

## Webinar

## Resilience Hubs

Date: August 14, 2024

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00:01:23 --> 00:01:25:

00:00:01 --> 00:00:05: Hello, everybody, and welcome to Resilience Hubs, essential Infrastructure for 00:00:05 --> 00:00:07: Resilient Communities. 00:00:07 --> 00:00:10: We're just going to wait another 30 seconds or minute 00:00:10 --> 00:00:13: or so to make sure everybody is here. 00:00:14 --> 00:00:17: And if you could share the next slide. 00:00:18 --> 00:00:19: All right, wonderful. 00:00:19 --> 00:00:21: Well, thank you all for coming today. 00:00:21 --> 00:00:25: My name is Mackenzie Jones and we're excited to talk 00:00:25 --> 00:00:27: about Resilience Hubs today. 00:00:27 --> 00:00:31: We will be doing a quick introduction to resilience Hubs 00:00:31 --> 00:00:34: and then we'll be hearing from both folks who've worked 00:00:34 --> 00:00:38: on resilience Hubs in Detroit and on Oahu will be 00:00:38 --> 00:00:42: doing a brief panel discussion and then take questions from 00:00:42 --> 00:00:43: the audience as well. 00:00:43 --> 00:00:45: And we are recording this discussion. 00:00:45 --> 00:00:49: You'll receive a link with the recording after this call. Next slide, please. 00:00:51 --> 00:00:52: 00:00:55 --> 00:00:56: Right. 00:00:56 --> 00:00:57: So I am Mackenzie Jones. 00:00:57 --> 00:01:01: I'm the Resilience Hub Director for the Urban Sustainability Directors 00:01:01 --> 00:01:02: Network. 00:01:02 --> 00:01:06: I'm joined today by Maria Galarza with the City of 00:01:06 --> 00:01:10: Detroit and Ilya Azarov with Plus Lab Architect. 00:01:10 --> 00:01:14: And we will be going through the value of new 00:01:14 --> 00:01:16: build resilience hubs. 00:01:16 --> 00:01:17: Next slide.

So just to get us all clear, what is resilience?

Let's have a shared terminology around this.

00:01:25> 00:01:28:	So at the Urban Sustainability Directors Network or USDN, we
00:01:28> 00:01:32:	talk about resilience as the ability of a community to
00:01:32> 00:01:36:	anticipate, accommodate and thrive amidst changing climate conditions.
00:01:36> 00:01:37:	Next slide.
00:01:39> 00:01:42:	And so within that context, if we're thinking about resilience
00:01:42> 00:01:44:	hub in those terms, then what are resilience hubs?
00:01:45> 00:01:49:	Well, resilience hubs are trusted community LED facilities that enhance
00:01:49> 00:01:54:	the well-being of marginalized communities before, during and after a
00:01:54> 00:01:55:	disruption.
00:01:55> 00:01:56:	So they serve two purposes.
00:01:57> 00:02:00:	On one hand, they enhance the quality of life and
00:02:00> 00:02:03:	social connection for community members and then they also act
00:02:03> 00:02:07:	as critical facilities that help communities stay safe and respond
00:02:07> 00:02:07:	to disruptions.
00:02:09> 00:02:10:	Next slide.
00:02:12> 00:02:14:	So why do we need resilience hubs?
00:02:14> 00:02:18:	And we know that marginalized communities experience increased exposure to
00:02:18> 00:02:21:	climate hazards and a reduced capacity to adapt.
00:02:21> 00:02:25:	So resilience hubs are really intended to build social connection
00:02:26> 00:02:30:	and reduce social isolation, shift power to community members and
00:02:30> 00:02:34:	then provide opportunities to address those root causes of disproportionate
00:02:35> 00:02:38:	exposure as well as enhancing communities capacity to adapt.
00:02:40> 00:02:41:	Next slide.
00:02:43> 00:02:45:	So how do we develop resilience hubs?
00:02:45> 00:02:49:	Most importantly, resilience hubs are developed and implemented through deep
00:02:49> 00:02:54:	collaboration between local governments, community leaders and community based organizations.
00:02:54> 00:02:56:	And you're going to hear more about this from Ilya
00:02:57> 00:02:58:	and Maria on this call as well today.
00:02:59> 00:03:00:	Next slide.
00:03:01> 00:03:04:	When we think about resilience hubs, we're thinking about them
00:03:04> 00:03:05:	across 3 modes.

00:03:05> 00:03:07:	So every day.
00:03:07> 00:03:12:	So blue skies, normal operations, all of the infrastructure and
00:03:12> 00:03:14:	services are available.
00:03:14> 00:03:16:	There's no major disruptions present.
00:03:17> 00:03:20:	And the primary focus is really on those community services
00:03:20> 00:03:21:	and relationship building.
00:03:21> 00:03:25:	So things like either serving as a food pantry or,
00:03:25> 00:03:30:	you know, if it's a Recreation Center, then providing
	recreation
00:03:30> 00:03:31:	classes.
00:03:31> 00:03:33:	Oh, back one slide, sorry.
00:03:34> 00:03:38:	During a disruption, when we're thinking about that mode, that
00:03:38> 00:03:42:	disruption can include anything from a natural disaster to social
00:03:42> 00:03:43:	unrest or pandemics.
00:03:44> 00:03:47:	And it really can vary from minutes to months or
00:03:47> 00:03:47:	years.
00:03:48> 00:03:49:	And then the last mode is recovery.
00:03:49> 00:03:52:	And so that's going to be the aftermath of the
00:03:52> 00:03:55:	disruption during which the community works to really restore to
00:03:55> 00:03:56:	normal or better conditions.
00:03:57> 00:03:59:	And as we've seen in Maui and other communities, that
00:03:59> 00:04:01:	can last from days to years.
00:04:01> 00:04:02:	Next slide.
00:04:05> 00:04:07:	So at USDN we use a framework called the five
00:04:07> 00:04:11:	foundational areas and they're really the core components of any
00:04:11> 00:04:11:	resilience hub.
00:04:12> 00:04:14:	We like to say that they're, you know, the line
00:04:14> 00:04:17:	art for a resilience hub and that the community members
00:04:17> 00:04:20:	really fill in the colour and patterns that really meet
00:04:20> 00:04:22:	their own individual needs.
00:04:22> 00:04:24:	There are five areas.
00:04:24> 00:04:27:	The 1st is programs and services and that really can
00:04:27> 00:04:32:	be everything from being a food pantry or serving, providing
00:04:32> 00:04:36:	child care to having dance lessons or legal aid for
00:04:36> 00:04:37:	immigrants.
00:04:37> 00:04:41:	The communications is the next one, and that focuses on
00:04:41> 00:04:45:	communications inside the hub and also out into the service
00:04:45> 00:04:46:	area.
00:04:47> 00:04:51:	Everything from building social connection and making sure
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**00:03:05 --> 00:03:07:** So every day.

that the 00:04:51 --> 00:04:53: neighbors are aware of the facilities there and that they 00:04:53 --> 00:04:56: trust it to how do you communicate during a disruption? 00:04:57 --> 00:04:59: Do you have radios, things like that? 00:05:00 --> 00:05:02: Then the third is the building and landscape. 00:05:03 --> 00:05:05: So the building and landscape can be, how does that 00:05:05 --> 00:05:08: support those programs and services year round? 00:05:08 --> 00:05:11: And also during a disruption, is the building safe and 00:05:11 --> 00:05:16: healthy and outside of a floodplain and electrified and efficient 00:05:16 --> 00:05:19: and does it really meet those needs as far as 00:05:19 --> 00:05:20: a landscape goes? 00:05:20 --> 00:05:22: Are there gathering places for the community? 00:05:23 --> 00:05:25: The 4th is the power systems. 00:05:25 --> 00:05:28: So does it have a backup power and that can 00:05:28 --> 00:05:32: be solar plus storage or some combination with a generator. 00:05:33 --> 00:05:36: And the final area is operations and maintenance. 00:05:36 --> 00:05:38: So do we actually have the staff, do we have 00:05:38 --> 00:05:42: the training in place to really operate these facilities year 00:05:42 --> 00:05:42: round? 00:05:44 --> 00:05:46: And just some last clarifying points here. 00:05:46 --> 00:05:49: So today we are going to be discussing new build 00:05:49 --> 00:05:52: resilience hubs because UL is audience really is composed more 00:05:52 --> 00:05:55: real estate and land use professionals. 00:05:55 --> 00:05:59: However, the majority of resilience hubs are an existing, well 00:05:59 --> 00:06:02: trusted and well loved buildings, and these buildings are often 00:06:02 --> 00:06:06: small or they function under less than ideal conditions. 00:06:06 --> 00:06:09: Some have asbestos or they're located in a flood prone 00:06:09 --> 00:06:09: area. 00:06:10 --> 00:06:12: A lot of them don't have air conditioning. 00:06:12 --> 00:06:15: These facilities are all working towards resilience and making improvements 00:06:15 --> 00:06:17: as they're able to based on the funding that they 00:06:18 --> 00:06:18: have. 00:06:18 --> 00:06:22: So when talking about resilience hubs, people often focus on 00:06:22 --> 00:06:25: that building and the backup power and things like that. 00:06:25 --> 00:06:28: However, the most important benefit that these facilities offer

factor during climate disruptions.

social connection.

