

Conducting a Mitigation Needs Assessment for the Community Development Block Grant Mitigation (CDBG-MIT) Program, 10/10/19

Jelani Newton: Good afternoon, everyone, and thank you for joining us for today's webinar, "Conducting a Mitigation Needs Assessment for The Community Development Block Grant Mitigation (CDBG-MIT) Program." My name is Jelani Newton and my colleague Michelle Grainger and I will be your webinar hosts today.

Before we get started with the session, I'll quickly mention a few housekeeping notes. First, for the best audio quality we recommend connecting to the webinar audio through your phone line, rather than using the computer audio. Please note that all attendees will be muted throughout the session, but the questions can be sent to the speakers via the Q&A panel at the lower right-hand side of your screen. If you hover over the right side, you'll see Q&A. There's a little arrow next to it. If you click the arrow it will drop down and create a window and you can type your questions into that window. Please remember, in the ask section, to select all panelists and that will ensure that your question is received by the entire group and can be answered during the Q&A section of the presentation.

Lastly, I'd like to note that the webinar is being recorded and that both the slides and the recording will be available on HUD Exchange after the session.

With that, I'd like to go ahead and turn it over to Jen Carpenter, Assistant Director of Policy at HUD's Disaster, Recovery, and Special Issues Division.

Jen Carpenter: All right. Thank you, Jelani. I'd like to welcome everyone today to our second webinar in our CBD G MIT webinar series. We had our first webinar on September 3 and we'll be showing you the link for that, so if you did miss that webinar you can go back and review it. Then we will also, towards the end of the webinar today we'll be announcing the rest of the series that we have planned. We have four more webinars planned for the next month or so, and so we'll be announcing those. Then we'll announce those formally also through the HUD Exchange. If there any additions to that schedule that will also come through the HUD Exchange, so you just want to make sure you're registered on there to get the announcements.

Let's see. Today we have a group from FEMA joining us, as well as myself from HUD. I just want to talk a little bit about FEMA's role and why they are joining us today. This is the federal government's largest single investment in disaster mitigation and we really can't do this in a vacuum. We can't just sort of do the HUD normal run of business. We really need to align our program, especially with an agency like FEMA that does mitigation. Their division does mitigation full-time, so we've worked with them extensively on the notice and then now we're working with them.

You'll see this isn't our only webinar we're partnering with them. We're doing another that we'll announce towards the end. It really is a partnership with us and FEMA.

Also, after the 2017 disasters, the Mitigation Framework Leadership Group was established and they developed the National Mitigation Investment Strategy which was released in August. It's a national approach to investments in mitigation activities and risk management across the country and emphasizes coordination of federal agencies and all levels of government and private and nonprofit sectors. This ensures the maximization impact of mitigation investments. This is why we've got FEMA with us today. They're going to be helping us with going through the mitigation needs assessment and the requirements in the HUD's notice.

This is a resource slide so you can see the link for the webinar we did on September 3, if you missed that. Then, also, we have resources from our 2019 CDBG-DR Problem Solving clinic in Kansas City. For those of you that attended that, all those slides are also available online.

This is our presenter list. The folks from FEMA will be introducing themselves as they begin their presentation. They'll go through the FEMA slides and then HUD will end their presentation with some additional slides and we'll talk about the webinar series moving forward.

I'd like to go ahead and handle over to Shubha.

Shubha Shrivastava: Hi, everyone. Good afternoon. My name is Shubha Shrivastava and I work at FEMA headquarters in the Mitigation Planning Program. As Jen said, FEMA provided input into the notice of learning opportunity for this. Me and my other FEMA colleagues are now going to talk to you about the connections of the mitigation needs assessment to mitigation planning and mitigation-related work that's maybe already done at the state level or at the local level as part of FEMA programs.

FEMA has obligated around \$15 billion for mitigation projects through various hazard mitigation assistance programs since 1989, and now with more than \$6 billion in mitigation funding through HUD there's an opportunity to expand and advance on that work done so far in this mitigation natural risk reduction resilience field. That's why we're speaking today. We thank HUD for the opportunity.

We'll start with an overview and then we will talk about how to leverage the existing state and local plan. Then we'll also go into more details about the lifelines construct and what it means for mitigation.

We wanted to share with you our regional office locations, and these are links that you will be able to access from the recorded webinar slides. We also have the contacts for the state Hazard Mitigation Officers. We envision that working together on this CDBG-Mitigation-funded planning and projects will be a start to a strong relationship with different state agencies around mitigation.

With that, we also have the definitions of mitigation and mitigation planning. In the definition for mitigation we always like to draw attention to the long-term nature of risk reduction actions as compared to immediately before disaster or response or recovery actions or projects. In the definition of mitigation planning we like to emphasize not only what it does – identifying the

hazards, impacts, and actions – but also that an effective mitigation planning process is of utmost importance and at the heart of sound mitigation decisions.

Having the right people involved in the mitigation planning process helps with the understanding of risk and creates buy-in for mitigation action. Back to the definition, it can be funded from a wide range of resources, so it doesn't have to be one particular source of funding. That's the layout of the mitigation planning process.

Which states and local governments have mitigation plans? This map shows the reach of the program. This program started a few years after the Disaster Mitigation Act of 2000, so it's been a few years since the program has been around. The green on the map are all of the local jurisdictions covered by a FEMA-approved plan. Light green are for approvable pending adoption plans. Once FEMA has approved the draft plan, it gets formally adopted by the local government and then FEMA gives the approval letter.

