was significantly different from the WebEOC data. Specifically, WebEOC contained 4,280 resource requests between January and March 2020, while PowerBI had only 2,772 resource requests during that same time period, a 35 percent decrease.\(^9\) Figure 4 provides the resources supplied according to each FEMA data source.

**Figure 4. Resources Supplied as Reported by FEMA Data Sources (in Millions)**

![Chart showing resources supplied]

<table>
<thead>
<tr>
<th>Source</th>
<th>Gloves</th>
<th>N95s</th>
<th>Surgical Masks</th>
<th>Face Shields</th>
<th>Gowns</th>
<th>Coveralls</th>
</tr>
</thead>
<tbody>
<tr>
<td>WebEOC</td>
<td>136.3</td>
<td>93.8</td>
<td>19.0</td>
<td>14.9</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>PowerBI</td>
<td>37.3</td>
<td>56.8</td>
<td>33.5</td>
<td>5.7</td>
<td>5.2</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Source: FEMA-provided data from WebEOC and PowerBI as of April 19, 2020*

The manual cleaning of the data created significant differences between FEMA’s system of record and the data used by decision makers for PPE allocations. FEMA cannot ensure all of the revisions were correct or repeatable because officials did not document the methods used to clean the data.\(^{10}\) Further, the system’s control weaknesses diminished FEMA’s ability to accurately understand, adjudicate, and respond to stakeholders’ needs. Finally, because FEMA did not leave an audit trail to verify accuracy, neither we nor FEMA could ensure the accuracy of the information it used for its decision making or reported to its stakeholders. During our audit, FEMA acknowledged many of the weaknesses and worked to update WebEOC to better address its needs throughout the pandemic and in future disasters.

\(^9\) During our audit period, WebEOC did not contain information about resources distributed from the Strategic National Stockpile. The Strategic National Stockpile data was combined with the WebEOC data during the “cleaning” process.

\(^{10}\) In November 2020, FEMA officials provided us a process guide, dated June 10, 2020, for “cleaning” the data and creating the PowerBI dashboards. Because FEMA did not provide a crosswalk between the resource requests in WebEOC and those included in the PowerBI dashboards, we were unable to test the process guide.
Appendix E highlights issues FEMA identified during the audit and its WebEOC improvements correcting these issues.

**FEMA Developed a Process to Allocate the Limited Supply of Ventilators, but Did Not Have a Similarly Documented Process for PPE**

During the height of the pandemic, the Nation experienced a significant shortage of ventilators used to treat COVID-19 patients. FEMA and HHS established the UCG, whose primary role according to a FEMA fact sheet was to resolve policy decisions regarding the Nation’s limited supply of PPE and equipment to meet stakeholder demands. FEMA and the UCG developed and communicated a standard process for allocating limited supplies of ventilators. This process required stakeholders to complete a questionnaire (right) when requesting ventilators from FEMA. Once FEMA received a request, the NRCC staff reviewed the questionnaire to validate the requestor’s current need against available data. If a stakeholder submitted a request for ventilators that could not be fulfilled, the NRCC staff established a process to supply the requesting stakeholder with justification for the decision.

### Ventilator Questionnaire

1. How many usable ventilators, ICU beds, and convertible ventilators are currently available within the state?
2. What is the current hospital bed and ICU bed occupancy rate in the state?
3. How many new ICU beds does the state estimate it can stand-up and the number of ventilators, or Food and Drug Administration approved ventilator alternatives, it can or is standing up?
4. What is the decompression ability of hospitals in the state? (i.e.: are there currently field hospitals or alternative care facilities established?)
5. How many anesthesia machines are in the state and have they been converted?