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So we know that social isolation is a major risk

00:06:35> 00:06:38:	So when we think about resilience hubs, our main focus
00:06:38> 00:06:41:	is on fostering an environment that people trust and feel
00:06:41> 00:06:42:	comfortable going to year round.
00:06:43> 00:06:46:	And so with that, I'm going to hand it off
00:06:46> 00:06:50:	to Maria Galarza from the city of Detroit to talk
00:06:50> 00:06:54:	more about her efforts with the AB Ford Community Center.
00:06:57> 00:06:58:	Thank you, Mackenzie.
00:06:58> 00:06:59:	Good afternoon, everyone.
00:06:59> 00:07:03:	Thank you so much for attending and having me here
00:07:03> 00:07:03:	today.
00:07:04> 00:07:07:	I am Maria Galarza, I am the Deputy Director at
00:07:07> 00:07:10:	the City of Detroit Office of Sustainability.
00:07:11> 00:07:15:	And I was really fortunate to have worked on the
00:07:15> 00:07:20:	community engagement and development of the 84 Community Center and
00:07:20> 00:07:24:	here on the Lower East Side in Detroit.
00:07:25> 00:07:28:	So as you guys can see and, and by Mackenzie
00:07:28> 00:07:32:	sort of description, this is a new building that actually
00:07:32> 00:07:36:	just opened in the neighborhood college Jefferson Chalmers.
00:07:37> 00:07:40:	It opened on October of last year.
00:07:41> 00:07:41:	Next slide.
00:07:45> 00:07:48:	So I thought we would, I would share some of
00:07:48> 00:07:52:	the key takeaways from the project and some of the
00:07:52> 00:07:57:	challenges and obviously some of the project budget and specifications.
00:07:57> 00:08:00:	And so, and, and I can also share like a
00:08:00> 00:08:03:	bit of the history of the project and I can
00:08:03> 00:08:04:	start with that.
00:08:04> 00:08:08:	So in Detroit, we've had a series of investments in,
00:08:08> 00:08:14:	in several neighborhoods, including renovations to some of our parks.
00:08:15> 00:08:18:	And in this neighborhood, the community had identified the need
00:08:18> 00:08:22:	for a community, a Community Center, you know, place to
00:08:22> 00:08:22:	gather.
00:08:23> 00:08:29:	And this was actually serving a purpose that was hired.
00:08:29> 00:08:31:	You know, previously there was a rec center that had
00:08:31> 00:08:33:	shut down in this neighborhood.
00:08:33> 00:08:35:	So this was a way to come back and sort
00:08:35> 00:08:38:	of provide that resource to the community.
00:08:38> 00:08:42:	And so through that planning effort and you know, that
00:08:42> 00:08:47:	this park, this location was identified and this all took
00:08:47> 00:08:51:	place, you know, in the years between 2018 and 2019.

00:08:51> 00:08:54:	And as we all know, 2020 and sort of really
00:08:54> 00:08:56:	threw a ranch in everybody's plans.
00:08:56> 00:09:01:	And, and we began really community engagement that March when
00:09:01> 00:09:02:	the pandemic hit.
00:09:03> 00:09:06:	And so this idea of sort of this crisis mode
00:09:06> 00:09:10:	or, you know, what do you do when you're, you
00:09:10> 00:09:13:	no longer have those places together?
00:09:14> 00:09:17:	And there was a lot of uncertainty in the community
00:09:17> 00:09:20:	was sort of really heavy on people's minds.
00:09:20> 00:09:23:	And so for better or for worse, you know, when
00:09:23> 00:09:28:	we started engaging residents, that was sort of an immediate
00:09:28> 00:09:29:	need, right?
00:09:29> 00:09:33:	Like making sure like public health was taking into account,
00:09:33> 00:09:36:	you know, outdoors and outdoor spaces.
00:09:36> 00:09:41:	So once we started sort of focusing conversations around the
00:09:41> 00:09:46:	building, I had learned about this concept of resilience hubs
00:09:46> 00:09:50:	and I had brought this idea to the community of
00:09:50> 00:09:55:	like, OK, you know, we're already talking about designing a
00:09:55> 00:09:59:	new building in this park for as a Community Center.
00:09:59> 00:10:03:	You know, how could this building now be used in
00:10:03> 00:10:06:	times of emergency, whether it's like a pandemic or the
00:10:06> 00:10:11:	neighborhood had also experienced flooding and, and, you know, people
00:10:11> 00:10:15:	were already gathering at the park to fill sandbags.
00:10:16> 00:10:19:	And in other parts of the city, folks were using
00:10:19> 00:10:22:	community centers as a place to pick up food boxes
00:10:22> 00:10:24:	or resources for neighbors.
00:10:25> 00:10:29:	And so as we were thinking about building this new
00:10:29> 00:10:33:	facility, we really wanted to think about both scenarios.
00:10:34> 00:10:37:	And so some of the, you know, key takeaways is
00:10:38> 00:10:41:	that we truly stayed core to the mission.
00:10:41> 00:10:45:	And first and foremost, the facility was meant to have
00:10:45> 00:10:49:	spaces where community could gather, where, you know, community leaders
00:10:50> 00:10:52:	want to have their blog club meetings.
00:10:52> 00:10:54:	So there's meeting rooms.
00:10:56> 00:10:59:	There was a big interest in in food and having
00:10:59> 00:11:02:	a kitchen and sort of, you know, there was a
00:11:02> 00:11:06:	lot of needs that were identified through the engagement
00:11:06> 00:11:10:	process. So, you know, listening to community members, listening to that

00.44.40 > 00.44.44	
00:11:10> 00:11:14: 00:11:14> 00:11:15:	those programming aspects of the functions of the building
00:11:15> 00:11:19:	was really important.  And once the community sort of had learned more about
00:11:19> 00:11:24:	resilience hubs as a concept and through our engagement
00.11.19> 00.11.24.	process,
00:11:24> 00:11:29:	we're really thought about, you know, asking questions like, OK,
00:11:29> 00:11:32:	what does each space look like in normal times?
00:11:33> 00:11:37:	So, you know, what purpose is the facility serving and
00:11:37> 00:11:40:	then how can you know these spaces serve a double
00:11:40> 00:11:44:	duty and transform in times where maybe they become, you
00:11:44> 00:11:48:	know, that resource to the neighbors most in need or
00:11:48> 00:11:50:	those affected by a hazard.
00:11:53> 00:11:58:	Another sort of piece of I think resilience is that
00:11:58> 00:12:01:	it can feel really abstract.
00:12:02> 00:12:08:	So communicating how each of the design elements really add
00:12:08> 00:12:14:	value, it's you're not really sort of adding things or
00:12:14> 00:12:17:	making things extra necessarily.
00:12:18> 00:12:22:	You are really thinking about sort of stretching that design
00:12:22> 00:12:24:	element for example.
00:12:24> 00:12:27:	And the community really wanted a kitchen.
00:12:27> 00:12:33:	So thinking about, you know, should there be long counters?
00:12:33> 00:12:36:	So if people are assembling food boxes, you know, you
00:12:36> 00:12:39:	can serve that that function instead of just, you know,
00:12:39> 00:12:42:	designing an area that had a place to, you know,
00:12:42> 00:12:43:	heat up food.
00:12:43> 00:12:47:	So and things like that, you know, thinking about how
00:12:47> 00:12:51:	can you like think of as many uses as possible
00:12:51> 00:12:53:	on the challenges.
00:12:53> 00:12:56:	And again, you know, I touched on this and it
00:12:57> 00:13:00:	could be hard to communicate the concept.
00:13:00> 00:13:04:	But really because we had some some scenarios where the
00:13:04> 00:13:10:	community had experienced flooding and we're experiencing the pandemic, you
00:13:10> 00:13:13:	know, we were able to talk about it at the
00:13:13> 00:13:17:	same time, you know, we realized that calling back those
00:13:17> 00:13:22:	memories or asking participants or residents to think about sort
00:13:22> 00:13:27:	of flooding that had happened in their neighborhood or talking
00:13:27> 00:13:31:	about the pandemic when people were, you know, whether he
00:13:31> 00:13:36:	might have been grieving from family members passing

away. 00:13:36 --> 00:13:39: It was it was sort of like a hard way 00:13:40 --> 00:13:40: to engage. 00:13:41 --> 00:13:44: And so making sure that you are aware that when 00:13:44 --> 00:13:48: you're asking folks to think about, you know, the worst 00:13:49 --> 00:13:53: case scenario that for some resident that might really sort 00:13:53 --> 00:13:56: of be a point of pain and sort of like 00:13:56 --> 00:14:01: really, you know, bring those topics out really sensitively and, 00:14:01 --> 00:14:05: and, and try to ease some of those anxieties by 00:14:05 --> 00:14:08: like having the preparedness conversation. 00:14:09 --> 00:14:13: And on the facility side, again, you know what, this 00:14:13 --> 00:14:17: is a municipal facility and, and we had, we have 00:14:17 --> 00:14:21: a limited staff in terms of new technologies and, and 00:14:21 --> 00:14:26: in talking about sort of solar and electrical work that 00:14:26 --> 00:14:28: was happening in the building. 00:14:28 --> 00:14:32: You know, we engage with the team at facilities very 00:14:32 --> 00:14:35: early on in the design so that they could ask 00:14:35 --> 00:14:40: all the questions and the engineering coordination calls and 00:14:40 --> 00:14:44: make sure that they were comfortable with the system that 00:14:44 --> 00:14:47: was coming in the the funding could be seen as 00:14:48 --> 00:14:48: a challenge. 00:14:48 --> 00:14:55: We actually started as a project that had received a 00:14:55 --> 00:14:58: visibility study for solar. 00:14:58 --> 00:15:02: So the facility is equipped with a solar system on 00:15:03 --> 00:15:07: the roof and battery storage that's able to provide 48 00:15:07 --> 00:15:12: to 72 hours of backup energy depending on the conditions. 00:15:12 --> 00:15:16: And and we had done the visibility study first and 00:15:16 --> 00:15:21: had continued with the design of the project and then 00:15:21 --> 00:15:26: through a separate philanthropic effort, we were able to fund 00:15:26 --> 00:15:29: the solar system and battery storage. 00:15:29 --> 00:15:33: So there were added and sort of design services to 00:15:33 --> 00:15:39: the design cost, you know, to get the engineering coordinated. 00:15:40 --> 00:15:43: So as a key take away, it's also like plan 00:15:43 --> 00:15:46: early, try to plan for the systems to be in 00:15:46 --> 00:15:50: place and work with your electrical engineers and your structural engineers and everybody involved in putting things on the 00:15:50 --> 00:15:54: 00:15:55 --> 00:15:58: early on so that you can always come back after 00:15:58 --> 00:15:59: and layer on. 00:15:59 --> 00:16:02: But it's obviously there's extra cost included to that.