All 50 states, territories, and 217 tribes have current plans, so every quarter we revise our numbers. At the end of September, our number was 239 tribes and 20,910 local jurisdictions. Eighty-seven percent of the country's population is covered by a mitigation plan, so the reach of the program is sort of far and wide.

There are a couple of things to know from this slide that there are three types of plans: state plans, local plans, and tribal. State plans can be standard or enhanced and local plans can be single jurisdiction or multijurisdictional plans. You might have to look at a few different plans to get an idea of what is going on in your sort of local situation.

Plans have to be updated every five years. It does happen from time to time that they don't get it updated in time and therefore they expire, so that is the red on the map. It says there that if a state plan expires, because it means the entire state loses eligibility for certain types of nonemergency disaster assistance, and definitely funding for mitigation projects has that plan requirement is what we call it, to have a FEMA-approved plan.

The mitigation planning process lays the foundation for and helps build partnerships for current and future risk reduction. As you think about projects to implement using this funding, the notice of funding opportunity also talks about the connection of land-use plans and other existing planning, so you could use the funding to further strengthen and integrate mitigation and resilience into land-use and other planning processes and update the mitigation plans as needed too. It's not only about projects and implementing, but it's also about [inaudible] the connections.

With that, we have the mitigation planning process which is the basic process for any kind of plan, state or local or tribal. Again, this is our sort of repetition on my part that this is an opportunity to leverage this well-established planning process. It's not just about using the plan document or the data that went into, information about hazard, the analysis that was done for risk assessment, but also build on the relationships and coordination that was done during the process amongst state agencies or among local agencies, organizations, around mitigation.

All plans are a snapshot in time. Whether a plan was updated a year ago or four years ago, there may be changes to consider as hazards and our built environment are always changing. Some risk reduction actions may have been implemented, so that's also a note to keep in mind is that they're a snapshot in time.

That concludes the overview and I will now transfer to my colleague, Laurie Bestgen.

Laurie Bestgen: Okay. Thank you, Shubha, and thank you all again that joined us for today's webinar. My name is Laurie Bestgen and I'm a mitigation planner for FEMA region seven out of Kansas City. For my part of today's webinar I will provide more details on using risk assessment from hazard mitigation plans to determine mitigation needs.

Although, as Shubha said, we do encourage the CDBG-MIT grantees to use the whole plan to inform the mitigation needs assessment, the risk assessment will really be an especially important source of relevant information, so we want to spend some time today kind of covering that.

Since you will likely be looking to those state and local mitigation plan risk assessments as a starting point for your mitigation needs assessment, we want to cover the typical steps in the risk assessment process so that you will, not only have an understanding of how this information is developed in those mitigation plans that you'll be referencing but also how you might then expand further with additional data to pull together the needed information for your mitigation needs assessment.

We also want to mention that we really see this as a tremendous opportunity for continued collaboration with state and local mitigation planning committees. I know many of you have probably already been involved, potentially at the state level, maybe even at the local level with hazard mitigation planning and we see this as an opportunity to strengthen that relationship and, as the mitigation needs assessments are developed for the CDBG-MIT grant, that will then be a continued resource to inform those future hazard mitigation plan updates. As Shubha said, mitigation plans really are living documents, new data all the time, new information about the built environment all the time, new studies to incorporate, so really constantly evolving with those required updates.

I want to kind of really just dive into the typical steps for a risk assessment which are on the slide there: identifying and describing hazards, identifying assets, analyzing risks, and summarizing vulnerability. The specific requirement for each step might differ somewhat depending on if it's a local or state plan, but they generally follow these same four steps. Both states and communities identify and describe their hazards and look at the location, past events, and future probably. I'm not really going to spend a lot of time on that first step. I'd really just encourage you to use those state and local plans to determine hazards that have been identified in your planning area.

In the next few slides I'm going to go into a bit more detail for steps two through four. This is kind of getting into that step two of risk assessment, really focusing on assets at risk. It's all about identifying what's important to protect. The assets that are identified in existing hazard mitigation plans really are likely those same people, structures, systems, things that you also

want to consider protecting and mitigating with the CDBG-MIT funding. When you reference those state and local plans there's often a list or summary information about assets in the plan, so, again, encouraging use of those at a resource.

I'll just touch briefly on kind of the categories of assets, what is meant by that. This first category state owned and leased buildings, we want to point out that that is a requirement for state hazard mitigation plans, really so that they are looking at the assets that they own or operate out of when considering risk. An important note here is that the CDBG-MIT notice did not include a waiver for the prohibition on activities that fund the general conduct of government, so CDBG-MIT grantees would need to request a waiver to include mitigation for state owned or operated buildings with this CDBG-MIT funding.

Moving on into the natural environment, this is just natural resources, our clean air, clean water, even looking at recreation areas, critical habitat.

Economy, this is looking at the major employers, things that are important to the economy of your communities, primary economic sectors, commercial centers, things of that nature.

Then moving on into the population, just a note to, not only consider general population and where populations are concentrated but also looking at subsets of the population such as functional and access-need populations, other vulnerable populations, and then always considering future growth that is expected in those areas.

