

Webinar

ULI Coastal Forum Fall/Winter 2021

Date: December 07, 2021

| 00:00:00> 00:00:04: | Appreciate really good. The staff at Uli doing such a |
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| 00:00:04> 00:00:07: | good job getting this program together for us. |
| 00:00:07> 00:00:10: | We've got have an excellent program today. |
| 00:00:10> 00:00:15: | Some excellent panelists and some super moderators to help us |
| 00:00:15> 00:00:19: | see what we can do as a network of interested |
| 00:00:19> 00:00:25: | people involved in real estate planning finance across the coastal |
| 00:00:25> 00:00:27: | parts of the United States. |
| 00:00:27> 00:00:30: | How do we deal with the biggest threat to the |
| 00:00:30> 00:00:33: | most expensive real estate with sea level rise? |
| 00:00:33> 00:00:37: | Creeping up into communities and with the increased strength of |
| 00:00:37> 00:00:41: | storms creating the conditions that will be catastrophic. |
| 00:00:41> 00:00:44: | As we've seen over the past year, |
| 00:00:44> 00:00:47: | is that they seem to be getting worse in order |
| 00:00:47> 00:00:52: | to share the ideas and experiences and to help prepare |
| 00:00:52> 00:00:55: | for the future that we see is coming. |
| 00:00:55> 00:00:58: | It takes a village. It takes going across the jurisdictional |
| 00:00:59> 00:01:02: | lines that might separate programs and plans and trying to. |
| 00:01:02> 00:01:07: | Addressed throughout that knows no boundaries the the rising Sea |
| 00:01:07> 00:01:10: | and the storms don't pay attention to the geography of |
| 00:01:10> 00:01:11: | political grounds, |
| 00:01:11> 00:01:15: | and we must try to enable that type of cross |
| 00:01:15> 00:01:20: | jurisdictional coordination as we watch the huge amount of attention |
| 00:01:20> 00:01:22: | and federal dollars, |
| 00:01:22> 00:01:25: | that's going to be paid beginning this year and in |
| 00:01:25> 00:01:28: | the future to resilience activities for climate change. |

| 00:01:28> 00:01:30: | Now is the time to share that experience and to |
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| 00:01:30> 00:01:33: | give that feedback and to help the government. |
| 00:01:33> 00:01:35: | Understand what works and what doesn't. |
| 00:01:35> 00:01:38: | Add a community level and looking at it from the |
| 00:01:38> 00:01:42: | best practices that we can share and that we can |
| 00:01:42> 00:01:46: | find among ourselves so there's nobody here but us chickens |
| 00:01:46> 00:01:48: | and we have to work on it. |
| 00:01:48> 00:01:51: | So I want to help everybody feel open and free |
| 00:01:51> 00:01:54: | to learn as much as we can and to share |
| 00:01:54> 00:01:56: | it at the end of this session. |
| 00:01:56> 00:01:59: | After the second panel, we will have a half hour |
| 00:01:59> 00:02:01: | of open discussion about the coast of forum and how |
| 00:02:02> 00:02:03: | it could be more useful. |
| 00:02:03> 00:02:07: | Or activities and it could help enable or participate with |
| 00:02:07> 00:02:10: | around the different regions of our coast in order to |
| 00:02:10> 00:02:13: | be more useful than to be helpful. |
| 00:02:13> 00:02:15: | So we want to invite those who are interested to |
| 00:02:15> 00:02:18: | hang on after the second panel question and answer in |
| 00:02:18> 00:02:21: | order to discuss that and see how you could help |
| 00:02:21> 00:02:24: | guide us into the plans that we make for the |
| 00:02:24> 00:02:25: | future. |
| 00:02:25> 00:02:29: | We're already of course, looking toward the San Diego Spring |
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| 00:02:29> 00:02:32: | |
| 00:02:29> 00:02:32: 00:02:32> 00:02:33: | meeting we we do plan to have a session for |
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| 00:03:18> 00:03:18: | us, |
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| 00:03:18> 00:03:25: | we have since they really about 2017 try to gather. |
| 00:03:25> 00:03:28: | People and just be a place where these ideas can |
| 00:03:28> 00:03:33: | be shared and we're experienced knowledge and links to resources |
| 00:03:33> 00:03:37: | can be shared to help help us learn a network |
| 00:03:37> 00:03:39: | of people around the coast. |
| 00:03:39> 00:03:43: | Uhm? I think the next order of business would be |
| 00:03:44> 00:03:46: | to introduced reuse Taylor, |
| 00:03:46> 00:03:50: | who is the Super moderator we have for the first |
| 00:03:50> 00:03:53: | session that we have a little science, |
| 00:03:53> 00:03:57: | then followed by some excellent panelists to two different panels. |
| 00:03:57> 00:04:00: | Looking at how communities can work together, |
| 00:04:00> 00:04:02: | how they've been successful, what works, |
| 00:04:02> 00:04:05: | and what does it, and and some kind of forecast |
| 00:04:05> 00:04:06: | about what's needed. |
| 00:04:06> 00:04:09: | As we look at the threats that face us and |
| 00:04:10> 00:04:11: | extremely pleased to. |
| 00:04:11> 00:04:17: | How grieves Taylor leave this session with Mr Marcy readers? |
| 00:04:17> 00:04:17: | I'll pass it to you. |
| 00:04:18> 00:04:21: | Thank you Jack and I I really want to emphasize |
| 00:04:21> 00:04:23: | that notion of collaboration, |
| 00:04:23> 00:04:28: | Meiko. CEO Diane Hoskins attended the COP 26 event in |
| 00:04:28> 00:04:29: | Glasgow. |
| 00:04:29> 00:04:32: | Not quite, you know, three weeks ago and radical collaboration |
| 00:04:32> 00:04:34: | was kind of the metric. |
| 00:04:34> 00:04:37: | The mantra of where we need to go quickly around, |
| 00:04:37> 00:04:39: | not just addressing long term climate impacts, |
| 00:04:39> 00:04:42: | but the current climate impacts the Jack you've talked about. |
| 00:04:42> 00:04:45: | And I'm really happy as a Co director of what |
| 00:04:45> 00:04:47: | we call design resilience. |
| 00:04:47> 00:04:48: | Part of our design delivery, |
| 00:04:48> 00:04:52: | but also part of the Gensler Research Institute looking at |
| 00:04:52> 00:04:56: | resilience approaches as it relates to both design. |
| 00:04:56> 00:04:58: | But also current impacts and it was really great to |
| 00:04:58> 00:05:01: | have a chance to get to know Doug Marcie going |
| 00:05:01> 00:05:03: | introduce here because it's the brass tacks. |
| 00:05:03> 00:05:05: | What's the threat? The science? |
| 00:05:05> 00:05:08: | The details that you know our next set of panelists |
| 00:05:08> 00:05:11: | and speakers will be addressing or responding to, |

