The evolving role of emergency management: insights from California

KPMG Emergency Management and Disaster Recovery Dialogues Podcast

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In this podcast, **Mark Ghilarducci**, former head of the California Governor's Office of Emergency Services and current CEO of Emergent Global Solutions, Inc, joins **Ross Ashley**, KPMG LLP Senior Director, for an insightful discussion on the evolving role of emergency management and California's experiences embracing technology, innovation, and a proactive approach to emergency management.

Introductions

Ross Ashley: Hello, everyone! My name is Ross Ashley. I'm a Senior Director here at KPMG, and I'm here today with Mark Ghilarducci, who is the former head of California's Governor's Office of Emergency Services (Cal OES). Cal OES is one of the largest, most diverse organizations in emergency management that we have across the country. Mark spent from 2012 to 2023 responding to and managing some of the most complex and challenging disasters, including some of the most catastrophic—to call them wildfires is a misnomer; they were urban fires--that really took a lot out of California. Mark led those efforts and has a vast amount of experience as a former firefighter. Mark, thank you for being with us today. Greatly appreciate it.

Mark Ghilarducci: Ross, happy to be here. Thanks for having me.

The evolving role of emergency management

Ross Ashley: We're just going to have a little discussion here and talk about emergency management and some of the things that are going on today. We started throwing this phrase around about "recovering fast but responding faster." There's always been this tug of war between getting things where they need to be, when they need to be there, but at the same time ensuring that we're accounting for things properly for reimbursement purposes, and that we're treating the federal taxpayers' dollars with respect.

When I was at the Federal Emergency Management Agency (FEMA) in charge of grants, I would get called up to Capitol Hill. They'd say, "Ross, you're not getting the money out fast enough," and then, 12 months later they'd call me back up to the Hill and go, "Ross, you weren't a good steward of the taxpayers' dollars." There's always that challenge. Tell us some of the things that you were able to put into place — whether they were parallel processes, prepositioning or other types of pre-negotiations — to help Cal OES in this area.

Mark Ghilarducci: All really important points. I would like to start off by saying that the whole concept of emergency management has changed so dramatically in the last 10–15 years and continues to evolve and change to this day. Driven a lot by the more extreme events that we're seeing across the country. Driven a lot by weather events resulting in multiple catastrophic impacts. It's really forced the need for emergency management to step back and first of all, look at themselves as far as what the role is, how fast they respond to things, how fast they get engaged. Even before the response, just speaking from our side of the coin on this is, it's all about what you do in advance of an event. That means that you're leaning more forward today.

Emergency management, in the past, as you go up the rungs, the idea is that you have the first responders that are responding and then if something gets overwhelming for a local government or a local community, then they're going to go up to the next level and ask for assistance.

Because of the speed and complexity of events, and how fast they change in size, scope and complexity, that timeframe where you're waiting for somebody to call for help is a time that you need to be really leaning forward to be engaged. And really, now it's a term I coined "one team, one fight." Everybody has a lane, but everybody is supporting everybody. There's just not enough resources to go around in preparing for these things. Leaning forward means communicating before the event, doing as much mitigation, prevention and preparedness before the event. It's getting good situational awareness of an event that's evolving and possibly prepositioning assets or engaging with your partners in other government agencies or other resources, both public and private. That makes it so that emergency management is much more dynamic, much more engaged.

Therefore, by knowing what's happening and being engaged on the front-end as the disaster evolves, and the engagement of emergency management broadens, that engagement and connection with what's happening makes a much smoother transition and a much more enriched and efficient response.

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Mark Ghilarducci

That said, one of the things we put in place in California was this whole concept that response and recovery aren't consecutive; they're concurrent actions. We built incident management teams within the State Operations Center and our field units to address that. The recovery side of the house was directly involved in standing side-by-side with the response side to understand the dynamics of the event so that it could streamline into a recovery operation much faster. That was really driven by the fact that we were having so many very, very fast-moving events back-to-back and so many communities were impacted. It really changed the dynamic and the way we were doing business here. I think we're starting to see that across the country, as well.