This last category here on the built environment, of course, that's where we're talking about existing structures, cultural resources and, again, always considering future development. Lifeline there, I know we're going to touch on that in several places for today's webinar, termed as critical service areas in the CDBG-MIT for the register notice. These fall for the most part within the category of the built environment. This subcategory includes critical infrastructure and facilities that represent the highest priority of assets that are needed for communities to maintain resilience in the aftermath of an event.

As I said, I'm just going to briefly touch on lifelines now and then my colleagues Abraham Gunn and Kate Judson are going to go into additional detail in a few minutes and I'll get into describing each lifeline component. But before we do go further we want to make two important points about lifelines and state hazard mitigation plans. The first is that you will likely not find the terminology of lifelines and specific callout of those components. We just want to be clear about that as you use these plans so that you don't expect to see this specific terminology.

Abraham will kind of go into this in a little bit more, but the reason for that is that the genesis of this lifelines construct was fairly recently with the after action report from the 2017 hurricane season. This identified a need to create a new operational prioritization and response tool. We want to recognize that although this lifelines construct was originally developed for response reporting, it's now being integrated into the mitigation space, which really makes perfect sense.

We know these are the things that need to be up and running for communities to be resilient, so it's important to ensure that we are putting mitigation resources towards those. Most plans do

specifically call out critical facilities and these are likely going to align with those lifeline components. We just kind of want to make that connection and point that out.

The other thing is that while many state and local hazard mitigation plans do have a quantitative assessment of impact, current guidance does not require that. The type of assessment completed is really dependent on the available data and also local capability. Some plans may rely on a more qualitative assessment that you can then use and reference to build out that quantitative mitigation needs assessment. Kind of just to summarize that, the main point we want to stress is that state and local mitigation plans are a valuable resource and in some cases really going to provide that starting point towards further development of your mitigation needs assessment.

As I already kind of mentioned, assessing risks, when we talk about that it really means looking at where those natural hazards overlap with the community or state assets. Mitigation plans do discuss characteristics of each hazard, so kind of really rounding out what makes up each hazard, and then considering that hazard in relation to those assets that have been inventoried, and looking at that point of intersection where the hazard and the assets overlap, as the area of risk to address in terms of mitigation investment.

In the next few slides I'm going to cover the typical methods that are used for risk assessment and you'll see that they range from those more quantitative methods and then kind of into some other qualitative methods. We'll kind of touch on those as we continue to go through.

This slide presents all of the risk assessment methods generally used. If you're following the steps of the four step risk assessment process, this is getting into step three of that analyzing risk. The top one there, exposure or GIS analysis, this is used for hazards with those geographic areas of known risk. You know where they are going to happen; in other words, you can map them. When you have hazards that fall into this category, you can conduct some pretty highly quantitative risk assessment results.

Getting into the next one, historical analysis, this is for hazards that may not have specific areas that they generally occur, but have a repository of historical data. You can still perform some quantitative analysis, but a little bit less so just because it's interpreting what's happened in the past to kind of look forward to determine those future potential impacts.

Scenario analysis is generally used for hazards that really don't have a defined pattern at all. You can't say where they are likely to occur; you don't have a lot of historical data on where they've happened before. This method is really where you're going to have that kind of narrative of qualitative assessment and where you would kind of focus on a scenario and say what if a particular scenario.

Then last is just to acknowledge that some hazards and available data lend toward a combination of methods. In the methods in the mitigation plan are in that more qualitative area; again, may need to supplement with some additional analysis, but just to start already with what is in a mitigation plan.

I'll kind of go through these in just a bit more detail mainly to sort of point out the hazards that typically fall under each of these different risk assessment methods. Exposure or GIS analysis, again, can be highly quantitative in terms of the results, relies on comparison of GIS hazard layers. In other words, you've got to have that data to be able to do this.

Flood risk hazard layers, wildland, urban interface layers, if those are available and then combined with GIS-based asset layers, so, in other words, if all of those assets that we identified, if you have those in a GIS data layer, again, determining that intersection of risk. The point is that the mitigation plans will help you identify what GIS-based data may be available, so it's a good place to go to see what was used in the plan as a cue for what may be available for enhancing analysis, both for those hazard layers and asset layers.

For data on lifeline facilities and infrastructure, we encourage you to reach out to agencies that focus on data in those areas, such as state fusion centers, the Department of Homeland Security Cyber Security and Infrastructure Security agency. But again, your mitigation plans are going to give some excellent information in terms of data and resources out there.

This is most useful for the GIS or exposure analysis, most useful for flood-related hazards such as the flooding, levee failure, and dam failure, again, things that there are maps that tell us where they're going to potentially occur. Geologic hazards such as earthquakes, land subsidence, and sinkholes. Then potentially wildfire where you've got those wildland urban interface areas maps.

Okay. I'll touch just on historical analysis. It's kind of a little bit self-explanatory. You have a history of occurrence and data. This is useful for those hazards that occur often and where you do have that repository of data; in other words, somebody's been collecting data and it can be accessed. Hazards that typically fall under this risk assessment method are natural meteorological hazards, so, like kind of your weather hazards, and also human-caused technological hazards. State and local mitigation plans have the option of including those human-caused and technological hazards, so as you use them as resources you will see some inclusion of risk assessment for those types.

This method, again, it's taking a look at the characteristics of those previous event, including where they occurred, what happened, how much damages were, and then taking that information to draw some conclusions about where they will continue to occur in the future, future impacts, and costs.