| 00:05:11> 00:05:14: | but it really takes the brass tacks getting into the |
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| 00:05:14> 00:05:16: | details of what are our first steps. |
| 00:05:16> 00:05:18: | What's kind of the balance of what has to be |
| 00:05:18> 00:05:22: | a very long term lifetime multi generational strategy. |
| 00:05:22> 00:05:25: | But again, just you'll see in the in the publication |
| 00:05:25> 00:05:26: | a much longer. |
| 00:05:26> 00:05:29: | Biography but very briefly, Doug Marcy is a coastal hazard |
| 00:05:29> 00:05:33: | specialist at the Noah Office for Coastal Management. |
| 00:05:33> 00:05:34: | Based in on the coast, |
| 00:05:34> 00:05:38: | Charleston, SC. He has been with Noah for 19 years, |
| 00:05:38> 00:05:40: | working on flooding and sea level rise. |
| 00:05:40> 00:05:44: | Geospatial mapping projects, storm surge assessments, |
| 00:05:44> 00:05:49: | and coastal hazards assessment projects contributing to the more disaster |
| 00:05:49> 00:05:53: | resilient communities and frankly preparing us as ULI members for |
| 00:05:53> 00:05:54: | both planning, |
| 00:05:54> 00:05:57: | investing, looking at real estate in its long term value. |
| 00:05:57> 00:05:59: | In this challenging coastal neck of the woods. |
| 00:05:59> 00:06:02: | So with that Doug, it's all yours. |
| 00:06:02> 00:06:04: | Lead on some great insights you'll be sharing. |
| 00:06:06> 00:06:09: | Thank you very much and thank you for having me |
| 00:06:09> 00:06:10: | today. |
| 00:06:10> 00:06:11: | I have quite a few slides here, |
| 00:06:11> 00:06:14: | but I was I I'm privileged to be able to |
| 00:06:14> 00:06:17: | kind of kick off this entire panel. |
| 00:06:17> 00:06:20: | I wasn't sure how sciency to get. |
| 00:06:20> 00:06:22: | I kind of try to keep keep it a little |
| 00:06:22> 00:06:24: | bit light and post some of what what you asked |
| 00:06:24> 00:06:25: | me to do, |
| 00:06:25> 00:06:26: | which is what is the threat? |
| 00:06:26> 00:06:31: | And also how Noah efforts can support community resilience? |
| 00:06:31> 00:06:33: | Kind of where we're going and where we're headed, |
| 00:06:33> 00:06:35: | what we're doing now, and where we're headed next, |
| 00:06:35> 00:06:40: | slide, please. So. America's coasts as we know we have |
| 00:06:40> 00:06:44: | a very thin ribbon of land where we have probably |
| 00:06:44> 00:06:45: | 40% |
| 00:06:45> 00:06:47: | of the population on like 10% |
| 00:06:47> 00:06:52: | of the landmass. Trillions of dollars in goods. |
| 00:06:52> 00:06:56: | Million of millions employed trains and wages along the coast. |
| 00:06:56> 00:07:00: | Next slide. Our ports as we are realizing now in |