00:16:04> 00:16:08:	So to the right is the project budget just in
00:16:08> 00:16:11:	terms of transparency of of what was spent in the
00:16:11> 00:16:12:	project.
00:16:13> 00:16:17:	The next slide shows a full view of the park
00:16:17> 00:16:17:	design.
00:16:18> 00:16:23:	So currently we have completed the project the the building
00:16:23> 00:16:28:	itself, but the engagement process and included the engagement for
00:16:28> 00:16:31:	all the activities happening at the park.
00:16:32> 00:16:37:	The construction budget also included the design and construction of
00:16:37> 00:16:41:	the a new parking lot with stormwater management system.
00:16:42> 00:16:46:	So really we were talking about a place, you know,
00:16:46> 00:16:47:	like a holistic place.
00:16:47> 00:16:51:	It wasn't just a building, but also the activities that
00:16:51> 00:16:54:	were happening outside and just trying to bring people to
00:16:55> 00:16:58:	that future scenario how they were going to be spending,
00:16:58> 00:17:02:	you know, the afternoons at this park, which is very
00:17:02> 00:17:04:	well loved in the neighborhood.
00:17:05> 00:17:06:	Next slide.
00:17:08> 00:17:12:	So because this was a new building, we went through
00:17:12> 00:17:17:	an exercise to collect the, the priorities from the community
00:17:17> 00:17:21:	as to what they wanted to see, you know, and,
00:17:21> 00:17:24:	and how they would prioritize the spaces.
00:17:24> 00:17:28:	And so really, if you are, you know, working with
00:17:28> 00:17:33:	community members, you know, I really encourage everyone to go
00:17:33> 00:17:37:	through an exercise where you do the programming with residents
00:17:37> 00:17:41:	to really figure out, you know, how they want to
00:17:41> 00:17:44:	use the space and then next slide.
00:17:46> 00:17:50:	And then you're really able to translate, you know, those
00:17:50> 00:17:54:	spaces like a quiet area as like a small library
00:17:54> 00:17:57:	zone or, you know, that multi purpose area into a
00:17:57> 00:18:01:	big large room that could be transformed to either, you
00:18:01> 00:18:04:	know, a bridal party shower or, or, you know, a
00:18:04> 00:18:08:	basketball, you know, room where you can just like play
00:18:08> 00:18:11:	with a ball or have lots of kids running around.
00:18:12> 00:18:13:	Next slide.
00:18:15> 00:18:19:	So as you can see on the left, you know,
00:18:19> 00:18:22:	we really planned for flexibility.
00:18:22> 00:18:27:	All of the diagrams really translated the community sort of
00:18:27> 00:18:31:	desires and feedback into the plan of the building and

00:18:31> 00:18:33:	the program of the building.
00:18:34> 00:18:39:	You know, we'd layer that resilience portion, which really was
00:18:39> 00:18:44:	translated into like large rooms that can host, you know,
00:18:44> 00:18:48:	folks for, you know, whether it's a warming center or
00:18:48> 00:18:50:	a cooling center.
00:18:51> 00:18:54:	And we had, you know, those quiet areas for people
00:18:54> 00:18:58:	who might need more of a quiet space, that kitchen
00:18:58> 00:19:02:	classroom area, which we really sort of designed as a
00:19:02> 00:19:06:	place where people can learn about nutrition, but it could
00:19:06> 00:19:09:	also come and, and maybe packed food boxes.
00:19:10> 00:19:14:	And then the most important piece, you know, the, or
00:19:14> 00:19:18:	one of the important pieces is that backup energy and,
00:19:18> 00:19:23:	and making sure we had enough plugs surrounding the each
00:19:23> 00:19:26:	of the rooms so that in case of a power
00:19:26> 00:19:30:	outage, people could come and charge their phones.
00:19:30> 00:19:34:	So that, you know, it's also details with engineering teams
00:19:34> 00:19:38:	that we really paid attention and try to incorporate throughout
00:19:38> 00:19:39:	the design process.
00:19:40> 00:19:42:	And I think that might be my last slide or
00:19:42> 00:19:43:	there might be one more.
00:19:43> 00:19:44:	No, that's great.
00:19:49> 00:19:49:	Wonderful.
00:19:49> 00:19:51:	Thank you so much, Faria.
00:19:52> 00:19:54:	And we're just Cindy, one quick question after each of
00:19:54> 00:19:57:	our presentations before we do more of a a panel
00:19:57> 00:19:58:	conversation.
00:19:58> 00:20:00:	So Maria, can you walk us through the process of
00:20:00> 00:20:04:	identifying and engaging key community partners in the
	planning and
00:20:04> 00:20:06:	design of your resilience hub?
00:20:06> 00:20:10:	And I'm curious how you ensured the process was community
00:20:10> 00:20:12:	driven and incorporated meaningful participation?
00:20:14> 00:20:15:	Yeah, that's a great question.
00:20:16> 00:20:21:	So for our engagement process, because it was sort of
00:20:21> 00:20:26:	the first time we're doing virtual engagement in the pandemic,
00:20:26> 00:20:31:	we actually came up with the idea of printing a
00:20:31> 00:20:35:	bunch of yard signs and we placed them all over
00:20:35> 00:20:37:	the neighborhood.
00:20:37> 00:20:40:	And because we knew people were taking, you know, long
00:20:40> 00:20:41:	walks or they were coming to the park.
00:20:42> 00:20:45:	And so we had advertised and the the QR code

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00:20:45 --> 00:20:48:
                          to, you know, getting to the Zoom and, you know,
00:20:48 --> 00:20:52:
                          the phone number if people wanted to call and leave
00:20:52 --> 00:20:55:
                          a message on their feedback or their questions.
00:20:57 --> 00:21:03:
                          We also placed a mailbox at the park where people
00:21:03 --> 00:21:07:
                          could like drop off comments or surveys.
00:21:09 --> 00:21:12:
                          So we had left sort of like paper copy surveys
00:21:12 --> 00:21:15:
                          with one of the nonprofit organizations that, you know, works
00:21:15 --> 00:21:17:
                          very closely with residents.
00:21:17 --> 00:21:20:
                          So if they were seeking any services, you know, we
00:21:20 --> 00:21:22:
                          had a survey delivered to to residents.
00:21:22 --> 00:21:25:
                          So really trying to kind of hit all your means
00:21:25 --> 00:21:28:
                          of communication, you know, from the people who are out
00:21:28 --> 00:21:32:
                          in the neighborhood looking at, you know, how to get
00:21:32 --> 00:21:35:
                          involved all the way to like, calling those community leaders
00:21:35 --> 00:21:38:
                          that are always very engaged to make sure that they
00:21:38 --> 00:21:42:
                          knew about the meetings and making sure that, you know,
00:21:42 --> 00:21:43:
                          they had all the information.
00:21:45 --> 00:21:49:
                          So yeah, we were very thoughtful and targeted in reaching,
00:21:49 --> 00:21:53:
                          you know, people who live at the proximity of the
00:21:53 --> 00:21:53:
                          project.
00:21:55 --> 00:21:56:
                          That's wonderful.
00:21:56 --> 00:21:57:
                          Thank you, Maria.
00:21:57 --> 00:22:00:
                          And we'll definitely have time to ask more questions for
00:22:00 --> 00:22:03:
                          For Maria after Ilya's presentation as well.
00:22:06 --> 00:22:10:
                          So with that, I'd like to introduce Ilya Azarov with
00:22:10 --> 00:22:13:
                          Lab Plus to share his experience in designing a new
00:22:13 --> 00:22:16:
                          build resilience hub on Oahu.
00:22:18 --> 00:22:22:
                          Thanks, Mackenzie and Maria, that was a great building.
00:22:22 --> 00:22:24:
                          I can't wait to see it in person next time
00:22:24 --> 00:22:25:
                          I'm in Detroit.
00:22:26 --> 00:22:27:
                          You know, it's, it's great to be here today.
00:22:27 --> 00:22:29:
                          I'm happy to take you through the Koala Loa Community
00:22:29 --> 00:22:30:
                          Resilience hub.
00:22:30 --> 00:22:31:
                          Again, my name is Ilya Azarov.
00:22:31 --> 00:22:34:
                          I'm an educator at New York City College of Technology
00:22:34 --> 00:22:36:
                          here in New York City and also the founder of
00:22:37 --> 00:22:37:
                          Plus Lab Architect.
00:22:38 --> 00:22:40:
                          Our mission is to give greater voice and visibility to
00:22:40 --> 00:22:42:
                          frontline communities all throughout the world.
00:22:43 --> 00:22:44:
                          So I'm very happy to give this presentation.
00:22:45 --> 00:22:48:
                          I'm working with Julio Haula, which is the five O
00:22:48 --> 00:22:51:
                          1C3, not-for-profit on the North Shore of Oahu.
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00:22:52> 00:22:54:	And when you think about vision, this is their vision.
00:22:54> 00:22:57:	It's to perpetuate family knowledge and love.
00:22:58> 00:23:01:	And to do that, their mission is to support health
00:23:01> 00:23:06:	or to support health, safety, educational, cultural,
	environmental, social and
00:23:06> 00:23:09:	economic resilience of all the Koala Loa communities.
00:23:10> 00:23:12:	So what I decided to do is take you a
00:23:12> 00:23:15:	little bit through the process of this project because this
00:23:16> 00:23:18:	community has an existing building.
00:23:18> 00:23:20:	And to Mackenzie's point, we always try to use the
00:23:20> 00:23:23:	existing building, but what we found is, is that this
00:23:23> 00:23:26:	building cannot meet the long term goals of the community.
00:23:26> 00:23:29:	It's a much older building, it's in a flood zone
00:23:29> 00:23:32:	and structurally it can't meet the challenges of high winds
00:23:32> 00:23:33:	and storms.
00:23:33> 00:23:36:	Its capacity is rather small to the population load of
00:23:36> 00:23:37:	the community.
00:23:37> 00:23:41:	And to support the community goals stated here, it was
00:23:41> 00:23:45:	found not to be the ideal building for their Resilience
00:23:45> 00:23:45:	Hub.
00:23:47> 00:23:50:	So in terms of process, how you engage a community
00:23:50> 00:23:53:	and get to the point of resilience Hub, you must
00:23:53> 00:23:54:	be ready for anything.
00:23:54> 00:23:57:	And here are the steps that I'm going to take
00:23:57> 00:24:00:	you through just in brief that how you begin to
00:24:00> 00:24:03:	assess the hazards of today and tomorrow, analyze the site
00:24:03> 00:24:05:	you plan with the community.
00:24:06> 00:24:07:	That's rather important.
00:24:07> 00:24:10:	And I think Maria put a finer point on that
00:24:10> 00:24:13:	align with government funding programs.
00:24:14> 00:24:16:	And then you go through the design process of the
00:24:16> 00:24:18:	site in the building only once you've gathered that basic
00:24:19> 00:24:19:	information.
00:24:21> 00:24:24:	So for our project in, in Oahu, here's the assessment
00:24:24> 00:24:27:	and it starts with your hazard mitigation plan.
00:24:27> 00:24:31:	Every community in the United States and its territories has
00:24:31> 00:24:31:	an HMP.
00:24:32> 00:24:33:	And this is where you should start.
00:24:33> 00:24:35:	You can see all of the hazards that are listed
00:24:35> 00:24:35:	here.
00:24:35> 00:24:38:	We have to have something that is ready for hurricanes,
00:24:38> 00:24:42:	tsunamis, sea level rise, climate change and rain bombs,

