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STATEMENT FOR THE RECORD

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Reviewing Federal and State Pandemic Supply Preparedness and Response

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Virtual Hearing



Chairman Payne, Chairwoman Torres Small, Ranking Members King and Crenshaw, and members of the subcommittees, thank you for inviting me to testify on the federal government's personal protective equipment (PPE) procurement and distribution during the COVID-19 pandemic.

Along with most of the nation and the world, California has been severely impacted by the COVID-19 pandemic. As of July 11, the state has 312,344 cases and has tragically lost 6,945 lives to COVID-19. However, California began dealing with indirect effects of this pandemic long before any other state – since January, when the state coordinated and accepted flights of repatriated citizens from China.

Repatriation Flights to California

In January 2020, as COVID-19 caused the entire city of Wuhan in the Hubei Province of China to quarantine, the State of California was notified by the U.S. State Department (DOS) of the need to activate the pre-established Repatriation Plan. California rose to meet the need when the DOS began repatriation flights to bring American citizens home. The California Governor's Office of Emergency Services (Cal OES) activated the State Operations Center (SOC) and worked with the DOS, Department of Defense, U.S. Department of Homeland Security, U.S. Department of Health and Human Services (HHS), and other federal and state agencies to assist and coordinate these missions.

Repatriation flights landed at March Air Reserve Base, Travis Air Force Base, and Marine Corps Air Station Miramar in late January and early February. California served as the gateway for thousands of Americans to return home safely. This required close coordination on the state's part with not only multiple federal and state agencies and departments, but also local fire and law enforcement, public health, and emergency management to provide the necessary logistical needs, such as appropriate sheltering and medical support for the repatriated citizens who were placed under quarantine upon arrival. As well, the federal government issued travel advisories for China, which resulted in tens of thousands of travelers immediately passing through or traveling to San Francisco, Los Angeles, and San Diego airports.

On February 1, there were six confirmed positive COVID-19 cases in California. Throughout the month of February, the California Department of Public Health, in conjunction with the California Health and Human Services Agency, continued to monitor cases and work with local public health departments on contact tracing in the state. In late February, the state enhanced its capabilities dedicated to COVID-19 response after the first case of community transmission in the state.

On March 4, the Governor declared a State of Emergency to build on the work already underway by the state and engage all levels of government in anticipation of higher rates of COVID-19 infection. At that time, resource requests for PPE were accelerating, prompting the SOC to begin distributing the 21 million N95 masks and 1 million surgical masks from its reserves.

Grand Princess Response

On March 6, Cal OES received notification from HHS that the Grand Princess cruise ship was heading to California from Hawaii. The Grand Princess, normally ported in San Francisco, initially went to Mexico before coming back to California to offload and pick up passengers. It then set sail to Hawaii. There were an unknown number of sick people on the ship. California supported the Centers for Disease Control and Prevention (CDC) and the HHS Office of Assistant Secretary of Preparedness and Response (ASPR) with several high-profile missions to the Grand Princess while still at sea. This included transporting medical staff and necessary PPE, testing of staff and passengers, delivery of essential medications for passengers, and several evacuations of sick individuals.

This was a major operation that demanded California provide large quantities of logistical support to HHS, the lead federal agency, including medical personnel and PPE. At this time, our partners at the Federal Emergency Management Agency (FEMA) Region IX were very responsive and provided as much assistance as possible, given they were not the lead federal agency.

Following an extensive effort involving multiple levels of government, the state developed a plan for the ship to berth at the Port of Oakland. The plan ensured the passengers, 21 of which had tested positive for COVID-19, could disembark safely and receive medical treatment. With HHS as the lead, California provided support by establishing a dockside medical receiving and processing capability. The first passengers disembarked on March 9, and the last passengers disembarked on March 16, in a meticulous process to protect the health of everyone involved. Passengers, including Californians, other U.S. citizens, and foreign nationals, were transported to, and quarantined at, Travis Air Force Base, Marine Corps Air Station Miramar and at other alternate care sites established by the state to ensure there was no COVID-19 spread in the community before they returned home.