Proactive emergency management

Ross Ashley: I want to pull on that idea of leaning forward more because it was really not until the passing of the Post-Katrina Emergency Management Reform Act that the emergency management community had the ability to lean forward. There was always pre-planning and training taking place. But it was really after those

reforms came into place, with pre-disaster declarations, all of the preparedness grants and the mitigation grants and allowing those engines to start up before disasters occurred that has led to that. It took the military a long time to come up with a doctrine on how to go from deliberate planning to crisis action planning. Where you go from training to actually war fighting. I think we're still learning this in emergency management. Would you say that's a fair statement?

Mark Ghilarducci: I would say it's a fair statement. The Reform Act was a game-changer in a lot of ways because people weren't tied to "how much is it going to cost me to respond?" and "I don't have the resource to respond" and more focused on the event and the impact to the communities. They were less encumbered by some concerns about financial, bureaucratic actions and were really leaning forward. We're still learning through that process. Different places around the country still approach it this way. I think it speaks to, in my view, a need to continue to standardize the profession.

I can go to any fire department in the country and the tactics and strategy are going to be pretty much the same. There's going to be uniqueness around the event that they're dealing with, of course, but their baseline tactics and strategy are going to be the same. I don't think we're there yet in emergency management. I do understand, it's not lost on me, that emergency management is very complex, and nothing can generally be the same in each event. But there are certain standardization practices and consistencies that can help emergency management.

One of them is this whole concept of being present and being engaged early enough to get the totality of the situation. Maybe you're not doing anything quite yet, but you're ready to do something to streamline the process as it's moving forward. That just takes a little bit more effort and it takes a change of protocols. You need to have a much better relationship with all the partners and entities and understand that we're all on the team working to get the job done.

Standardization and a whole-of-government approach

Ross Ashley: I agree with that standards part. If you look at law enforcement, you have reporting standards, the National Incident-Based Reporting System (NIBRS). You walk into a police department, and it's done the same way as in other jurisdictions across the country. Same thing with National Fire Protection Association (NFPA) standards with firefighters. We don't have a lot of that in emergency management. If you look at a debris

load ticket in one jurisdiction, it's going to look completely different from a debris load ticket in another jurisdiction. All the way from that low level to how emergency managers interact in their states.

We just had elections here and if you look at Indiana, Emergency Management and Homeland Security used to be in a Cabinet position. It's now being moved down under the Department of Public Safety, and the next administration may come back and undo that and do it over. We end up with this inconsistent way of doing that whole-of-government interaction. I don't know how we solve that problem other than the National Governors Association (NGA) or something, but it seems to be inconsistent everywhere.

Mark Ghilarducci: Yeah, I concur. The National Governors Association and the National Emergency Management Association (NEMA) do put out guidance to governors and new governors that are coming in that speak to the importance of having emergency management placed in the right place, particularly at the state government level, and even at county government levels. Even in California, it's kind of all over the map. Some are in county executive offices; some are working for the Sheriff; some are working for the Fire Chief. There's a complexity when that happens. It doesn't mean that the emergency manager isn't working very hard and being professional. Some places it works really well.

I'll just use as an example, when we had we had multiple wildfires taking place; we also had a significant amount of civil unrest going on at the same time. The Sheriff's duties are focused in different places; emergency management duties are focused in different places. Obviously, emergency management is supposed to bring all of that together. It's something that's important. I think a lot of it's still a little misunderstood with regard to our elected leaders, the importance of emergency managers and how they're critical to bringing all the disparate pieces together to effectively respond to, recover from and mitigate disasters and emergencies.

From my time spent at Harvard, in state and local government, you're either on the dance floor or you're on the balcony. I think that sometimes, on the dance floor you have a very specific view of things. Emergency managers tend to be on the balcony, and they're looking at this from a broader perspective.
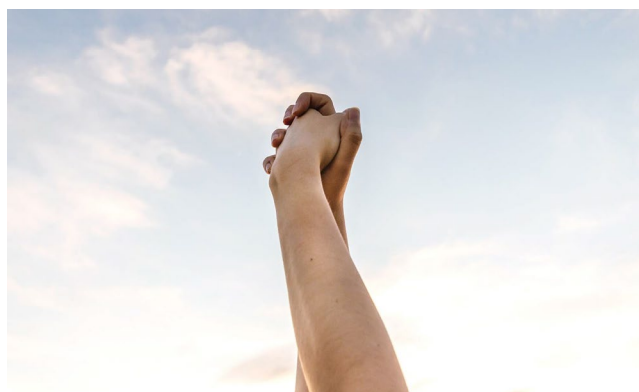
They can see all the all the people dancing on the dance floor, and where the gaps and challenges are and bring that together. And putting emergency managers deep into an organization really makes it difficult to be on the balcony and be able to effectively do the job that they need to do.