Okay. Getting into that scenario-based analysis, as you can see, a lot of application for this is the human-caused and technological hazards. These are hazards that are low-frequency, high consequence. This can also be applied to the natural hazard of tornado. You can kind of do a scenario what if for that hazard as well.

Okay. Then just kind of showing a couple of examples of combination, some hazards have data that will allow for a couple of different methods to be used. For example, a good flood risk assessment will use both exposure GIS and historical analysis methods just like the data available for both of those, and a good analysis of tornado, as I said, it could be scenario-based,

but there's also likely some historical data to help with that. There are other hazards that can be a combination. That's just a couple of examples.

We do want to pause before we kind of get into some examples of the types of quantitative analysis that you'll find, just to make a note of the importance of considering future risks, including consideration of the future climate and weather patterns. This should be a consideration when developing those mitigation solutions. As Shubha mentioned, looking at really those long-term solutions, so considering how things might be in the future to ensure able to build out long-term.

Okay. I'll just kind of move quickly through a couple of examples of quantitative risk assessments that you'll find. One example is the repetitive loss properties. This relates to the national flood insurance program. A quantitative risk assessment of repetitive loss properties should be in all local mitigation plans, as well as state plans where they have got a higher federal cost share for mitigation of these properties. This information is just an example of something that can be used directly to inform quantitative assessment. It relates to the food, water, shelter lifeline that Abraham is going to go into a little bit more because this speaks to the potential impacts to residential sectors, or I should say residential shelter homes is kind of the point there.

The next one is an example out of the Commonwealth of Massachusetts. I just want to point out that when you see risk assessment results like this in a state or local plan, that also is kind of a cue to let you know that additional, more granular or structure-specific analysis results may be available from the entity that's responsible for planned maintenance. This is important to know. Just, you know, you see the numbers in these tables, but there's background that you might be able to access that will help inform those specific mitigation needs.

Okay. Moving on into summarizing vulnerability, the last step of conducting a risk assessment, I kind of consider myself a little bit of a data nerd, I guess; I kind of like numbers. But just really important to point out that all of that data and analysis, it really doesn't get you to the point of what you need to do without taking a step back and saying, okay, so what does that tell me. That's what this summarizing vulnerability is really all about.

A key outcome of doing the risk assessment is really just to gain that complete understanding of each community's overall vulnerability and significant risks. This can be used to get into problems statements and then problems statements baked for a solution. What we're looking for is really identifying that problem to then say, okay, what is that mitigation solution to solve the problem.

I want to go ahead into just a couple of examples of what you might find in state and local hazard mitigation plans when it gets to looking at problem statements. This slide provides an example of narrative problems statements developed as part the risk assessment findings, again, for the Commonwealth of Massachusetts. Just kind of looking at that second statement there, pointing to storm water conveyance infrastructure that's maybe not quite adequately sized to accommodate projected rainfall. Problems presented in this way, they just kind of naturally lead to, okay, what can be done about that; what are the solutions for that.

This example is simply a visual problem statement just in terms of this was low water crossings in Polk County, Missouri. This is where they kind of realized that they get damaged frequently. There's a problem there and they prioritized them. Then, so the next step would be saying, okay, what is appropriate mitigation to solve these problems here. So, just a couple of examples of how you might see those problems statements displayed.

Then this slide just really goes through that process or that flow of then using the risk assessment and those problems statements to get to the point of those mitigation actions, those solutions. Having a clear understanding of the problems is that first step, and then moving through. There should initially be a range of options considered. Sometimes the mitigation option might seem obvious, but it should consider really what is the best way to solve a problem. Then the process turns to really analyzing each of the potential solutions to determine which one is the best option, and then selecting that action to move forward.

In terms of mitigation planning where you are looking at multiple problems with multiple solutions, then you basically have a list of activities that you know can be done to become more resilient and it turns then into prioritizing, where do you start first. That's kind of in a nutshell getting into that process a little bit.

In the hazard mitigation plan for each selected action, you will also see an action plan. I'll show you an example here in just a minute, but it really is all about more details, about getting into implementation.

Okay. This slide is also kind of for your awareness and understanding how FEMA guidance breaks down mitigation actions into these four broad categories: local plans and regulations, both structure and infrastructure projects, natural systems protection, and education and awareness. This is just for familiarity with these categories as you use those mitigation plans as resources.

This slide then gets on into that example action plan that I talked about. Just to let you know, you can find details about who will implement, what the cost may be, who might fund the action, how long it'll take, and how important each is with the priority there. We wanted to kind of take a moment to look at this and stress the importance. You can start from actions and mitigation plans as a pipeline for CDBG-MIT funding. Actions, probably not so ready, but they're the result of a deliberative process and really can kind of be something to build on for potential options to reduce natural hazard risk.

Okay. Then to kind of wrap up my portion of today's presentation, want to point out that the structure and infrastructure mitigation category – we talked about the four different categories of actions – that structure and infrastructure mitigation category is generally where mitigation to community lifelines fits.

This slide shows just a few examples. I know Kate has got some additional examples in-depth, but an elevated home addressing the shelter component of food, water, shelter lifeline; and elevated electrical infrastructure addressing that energy lifeline; and then that far right picture there is a bio swale that's addressing mitigation to the adjacent roadway relating to the transportation lifeline.

Next Abraham is really going to provide that additional background as community lifelines and touch on that construct in more detail.