	tornadoes,
00:24:42> 00:24:46:	earthquakes, volcanoes, landslides, and these are the, the,
	the, the
00:24:46> 00:24:48:	effects of the environment.
00:24:49> 00:24:52:	Now our job as architects and a design team is
00:24:52> 00:24:55:	to look at the effects of those hazards on the
00:24:55> 00:25:00:	community we're working with, identify what the cascading effects might
00:25:00> 00:25:02:	be in the short term and the long term.
00:25:03> 00:25:05:	This image, it just shows some of that process that
00:25:05> 00:25:06:	we go through.
00:25:06> 00:25:09:	And the goal is to be aware of your vulnerabilities
00:25:09> 00:25:12:	as a community and designed to meet those needs to
00:25:12> 00:25:13:	become resilient.
00:25:15> 00:25:19:	And any assessment should be aligned with some of the
00:25:19> 00:25:20:	federal guidelines.
00:25:20> 00:25:24:	You have to speak, federal speak, and government speak to
00:25:24> 00:25:26:	be able to move these elements along.
00:25:27> 00:25:30:	So here, for example, of the seven community life lines
00:25:30> 00:25:32:	that we use as part of our assessment process.
00:25:33> 00:25:36:	And this is the government framework put together by FEMA.
00:25:36> 00:25:39:	And you can see what a viable community is and
00:25:39> 00:25:42:	understand where your gaps might be and where you can
00:25:42> 00:25:44:	bring that to the forefront.
00:25:46> 00:25:50:	Ultimately, being sustainable and resilient is, is our goal and
00:25:50> 00:25:53:	the goals of the communities that we work with.
00:25:53> 00:25:56:	And really these are two sides of the same coin.
00:25:56> 00:25:59:	And if we recognize that, we can really create true
00:25:59> 00:26:00:	equity in the community.
00:26:02> 00:26:03:	On to analyzing.
00:26:03> 00:26:07:	So analyzing the site is something that we really rely
00:26:07> 00:26:09:	on a lot of partners for.
00:26:10> 00:26:13:	We looked at storms and flooding for this community and
00:26:13> 00:26:16:	you can see that green rectangle is where our site
00:26:16> 00:26:20:	is located and the site selection was done by the
00:26:20> 00:26:22:	community as as the most opportune site.
00:26:23> 00:26:26:	And then you can you'll see why this shows the
00:26:26> 00:26:29:	category one through 4 hurricanes and the number of houses
00:26:29> 00:26:33:	and businesses that will be affected, but This site is
00:26:33> 00:26:35:	is out of those zones.
00:26:35> 00:26:40:	We also looked at future flooding projections using FEMA
00:26:40> 00:26:43:	maps going all the way through 100 to 500 years.
UU.20.4U/ UU.20.43.	going an the way through 100 to 500 years.

00:26:43 --> 00:26:46: And there's our site, the Red Rectangle. 00:26:47 --> 00:26:50: And we also looked at earthquakes and tsunamis. 00:26:50 --> 00:26:52: You can see our location, the western part of our 00:26:53 --> 00:26:55: site is up and out of the extreme tsunami zone. 00:26:56 --> 00:26:59: A tsunami is a tidal wave that's generated by an 00:26:59 --> 00:27:00: underwater earthquake. 00:27:01 --> 00:27:03: And this part of the island has been hit by 00:27:03 --> 00:27:04: 00:27:04 --> 00:27:07: You can see from 194657 and 1960. 00:27:08 --> 00:27:11: So it's really important that you're located in critical facility 00:27:11 --> 00:27:13: up and out of those zones. 00:27:14 --> 00:27:17: So the Koala Loa Community Resilience hub, we looked at 00:27:17 --> 00:27:19: the other vulnerabilities, Rd. 00:27:19 --> 00:27:23: access for one, power fragility, isolation of the community and 00:27:23 --> 00:27:24: the overall need. 00:27:25 --> 00:27:28: This entire area has 26,000 residents. 00:27:28 --> 00:27:33: It's largely an agricultural area, but there are no rated 00:27:33 --> 00:27:35: storm shelters in the entire area. 00:27:36 --> 00:27:37: There's also a single Rd. 00:27:37 --> 00:27:42: that comes in and out that's very vulnerable to storms. 00:27:44 --> 00:27:46: Yet knowing the science is just the beginning. 00:27:46 --> 00:27:49: The true resilience starts with that community engagement that was 00:27:50 --> 00:27:52: mentioned to really understand what the vulnerabilities. 00:27:53 --> 00:27:55: And this is my first shot of my first meeting 00:27:55 --> 00:27:57: with the community near some five years ago. 00:27:58 --> 00:28:01: My community is self aware, self actualized, and invisible. 00:28:02 --> 00:28:05: But who is the community we set to work very 00:28:05 --> 00:28:07: early on is to identify who the stakeholders are. 00:28:08 --> 00:28:10: And this is what part of that process is. 00:28:11 --> 00:28:14: It's not just the residents and land owners, but it's 00:28:14 --> 00:28:18: also businesses, institutions, whether it's universities or other government from 00:28:18 --> 00:28:20: city all the way through the federal side. 00:28:21 --> 00:28:22: And then of course the design team. 00:28:23 --> 00:28:25: And this is just a map of, of who our 00:28:25 --> 00:28:28: stakeholders are for this project. 00:28:29 --> 00:28:32: And what we found in this engagement is that food 00:28:32 --> 00:28:36: insecurity, even though this is an agricultural area, is, is 00:28:36 --> 00:28:37: very prevalent. 00:28:37 --> 00:28:40: Hunger is prevalent, poverty is big.

00:28:41> 00:28:44:	Power outages are constant, even under blue skies, almost on
00:28:44> 00:28:47:	a monthly basis, parts of the community lose power.
00:28:49> 00:28:50:	The housing is vulnerable.
00:28:50> 00:28:53:	85% of the housing are projected to be damaged from
00:28:54> 00:28:55:	a category one hurricane.
00:28:55> 00:28:58:	So that tells you 26,000 people, that's a lot of
00:28:58> 00:29:00:	folks who need a place to go in case of
00:29:00> 00:29:01:	a storm.
00:29:01> 00:29:06:	And then of course, daily flooding or high tide flooding,
00:29:06> 00:29:08:	full moon flooding, Rd.
00:29:08> 00:29:11:	access and erosion are part of the issues that this
00:29:11> 00:29:12:	community faces.
00:29:13> 00:29:16:	So when we think about that, if you look at
00:29:16> 00:29:18:	the left side of the slide, that is all of
00:29:18> 00:29:21:	the hazards from the hazard mitigation plan for the island
00:29:21> 00:29:24:	all identified and it begins to tell us what the
00:29:24> 00:29:26:	response is in our design.
00:29:26> 00:29:29:	But as I said, it's the community engagement to get
00:29:29> 00:29:31:	to the true program of the project.
00:29:31> 00:29:36:	We held workshops with the community over the pandemic, a
00:29:36> 00:29:40:	one month stretch of community engagements that were aimed at
00:29:40> 00:29:46:	prioritizing and identifying the community needs through the
	stakeholders.
00:29:46> 00:29:50:	stakeholders. We also aligned with local resilience plan, the Ola plan
00:29:46> 00:29:50: 00:29:50> 00:29:54:	
	We also aligned with local resilience plan, the Ola plan
00:29:50> 00:29:54:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as
00:29:50> 00:29:54: 00:29:54> 00:29:56:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community.
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13: 00:30:14> 00:30:15: 00:30:17> 00:30:20:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.  The community agreed on these goals and as we move
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:  00:30:14> 00:30:15: 00:30:17> 00:30:20: 00:30:20> 00:30:23:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.  The community agreed on these goals and as we move forward, they also identified a lot of potential new partners.
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:  00:30:14> 00:30:15: 00:30:17> 00:30:20: 00:30:20> 00:30:23: 00:30:24> 00:30:26:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.  The community agreed on these goals and as we move forward, they also identified a lot of potential new partners. But let's not forget the community has a face.
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:  00:30:14> 00:30:15: 00:30:17> 00:30:20: 00:30:20> 00:30:23: 00:30:24> 00:30:26: 00:30:28> 00:30:30:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.  The community agreed on these goals and as we move forward, they also identified a lot of potential new partners. But let's not forget the community has a face.  This community has not had a voice, we have not
00:29:50> 00:29:54: 00:29:54> 00:29:56: 00:29:56> 00:30:00: 00:30:00> 00:30:04: 00:30:04> 00:30:08: 00:30:08> 00:30:13:  00:30:14> 00:30:15: 00:30:17> 00:30:20: 00:30:20> 00:30:23: 00:30:24> 00:30:26: 00:30:28> 00:30:30: 00:30:30> 00:30:31:	We also aligned with local resilience plan, the Ola plan is the island wide resilience plan for implementation and as you can see here on the left side of the slide, these are the actual written goals of the community. Once we came to the end of those workshops, family was number one with security and safety for families, health, social benefits, accessibility, communication, food resources and this facility has to be self-sustaining.  The community agreed on these goals and as we move forward, they also identified a lot of potential new partners. But let's not forget the community has a face.  This community has not had a voice, we have not been visible.  The community engagement, getting together, talking,