Coordination with the Federal Government

In January, as discussed above, the lead federal agency during the repatriation and Grand Princess mission was HHS. It quickly became clear that HHS had trouble with maintaining the tactical ability to respond to the issues that arose

during those missions. All deployed staff from HHS had specific purposes and were inflexible and/or unable to respond to evolving needs of the state in the challenges we were addressing.

Once the pandemic spread across the nation, it was clear there was no strategic initiative or coordinated plan from HHS, the White House or the CDC. Outside of the CDC, there was very little federal guidance provided to the states. Regarding PPE, specifically, there was one brief mention of cost eligibility provided in a FEMA fact sheet on emergency protective measures. At the same time, our partners at FEMA Region IX, who had embedded at the SOC along with HHS, worked to adjudicate and provide critical technical assistance where possible, including those related to federal resources, the state's procurement, and ultimately FEMA's distribution of PPE.

On March 13, the President issued an Emergency Declaration, and on March 19, the Governor issued a statewide stay at home order, requiring all non-essential activity to cease. On March 22, the Governor requested, and the President approved, a Major Disaster Declaration for California for Direct Federal Assistance, Emergency Protective Measures, and Public Assistance. This action initiated the switch in lead federal agency from HHS to FEMA.

Given the complexity of the situation and how late into the response they took over federal responsibility, FEMA was both challenged and worked to be incredibly responsive. FEMA did the best they could to organize information and operations to assist our state. FEMA Region IX is still embedded in the SOC and has played a critical role in the state's Logistics and Commodity Movement Task Force and in communicating across the entire federal family. Particularly, the FEMA Region IX Administrator and liaison officers have been highly communicative and supportive, especially in moving the state's requests through the relevant federal departments.

Federal Resource Procurement and Distribution

Strategic National Stockpile

The same week as the Major Disaster Declaration on March 22, following requests by the state to HHS for deployment of the Strategic National Stockpile (SNS), California received its initial allotment of PPE from the SNS. It quickly became apparent that the federal government had not effectively maintained the SNS. Although the state had planned on a complete and fully functional SNS, HHS provided the state with only a percentage of PPE necessary to keep healthcare workers and frontline workers safe. Notably, the SNS allocation to California was absent any ventilators to treat those affected most seriously by

COVID-19. Of the SNS resources that were received, many of the N95 respirators were expired. In the end, California only received 75% of the total SNS allocation that it had expected and planned for. The separate SNS allocation dedicated specifically to the County of Los Angeles included a small number of ventilators, and unfortunately, all of the ventilators were inoperable and required refurbishment by the state, delaying the deployment of these critical resources.

California received only 75% of its allotment from the SNS, comprising:

	N95 Masks	Surgical Masks	Face Shields	Surgical Gowns	Coveralls	Gloves	Goggles
Total	20	10	600,000	600,000	100,000	600,000	300,000
	million	million					

Federal Testing Supply Distribution

In addition to PPE, California has received the following monthly allocation of testing supplies from the federal government:

	Swabs	Transport Media
May	1.2 million	900,000
June	1.5 million	900,000
Total	2.7 million	1.8 million

California has requested 1.2 million swabs and 1.2 million units of media for the month of July, and we expect to receive these amounts based on our communications with HHS. Additionally, HHS provides a weekly allocation of Abbot ID Now test kits to the state. Our initial allocation was 2,400 tests per week, although recently the amount has increased. On July 9, California received word that the federal government is providing us with an additional 50 Abbott ID Now devices and 15,000 tests to address current surge needs. This is a huge one-time increase in rapid point of care testing for the state and will be immensely helpful.