Abraham Gunn: Yes. Thanks. Hi. This is Abraham Gunn. I'm the Director of the Office of Response Policy and Performance here at FEMA headquarters. What I'm going to do is I'm going to touch on lifelines primarily from a response point of view. I understand that this is all about incorporating lifelines into mitigation planning, but hopefully this will help you do that by understanding through these mitigation efforts how you can affect response and making it more efficient and more effective.

I know that some of you are familiar with lifelines. The construct has now been employed by approximately 38 states, so if you have exposure to this and you understand what lifelines are, please bear with me. For many of you that may not understand it, I'm going to go ahead and go into a little bit of detail. I don't have much time, but definitely can take questions and hope to answer some later on.

From a response point of view, we have always operated under emergency support function structures and that's how we organize and task organize resources. That's how we've always reported. That's how we've always consumed our situational awareness and made decisions that way. But we never really understood what it took to stabilize a community and then organize in an efficient manner.

Through a great deal of time and research and engaging with stakeholders at all levels, and even in the international communities, and testing the concepts, we've identified the needs that when communities are not required to expend their energy and time on them, they are able to engage in all other aspects of civilized life. That's not to say that other elements are not important now in communities.

For example, historical and natural cultural resources are important, but when it comes to response efforts, that's not something that may necessarily take priority, and we have to make sure that all of our capacity is devoted toward stabilizing the things that we determine as the underpinnings of communities, that allow society in our nation to grow and prosper.

We concluded that if you we organize and prioritize our response activities around these, we not only are more effective in preventing loss in life and property but we enable the state, local, tribal, and territorial governments to recover much faster. There on the slide you'll see the seven community lifelines. I want to emphasize these are community lifelines. These are our local in nature and this is what our goal is, is to stabilize these lifelines after they've been disrupted after an event.

Then moving on to incident stabilization, so stabilization occurs when basic lifeline services are provided to survivors, and that can be in a number of manners. Now, these services – I want to emphasize again that these services are something that exists, it's steady-state, and they are organic to the community, being provided by something that already exists, whether it's a

government that is providing the service or infrastructure that is there that is providing the service.

If they are destabilized, then there's a number of ways that they can be stabilized. They can be stabilized through contingency response resources; they can be stabilized through full restoration, temporary repairs. There are a number of things that we can do to stabilize these.

But the corrective issue of response is that when those services are provided in one of those manners, we consider them stable. That does not necessarily mean that they have fully recovered. A good example is what you see in the call-out box there where we have an incident that destroyed cell towers that disrupt communications. Stabilization occurs when we provide through contingency response solutions, so, for example, Cell on Wheels, which is a tactical capability, a mobile capability that reestablishes that service even though it's temporary. We consider that lifeline stabilized again.

Now, to do that, we have to, in steady-state plan for stabilization targets. Now, stabilization target is the desire to in-state the response. So, have reached lifeline during deliberate planning process, we're supposed to create a stabilization target, and that can be modified on a per incident basis to match incident circumstances.

Now, that may have some value – I know this is new to mitigation – that may have some value when it comes to mitigation planning and understanding how to quantify the components and the subcomponents in the lifelines is my understanding of what those stabilization targets are.

Now, here you see the seven lifelines and the components that make up those lifelines. Now, under each of these components you will find a number of subcomponents. The lifelines, the seven community lifelines and the components that you see on the slide are fixed. They essentially make up the general scope of the services for a lifeline. The components are further divided into relevant subcomponents that provide a more granular level of enabling functions for the delivery of services to a community. Subcomponents may be just as necessary.

Now, I'll give you a quick example under energy. You see your two components there are power and fuel. Now, your subcomponents under power would be generation capabilities, transmission capabilities, and distribution capabilities. Subcomponents under fuel would be storage facilities, pipeline facilities, refineries and processing, commercial fuel distribution, and public safety fuel distribution.

Now, when we assess our lifelines, the simple way of doing so is asking what we call the what, the so what, the now what, what's the gap, and when. We need to understand the status of it; what the impact has been to it; what actions we are planning to take or are taking; what the limited factors are, so having an understanding of the gap if there is one; and then always having an understanding of what the estimated time to green or stabilization is.

Now, on the slight here, this is just a handy poster that, if requested, we can send the file out that it can then be print out and referred to. It is something that we use as an aid for people to reference. Nothing for me to brief on this slide.

That is essentially it for community lifelines. Unless there are any questions that they need to be referred to me, otherwise I'm going to turn it over to our next panelist. If there are questions referring to specific components and subcomponents in the lifelines, I'd be happy to answer those offline as well.

Kate Judson: Great. Thank you, Abraham. This is Kate Judson. I'm part of the FEMA's Hazard Mitigation Assistance Grant Policy team. As Abe detailed, the lifelines construct was developed by FEMA's Response team, but that being said, the lifelines construct can be applied across the full disaster lifecycle and should be considered when engaging in pre-disaster mitigation efforts.

I'm going to be speaking a bit about the connection to mitigation and how we're thinking about it here at FEMA. By investing in projects that target community lifelines, we will reduce the need for stabilization of that lifeline post-event. That really means that communities will be able to bounce back more quickly and will be more resilient to both acute shocks and stressors. The question is often asked why mitigate risk to lifelines. We like to explain it as mitigating risk to lifelines before, during, and after disasters may result in less devastation and response and recovery efforts may be faster and more effective.