00:30:41> 00:30:42:	the future of the community.
00:30:43> 00:30:45:	These young ladies and some of their colleagues said we
00:30:46> 00:30:49:	when we talk about sustainability and sustaining our future, I
00:30:49> 00:30:52:	believe helping to sustain our culture is rather important.
00:30:53> 00:30:56:	Culture became a huge theme in these engagements, and
	this
00:30:56> 00:30:58:	is from Ronnie there on the left.
00:30:58> 00:31:00:	We may be poor, but we're rich in our culture.
00:31:00> 00:31:02:	That's why we still hang on and still do what
00:31:02> 00:31:03:	we do.
00:31:03> 00:31:05:	We fight for the next generation so that we don't
00:31:05> 00:31:06:	forget our culture.
00:31:07> 00:31:09:	They don't forget where they're from and what their roots
00:31:09> 00:31:09:	are.
00:31:11> 00:31:13:	So what that brought us to is this entire group
00:31:13> 00:31:16:	of partners that the community already had engaged and new
00:31:17> 00:31:21:	ones identified to really provide services identified for the community.
00:31:21> 00:31:25:	And whether that's green jobs and youth programs or the
00:31:25> 00:31:31:	local energy authority, Verizon for our communications, veteran services, Native
00:31:31> 00:31:34:	Hawaiian healthcare programs, so on and so forth.
00:31:34> 00:31:38:	These are the programs that are supported by partners and
00:31:38> 00:31:42:	will and are part of the current Community Center.
00:31:43> 00:31:44:	That brings us to the design.
00:31:45> 00:31:48:	So there are two ideas that underpin the design.
00:31:48> 00:31:51:	The resilience hub is rooted in culture itself.
00:31:51> 00:31:53:	the BA for the building, I'll talk about that.
00:31:54> 00:31:57:	And the other is the Ahupua and that's the relationship
00:31:57> 00:31:58:	to the land.
00:31:58> 00:32:01:	So just as Mackenzie said, we're looking at the site
00:32:01> 00:32:03:	and the building as as part of this.
00:32:04> 00:32:07:	So first for the site itself, you can see here,
00:32:07> 00:32:10:	this is the campus of three buildings on A5 acre
00:32:10> 00:32:10:	site.
00:32:11> 00:32:14:	We're restoring the relationship of land through the Ahupua Ah.
00:32:15> 00:32:20:	It's a water management, ancient Hawaiian water management food production
00:32:20> 00:32:26:	system that produces agropharma for indigenous practices and agroforestry.
00:32:26> 00:32:30:	So we begun the implementation of this of this design
00:32:30> 00:32:33:	practice as the underpinning of this project.

00:32:36> 00:32:40:	Changing slides, there it is here on the site you
00:32:40> 00:32:44:	can see that it supports agricultural practices to the right
00:32:44> 00:32:48:	side of the site and the cultural regeneration is really
00:32:48> 00:32:52:	rooted in all of that, the community engagement and rooted
00:32:52> 00:32:53:	in indigenous wisdom.
00:32:54> 00:32:57:	The building locations are up on the highest part of
00:32:58> 00:33:01:	the site, away from the flooding hazards and tsunami and
00:33:01> 00:33:02:	storm surge.
00:33:03> 00:33:06:	So we're responding to those technical things but also engaging
00:33:06> 00:33:10:	what the community has brought forward through culture and cultural
00:33:10> 00:33:11:	practice.
00:33:11> 00:33:15:	The site design further reduces risk by identifying hazards such
00:33:15> 00:33:16:	as wildfire and earthquakes.
00:33:17> 00:33:20:	Here you can see defensible space and how we're designing
00:33:20> 00:33:22:	around the buildings to keep wildfires away.
00:33:23> 00:33:27:	Very important after the fires in behind on to the
00:33:27> 00:33:28:	the building itself.
00:33:28> 00:33:31:	The main hub, the main resilience hub is based on
00:33:31> 00:33:35:	talk story with many of the elders, specifically with Doctor
00:33:35> 00:33:39:	Tusi who is a cultural leader throughout the Polynesian culture.
00:33:40> 00:33:43:	And we talked about the value of the Baha or
00:33:43> 00:33:47:	the canoe and flipping the canoe over so you can
00:33:47> 00:33:50:	take shelter underneath called Huli.
00:33:50> 00:33:53:	The Baha became the basis of how we engaged culture
00:33:53> 00:33:54:	and design practice.
00:33:55> 00:33:58:	And here you can see this is the rendering of
00:33:58> 00:34:02:	the Koala Loa Community Resilience Hub based on that canoe
00:34:02> 00:34:06:	or the BAA being turned over and harboring underneath with
00:34:06> 00:34:10:	your family, surrounded by your community members during the worst
00:34:10> 00:34:11:	parts of storms.
00:34:13> 00:34:16:	And here is just a snapshot of what that project
00:34:16> 00:34:16:	provides.
00:34:18> 00:34:22:	To answer health security, there's a Health Center and a
00:34:22> 00:34:26:	dialysis program embedded in the project for power security.
00:34:27> 00:34:30:	We have 30 days of stand alone and renewable energy.
00:34:31> 00:34:33:	So this this we can be cut off from the
00:34:33> 00:34:35:	community, can be cut off from the rest of the

00:34:35> 00:34:36:	island for 30 days.
00:34:37> 00:34:40:	Food security it has on site gardening, but also has
00:34:40> 00:34:44:	a program with Hawaii food bank that pre positions food
00:34:44> 00:34:47:	to provide meals for 30 days after disaster.
00:34:47> 00:34:51:	Water security It has water catchment on site as well
00:34:51> 00:34:54:	as a new well has been been is being dug
00:34:54> 00:34:59:	
00.34.54> 00.34.55.	or tanks for pre positioning freshwater to support 1500 people
00:34:59> 00:35:00:	for 30 days.
00:35:01> 00:35:06:	The structure itself meets FEMA 361 guidelines, which will which
00:35:06> 00:35:10:	will resist a category 5 hurricane and tsunami resistant.
00:35:11> 00:35:14:	Because it's located up and above the tsunami level, it
00:35:14> 00:35:18:	also generates jobs, income and supports all of the programs
00:35:18> 00:35:21:	that were listed earlier on in the presentation.
00:35:23> 00:35:25:	In part of this alignment, we've been working with the
00:35:25> 00:35:26:	Department of Energy.
00:35:26> 00:35:30:	The community received an E tip grant working with Sandia
00:35:30> 00:35:34:	Labs to design our entire sustainable off grid operations for
00:35:34> 00:35:38:	30 days leveraging solar, wind, hydrogen and geothermal along with
00:35:38> 00:35:39:	battery backup.
00:35:40> 00:35:43:	This hub is to jump start the community after disaster.
00:35:44> 00:35:46:	Remember, 85% of the housing is going to be damaged
00:35:47> 00:35:48:	in the category one.
00:35:48> 00:35:51:	So how do we jump start the community back online?
00:35:51> 00:35:54:	So the hub will be that anchor for that, for
00:35:54> 00:35:57:	bringing the community back after disaster.
00:35:58> 00:36:00:	So now I'm winding down to talk about where we're
00:36:00> 00:36:00:	at today.
00:36:01> 00:36:04:	So the community relationship with Land is well on the
00:36:04> 00:36:04:	way.
00:36:04> 00:36:06:	The site has been cleared.
00:36:06> 00:36:10:	The environmental assessment and early design has been completed.
00:36:11> 00:36:14:	They're going to be planting native trees over the course
00:36:14> 00:36:15:	of this next year.
00:36:15> 00:36:18:	And then adaptation funding from the state has been secured,
00:36:18> 00:36:22:	as well as pursuing other federal funding for ecological regeneration.
00:36:24> 00:36:27:	As of today, on the weekends, there's farmers markets that
00:36:27> 00:36:29:	take place in the five acre site, bringing in the

00:36:29> 00:36:29:	community.
00:36:29> 00:36:32:	There's a playing field that's used almost on a daily
00:36:32> 00:36:34:	basis and hiking paths that go up and around the
00:36:34> 00:36:34:	site.
00:36:35> 00:36:37:	There are many grants that have been received by the
00:36:37> 00:36:38:	community thus far.
00:36:38> 00:36:41:	And just to be clear, this is a very economically
00:36:41> 00:36:45:	challenged Indigenous community that had almost no money to start
00:36:45> 00:36:47:	this work five years down the line.
00:36:47> 00:36:48:	They're very far along.
00:36:48> 00:36:52:	We have a a FEMA brick technical assistance grant to
00:36:52> 00:36:55:	continue to help us complete the design work.
00:36:55> 00:36:57:	And of course, we're going after another one of those
00:36:57> 00:36:58:	Department of Energy grants.
00:36:59> 00:37:02:	But the good news is, is this community engagement and
00:37:02> 00:37:05:	visibility and voice have brought the state senators on board.
00:37:05> 00:37:10:	This community has received earmarks from the Senate \$5.4 million
00:37:10> 00:37:12:	as of June of this last year.
00:37:13> 00:37:16:	We will start breaking ground on the horizontal infrastructure for
00:37:16> 00:37:18:	the site in very short order.
00:37:16> 00:37:18: 00:37:18> 00:37:20:	the site in very short order. That brings me to a close and I want to
	•
00:37:18> 00:37:20:	That brings me to a close and I want to
00:37:18> 00:37:20: 00:37:20> 00:37:21:	That brings me to a close and I want to leave you with this. The branches grow because the trunk without ancestors
00:37:18> 00:37:20: 00:37:20> 00:37:21: 00:37:21> 00:37:24:	That brings me to a close and I want to leave you with this.  The branches grow because the trunk without ancestors would not
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00:37:18> 00:37:20: 00:37:20> 00:37:21: 00:37:21> 00:37:24:  00:37:24> 00:37:25: 00:37:25> 00:37:30:  00:37:30> 00:37:34: 00:37:34> 00:37:36: 00:37:36> 00:37:39: 00:37:40> 00:37:40: 00:37:40> 00:37:41: 00:37:45> 00:37:46: 00:37:46> 00:37:47: 00:37:47> 00:37:50:	That brings me to a close and I want to leave you with this.  The branches grow because the trunk without ancestors would not be there.  This is the essence of community engagement, especially with Indigenous communities relying on the the wisdom of of the people who were there.  Launch these projects into where they could be and where they will be.  Thank you very much.  Thank you, Ilya.  What an amazing story.  It's it's so exciting to see all the momentum that's
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00:37:59> 00:38:00:	of a resilience hub.
00:38:01> 00:38:04:	How does a space become trusted by its community, and
00:38:04> 00:38:07:	what role can real estate and other stakeholders play in
00:38:07> 00:38:08:	supporting that?
00:38:09> 00:38:10:	That's a great question.
00:38:10> 00:38:13:	And you know, you know, resilience, I mean, there's a
00:38:13> 00:38:14:	lot of quotes around this.
00:38:14> 00:38:17:	Resilience and adaptation move at the speed of trust.
00:38:17> 00:38:18:	And that is the truth.
00:38:19> 00:38:23:	You saw the first piece about the meeting five years
00:38:23> 00:38:23:	ago.
00:38:24> 00:38:26:	Gaining the trust of the community takes takes a great
00:38:26> 00:38:27:	deal of time.
00:38:27> 00:38:30:	But first and foremost, you you really need to understand
00:38:30> 00:38:31:	two very important things.
00:38:31> 00:38:33:	One, communities understand the plight.
00:38:33> 00:38:40:	They also have many of the resources and solutions for
00:38:40> 00:38:42:	building resilience.
00:38:43> 00:38:47:	You're playing a role of either support or communication of
00:38:47> 00:38:50:	what those are to unlock the funds and push their
00:38:50> 00:38:51:	vision forward.
00:38:51> 00:38:55:	So trust starts with listening, listening and respecting the fact
00:38:56> 00:39:00:	that these communities are very powerful already and what you're
00:39:00> 00:39:03:	doing is translating their goals to funding streams.
00:39:05> 00:39:06:	So that's the way that we've done it.
00:39:06> 00:39:10:	And with, with specifically with real estate, make sure that
00:39:11> 00:39:14:	if you're in the community that you're there for the
00:39:14> 00:39:18:	long term, that they know you're not going to leave.
00:39:18> 00:39:20:	That's the big, big take away.
00:39:20> 00:39:21:	Thanks.
00:39:23> 00:39:23:	Thank you.
00:39:25> 00:39:29:	So we're going to transition into a panel conversation between
00:39:29> 00:39:32:	Ilya and Maria and I for the next 10 minutes
00:39:32> 00:39:32:	or so.
00:39:32> 00:39:35:	And then we'll address some audience questions as well.
00:39:35> 00:39:36:	So keep up voting.
00:39:36> 00:39:39:	If you see something there that you can keep adding
00:39:39> 00:39:40:	questions to the Q&A.
00:39:40> 00:39:43:	And, and if somebody else said something that really resonates
00:39:43> 00:39:45:	with you, please upload it as well so that we