**Source:** FEMA

Conversely, FEMA did not have a similarly documented process to help guide allocation decisions for PPE and ensure stakeholder requests were consistently adjudicated during the initial response to the pandemic. Under normal circumstances, when resources are readily available, FEMA uses the Resource Request and Fulfillment Process Guide to approve requests and distribute available resources for responding to a natural disaster, such as hurricanes or floods. However, FEMA NRCC officials did not have a documented process and were unable to provide specifics detailing how they made allocation decisions for limited supplies. According to a FEMA NRCC official we spoke to and FEMA’s Initial Assessment Report, the UCG prioritized limited resources based on the requests received. Furthermore, UCG officials considered various factors such as number of cases, number of deaths, available intensive care unit beds and ventilators, prevalence of vulnerable populations, and knowledge of a location’s medical infrastructure. FEMA officials could not provide any specific information about how each factor was evaluated nor the weight given to each factor when rendering a final decision.
Additionally, FEMA’s regional officials were also unclear about what information the NRCC and UCG needed to make PPE allocation decisions. In the absence of information requirements from the NRCC, FEMA’s regional offices developed a variety of products and reports to help inform senior leaders making PPE allocation decisions. We identified 23 different data analytic products. We found inconsistency among the 10 regions as FEMA officials gathered disparate information from assorted sources and developed dissimilar products, as shown in Table 4 in Appendix F. Even when regional officials produced the same report to the NRCC, the reports were prepared differently as shown in Table 5 in Appendix F.

According to FEMA NRCC officials, the agency prioritized ongoing pandemic efforts and other declared disasters over documenting and updating its policies and procedures. The undocumented processes contributed to stakeholder confusion about FEMA’s adjudication and allocation decisions, with some alleging that FEMA’s PPE allocation decisions were inconsistent and lacked transparency. FEMA NRCC officials told us the reason for not documenting decision-making processes is that processes have continued to evolve with the pandemic over time.

**FEMA Did Not Have Strategic Documents to Effectively Lead Pandemic Response Efforts**

The pandemic response was also hindered by confusion about Federal agencies’ roles and responsibilities. HHS issued high-level, strategic guidance in the PanCAP-A to identify which agencies were responsible for the different aspects of the COVID-19 response. This guidance was quickly overcome by events when the President issued Stafford Act emergency declarations to increase the Federal response on the same date the guidance was published. The PanCAP-A did not address the changes that ensued when FEMA was designated the LFA. Furthermore, FEMA (and HHS) did not update the PanCAP-A or issue interim guidance addressing the changes in critical roles and responsibilities for each agency.

The outdated guidance, summarized in Table 1, caused confusion among stakeholders.
Table 1. Strategic Guidance vs. Federal Response Activities for Pandemic

<table>
<thead>
<tr>
<th>Strategic Guidance</th>
<th>Federal Response Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>HHS will serve as LFA. (As described in the Biological Incident</td>
<td>FEMA serves as LFA.</td>
</tr>
<tr>
<td>Annex (BIA), PanCAP and PanCAP-A)</td>
<td></td>
</tr>
<tr>
<td>HHS ASPR Regions are responsible for processing resource</td>
<td>FEMA serves as lead in the resource</td>
</tr>
<tr>
<td>requests and HHS Assistant Secretary for Preparedness and</td>
<td>request process and determines the sourcing.</td>
</tr>
<tr>
<td>Response headquarters determines the sourcing. (PanCAP-A)</td>
<td></td>
</tr>
<tr>
<td>FEMA is responsible for managing non-medical supply</td>
<td>FEMA is managing medical supply resourcing for critical</td>
</tr>
<tr>
<td>resourcing. (BIA)</td>
<td>lifesaving resources such as PPE and ventilators.</td>
</tr>
</tbody>
</table>

Source: DHS OIG analysis of strategic guidance and Federal response

FEMA noted similar challenges in its Initial Assessment Report, such as staff supporting the COVID-19 response often not understanding the UCG’s role, not knowing how and when to engage with the UCG, and not knowing which decisions should be routed through the UCG and which they could make independently. FEMA also acknowledged that the scope of the pandemic outstripped assumptions made in existing policies, plans, and procedures. One such assumption was that HHS, not FEMA, would remain the lead agency during the pandemic. When we discussed the need to update strategic guidance with FEMA NRCC officials, they stated they intend to issue new guidance that will clearly define roles and responsibilities.