What defines a lifelines mitigation project and what makes a lifelines mitigation project different than your typical mitigation project? We've been thinking a lot about it and a lot of times people think, is there a specific lifelines project type for mitigation. The answer is really no. We like to think of lifelines mitigation projects in a much broader and a more holistic way through the lens of criteria. There are three criteria that you can see now on the screen and that's sort of how we are assessing whether or not a mitigation project can be deemed a lifelines project. I'm just going to go through briefly what those three criteria mean.

The first one is that projects require deliberate planning. What we're thinking for deliberate planning is really that the planning process should be inclusive of diverse stakeholders; it shouldn't be a rush process and it should be really thoughtfully planned out. As you know, there isn't a one-size-fits-all approach for engaging with stakeholders in planning and that there is a need for innovative and personalized engagement techniques. Deliberate planning also means that stakeholders are engaged from the start and that they continue to have an active voice throughout the entirety of the planning process.

The next criteria that we use to assess whether or not a mitigation project is a lifelines mitigation project is thinking about cascading impacts of the project. The projects should really consider how mitigating one lifeline will impact other systems in the community. As you know, a project doesn't exist in a bubble and a project has impacts on surrounding lifelines and communities. So, when thinking about a mitigation project, really ask what cascading impacts should be mapped out.

Then the third criteria is impacts a significant portion of a community. This criteria is really looking at scale. Small rural and impoverished communities that don't have high population densities, such as in urban areas, they may have projects that impact a greater proportion of residents than projects in an urban area, so looking at just size alone shouldn't be a determinant

of a lifelines mitigation project but really looking at the scale and how mitigating this one lifeline, what the impact would be on the proportion of the community that it's in.

Now, I just want to highlight, thinking about those criteria, three specific projects that FEMA has funded that are really strong examples of lifelines mitigation projects. They're three very different projects and they all touch on different lifelines and mitigate different lifelines, but I think it's sometimes helpful to have examples to illustrate how we're putting a construct into practice.

The first example that you see is from the Big Apple. It's New York University's Langone Medical Center. It's an example of how FEMA has already started to take a lifelines approach to mitigation. The New York University Langone Medical Center experienced significant damage as a result of Hurricane Sandy. Not only did flooding hamper its ability to serve the community, but there was also this giant power failure that caused the loss of years of cancer research and millions of dollars.

The university responded by developing and implementing a holistic campus-wide mitigation strategy that included public assistance 406 mitigation to minimize the impacts of similar future events. Some of the resulting projects that came out of this strategy included constructing a flood barrier, and this barrier helped to shield campus buildings, and also funding a cogeneration plant to protect the center's power supply and ensure uninterrupted medical treatment and research could happen.

These activities used mitigation funding to safeguard the health and medical lifeline, as well as the energy lifeline and the safety and security lifeline. This one project touched on many lifelines. It worked across several forms of mitigation and lifelines to really improve national resiliency.

The second example I wanted to share is from the USVI. After several historic hurricanes, as I'm sure you're aware, the USVI suffered a lot of damage. They were able to use FEMA's public assistance program to not only repair their facilities but to also make them more resilient by protecting them from future and similar damage. Some examples of projects that FEMA funded included installing underground electrical lines, strengthening flood prone streets, as well as installing impact resistant roofs.

These projects touch on several lifelines similar to the NYU Langone Center for in the USVI we were able to help mitigate the energy, transportation, as well as the food, water, and shelter lifelines. A kind of fun fact about these projects is that the USVI has actually spent more money on hazard mitigation than on permanent disaster repairs, and these mitigation investments are estimated to help save future disaster-related losses of \$2.3 billion. So, a really great success story to highlight and that FEMA is really proud of.

The third example is actually from Alaska. In the past five years Alaska has experienced 150,000 earthquakes. It's one of the most seismically active regions in the world. Back in 2009, the city of Anchorage mitigated the risk of natural gas entering buildings by applying for FEMA's PDM program, the Pre-Disaster Mitigation, as well as the Hazard Mitigation Grant Program funding.

This fear in Anchorage was that if there was a large earthquakes, critical facilities such as hospitals, could be faced with natural gas entering the structures and harming the patients.

These two FEMA grants, the PDM -- the Pre-Disaster Mitigation -- and the HMGP -- Hazard Mitigation Grant Program -- funding helped fund the installation of seismic gas shutoff valves in 117 public buildings. Of these 117 public buildings, 91 were actually school facilities, and several of these schools not only serve -- they're not only schools but they're also shelters. So, in order to allow the schools to be viable shelter locations, these seismic gas shutoff valves were helping in that situation as well. Basically, the valves sense shaking and they respond by stopping gas flow from entering a building.

So, yes, this was back in 2009 and then just recently in November 2019, November 30, there was actually a 7.1 magnitude earthquake that hit and these valves helped protect more than 297,000 residents. I think this is a really strong example of mitigating the safety and security lifelines by installing these valves in critical facilities, like hospitals and schools, not only protecting the kids but also allowing these schools to serve as emergency shelters as well..

Those are the three examples. Then the next thing I just wanted to share with everyone is a list of resources that I think will be helpful. The first cluster is all hazard mitigation planning resources. There's also a link to the community lifelines implementation toolkit, which is a great resource. Abe shared a lot of the materials from that that you can go a little bit more in-depth. Then the APA, the American Planning Association, also has some great guidance materials on hazard mitigation planning as well.