Managing scope creep in emergency management

Ross Ashley: Let's go in a bit of a different direction here to get your take on something that a lot of folks have been talking about. Scope and scope creep in emergency management. That the mission has become so broad. I'm going to paraphrase Craig Fugate, former FEMA Administrator. He defines emergency management as when the org chart of government breaks and it has nowhere to go, it goes to emergency management. It seems like in the last five years to a decade, the scope creep of what emergency management is doing is becoming so broad.

I'll give you a good example. I was visiting a jurisdiction in California, and the local emergency manager was telling me that they had just hired two social workers inside the emergency management agency. A lot of this had to do with COVID and the housing crisis and things of that nature. When I asked that same emergency manager about a new regional sheltering plan and asked the emergency manager how that would affect the jurisdiction, the individual told me, "I don't know because I've been busy doing this other stuff." I want to get your take on that — it seems like emergency managers today are taking on so much other than just natural disasters, or any kind of mass acts of aggression.

Mark Ghilarducci: It's a fair point. I think if that's true. Community leaders, when they're not sure where to go; if it doesn't look like it fits in the fire department, doesn't look like it fits in the law enforcement; it's emergency management. I've seen a lot of very different variations. Emergency management organizations that have become more of a homelessness coordination center or housing support community. I think the principles that emergency management bring to the table of collaboration, coordination, being able to bring all the right players to the table, are what really are the effective tools and capabilities that make people interested in in bringing complex problems to emergency managers.

While I do overall agree with Craig that sometimes there's too much going on in emergency management and it basically dilutes their primary functions, I would also say resource properly. This happened to me several times in California, where I didn't take on a new program, but I was able to send a team in, or we went in using the principles of emergency management to organize the capability, the effort and then stepped away.

We really helped our sister agencies and departments with the principles of emergency management of being metrics-driven, objective-driven, time-phased, operational incident action planning. All of those things that are bread and butter to emergency management at scale can be applied to other kinds of events.

I stood up fraud task forces for our Employment Development Department (EDD). I stood up a cannabis enforcement task forces. The idea was standing them up from the standpoint of helping those organizations that have primary responsibility because they were bringing in so many others. You need so many other disparate organizations that you're not used to working with. Emergency management is used to working with multiple different kinds of agencies that aren't of the same like. Bringing those principles to bear in in other areas is what we try to focus in on, to try to minimize the amount of taking on more within the emergency management function.

Strength in unity: the importance of partnership

Ross Ashley: I think you hit on it. Partnership is key. It's the number one word for emergency management. It's having those partnerships already in place. And obviously we saw that a lot during the pandemic with COVID-19. Where we saw emergency management and public health partnering together, you saw really good effective things. When they worked independently, you saw some challenges.

I use the expression, the public health community is really good at putting a shot in an arm. But you really need to bring the emergency management community to bear if you're really trying to put 10,000 shots a day in arms. That's not what public health has been designed for. They're not scaled for that. Where they work together inside their lanes, partnering, you saw really some really effective things. One person told me a story in the Mercedes Center in Atlanta. That one individual came in and determined that if people that were giving the shots, if you put them in swivel chairs, you save 20 seconds. Now, 20 seconds doesn't sound like a lot but when you're moving that many people through a facility, a swivel chair makes all the difference in the world. It's those kinds of things.

Emergency management understands logistics and understands so much of this that goes into pulling those communities together. If you take an independent agency, they do great. If you put two agencies together, unless there's a coordinating factor or coordinating body, they're going to fail working independently. Emergency management provides that glue, if you will.

> ## Emergency management provides that glue, if you will.
> Ross Ashley

Changing gears a little bit here, let's also talk a little bit about innovation. California has done some amazing things, whether it's wildfire warnings, earthquake warnings or tsunami warnings. Earlier, we were talking about an earthquake that happened earlier today.