00:39:45> 00:39:47:	can prioritize the questions that are most important to you
00:39:47> 00:39:47:	all.
00:39:49> 00:39:52:	So with that, I'm going to ask a question for
00:39:52> 00:39:52:	both of you.
00:39:53> 00:39:55:	Maria, we'll start with you.
00:39:56> 00:40:01:	What important design consideration should go into the creation of
00:40:02> 00:40:03:	a resilience hub?
00:40:06> 00:40:10:	I would say that's very much sort of like community
00:40:10> 00:40:11:	specific.
00:40:11> 00:40:17:	And however so much of the space has to enable
00:40:17> 00:40:20:	that social cohesion.
00:40:20> 00:40:24:	So like really thinking about like, you know, who are
00:40:24> 00:40:27:	the people gathering in the space?
00:40:28> 00:40:31:	Like, for example, like if you're gonna have seniors, like
00:40:31> 00:40:33:	think about chairs that have like armrests.
00:40:33> 00:40:36:	So like they can have like an easier sort of
00:40:36> 00:40:37:	time like getting up.
00:40:37> 00:40:40:	Or like, if there's gonna be moms with kids, like
00:40:40> 00:40:43:	think about a space that, you know, might be big
00:40:43> 00:40:46:	enough that you can put some floor mats for kids
00:40:46> 00:40:47:	to play.
00:40:48> 00:40:52:	So I think it really depends on your user and
00:40:52> 00:40:53:	your audience.
00:40:54> 00:40:57:	But like, if you we are trying to create sort
00:40:58> 00:41:01:	of a community and be in community, like, think about
00:41:01> 00:41:04:	how you would design A space that is conducive for
00:41:05> 00:41:05:	that.
00:41:05> 00:41:07:	So yeah.
00:41:08> 00:41:08:	Wonderful.
00:41:08> 00:41:11:	Thanks, Maria and Ilia, back to you on this one.
00:41:11> 00:41:15:	So do you, what important design considerations would you think
00:41:15> 00:41:17:	about for Resilience Hub?
00:41:18> 00:41:21:	Yeah, I think it took you through some of the
00:41:21> 00:41:24:	the assessment process from the science side, understanding the design
00:41:24> 00:41:27:	of today for tomorrow and and tomorrow to understand what
00:41:27> 00:41:31:	that looks like and understanding that the short sighted nature
00:41:31> 00:41:33:	of I want to put a Band-Aid on it rather
00:41:33> 00:41:36:	than really looking at what the major surgery looks like.
00:41:36> 00:41:37:	ls, is is important.

00:41:38> 00:41:42:	So in terms of design, that science piece presented to
00:41:42> 00:41:46:	the community, so they have the ability to weigh in
00:41:46> 00:41:50:	on and, and, and bring forward what has to happen
00:41:50> 00:41:52:	there is rather important.
00:41:53> 00:41:56:	And I, I think the other thing about design is,
00:41:56> 00:41:58:	is, is understanding what's not there.
00:41:58> 00:42:01:	What we found in our community is that, that the
00:42:01> 00:42:03:	youth leave because there's no economic opportunity.
00:42:04> 00:42:07:	When they turn 19, they don't, they leave and they
00:42:07> 00:42:10:	don't come back until they're like 38 to raise a
00:42:10> 00:42:10:	family.
00:42:11> 00:42:13:	And that's because there's no jobs.
00:42:13> 00:42:15:	And so when you begin to think about that and
00:42:15> 00:42:17:	you get that information, well, our project has to have
00:42:17> 00:42:18:	vocational training.
00:42:19> 00:42:22:	The vocational training will support jobs, local jobs, so those
00:42:22> 00:42:23:	kids don't leave.
00:42:23> 00:42:26:	So I think when we think about designing a space,
00:42:26> 00:42:27:	there's the technical side.
00:42:27> 00:42:28:	So it withstands these things.
00:42:28> 00:42:30:	It's going to be around a long time and you're
00:42:30> 00:42:31:	designing for tomorrow.
00:42:31> 00:42:33:	And then the other thing is really look at a
00:42:33> 00:42:36:	gap analysis that goes deeply into the issues of your
00:42:36> 00:42:36:	community.
00:42:37> 00:42:39:	So when you're looking at solution sets, it's not putting
00:42:39> 00:42:40:	a Band-Aid on it.
00:42:40> 00:42:43:	It's actually doing severe healing.
00:42:44> 00:42:44:	Thanks.
00:42:46> 00:42:46:	Thanks, Ilya.
00:42:48> 00:42:49:	Here's a question for both of you.
00:42:50> 00:42:54:	What opportunities are there for the private and public
00.42.54 > 00.42.56.	sectors
00:42:54> 00:42:56:	to collaborate on Resilience Hub creation?
00:42:57> 00:42:59:	I'm not sure if either one of you want to
00:42:59> 00:43:00:	volunteer to go first on that.
00:43:04> 00:43:04:	Sure.
00:43:04> 00:43:05:	I think it.
00:43:05> 00:43:06:	So there's a couple of things.
00:43:06> 00:43:09:	If you really look at the CDRZ zones as well
00:43:09> 00:43:12:	as the Justice 40 zones, there's incredible amount of federal
00:43:12> 00:43:16:	dollars pouring into communities all across the US.

00:43:17> 00:43:20:	Those are aimed at making sustainable, resilient, healthy and equitable
00:43:20> 00:43:21:	communities.
00:43:22> 00:43:26:	The trigger or design that's needed to bring that forward
00:43:26> 00:43:28:	already lies within the community.
00:43:28> 00:43:30:	They, those communities know what they need.
00:43:30> 00:43:34:	So to play the translating role, that's the design community,
00:43:34> 00:43:37:	but to play the role of procurement of the right
00:43:38> 00:43:41:	sites, unlocking that funding and moving it forward as a
00:43:41> 00:43:46:	partnership is a great 3P partnership opportunity with community groups,
00:43:46> 00:43:49:	local government and developers in the private side.
00:43:50> 00:43:53:	That enormous amount of money is, is sitting there.
00:43:53> 00:43:56:	And until these projects get rolling, it's going to keep
00:43:56> 00:43:56:	sitting there.
00:43:56> 00:43:59:	And so I think if you really look at your
00:43:59> 00:44:02:	profile of what you're doing as a business, I the,
00:44:02> 00:44:03:	the question is, why not?
00:44:04> 00:44:07:	And then lastly, insurance is, is no longer insuring a
00:44:07> 00:44:10:	lot of places that have high, high vulnerability and high
00:44:10> 00:44:11:	risk.
00:44:11> 00:44:14:	So part of this process is, is that you're building
00:44:14> 00:44:18:	to a standard that alleviates that issue with insurance.
00:44:18> 00:44:21:	So if you look at the business side, there's a
00:44:21> 00:44:24:	huge ROI on this on the social side, but also
00:44:24> 00:44:27:	on economic and economic benefit to it.
00:44:30> 00:44:30:	Yeah.
00:44:30> 00:44:34:	I would say, yeah, there's a huge opportunity to sort
00:44:34> 00:44:38:	of think of resilience as a, you know, strengthening piece
00:44:38> 00:44:42:	to whether it's like the private or public sector sort
00:44:42> 00:44:43:	of buildings.
00:44:44> 00:44:48:	You know, if you think about sort of grocery stores,
00:44:48> 00:44:51:	for example, in a grocery store losing power and all
00:44:51> 00:44:54:	that food waste that happens if, you know, there were
00:44:54> 00:44:57:	to be without power for a long time, you know,
00:44:57> 00:45:00:	like, what does it mean to design, you know, the
00:45:00> 00:45:02:	future and grocery store?
00:45:02> 00:45:06:	And, you know, again, I'm incredibly fortunate to live in
00:45:06> 00:45:11:	Detroit where there's people who are already thinking about this.
00:45:11> 00:45:15:	And there's a neighborhood grocer that is, you know, has
00:45:15> 00:45:16:	a walk in freezer.
00:45:16> 00:45:19:	And they're thinking about backup power because, you know,