Conclusion

Since the onset of the COVID-19 pandemic, FEMA coordinated with its partners to provide critical resources, such as PPE and ventilators, but faced challenges in ensuring stakeholder requests were accurately adjudicated and allocation decisions were properly informed. PPE is essential to protect first responders and healthcare personnel treating patients with COVID-19. Likewise, ventilators are crucial in aiding COVID-19 patients experiencing respiratory symptoms. FEMA can improve its current and future pandemic response operations by documenting and communicating its decision-making process for the allocation of critical medical supplies and resources. Without such documentation and communication, FEMA will continue to face stakeholder allegations that PPE allocation decisions are inconsistent and lack transparency. Additionally, FEMA officials at the Operations Capabilities Office should continue to improve IT controls within its system of record so there are assurances that stakeholder resource requests for both pandemic and natural disasters are properly adjudicated.
Recommendations

**Recommendation 1**: We recommend the Assistant Administrator for Response in the Office of Response and Recovery at FEMA improve the reliability of WebEOC data by:

a) developing internal controls for WebEOC to prevent incomplete and inaccurate information from being entered into the system; and

b) ensuring all new users receive formal training on completing, submitting, processing, and tracking of resource requests in WebEOC.

**Recommendation 2**: We recommend the Associate Administrator for Response and Recovery at FEMA strengthen FEMA’s coordination during the COVID-19 response and future pandemics by formally documenting the policies and procedures for making informed and consistent resource allocation decisions for critical lifesaving supplies and equipment.

**Recommendation 3**: We recommend the Administrator of FEMA, working with the Secretary of Health and Human Services, issue clarifying guidance defining agencies’ pandemic response roles and responsibilities under Stafford Act declarations.

Management Comments and OIG Analysis

FEMA concurred with all three recommendations. Appendix B contains a copy of FEMA’s management response in its entirety. FEMA also provided technical comments to our draft report, which we incorporated as appropriate. Based on FEMA’s response and proposed actions, we consider all three recommendations open and resolved. A summary of FEMA’s management responses and our analysis follow.

**FEMA Response to Recommendation 1**: Concur. The FEMA Response Directorate is developing a training plan to address training gaps identified in the report. Additionally, the Response Directorate plans to analyze, and address, how the staffing requirements of the Operations Capabilities Office were impacted by the expanded mission-set presented by COVID-19. FEMA’s estimated completion date is July 29, 2022.

**OIG Analysis**: We consider FEMA’s actions responsive to the intent of the recommendation. We consider this recommendation resolved, but it will remain open until FEMA provides evidence showing the planned corrective actions are completed.
FEMA Response to Recommendation 2: Concur. The FEMA Response Directorate is including resource allocation guidance, which will incorporate COVID-19 lessons learned and best practices related to resource allocation, in the revised BIA to the Response and Recovery FIOP [Federal Interagency Operational Plan] as well as the revised PanCAP. The estimated completion for the BIA is January 2022 and the revised PanCAP is July 2022. FEMA’s estimated completion date is July 29, 2022.

OIG Analysis: We consider FEMA’s actions responsive to the intent of the recommendation. We consider this recommendation resolved, but it will remain open until FEMA provides evidence showing the planned corrective actions are completed.

FEMA Response to Recommendation 3: Concur. FEMA is co-lead (with HHS) in revising the BIA to the Response and Recovery FIOP, which will strengthen the existing document by including lessons learned from the COVID-19 response. Upon completion of the new BIA, FEMA’s Response Directorate will revise and update the PanCAP to further develop planning guidance and operational concepts for future pandemic response. The estimated completion for the BIA is January 2022 and the revised PanCAP is July 2022. FEMA’s estimated completion date is July 29, 2022.

OIG Analysis: We consider FEMA’s actions responsive to the intent of the recommendation. We consider this recommendation resolved, but it will remain open until FEMA provides evidence showing the planned corrective actions are completed.
Appendix A
Objective, Scope, and Methodology

DHS OIG was established by the Homeland Security Act of 2002 (Public Law 107–296) by amendment to the Inspector General Act of 1978.

Our audit objective was to determine how effectively FEMA supported and coordinated Federal efforts to distribute PPE and ventilators in response to the COVID-19 outbreak.