<u>Like federally distributed PPE, however, testing supplies and processes have also had significant issues</u>. Initially, there was much confusion and discoordination with both distribution of testing supplies and the roll out of the testing sites across the country. Although California was actively working to implement a statewide testing process, HHS had an inflexible approach requiring the state to follow a "one size fits all" strategy, which was very problematic. Nevertheless, the state adjusted to meet HHS requirements. In the end, HHS changed course and

allowed the state to implement their own system. This simply cost valuable time and much unnecessary strain.

As well, early on, there were complexities with getting appropriate and sufficient testing supplies, to include swabs and media. The ability to get testing supplies in a timely fashion was inconsistent and on more than one occasion, the testing supplies provided were the wrong ones. Currently, about 760,000 units of the viral transport media manufactured by Fillakit are in quarantine in one of our state warehouses due to potential quality assurance issues. FEMA is aware of this issue and is working hard with the U.S. Food and Drug Administration (FDA) to resolve the problem.

On July 8, to address a recent spike in positive cases throughout the state, California submitted additional requests for testing supplies to the federal government, including:

- Roche Cobas 6800/8800 test reagents, to support 30,000 tests per day.
- Roche extraction reagents for MP96, Compact, and LC 2.0, to support 20,000 tests per day between the three machine types.
- 50 Abbott ID Now machines to place in prisons/jails for symptomatic testing and 15,000 cartridges per day to support this testing prison/jail testing over the next six months and in Imperial County's two hospitals.
- 100 Cepheid GeneXpert machines to place in skilled nursing facilities and in Imperial County's El Centro Hospital, and 480,000 cartridges to support skilled nursing facility testing over the next six months.
- Qiagen RNA extraction reagents, to support 15,000 tests per day.
- Additional 200 BD Max supplies boxes per week, to support Imperial Public Health Lab.
- Biomerieux EasyMAG RNA extraction kits, to support 30,000 reactions per week.
- 29 Hologic Panther Fusions machines to place in 29 public health labs, reagents to support 20,000 tests per day, and Hologic TMA reagents to support 15,000 tests.

Federal Medical Personnel

Obtaining consistent federal medical resources has been challenging as well. This is more understandable, given the nationwide impact from the pandemic and the need for resources by all states. However, the lack of a strategic, coordinated approach to resource allocation has been problematic. As well, the reluctance to utilize or commit DOD assets and facilities for the long term has been a challenge. The inability to secure federal resources for more than short durations results in a "revolving door" approach of assets, requiring the

state to continually shop for resources during a pandemic that has exhausted resources. Beyond the request for federal assets, California has actively pursued contracts with private medical providers and early on, launched a statewide Health Corps initiative. Through the Health Corps, the state leverages available medical professionals and deploys them strategically to locations throughout the state.

More recently, on July 6, California requested an additional 190 professional medical staff from the federal government to deploy from July 15 to September 15. These personnel will assist California's efforts in Imperial County to address the ongoing surge at the U.S.-Mexico border, as well as intensive care unit (ICU) capability throughout the state. This request included:

MD Intensivists – ICU and ER	Mid-level Providers (Nurse Practitioners /	Respiratory Therapists	ICU / ER Critical Care	Total Requested
- ICO dila Ek	Physicians Assistants	merapisis	RNs	Staff
30	20	20	120	190

Again, FEMA has been very helpful and as of July 10, all 190 staff have been identified for this mission from the Department of Defense and from HHS, which will immensely assist the state.

Operation Airbridge

To begin, the overall approach by the federal government to secure, obtain, and distribute PPE to states has been an ongoing challenge and should be characterized as an overall failure. In a global pandemic with worldwide competition for critical lifesaving assets, a national strategy to leverage federal buying power and consolidate asset acquisition and distribution was nonexistent. In fact, every state was on their own. It became the wild-wild west, with little or no oversight or support by the federal government. The amount of fraud, misrepresentation and promises broken by suppliers and would-be profiteers was simply astounding. Every state was left to compete with each other, as well as with other countries, for the same commodities.