they 00:45:19 --> 00:45:21: don't want that food to go to waste. 00:45:22 --> 00:45:25: But not only that, they're thinking about like, OK, like 00:45:26 --> 00:45:29: if we're going to have backup freezer, that's going to 00:45:29 --> 00:45:31: be, you know, operational backup power. 00:45:32 --> 00:45:34: How can we serve the community and have that be 00:45:34 --> 00:45:37: a space where people bring containers with their food if 00:45:37 --> 00:45:38: they lost power in their house? 00:45:38 --> 00:45:43: So I think like there's this hyper community examples, but 00:45:43 --> 00:45:48: resilient and maybe it's better conceptualized. 00:45:48 --> 00:45:49: It's sort of like that if you lose power and 00:45:49 --> 00:45:51: make sure you have some some backup, right? 00:45:51 --> 00:45:55: And like as a business, whether you know your community 00:45:55 --> 00:45:58: is you know, your customers, like thinking about those things 00:45:58 --> 00:45:59: is important. 00:46:00 --> 00:46:04: And if you have a a service that's community driven, 00:46:04 --> 00:46:07: I think thinking what else could you let layer to 00:46:07 --> 00:46:12: serve your customer, your residence and and even more so 00:46:12 --> 00:46:17: those residents who are most vulnerable or higher need wonderful. 00:46:17 --> 00:46:17: Thank you. 00:46:18 --> 00:46:21: So based on your experience, what advice would you give 00:46:21 --> 00:46:25: to real estate professionals and developers looking to incorporate resilience 00:46:25 --> 00:46:26: hubs into their projects? 00:46:27 --> 00:46:29: Are there any common pitfalls to avoid? 00:46:34 --> 00:46:34: Pitfalls. 00:46:34 --> 00:46:36: You know, it's Go ahead. 00:46:36 --> 00:46:37: Go ahead, Marie, you first. 00:46:37 --> 00:46:41: No, I, I mean, you know, like very early on 00:46:41 --> 00:46:44: to like that side analysis piece. 00:46:44 --> 00:46:47: Like if you are thinking about solar as your backup 00:46:47 --> 00:46:51: energy source, you know how you design your roof and 00:46:51 --> 00:46:55: like which way your building's facing and your utilities, like 00:46:55 --> 00:46:59: how much power supply you have to go into, into 00:46:59 --> 00:47:00: the site. 00:47:00 --> 00:47:03: Like all of those things are considerations that have to 00:47:03 --> 00:47:06: come in really early on because you might have a 00:47:06 --> 00:47:09: beautiful tree that you thinking about placing your building next 00:47:09 --> 00:47:12: to and that might not make your building as favorable 00:47:12 --> 00:47:14: to, you know, solar energy.

Or you know, maybe the size of your building and

00:47:15 --> 00:47:17:

00:47:18> 00:47:20:	your roof and you know, won't allow you to fully
00:47:20> 00:47:23:	power the entire roof and you might have to look
00:47:23> 00:47:25:	at a off site location for additional solar.
00:47:25> 00:47:33:	So I think like thinking about your resilience, energy
	generation
00:47:33> 00:47:35:	is really important.
00:47:35> 00:47:40:	Obviously, we're encouraging everyone to move away from fossil fuels
00:47:40> 00:47:43:	and not have a diesel or natural gas generator.
00:47:43> 00:47:46:	But we know that that is also a piece of
00:47:46> 00:47:47:	resiliency.
00:47:47> 00:47:51:	Like some folks do need and have those generators, but
00:47:51> 00:47:54:	doing that double duty of having that solar system that's
00:47:55> 00:47:58:	like, you know, reducing your energy costs on like your
00:47:58> 00:48:02:	normal days and then picks in with the battery storage
00:48:02> 00:48:04:	when there's a power outage.
00:48:04> 00:48:07:	I think thinking about the benefit of that is really
00:48:07> 00:48:09:	important early on, as early as possible.
00:48:11> 00:48:14:	Yeah, I would, I would add to that just to
00:48:14> 00:48:15:	say your site selection.
00:48:16> 00:48:18:	If you have a site that is already risk adverse,
00:48:18> 00:48:20:	then you're that's half your battle.
00:48:20> 00:48:24:	And then the other thing is multiplicity resilience is, is
00:48:24> 00:48:26:	much about slacking the system.
00:48:26> 00:48:29:	So you have extra, but it also is backup systems.
00:48:29> 00:48:34:	So Maria mentioned, for example, backup power or multiple
	ways
00:48:34> 00:48:34:	of input.
00:48:35> 00:48:37:	You should be thinking about that in your in your
00:48:38> 00:48:38:	your project.
00:48:38> 00:48:42:	And sometimes that is the pitfall is that, well, you
00:48:42> 00:48:45:	know, we can afford only this recognize that in your
00:48:46> 00:48:49:	all hazard assessment that the the thin nature of a
00:48:49> 00:48:52:	single system is your vulnerability.
00:48:52> 00:48:55:	And so how do you look long term to make
00:48:55> 00:48:58:	sure that I have a a project that here's where
00:48:58> 00:48:59:	l open.
00:48:59> 00:49:01:	And then in five years, my five year plan is
00:49:01> 00:49:04:	to make sure that I have extra battery backup system
00:49:04> 00:49:07:	than the 10 year plan is something else and something
00:49:07> 00:49:07:	else.
00:49:08> 00:49:10:	So the pitfall is, is that is that, that, that
00:49:10> 00:49:13:	getting a project up and running should be the beginning

00:49:14> 00:49:17:	of a long standing relationship with that project to increase
00:49:17> 00:49:18:	its resilient capacity.
00:49:19> 00:49:20:	If your budget is stressed from the beginning.
00:49:21> 00:49:23:	So in others don't settle for, for, for less.
00:49:24> 00:49:26:	It's it's here's where I'm going to start.
00:49:26> 00:49:29:	And my plan is, is that hear what the improvements
00:49:29> 00:49:30:	are down the road.
00:49:31> 00:49:35:	That's going to save you a lot in the future
00:49:35> 00:49:37:	and avoid avoid interruptions.
00:49:38> 00:49:40:	I think that's an excellent point.
00:49:40> 00:49:42:	And you know, one thing that we do hear from
00:49:42> 00:49:45:	our clean Energy Partners is like please bring us in
00:49:45> 00:49:45:	early.
00:49:46> 00:49:50:	So it's so much easier when they're brought in early
00:49:50> 00:49:51:	and often.
00:49:51> 00:49:54:	I think another piece that you mentioned Ilia, was the,
00:49:55> 00:49:58:	that it's always, you know, resilience is in, in progress.
00:49:58> 00:50:00:	It's not ever done.
00:50:00> 00:50:02:	You don't just build a fancy building that you know,
00:50:02> 00:50:05:	meets everybody's needs and then you don't need to adapt.
00:50:05> 00:50:08:	When we're thinking about these buildings, it's, it's that we're
00:50:08> 00:50:11:	constantly evaluating how they meet the community's needs and how
00:50:11> 00:50:12:	they need to shift.
00:50:12> 00:50:15:	And some of that is that, you know, when you're
00:50:15> 00:50:19:	thinking about designing or designing flexible spaces, but that's also
00:50:19> 00:50:22:	just being able to think about how things are are
00:50:22> 00:50:24:	changing with time we've received.
00:50:24> 00:50:26:	So we're gonna switch over to audience questions now.
00:50:27> 00:50:30:	And a question that a lot of you say to
00:50:30> 00:50:34:	upvoted is if a resilience hub is mostly about social
00:50:34> 00:50:38:	connection, how is it different than a Community Center or
00:50:38> 00:50:43:	other social service organizations within with a physical building?
00:50:43> 00:50:45:	So that's a great question.
00:50:45> 00:50:47:	And I think this is probably in part in response
00:50:47> 00:50:49:	to what I was sharing at the beginning about that
00:50:49> 00:50:51:	need to build social connection.
00:50:51> 00:50:55:	I do think there's probably a lot of community centers
00:50:55> 00:50:59:	that are not actually building a social connection or meeting
00:50:59> 00:51:01:	their community needs.

00:51:01> 00:51:04:	So we use that kind of as a standing point
00:51:04> 00:51:07:	of, oh, it's just a Community Center with the power
00:51:07> 00:51:08:	system, but it's not.
00:51:08> 00:51:11:	And so I think a big portion, at least in
00:51:11> 00:51:15:	my understanding of this, is that sometimes cities or or
00:51:15> 00:51:19:	counties start with a building and they'll say, we created
00:51:19> 00:51:22:	this cooling center and nobody goes to it and we
00:51:22> 00:51:24:	don't understand why, right?
00:51:24> 00:51:25:	And that's because they started with the building.
00:51:25> 00:51:28:	And so when you're thinking about that social connection, you
00:51:29> 00:51:32:	can build this gorgeous building, but it doesn't mean anything
00:51:32> 00:51:33:	if people don't go to it.
00:51:34> 00:51:37:	And so when we talk about it, we're really thinking
00:51:37> 00:51:40:	about like, OK, well, people need to go to a
00:51:40> 00:51:41:	place every day.
00:51:41> 00:51:42:	They need to go there as their food pantry.
00:51:42> 00:51:44:	They need to go there as their child care facility,
00:51:45> 00:51:46:	something along those lines.
00:51:46> 00:51:49:	So that when there is a disruption, they go the
00:51:49> 00:51:51:	place that I'm going to go is the Lennox Center
00:51:51> 00:51:53:	or sorry, the AB Ford.
00:51:54> 00:51:56:	So yeah, I don't know if either of you have
00:51:56> 00:51:58:	anything to add on that question as well.
00:52:00> 00:52:04:	Yeah, I think, I think that's exactly it, that like
00:52:04> 00:52:04:	it.
00:52:04> 00:52:06:	It could be like a House of worship.
00:52:06> 00:52:11:	You know, it could be sort of a smaller gathering
00:52:11> 00:52:16:	place that, you know, you're used to going.
00:52:16> 00:52:17:	Maybe it's the library.
00:52:17> 00:52:21:	But I think like we in the city of Detroit
00:52:21> 00:52:25:	are working on a network of hubs of smaller nonprofit
00:52:25> 00:52:28:	organizations that have space that can host.
00:52:30> 00:52:33:	We're setting sort of our own sort of like requirements
00:52:33> 00:52:35:	based on the community that we serve here in the
00:52:35> 00:52:36:	city.
00:52:37> 00:52:41:	And there is, for example, homes in each neighborhood.
00:52:41> 00:52:44:	And there's an organization called Brilliant Detroit.
00:52:45> 00:52:49:	They just received their solar and backup battery storage system
00:52:49> 00:52:52:	and they are able to host a family, you know,
00:52:52> 00:52:55:	and they have, you know, it's, it's a house so
00:52:55> 00:52:59:	that they can have a shower, whatever their needs of