To accomplish our objective, including the assessment of internal controls, we evaluated FEMA’s COVID-19 response activities. We reviewed applicable Federal laws and regulations and FEMA policies and procedures. We interviewed FEMA officials at the NRCC and within all 10 FEMA regions, and HHS officials to gain an understanding of FEMA’s activities and decision-making processes from January 27, 2020 through April 19, 2020, for PPE and ventilator distribution. We also developed a survey that was distributed to 444 stakeholders, to which there were 105 responses, to obtain stakeholder perspectives on FEMA’s response activities prior to and after it assumed the LFA role. We did not quantify the data from the survey in our report and instead used examples from the survey responses to illustrate the potential effects of the issues identified.

Further, to assess the reliability of computer-based data, we obtained an understanding of FEMA’s controls over data in WebEOC, and conducted limited testing to trace data to source documents and identify missing or invalid data elements. We reviewed and analyzed the audit universe of the 4,280 resource requests for PPE and ventilators placed between January 27, 2020 and April 19, 2020, in WebEOC; tested FEMA provided WebEOC data sets for consistency; and judgmentally selected a minimum of 25 percent of resource requests to test for accuracy, sufficiency, and completeness. We found the data was inaccurate, insufficient, and incomplete. Therefore, the data was unreliable. The team issued a recommendation to improve the accuracy, completeness, and reliability of the system.

We conducted this performance audit between May 2020 and March 2021, pursuant to the Inspector General Act of 1978, as amended, and according to generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based upon our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based upon our audit objectives.
MEMORANDUM FOR: Joseph V. Cuffari, Ph.D.
Inspecting General
Office of Inspector General

FROM: Cynthia Spishak
Associate Administrator
Office of Policy and Program Analysis

(Revised Report No. 20-038-AUD-FEMA)

August 31, 2021

Thank you for the opportunity to comment on this draft report. The Federal Emergency Management Agency (FEMA) appreciates the work of the Office of Inspector General (OIG) in planning and conducting its review and issuing this report.

The coronavirus disease 2019 (COVID-19) presented, and still presents, an ongoing historic challenge to the FEMA mission, as the agency had to concurrently coordinate the response to a major disaster declaration in every U.S. state, territory, the District of Columbia, and three tribal territories. Additionally, an unprecedented 96 tribes sought assistance directly from FEMA under the nationwide emergency declaration or a state’s major disaster declaration. FEMA managed shortages, prioritized resources, and oversaw a deeply collaborative interagency response that required a whole-of-America effort.

On March 19, 2020, in remarks by the then-President and Vice-President of the United States during a video teleconference with Governors on COVID-19, FEMA was designated as the agency leading the federal response to COVID-19, shifting this designation from the U.S. Department of Health and Human Services (HHS), which normally serves as the lead federal agency (LFA) for pandemic response. This decision subsequently brought the full weight of the federal government to bear to support our states, territories, and tribes. In total, FEMA’s National Response Coordination Center was activated for an unprecedented 475 continuous days. During the activation, all of the operational areas within FEMA were impacted as the nature and requirements of the pandemic continued to expand and evolve, requiring FEMA to regularly re-examine its practices, policies, and procedures to minimize risk to its workforce and deliver upon its mission in the most effective, efficient, and equitable way possible.
The scope of time the OIG analyzed for this report ended on April 19, 2020,—just 30 days into what would become a 16-month activation, and ongoing response, led by FEMA. As a result, the OIG analysis does not capture a significant amount of the work that the Agency has performed in response to COVID-19 including:

- Completing Project Airbridge;¹
- Administering nation-wide crisis counseling, lost wages, and funeral assistance programs;
- Implementing a multitude of changes to WebEOC² in order to meet operational needs; and
- Assisting in the distribution and administration of millions of vaccinations.

In all cases, FEMA demonstrated that the Agency and its people are resilient and can learn, adapt, and innovate when faced with new demands.