Harnessing technology: California's pioneering efforts in AI and innovation

Mark Ghilarducci: Obviously we, as a society, are constantly in a state of change, with regard to innovation. We see that on a day-to-day basis. In emergency management, just take the alert and warning aspects of what emergency management does. How do you get a signal? How do you get an alert to an individual today? There's still a part of our generation that is used to having a hardline hardwired phone, but the majority of the population is on cell phones. That changes a little bit of that dynamic because it's not like you have a hard wire into your house anymore or you're at a single point of communication.

From a situational awareness standpoint, there's a need to empower the community. Events are moving so much faster and getting complicated much faster. What's the situation? What's the threat? What's the evacuation route that you need to take? All of this data is being moved to an individual today. That drives us for a need to innovate with regard to the tools that we're using in emergency management. And again, those tools that we're using are predicated and built around the principles that we've always used for a long time, paper and pencil in emergency management but the whole action planning, multi-agency, coordination, unified coordination concept.

We moved very rapidly. We started in about 2013–14. We've always had some level of innovation in California, but really it was after the drought we had. We could not get the data analytics we needed to be able to assess the impact of the drought. What were we seeing with land subsidence, water delivery systems, etc.? We really launched on a pivot on building common operating platforms and data analytics capabilities so we could help the emergency management community and by extension, state and local government and the

community at large, understand what was happening and be able to effectively prepare for, respond to or recover from it.. We could not get the data analytics we needed to be able to assess the impact of the drought. What were we seeing with land subsidence, water delivery systems, etc.? We really launched on a pivot on building common operating platforms and data analytics capabilities so we could help the emergency management community and by extension, state and local government and the community at large, understand what was happening and be able to effectively prepare for, respond to or recover from it.

It also helped us create a narrative, public communication, public education and media relations, to be able to better inform the public on what we're doing in a much more timely fashion. That has continued to expand over the course of the last several years. We have advanced capabilities in fire detection, predictive analysis, and the ability to look at weather data. We established what was called the California Wildfire Forecast and Threat Intelligence Integration Center, which, if you think National Hurricane Center, this is something similar to that at a smaller scale. The idea was is, there was a collaborative effort of input from multiple sources, multiple agencies sitting around in this collaborative way.

My view at the time was if we could see a hurricane evolving five days out and could slowly do predictive analysis of where that hurricane was going to make landfall and what communities were going to be most impacted, why couldn't we do the same thing with fire weather evolving on the West Coast? So, we could. We work with the Weather Service, our fire meteorologist, our data analytics team and a lot of software companies. Now, we can determine five days out or so what the most critical fire weather area of the State is going to be. We issue red-flag warnings.

If it's really critical and meets a metric, we will pre-position fire strike teams in that community so that if a fire starts, they can get on it right away. If it's really extreme, we'll pre-evacuate an area so that the firefighters are not worried about dealing with rescue and can focus on fighting the fire. We've done quite a bit in this arena. We also built in capabilities where now responders can see what's happening on their smartphone prior to getting to an incident. That helps for safety and planning, understanding the situation awareness.

Mostly, we've worked extensively to build better public education and public relations. That's been a game-changer for us. Everything from implementing the nation's first earthquake early warning system, which literally can detect shaking before it reaches you and give you a warning so that then you could drop cover and hold. Or if it's in a manufacturing context or say, it's a train. Trains coming down can be slowed or stopped prior to the shaking so that the train doesn't derail. There's all these mitigative measures and lifesaving measures that come from that. We want to empower the public more. Doing that required building resiliency into our network systems, working with our telco partners in the private sector to put resiliency and redundancy into the system and upgrading our communications network statewide. So many things have happened.

We established this statewide camera network that's looking for wildfires. It's driven extensively wildfires, but it can do a lot of different things now. We're moving them through to AI cameras so that AI can take all the data we're seeing with weather and wind and take the predictive analysis and focus on areas that could potentially be fire-start areas before the fire starts. The camera gets the first picture of it and then it moves back to our command centers. We have folks that are monitoring that and then we can push that data out to the community.

We're doing some pretty phenomenal things. Of course, it's happening across the country. I think this whole issue of AI, and I just talk about the wildfire context, but if you think about AI helping emergency managers with a decision matrix, it's not taking the place of humans making decisions but it's prompting decisions that could help streamline, amplify and accelerate the effort of emergency managers.