As well, with Operation Airbridge, the states were left to compete with our own federal government. This approach was horrendous, resulting in massive costs and a lack of ability to secure the necessary PPE we needed for our healthcare workers. Although the federal government implemented a hybrid version of the Defense Production Act, it was not leveraged as designed and really had no positive effect on states.

Operation Airbridge was a program in which the federal government partnered with several US based private medical suppliers to scour manufacturers in China to obtain as much PPE as possible. The federal government utilized its assets to find, procure, and transport PPE. It then allocated the PPE to private medical suppliers to provide to their customers, mostly hospitals, and retained some of the PPE to build into the SNS. As we understand it, roughly half of the obtained resources went to medical supply companies and 20 percent went to the medical supply companies to sell to others, with priority for hot spots in the country. The final 30 percent was allocated to FEMA for distribution via the SNS.

As of July 3, California has received the following from the federal government through Operation Airbridge:

	N95 Masks	Surgical & Procedural Masks	Eye / Face Shields	Gowns & Coveralls	Gloves
Total	14,757,500	87,552,500	2,792,400	34,612,300	2,164,685,500

While this effort did bring more resources into the U.S., it compounded the difficulty that states were facing with securing PPE. In essence, this process "cornered the market" when the market already had limited availability. Any resources that were left or that could be obtained in the Asian market were almost entirely unavailable because of Operation Airbridge.

Lack of communication from the federal government caused another issue with Operation Airbridge. We did not get notification of the program until it had been active already for weeks. Our FEMA liaisons were given very little information about the operation. Once information did start to flow, the state was only told which counties were prioritized but was not given a breakdown of which facilities had received which resources. At a time when the state was developing a strategy to distribute PPE procured through its own contracts, the lack of communication caused confusion and inefficiency in resource allocation.

Operation Airbridge has been somewhat effective, but the supply chain has still not recovered. It helped fill gaps and confirm another commodity flow into the state, but with the consequence of driving market prices up, further increasing competition, and limiting the number of resources we could secure independently.

PPE Shipments to Skilled Nursing Facilities

FEMA established a separate program specifically to distribute PPE to skilled nursing facilities. This effort, however, was not directly coordinated with the state. The state was notified of this program only after the PPE had been distributed and had little visibility over delivery dates, quantity, and locations. While this effort was well-intentioned and critically needed, there have been complaints on the quality of some products, such as gowns that fit like ponchos or masks that were not usable.

Battelle Critical Care Decontamination Systems

Through partnership with FEMA, the state leveraged Battelle Critical Care Decontamination systems to decontaminate N95 respirators, allowing for their reuse during the supply chain shortage of this critical piece of PPE. The FDA issued an Emergency Use Authorization for the Battelle units, which can decontaminate one mask up to 20 times and can clean up to 80,000 masks per day.

On April 20, the first Battelle site was established in Burbank. The second was established in Fremont on April 25. As of July 8, California's Battelle units have decontaminated 151,356 N95 respirators for 319 facilities, with 1,864 facilities signed up for the service.

California's PPE Procurement and Distribution Strategy

Early on in the pandemic it became very clear to the state that given the volatile, competitive market fueled by scare resources, the limited availability of PPE, an unpredictable Chinese government, and an ongoing tremendous need for PPE, continuation down the same path was unsuitable. We needed a more strategic approach. We leveraged the systems and concepts we have utilized in many previous disasters to develop a multi-prong strategy to build a more manageable, reliable, and sustainable pipeline to meet the needs now, and for the duration of the event, as well as prepare for needs to re-open the economy. As we have seen across the country, some industries need to utilize PPE that have never been required to use it before, in order to mitigate any potential for COVID-19 infection. We set a path to build a sustainable, reliable capability that we could move us from a defensive position to an offensive one.

The state's PPE strategy is aligned with the Governor's six indicators and four stages of reopening. It is informed by resource requests received by relevant

industry sectors' prior efforts to secure PPE, existing burn rates of PPE, and immediate needs to support operations.