The decision to shift the lead role from HHS to FEMA involved rapid adjustments to the organizational structure and coordination mechanisms of the overall federal response to the COVID-19 pandemic, which was naturally challenging. However, these issues were mitigated by the integration and maturation of task forces across multiple federal departments and agencies, because each task force had a discrete focus area and objectives to achieve. The Unified Coordination Group was also integral to overcoming these challenges, as it facilitated collaboration between principal-level leaders. Further, while existing plans and policies were not predicated on the structure of a White House Task Force led by the Vice President, the daily engagement of federal principals fostered open dialogue and rapid decision-making, and encouraged the quick resolution of obstacles as they arose. Ultimately, with an incident of this scope and scale, it is expected that unforeseen challenges will emerge. At the height of this response, more than 40 federal agencies with numerous authorities, capabilities, and funding streams were involved.

Despite the unprecedented nature of the pandemic, it’s important to note that FEMA had pre-existing systems, plans, and doctrine providing a foundation for the response to COVID-19. These documents and authorities enabled FEMA, HHS, and other federal agencies to rapidly commit personnel and funding to the pandemic response. Within the first 11 days of the disaster declaration FEMA consequently obligated $1 billion in

¹ Project Airbridge was a line of effort lead by the Supply Chain Task Force in accordance with their four-pronged approach to address immediate and future critical medical supply needs created by COVID-19—acceleration, preservation, allocation, and expansion. Project Airbridge addressed immediate shortfalls by drastically shortening the amount of time it took for U.S. medical supply distributors to get PPE and other critical medical supplies into the U.S. during the pandemic.

² WebEOC is FEMA’s comprehensive Crisis Management System that provides real-time situational awareness and a common operating picture during national responses and daily response planning operations.
funding to state, local, territorial, and tribal partners (SLTT) for COVID-19 related activities. Furthermore, the Agency’s investment in its regional resources, staff, and operational relationships created lines of trust and provided an effective framework for the federal government to support SLTT partners in executing their own jurisdictional responses. In designating FEMA as the LFA, the then-President and Vice-President of the United States highlighted familiarity that all governors have with FEMA systems, processes, and procedures in remarks on March 19, 2020.

Despite FEMA’s foundational doctrine and operational relationships, the COVID-19 pandemic nevertheless stressed the traditional FEMA resource request process and related systems. The nationwide response to the pandemic, and subsequent global demand for personal protective equipment (PPE), for instance, led to an inundation of resource requests that severely taxed the existing staff responsible for receiving and processing requests for assistance. During most disasters, FEMA domestically manages abundant supplies and resources so that they are strategically positioned for efficient delivery to distinct impacted areas. To respond to the COVID-19 pandemic, though, FEMA was charged with managing new types of resources in an incident where worldwide demand far exceeded supply, challenging the Agency’s capacity to maintain operational awareness of the types and quantities of items that SLTTs were requesting and receiving. World-wide resource scarcity meant requests often could not be immediately or completely fulfilled, which had never been an issue in past disasters.

However, FEMA addressed resource shortages with new analytical tools and collaboration with the private sector. One example is Project Airbridge, which was undertaken between March 29, 2020 to June 30, 2020 to fill the immediate PPE shortfall in the U.S. by shortening the amount of time it took for U.S. medical supply distributors to transport critical medical supplies into the U.S. A total of 249 flights delivered nearly 6.3 million N95 respirators, 937.0 million gloves, 125.4 million surgical masks, 66.8 million surgical gowns, and more, through Project Airbridge. These expedited shipments arrived nine times faster than cargo deliveries by sea, allowing prioritized distributor channels to deliver PPE to the points of greatest need across the nation.

FEMA believes OIG’s recommendations will help improve the Agency’s systems, policies, and plans to respond to the next crisis. Unfortunately, however, the OIG’s scope for this report is too narrow to accurately depict FEMA’s response to COVID-19 and does not portray how FEMA continues to adapt, innovate, and improve its ability to deliver upon its mission throughout the ongoing pandemic.