That is it on behalf of FEMA. Thank you very much. I'm going to turn it back over to Jen from HUD. Thanks so much.

Jen Carpenter: All right. Thanks, Kate, and thanks everyone from FEMA for walking through that. I think we've had a lot of questions about what using these lifelines and any of the assessment context looks like; what quantitative assessments look like, so I think they did a great job of hitting all those points and I hope that, especially with the examples specifically they provided, that folks are really seeing how this is going to look and how it makes sense for their needs assessment when they're putting their action plan together.

All right. Just to bring it back to the requirements in your notice -- I don't want to get away from those. I want to just reiterate those. These are the kind of things we want you to be thinking about when you're writing up your narrative for your action plan. HUD will put together an action plan checklist, so these are the things we're going to be looking for when we put that checklist together.

We've already had some questions coming through about when that action plan checklist is going to be available and also asking about the financial certifications and implementation plan. We will have a similar document that we had for the 2017 grant, so that will be coming up shortly. I'm going to just hope for an early November timeline to get that out to you since the first cohort of action plans is due in February of 2020.

I know there are a lot of grantees who hope to do it earlier and so we're trying to move as quickly as possible here at HUD to get resources out to you to get these webinars done, to get checklists out to help you do that, so we'll keep working on that and try to get that out as soon as possible.

But to just go over some of those requirements, again, our notice does require that in your needs assessment you incorporate quantitative assessments. The FEMA folks did a great job of providing you some examples for how to do that. Just a note on that, not every risk you identify – you're not going to have quantitative assessments for every risk identified in your needs assessment; we don't expect that, but we do expect that you incorporate some quantitative assessment.

You're required to identify and analyze all significant disaster risks for current and future disasters and provide a substantive basis for the activities you proposed. You must assess your mitigation needs in a manner that effectively addresses the risks through these community lifelines, so we've talked sort of exhaustively about today. The idea is to ensure those critical areas are more resilient and can reliably function during future disasters. That's the goal here. This doesn't mean that all projects are going to be lifeline projects, but the needs assessments should be organized in a way that addresses risks to those critical areas and ensures the community operations are able to function in the next disaster.

Again, risks identified in the FEMA-approved plans that you have at the state level and the local level, those are a starting point for your mitigation needs assessment. Grantees in your action plans, you should be citing data sources and including those risks identified in those plans. We had a question asking can you just use the FEMA plan as your action plan and I think our grantees know that that's not the case.

There're definitely additional items you've got to touch on for your action plan and specifically in the mitigation needs assessment. The FEMA folks touched on the fact that lifelines are not going to necessarily be the way these mitigation plans are organized at the state and local levels, so you're going to have to do an extra step there. You also might want to identify additional risks that are not included in the jurisdiction hazard mitigation plan. We encourage that if you have identified those risks.

Then, also, just a reminder we added a certification to this grant. If you check out the notice, the list of certifications at the back of the notice, one of those is that you have to certify that you have considered and reviewed the resources that are appropriate for your plan that are listed in the next slide, in slide 55 and 56 in this presentation; they're also in the notice. I just wanted to remind you of that, that that's actually a certification in the action plan.

Also, if right now the organization is going through an update of the hazard mitigation plan, we just want to keep stressing the coordination, right, that you need to be doing. You're going to coordinate and align the funds with mitigation projects and other agencies as appropriate; you're going to coordinate with your data hazard mitigation officers; you're going to coordinate with any other partners that you identify in your action plan and demonstrate the connection – and this is key, really.

Once you've done your mitigation needs assessment, just like in a regular program, when you do an unmet needs assessment, you tell us what those unmet needs are and then you identify the projects that meet those needs. You're doing the same thing for your mitigation needs assessment. Once you've done that analysis, then you're going to tie that back to your activity's total funding and what those activities are that you've identified.

Moving to the next one, just some things to talk about; we're still HUD. We still have these things that are different from FEMA and so I just want to kind of stress those again. We have our mission to prioritize these programs and projects to protect low and moderate income individuals. You have an overall benefit requirement. We waived it in this notice down to 50 percent, so we have addressed it knowing that with these projects there is a lot of requirements that you have to meet on top of this, but we still want to make sure we're prioritizing those individuals.

Then the next slide and then one after this focuses on our MIT requirements, the most impacted and the stress areas. Then all of this is through the lens of working on projects in these areas, 50 percent for the HUD-identified areas, 50 percent for the grantee-identified areas. The projects should benefit those areas that we say in the notice. We stressed this in the last webinar, if you work outside of the mid-area you still have to demonstrate how that expenditure of funds will mitigate the risks identified within those areas.

Again, this is a grantee-defined most impacted and distressed areas and we just want to make sure that you're remembering that those requirements are still there.

Let me just get through the slides and then we'll hit questions. It's probably the best way to do it. Here's our unrelated mitigation webinar series. I'm happy to announce that we have four more webinars coming up. You can see we've got times and everything locked in for those. Our next one will be on Public Participation and Citizen Advisory Groups-Requirements and Best Practices for MIT.

Thursday, November 7th we're going to do one on Buyouts. That'll apply to both DR funds and Mitigation funds. There're not a lot of buyout requirements specific to mitigation in our notice. There are a few clarifications that we'll touch on, but it really will apply to both.