Detailed further below, California's PPE strategy includes:

- Contracts;
- Contributions website and Safely Making CA;
- State PPE distribution and guidance; and
- Leveraged procurement agreements for sectors to purchase their own PPE.

State Contracts

The challenge of obtaining PPE during the worldwide supply chain shortage was worsened by fraudulent and dishonest vendors, overstated capabilities, and individuals and companies using the "seller's market" to take advantage of the global pandemic. There were cases where states were successful in getting PPE orders filled only for the shipments to be diverted, or the orders suspended, by the federal government. California lost shipments of swabs and face shields to this situation and saw diversions of three million N95 respirators. The state also lost several orders of N95 respirators due to the Chinese government shutting down PPE manufacturers and halting commodities shipments out of the country following market volatility and criticism against China.

Central to the state's PPE procurement strategy has been its contract with the California-based BYD Motors, which has significant manufacturing capabilities in China. Critical to this effort was the assistance California received from FEMA, the FDA, and the National Institute for Occupational Safety and Health (NIOSH) in moving through the certification process for the masks produced by BYD. Since receiving NIOSH certification, this contract allowed California to provide tens of millions of surgical masks and N95 respirators. California also added to its PPE pipeline by entering into agreements with numerous other state-based companies, who "re-tooled" production lines to provide assets, including:

- Bloom Energy in San Jose to repair and refurbish ventilators;
- Anheuser Bush in Los Angeles to produce hand sanitizer;
- St. Johns Knits in Los Angeles to manufacture gowns and face coverings;
- Oakley in Orange County to produce face shields;
- Virgin Orbit Rocket in Long Beach to produce ventilators;
- Ustrive Manufacturing in Los Angeles to produce cloth face masks and reusable gowns;
- Biotix in San Diego to produce face shields;
- Advogue in Santa Clara to produce N95 masks, and

Daniels Woodland in Paso Robles to produce gowns.

Contract Vetting and Price Gouging Prevention

The state rapidly incorporated procedures and on-going checks and balances in partnership with local, state, and federal law enforcement, including the Federal Bureau of Investigation, the U.S. Attorney's Office, and the U.S. Department of Homeland Security. The purpose of this enhanced vetting process was to help the state avoid nefarious actors and fraudulent orders.

The Governor took an additional step to combat price gouging by issuing Executive Order N-44-20 on April 3, prohibiting a company from raising the selling price of any consumer good by more than 10 percent above the regular selling price of that item on February 4, 2020. Products on which suppliers had increased the cost were excepted.

Contributions Website and Safely Making CA Portal

On March 18, the state launched a COVID-19 website to serve as a one-stop shop for information on COVID-19 state and federal resources. A key component of this website was the Medical Supply Contributions portal, established on April 4 to facilitate the donation and distribution of PPE and other supplies from vendors and individuals.

The vetting process for this includes filtering a donation or request through a Contributions Group to determine whether the vendor has provided enough information, a Validation Group to ensure the resource will meet state specifications, and finally a Procurement Group to either pursue or disqualify the request.

To connect California businesses seeking PPE directly with California businesses selling PPE, the administration worked with the California Manufacturing Technology Association to establish the website Safely Making CA. This website fills a critical gap in helping businesses obtain non-medical grade PPE to assist in the reopening of the state. The portal also offers free licenses for cloud-based collaboration software so manufacturers can upload designs and specifications to the portal.

State PPE Distribution and Guidance

As part of California's distribution strategy, the SOC implemented a Standard Operating Procedure (SOP) for Non-Healthcare Sector and State Agency PPE

Requests, which outlines the request submission protocol and the adjudication and prioritization process for PPE allocation to non-healthcare sectors and state agencies. Per the SOP, the SOC evaluates unmet needs through coordination with state agencies, who solicit feedback from industry stakeholders.