00:52:59> 00:53:02:	the family might be, they're able to host it.
00:53:02> 00:53:03:	And, and that's a resilience hub.
00:53:03> 00:53:07:	And it's not necessarily your typical like warming and cooling
00:53:07> 00:53:10:	center, but it's like resilient in a way that it's
00:53:10> 00:53:13:	going to be available and like a staff are trained.
00:53:13> 00:53:15:	And so we're also working on the training of like,
00:53:16> 00:53:19:	you know, could you point people to other resources or
00:53:19> 00:53:21:	like, do you have a certain level of mental health
00:53:22> 00:53:25:	training so that if there is an emergency, like someone
00:53:25> 00:53:28:	floods or there's a fire, that you're able to respond
00:53:28> 00:53:30:	to that family and that those residents.
00:53:30> 00:53:33:	So I think we're all sort of adapting as we're
00:53:33> 00:53:37:	seeing sort of these shocks and crises kind of like
00:53:37> 00:53:41:	emerge, but I think it's sort of layered to serve
00:53:41> 00:53:43:	the community where you are.
00:53:44> 00:53:48:	Yeah, for for me, yeah, there's there's a difference A
00:53:48> 00:53:52:	a Community Center could be the great basis of a
00:53:52> 00:53:53:	resilience hub.
00:53:53> 00:53:57:	A resilience hub is a near absolute protection cannot fail
00:53:57> 00:54:01:	and jump starts the community after severe shocks and stresses.
00:54:02> 00:54:06:	And that comes from working a lot with FEMA and
00:54:06> 00:54:10:	their guidelines about disaster safety preparedness.
00:54:11> 00:54:14:	And to Maria's points, the the resilience hubs that we
00:54:14> 00:54:17:	work on are usually identified as part of a network
00:54:17> 00:54:20:	that is advancing on the island of Oahu.
00:54:20> 00:54:21:	They're building seven of these.
00:54:21> 00:54:23:	This is the first that will be built.
00:54:23> 00:54:27:	That network is meant to do exactly what Maria highlighted
00:54:27> 00:54:30:	is that in the worst case scenario, this is something
00:54:30> 00:54:33:	that will not fail and support those families in the
00:54:33> 00:54:37:	neighborhood identifying in our case, for example, dialysis machines have
00:54:37> 00:54:40:	to be there because if you lose power, you're on
00:54:40> 00:54:41:	dialysis, you're going to die.
00:54:42> 00:54:43:	That's just what it is.
00:54:43> 00:54:46:	So when you think about a resilience hub, it looks
00:54:46> 00:54:49:	at the absolute do not fail, but responds specifically to
00:54:49> 00:54:50:	those community needs.
00:54:51> 00:54:52:	And it's different for every community.
00:54:53> 00:54:55:	It is, it is, it should be different for every
00:54:55> 00:54:58:	community, but it's also something that is living and
	<i>,,</i>

	constantly
00:54:58> 00:54:59:	changing.
00:54:59> 00:55:01:	So that to me is is the base is the
00:55:01> 00:55:02:	main difference.
00:55:03> 00:55:06:	Most of these have to be islandable, meaning they have
00:55:06> 00:55:09:	to operate without external inputs of power and water for
00:55:09> 00:55:10:	a certain amount of time.
00:55:11> 00:55:13:	I did see with Maria's it's 72 hours, 72 hours
00:55:14> 00:55:17:	is the minimum standard from Red Cross and the federal
00:55:17> 00:55:17:	government.
00:55:18> 00:55:20:	So all of these start to adhere to things that
00:55:20> 00:55:22:	community centers do not have to adhere to.
00:55:23> 00:55:25:	So it's easy to take a Community Center and move
00:55:25> 00:55:29:	them that direction, take an existing facility building and a
00:55:29> 00:55:32:	great a great active group and bring them there to
00:55:32> 00:55:33:	meet these guidelines.
00:55:34> 00:55:36:	But it's really hard if that you don't have that
00:55:36> 00:55:39:	social cohesiveness that will make that happen.
00:55:39> 00:55:43:	And then lastly, who runs these facilities is really important.
00:55:43> 00:55:47:	So that community group, whether it's Community Center, faith-based group,
00:55:47> 00:55:50:	super important because city budgets are so strained, the city
00:55:50> 00:55:53:	is not going to run these and something that is
00:55:53> 00:55:56:	maintained on a daily basis, daily use, daily knowledge will
00:55:56> 00:55:57:	always function.
00:55:57> 00:56:00:	If you leave it there as a dusty building that
00:56:00> 00:56:02:	you unlock the door during disaster, it's going to fail.
00:56:03> 00:56:06:	So I I love the question because yes, it's a
00:56:06> 00:56:07:	Community Center.
00:56:07> 00:56:09:	And what must it be?
00:56:11> 00:56:12:	I think that's a great point.
00:56:13> 00:56:16:	And I would just add that, you know, one of
00:56:16> 00:56:19:	the things that we've heard a lot from our, our
00:56:19> 00:56:23:	partners on Maui was that frequently when a disruption occurs,
00:56:23> 00:56:27:	what happens is an American Red Cross and other entities
00:56:27> 00:56:30:	come in and they start operating the facilities.
00:56:30> 00:56:33:	And then when people show up to their neighborhood Community
00:56:33> 00:56:36:	Center, resilience hub, they're seeing strangers, right?
00:56:37> 00:56:40:	And so it's so, so important.
00:56:40> 00:56:42:	And this is part of why you do that work

constantly

00:56:42> 00:56:45:	before disruptions that the people see friendly faces that they
00:56:45> 00:56:45:	know.
00:56:45> 00:56:48:	And this there's, you'll hear us talk a lot about
00:56:48> 00:56:53:	the importance of mental health programming every day during disruptions
00:56:53> 00:56:54:	and also during recovery.
00:56:54> 00:56:58:	But we've really seen that in Maui in particular, that
00:56:58> 00:57:01:	doing that work to make sure that the front desk
00:57:01> 00:57:05:	folks are your neighbors and that they aren't strangers from
00:57:05> 00:57:08:	off the island or from out of state, that that's
00:57:08> 00:57:09:	really important as well.
00:57:10> 00:57:14:	Maria, we received a question about what the programmatic components
00:57:14> 00:57:17:	of your building are as well as the size.
00:57:20> 00:57:20:	Yes.
00:57:20> 00:57:25:	So it is 8600 square feet.
00:57:26> 00:57:32:	It contains two meeting rooms, one large multi purpose room,
00:57:32> 00:57:36:	a classroom, kitchen, sort of that we call it the
00:57:36> 00:57:40:	lab, a small library area and the reception.
00:57:41> 00:57:45:	So really it's it's a small ish building for
00:57:45> 00:57:49:	us, for some of our community centers, but it definitely
00:57:49> 00:57:52:	packs a lot of functions and I'm happy to put
00:57:52> 00:57:54:	in the chat too.
00:57:54> 00:57:55:	So you can live as part of the recording.
00:57:56> 00:57:57:	Wonderful.
00:57:57> 00:57:57:	Thank you.
00:57:58> 00:58:00:	And we did receive, I know that you all touched
00:58:00> 00:58:03:	on this a little bit earlier, but what the monetary
00:58:03> 00:58:06:	incentives are to real estate developers to developing resilience hubs.
00:58:06> 00:58:09:	And I will just start by saying, I know we're
00:58:09> 00:58:11:	in our last minute or so, but one of the
00:58:11> 00:58:14:	things USDN has done over the last several years is
00:58:14> 00:58:18:	to work with the federal government to explain what resilience
00:58:18> 00:58:21:	hubs are so that when they are releasing grant funding
00:58:21> 00:58:25:	and federal funding and appropriations that they can be focused
00:58:25> 00:58:27:	on resilience hub construction.
00:58:27> 00:58:30:	So there are so many federal dollars going into these
00:58:30> 00:58:31:	projects right now.
00:58:32> 00:58:33:	To either of you have anything to add on that
00:58:33> 00:58:34:	subject?

00:58:35> 00:58:39:	No, just I've been working with USDN specifically for this
00:58:39> 00:58:41:	kind of work and unlocking that funding.
00:58:42> 00:58:43:	So that's a great resource.
00:58:44> 00:58:47:	And yeah, there's more money out there than you can
00:58:47> 00:58:49:	possibly imagine for this work.
00:58:49> 00:58:52:	It does take a good team of grant writers and
00:58:52> 00:58:55:	working with USDN and others will give you a leg
00:58:55> 00:58:56:	up to do that.
00:58:56> 00:58:59:	So I'm just giving you a shout out because it's
00:58:59> 00:59:00:	been been great.
00:59:00> 00:59:01:	Thanks.
00:59:01> 00:59:02:	We appreciate that.
00:59:02> 00:59:03:	And we, I have to echo, I've heard that from
00:59:03> 00:59:06:	folks who are working on their resilience hubs and they've
00:59:06> 00:59:07:	been historically community centers.
00:59:07> 00:59:09:	And they said in the time we've been trying to
00:59:09> 00:59:12:	raise money for the last 20 years, we've raised more
00:59:12> 00:59:14:	money in the last two to three years when we've
00:59:14> 00:59:16:	been thinking about ourselves as a resilience hub than we
00:59:16> 00:59:17:	did in the prior 20.
00:59:18> 00:59:21:	So there are many resources out there with that.
00:59:21> 00:59:23:	We are at the hour.
00:59:23> 00:59:26:	Thank you all so much for coming and thank you
00:59:26> 00:59:28:	to Maria and Ilya for sharing your experience and your
00:59:28> 00:59:29:	expertise on this.
00:59:30> 00:59:32:	We will be sending out the recording and slides in
00:59:32> 00:59:35:	the next few days and we hope everyone has a
00:59:35> 00:59:36:	wonderful rest of your day.

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