Thursday, November 14th we'll be working with FEMA again and they're going to do a demo of their BCA Toolkit, so that will be really informative for folks, grantees who are going to be doing covered projects that we identified in the notice as requirements and you have to do a BCA if you're doing covered projects.

Then Wednesday, November 20th we'll be doing a Best Practices for Transformative Mitigation Projects and really go in-depth in some of the best projects we've seen on mitigation.

Again, this is your resource page. I talked about the certification that grantees, you have to certify that you reviewed and considered these resources. The DOB webinar is not one of them, but all of these resources that are mentioned in the notice, so I just want to remind folks of that, that that is just in there and you've got to certify that, so make sure you follow that.

Then, let's see. I'm going to hit some questions. I had some more coming in, but let me get the ones that I know so far.

Someone asked, "In order to access CDBG-MIT funds, do lifelines need to be addressed or added as an amendment in existing plans?" And then, "Can we provide examples of mitigation actions pertaining to lifelines?" I think, actually, Kate and Laurie did a good job of giving us some examples of that, so I hope that answers that question. Then I think maybe a little confusion on how this works. The lifelines will be addressed in grantee's mitigation needs assessment in their action plans, so that's how they're going to be addressed. There's no need for an amendment because that'll be in everyone's initial action plan.

We had a question about the action plan checklist. I answered that. Then someone asked based on, I think, Abraham's presentation, "Are they required to include all the subcomponents of lifelines in the action plan for mitigation?" The answer is no. Those are there to inform what those lifelines, what all makes up those lifelines as they're then defined by FEMA, and so that's just a way to explain that. The only requirement in the notice is that you address your mitigation needs assessment through the lens of those lifelines.

Then a question, "Is there a requirement to spend CDBG-MIT funds on each lifeline?" No. There's not. Our requirements on where you have to spend your money revolves around the most impacted and stressed areas. They revolve with our LMI priority and those are the requirements. But you do have to address each lifeline in your mitigation needs assessment when you're doing that analysis.

Let's see. This is another question. "Is there a way for us to know who the grantees in our region are so they can serve as the regional resource for grantees if need be?" I think this is a good point and I know the FEMA folks have been stressing this need that they have, as Laurie is the regional planner, FEMA has regional planners all over the U.S. and have been offering, if grantees are interested in connecting, our CDBG-MIT grantees with those regional planners in the regions.

What we'd like to do, I think the best way to sort of make that happen is we have this new e-mail address CDBGMIT@HUD.gov, and so HUD will be answering questions that we get, information requests that we get through that e-mail box. If you are a CDBG-MIT grantee you can either talk to your CDBG rep and go through them, which is always recommended, and you can also CC the CDBG-MIT inbox as well on your e-mail and just let us know if you're interested in connecting with those regional officers.

Planners, we've talked about maybe even doing regional webinars if that's something you all are interested in, to bring in folks and connect you guys. I think there're lots of ways to do that we want to just provide that as a resource if folks are interested, and FEMA has been great in wanting to make that happen.

I'm not sure. If any of the FEMA folks want to chime in about that just let me know or feel free to chime in. Okay. I'm going to try to hit some of these other questions.

"Does the project have to be listed as a project in the state or local mitigation plan to be funded?" No. It does not. That is not a requirement. We know that some grantees will include those projects and if your mitigation needs assessment you're doing for the MIT fund shows that that's addressing an identified risk in your mitigation needs assessment and it fits all the other HUD requirements, we fully expect that those projects will be included, but there is no requirement that you must include them.

Okay. Let me look. "How close does the CDBG-MIT have to be coordinated with the local mitigation strategy?" I would say fairly closely. I mean, we use a lot of terms about coordination and cooperation in our notice. You're going to have to address that in your narrative. You're going to have to show us that you did coordinate with your state hazard mitigation officers, that you worked with the folks making those plans, and you're going to have to spell that out in the narrative. I'm not going to tell you, I guess, how close, but pretty close; we'll just leave it there and you're really going to want to describe that in your narrative for your action plan.

Maybe this is a good question to end on. "Is the CDBG-MIT grant going to be an ongoing program annually?" I will just say you should ask your congressperson that question because we at HUD do not control that. You can definitely ask your representative if that's the case, but as Congress allocates funds, we put our notices and provide the training and rules and requirements around those grants. I think that's a good question to end on.

If you asked a question in the Q&A box and we did not get to you, we will follow up. I would also encourage folks to use this e-mail address that we put up, CDBGMIT@HUD.gov and send us your questions there and feedback. Now that we've announced the webinar series, I'd also like to know if folks, if they see a hole missing, something else that we need that we're not addressing in the next four webinars and you think we need to address it. Again, send an e-mail to that inbox and let us know.

I just want to thank, again, all the folks at FEMA for joining us today. If you have questions specifically for FEMA you can also send them in the HUD box and I'll coordinate with everyone afterwards to get answers and get back to you. I appreciate everyone joining and hope everyone has a great day.

Jelani Newton: Thank you, Jen. Thanks all the panelists and thanks for everyone for joining us today. That concludes this session.

I wanted to just reiterate that the slides and the recordings will be made available on HUD Exchange shortly and also mention that after you disconnect from the webinar you'll be prompted to complete a survey. Please take a couple of minutes and let us know how you thought this webinar went and your feedback will help us to improve future webinars.

Thank you again for joining us. Have a great day, everyone.