The PPE distribution process is also informed by the California Division of Occupational Safety and Health and the California Department of Public Health, which have been key in developing reopening and worker safety guidance documents spanning numerous industries in California.

To ensure compliance with federal and state laws, recipients of PPE are required to maintain documentation and ensure no duplication of funds. As of July 8, California has distributed:

N95 Masks	KN95 Masks	Surgical Masks	Cloth Masks	Face Shields	Goggles
80,542,775	2,339,450	201,533,482	9,244,100	13,941,214	1,012,609
Gowns	Coveralls	Gloves	Hand	Collection	
			Sanitizer	Kits	
14,157,598	266,340	62,710,803	8,382,421	3,937,986	

Leveraged Procurement Agreements

A major part of the state's PPE strategy is leveraged procurement agreements. Moving forward, the California Department of General Services (DGS) has issued a competitive procurement for N95 and surgical masks. The state's intent is for public entities to leverage this procurement vehicle to purchase their own PPE, rather than have the state continue to directly procure and distribute these resources. The Request for Information closed on May 28, and DGS is in the process of preparing the Request for Proposal. Once it is in place in September, the statewide procurement agreement will last for one year, with opportunities to extend if necessary.

Medical and Testing Supplies and Capacity

California has built public-private partnerships to drastically expand our ability to collect and process specimens. Through these efforts, we are now equipped to test over 100,000 specimens per day. Despite this progress, we still have work ahead of us to ensure the supply chain is stable and that we build adequate access to testing, particularly among low-income and minority communities.

A particular problem arose with the procurement of swabs during this pandemic. The world's production center of critically necessary swabs for COVID-19 testing is located in Italy's hardest-hit province, which caused a global shortage of this resource. This limited supply in materials caused a slow start in California's ability to test. We were conducting only about 2,000 tests per day in early April. This shortage required us to innovate quickly to build out a new supply chain for swabs, as well as viral transport media and specimen collection kits.

To date, California has distributed the following:

	Collection Kits	Swabs	Transport Media (vials)
Total	414,000	3.4 million	2.2 million

As a result of these efforts, California averaged just under 106,000 tests per day from the week of July 1 to July 7. Our ultimate goal is to reach a consistent and sustainable minimum of 100,000 tests per day. As of July 9, California has conducted over 5 million tests.

Despite this progress, new spikes in cases and new supply chain issues are raising concern that our testing capacity will again be insufficient to meet the demand. A number of commercial laboratories are processing samples from testing sites across the nation, not just from within California, and are becoming overwhelmed with the large volume. Additionally, labs within California are experiencing shortages of chemical reagents and machine cartridges, limiting processing capabilities and slowing result timelines. To address this, California has instructed all labs to prioritize samples from high-risk groups, including individuals who are COVID-19 symptomatic and those who are hospitalized or in long-term care facilities.

California is taking steps to further build out its testing capacity, even amid the current challenges. We are deploying new testing modalities, such as pooled testing, to better leverage resources. We are proactively matching organizations with laboratories to ensure we are leveraging all public and private lab capacity across the state. We have issued a survey to all local public health and academic labs to better understand supply constraints and fully utilize lab capacity for PCR testing. Finally, we are continuing to work with our federal partners to address supply chain issues. Now more than ever, we need the federal government to help ensure a strong and sustainable supply chain so that we may continue and further build our testing capabilities.

Medical Surge Capacity and State Stockpile

In addition to the actions California has taken to date, we are fully aware of the possibility of concurrent medical events overwhelming our healthcare system. The state knows it needs to be prepared for a worst-case scenario, especially given the many unknowns of COVID-19 transmission, its interaction with influenza, and the speed at which non-pharmaceutical interventions can be instituted.