That moves through the recovery process. One area we worked on was implementing or integrating our finance and admin folks into the incident management teams at the State Operations Center. This whole concept where we moved into recovery and the documentation and the activities that happen in a response were not in alignment with what was happening in recovery. We'd have to go back and rebuild those. We'd have trouble with FEMA in being able to do Public Assistance (PA). Now, having the finance people integrated in the management team and through the response, they're building the playbook that will be moved into recovery. It super streamlines that effort and AI is a huge component of that now, of being able to ensure that those documents and actions are consistent with what PA guidelines, FEMA guidelines, etc., will be in the long run. The idea is to accelerate the pace of recovery and hopefully maximize your amount of financial recovery from our federal government.

Combatting mis- and disinformation

Ross Ashley: You mentioned something there about the earthquake warning and about trains. You did something that had a mitigation effect on second and third-order things like the train, slowing the train down.

Sometimes the human brain can pick up on maybe the train, but then all of the other things that are being mitigated by that one warning. That's amazing. Using technology to figure out what the true effects of those investments are; that's a huge one. If it's just one train not derailed, that saves a lot of people.

So, let's cap this off with what I think is an emerging challenge for emergency management that we're seeing out there. Especially this year, it has really come to light. That's this notion of disinformation. The notion that there are illicit actors out there that are trying to make things worse, and sometimes that's nation states, sometimes that's disgruntled individuals, whatever it is.

I wrote a paper on this back in 2012 about the cyber idea of "What if we're fooled?" What if the public is told to turn left to evacuate when they're supposed to turn right? You only have to fool the public once and they're going to lose confidence in the government that told them to do that right because it wasn't the government that told them to do it. How do you see this playing out?

This is a really new one that emergency management hasn't really had to focus on until recently. How do we combat that today? How do we make sure the right information is getting to the right people and that it's not being squandered by nefarious actors?

Mark Ghilarducci: It's a huge issue and it's going to become more complex as time goes on. In general, we've seen over the course of the last several years as social media has become more prevalent, mis- and disinformation. It has gotten to a level now where it literally can have an impact on response and public perception. So, you're a hundred percent correct. I think the COVID-19 experience played into that with regards to mis- and disinformation. I think for me growing up in the industry, we had preconceived notions that we built into our psyche about how the government's going to get up and give you a warning that is built around the best information, and you're going to take that information and act on it. That's been eroded and that's a problem.

I will tell you just from my side, while I was in my role in emergency services and homeland security, our homeland security has a very robust State threat assessment system of intelligence team, but we also have a very robust cyber security Integration Center. They don't sit over on the right-hand side and watch everything that's happening on the emergency management side. They're integrated. So, they're helping to be able to buffer mis- and disinformation from a social media perspective, a dark web perspective and bad information. This gets back to this leaning-forward issue. You can't wait for the phone to ring and then get engaged. By that time, you're already too late and you're behind the power curve on messaging.

This is important to lean out forward and be able to frame the narrative in a way that builds confidence early on in the public that we're responding accordingly. We want you to do a certain kind of thing. Then, you build on that with messaging, but you have to be accurate. There's going to be people that are going to try to erode your message and turn it over, and you have to have your act together to be able to effectively frame that narrative, that narration. Framing that narrative, having the capabilities to buy down or buffer some of this mis- and disinformation and then working with your partners, who are also responders, to be on the same page with what's being said. This will become more and more of a problem because we're just in a period of our time where people put out what they feel or it's not based on anything.

There's no authority around it. It's not rooted in science or professional actions. But people listen to those. So, you have to have your act together at the government level, and all your partners have to be on the same page, and you have to be able to control the narrative.

Ross Ashley: I'll modify your slogan that you use, instead of "one team, one fight" how about "one team, one message"?

Mark Ghilarducci: Yeah, 100%. I like that.

Ross Ashley: One team, one message. Well, listen, Mark. I want to thank you very much for your time today and also thank you very much for your service to the State of California and being a national leader in the emergency management community. Again, thank you very much for your time. Greatly appreciate you being here.

Mark Ghilarducci: Thanks, Ross, and thanks you for all your great service to our country. You're no slacking yourself, my friend.

Ross Ashley: Appreciate that, sir.

Mark Ghilarducci: Appreciate it. Have a great rest of your day, folks. Thank you.

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