The draft report contained three recommendations for FEMA with which the Agency concurs. Attached is a detailed response to each recommendation. FEMA previously submitted technical comments addressing several accuracies, contextual, and other issues under a separate cover for OIG’s consideration.
Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Attachment
Attachment: Management Response to Recommendations
Contained in 20-038-AUD-FEMA

OIG recommended that FEMA’s Assistant Administrator for Response in the Office of Response and Recovery:

Recommendation 1: Improve the reliability of WebEOC data by:
   a) developing internal controls for WebEOC to prevent incomplete and inaccurate information from being entered into the system; and
   b) ensuring all new users receive formal training on completing, submitting, processing, and tracking of resource requests in WebEOC.

Response: Concur. The FEMA Response Directorate is developing a training plan to address training gaps identified in the report. Additionally, the Response Directorate plans to analyze, and address, how the staffing requirements of the Operations Capabilities Office were impacted by the expanded mission-set presented by COVID-19. Since March 2020, the Operations Capabilities Office has offered virtual introductory WebEOC training on a regular weekly or bi-weekly basis. FEMA also developed and offered virtual Resource Request Board training on a quarterly basis. WebEOC users — including FEMA employees, federal interagency staff, and SLTT partners — now have access to regular virtual training as well as independent study training as an option. From March 2020 to December 2020, over 1,600 users attended virtual WebEOC training. Further, from January 2021 to August 5, 2021, an additional 1,000 users attended WebEOC training.

Estimated Completion Date (ECD): July 29, 2022.

OIG recommended that FEMA’s Associate Administrator for Response and Recovery:

Recommendation 2: Strengthen FEMA’s coordination during the COVID-19 response and future pandemics by formally documenting the policies and procedures for making informed and consistent resource allocation decisions for critical lifesaving supplies and equipment.

Response: Concur. The FEMA Response Directorate is including resource allocation guidance, which will incorporate COVID-19 lessons learned and best practices related to resource allocation, in the revised “Biological Incident Annex” (BIA) to the “Response and Recovery Federal Interagency Operational Plans” (FIOP) as well as the revised “Pandemic Crisis Action Plan” (PanCAP). The estimated completion for the BIA is January 2022 and the revised PanCAP is July 2022.

ECD: July 29, 2022.
OIG recommended that the FEMA Administrator:

**Recommendation 3:** Working with the Secretary of Health and Human Services, issue clarifying guidance defining agencies’ pandemic response roles and responsibilities under Stafford Act declarations.

**Response:** Concur. FEMA is co-lead (with HHS) in revising the BIA to the Response and Recovery FIOP, which will strengthen the existing document by including lessons learned from the COVID-19 response. Upon completion of the new BIA, FEMA’s Response Directorate will revise and update the PanCAP to further develop planning guidance and operational concepts for future pandemic response. The estimated completion for the BIA is January 2022 and the revised PanCAP is July 2022.

ECD: July 29, 2022.
Appendix C
Federal Pandemic Response Guidance Documents

Table 2. Summary of Pandemic Response Guidance

<table>
<thead>
<tr>
<th>Federal Guidance</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Response Framework (NRF)</strong> (Oct. 2019)</td>
<td>Provides the foundation for the Nation’s emergency management and how it responds to all types of incidents.¹¹</td>
</tr>
<tr>
<td><strong>Biological Incident Annex (BIA)</strong> (Jan. 2017)</td>
<td>Serves as the Federal organizing framework for responding to and recovering from a biological threat and aligns coordination to foster effective communication among Federal, state, local, territory and tribal partners, and private sector organizations.</td>
</tr>
<tr>
<td><strong>Pandemic Crisis Action Plan (PanCAP)</strong> (Jan. 2018)</td>
<td>Operationalizes BIA with a focus on potential viral pandemic pathogens, outlines coordinated Federal response activities for a pandemic in the United States, and clarifies roles and responsibilities of HHS, FEMA, Federal interagency partners, and other supporting agencies to establish lines of authority and to eliminate overlap and duplication of effort.</td>
</tr>
</tbody>
</table>

*Source: Federal Guiding Documents*

¹¹ An “incident” is defined as any occurrence that necessitates a response to protect life or property, such as emergencies or disasters of all kinds and sizes, including pandemics. National Response Framework, p. 4.
Appendix D
United States Map of FEMA Regions