The state's role in this situation is to support the healthcare system and protect vulnerable populations by augmenting existing supplies with the state stockpile. It is almost impossible to predict what the "right" amount of PPE is for fall surge planning. Variables include the number of patients hospitalized, the geographic extent of the surge, how much inventory is being produced, how much PPE institutions have in reserve, and the affordability of available PPE to the private sector. The state is using data available from Johns Hopkins University, assumptions collected by the California Health and Human Services Agency, industry association partners, and internal Cal OES data on local demand history and PPE burn rates to arrive at informed estimates for the state's fall surge PPE stockpile. These recommendations are:

N95 Masks	Surgical Masks	Cloth Masks	Face Shields	Gowns	Gloves (pairs)	Coveralls
100	200	500,000	10 million	50 million	200	1.5
million	million				million	million

Emergency Management Assistance Compact (EMAC)

Through the Emergency Management Assistance Compact (EMAC), California has been able to provide assistance to other states. California lent ventilators to states that experienced an earlier COVID-19 spike and delivered PPE for reimbursement. California's ventilator and PPE EMAC resources include:

Ventilators					
State	Quantity				
Illinois	100				
Nevada	50				
Maryland	50				

	PPE					
State	Quantity	Туре				
Arizona	10,000,000	Surgical Masks				
	500,000	Face Shields				
Alaska	3,000,000	Surgical Masks				

Washington DC	50
New Jersey	100
New York	100
Delaware*	50
Michigan	50
TOTAL	500

Nevada	3,000,000	Surgical Masks
Oregon	1,000,000	Surgical Masks
TOTAL		17,500,000

Conclusion and Recommendations

Thank you for the opportunity to testify before you and for your commitment to ensuring strong preparedness and response to this pandemic. To conclude, I offer the following recommendations:

- FEMA should increase the federal share to 100 percent of the total eligible costs for emergency protective measures (Category B), including direct federal assistance, to reduce the economic burden on state and local governments experiencing significant economic impacts, and ensure the continuity of public safety and medical/health services during this prolonged disaster. California made this request of the federal government on March 22, to include the first 90 days of the major disaster declaration. To date, this request has not been addressed by FEMA for California, nor for any other state that has made this same request.
- Congress should increase the appropriation to the Emergency Management Performance Grant (EMPG) by 85 percent and reform the match requirement. This pandemic has made it clear that the federal government must invest in building and enhancing robust emergency management capabilities on the state and local level. EMPG funding enables state, local, and tribal governments to prepare for all hazards through planning, training, exercises, and developing professional expertise. It also supports response capabilities, emergency operation centers, public outreach campaigns, and alert and warning programs. EMPG's dollar-for-dollar match requirement has been difficult for local government to match as many have not fully rebounded from the recession. Due to the global economic crisis initiated by the pandemic, it is more important than ever that the dollar-for-dollar match be reformed to a percentage cost match consistent with the Hazard Mitigation Grant Program, currently at 25 percent.

- The SNS needs a thorough review and overhaul to build process transparency and support more realistic expectations and planning on the part of state and local government. The federal government must better understand the demand for lifesaving SNS resources, procure and maintain those resources, and deploy them effectively.
- The Defense Production Act should be more broadly invoked for this pandemic, particularly to produce N95 respirators, to relieve the supply chain.
- The federal government should establish centralized commodity buying. The federal government would have far greater purchasing power than individual states. Leveraging this purchasing power and securing commodities for states will relieve pressure on the supply chain and competition between states in purchasing PPE and testing materials.
- As a nation, we need to encourage more ventilator manufacturing. With the current domestic manufacturing capability and supply, the nation is still far short of the ventilators that would be needed in the worst-case scenario.
- The federal government must improve its coordination. Particularly, coordination and communication must improve between HHS/ASPR, CDC, FEMA, border agencies, and regulators, to include internal communication between the headquarters and regional staff for these entities. Better coordination will allow for more streamlined communication with states and more efficient resource management and delivery, including funding.
- The federal government should lead unified, coordinated communications during disasters, including guidance and education for states and localities, as well as talking points for government officials to use when communicating with their constituents.