Figure 5. FEMA Regions

Source: FEMA
## Appendix E

### Updates to WebEOC

#### Table 3. Identified Issues and FEMA’s WebEOC Updates

<table>
<thead>
<tr>
<th>Identified Issues</th>
<th>Completed WebEOC Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMA officials changed “Quantities Order” to document partially filled orders.</td>
<td>Added “Partially Fulfilled” option to the “Status” field.</td>
</tr>
<tr>
<td></td>
<td>Renamed the existing quantity field to “total QTY Requested and added new Total QTY Filled” number and units fields.</td>
</tr>
<tr>
<td>Diversity of PPE (e.g., gloves, gowns, masks, other medical systems, equipment, and supplies) and various sizes (small, medium, and large) and types (exam or surgical).</td>
<td>Pre-populated “Resource” field options related to medical systems, equipment, supplies, and new options related to PPE.</td>
</tr>
<tr>
<td></td>
<td>Added a new document library tool with expanded functionality to support nationwide incident.</td>
</tr>
<tr>
<td>Information from Original Request not transferred to Split Requests</td>
<td>Re-configured relationship between original resource request and attachments, so when split, those attachments are available in all records.</td>
</tr>
<tr>
<td>Duplicated resource requests</td>
<td>Added safeguard to prevent users from pressing “Split” button multiple times, which resulted in duplicate resource requests.</td>
</tr>
</tbody>
</table>

*Source: DHS OIG analysis and FEMA list of WebEOC modifications*
Appendix F
FEMA Regional Products and Reports

Table 4. Regional Reports

<table>
<thead>
<tr>
<th>Purpose of Product</th>
<th>Needs Validation</th>
<th>Planning/Needs Assessment</th>
<th>Resource Tracking</th>
<th>Situational Awareness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supports and ensures resource request and allocation is suitable to future needs</td>
<td>Provides projections, models, and assumptions to support planning and needs</td>
<td>Tracks resource request status (requested vs. fulfilled)</td>
<td>Provides snapshot of current situation (may include portions of other report classifications)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Products Developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<td>9</td>
<td>1 1</td>
</tr>
<tr>
<td>10</td>
<td>1 1 3</td>
</tr>
<tr>
<td>Total Products Developed</td>
<td>1 6 5 11</td>
</tr>
<tr>
<td>Percent of Regions Developing Product</td>
<td>10% 60% 40% 70%</td>
</tr>
</tbody>
</table>

Source: DHS OIG analysis of FEMA reports
### Appendix F
FEMA Regional Products and Reports (Continued)

#### Table 5. Differences in Regional Approach to Situation Reports

<table>
<thead>
<tr>
<th>Region</th>
<th>Sources</th>
<th>Author(s)</th>
<th>End User</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>States, Territories, or Tribes</td>
<td>Planning, Operations, and Logistics sections, Movement Control Unit</td>
<td>• Regional officials&lt;br&gt;• State, Territory, &amp; Tribal partners&lt;br&gt;• NRCC&lt;br&gt;• HHS</td>
<td>Daily</td>
</tr>
<tr>
<td>7</td>
<td>• Johns Hopkins University&lt;br&gt;• U.S. Census Bureau</td>
<td>Planning section</td>
<td>• Regional officials&lt;br&gt;• NRCC</td>
<td>Daily</td>
</tr>
<tr>
<td>8</td>
<td>• States, Territories, or Tribes&lt;br&gt;• FEMA Logistics</td>
<td>Planning and Logistics sections</td>
<td>Regional officials</td>
<td>Weekly</td>
</tr>
<tr>
<td>10</td>
<td>• FEMA Logistics&lt;br&gt;• FEMA Planning</td>
<td>Planning and GIS sections</td>
<td>• Regional officials&lt;br&gt;• NRCC&lt;br&gt;• HHS</td>
<td>Daily</td>
</tr>
</tbody>
</table>

*Source:* DHS OIG analysis of FEMA provided documentation
Appendix G
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Appendix H

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