| 00:07:00> 00:07:05: | this crunch of Christmas time and the issues with the |
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| 00:07:05> 00:07:07: | supply chain or critical. |
| 00:07:07> 00:07:11: | Uh, in terms of the imports and jobs. |
| 00:07:11> 00:07:16: | Next slide. And as we know from previous disasters, |
| 00:07:16> 00:07:19: | like the ones going on right now with the supply |
| 00:07:19> 00:07:21: | chain in Long Beach and then New Orleans in the |
| 00:07:21> 00:07:24: | past with with Katrina and the port shutdown, |
| 00:07:24> 00:07:27: | it's literally like shutting down the heart to the blood |
| 00:07:27> 00:07:29: | supply to the rest of the country. |
| 00:07:29> 00:07:31: | And the arteries and the Kappel. |
| 00:07:31> 00:07:34: | Aries 'cause all that. All those goods and services feed |
| 00:07:34> 00:07:36: | to the rest of the country so. |
| 00:07:36> 00:07:36: | Whether you like it or not, |
| 00:07:36> 00:07:40: | we're a coastal nation. Even in the heartland. |
| 00:07:40> 00:07:46: | Next slide. Disasters are happening more frequently in their becoming |
| 00:07:46> 00:07:47: | more expensive. |
| 00:07:47> 00:07:51: | This is from our colleagues that and no NCI billion |
| 00:07:51> 00:07:54: | dollar disasters and you can see this has been going |
| 00:07:54> 00:07:54: | up. |
| 00:07:54> 00:07:56: | Uhm, we're not even finished for 2021 yet, |
| 00:07:57> 00:07:58: | and we're already up there, |
| 00:07:58> 00:08:04: | so it is increasing. We're spending more and more money |
| 00:08:04> 00:08:05: | on disaster. |
| 00:08:05> 00:08:11: | Response and recovery next. So let's define resilience. |
| 00:08:11> 00:08:13: | We're going to be talking a lot about that today, |
| 00:08:13> 00:08:15: | as defined by the National Academy of Sciences. |
| 00:08:15> 00:08:17: | The ability to prepare and plan for, |
| 00:08:17> 00:08:21: | absorb, recover from, and more successfully adapt to, |
| 00:08:21> 00:08:26: | adverse events. This really comes down to building back better, |
| 00:08:26> 00:08:30: | being more adaptive as climate is going to change, |
| 00:08:30> 00:08:36: | not relying on just robust solutions such as Gray infrastructure. |
| 00:08:36> 00:08:40: | But an adaptable infrastructure that will allow us to change |
| 00:08:40> 00:08:43: | as as our as we're seeing some of our. |
| 00:08:43> 00:08:46: | Sort of stationary processes become nonstationary, |
| 00:08:46> 00:08:48: | and I'll go into that in a minute. |
| 00:08:48> 00:08:52: | But this is comes down to just being adaptive next. |
| 00:08:54> 00:08:57: | Overcoming barriers. This is what Noah has been trying to |
| 00:08:57> 00:09:02: | do for coastal communities provide at risk communication training, |
| 00:09:02> 00:09:04: | provide data and tools for decision makers. |

| 00:09:04> 00:09:08: | Building capacity. To inform action and leadership, |
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| 00:09:08> 00:09:11: | and then convening and leveraging partnerships that will go into, |
| 00:09:11> 00:09:14: | I'll tell you some of our partnerships which we are |
| 00:09:14> 00:09:18: | actually have a good partnership with ULI next. |
| 00:09:18> 00:09:20: | A lot of the key actions, |
| 00:09:20> 00:09:22: | key issues we are involved in, |
| 00:09:22> 00:09:24: | and now we're looking at storm surge, |
| 00:09:24> 00:09:26: | sea level rise, high tide flooding, |
| 00:09:26> 00:09:29: | and coastal stormwater impacts, and I'll go through all of |
| 00:09:29> 00:09:32: | those issues now and what we're doing about it and |
| 00:09:32> 00:09:34: | what it's looking like in the future next. |
| 00:09:36> 00:09:39: | Hurricanes. We always want to know are they going to |
| 00:09:39> 00:09:42: | continue at the current frequency and intensity. |
| 00:09:42> 00:09:46: | We know we have experienced catastrophic losses and we know |
| 00:09:46> 00:09:47: | what they're capable of. |
| 00:09:47> 00:09:50: | We're starting to see what looks like more intense hurricanes, |
| 00:09:50> 00:09:54: | and if you see from the latest climate assessment NCA |
| 00:09:54> 00:09:54: | 4, |
| 00:09:54> 00:09:56: | the figure on the right, |
| 00:09:56> 00:09:59: | there's more area under the curve under the right on |
| 00:09:59> 00:10:00: | the right side of that. |
| 00:10:00> 00:10:01: | If you're a calculus person, |
| 00:10:01> 00:10:05: | that means there's more energy and more counts. |
| 00:10:05> 00:10:07: | We're seeing more frequency, and obviously there's more. |
| 00:10:08> 00:10:11: | Energy in the system due to that warming oceans and |
| 00:10:11> 00:10:12: | warmer at depth, |
| 00:10:12> 00:10:16: | so we're looking at probably more intense storms in the |
| 00:10:16> 00:10:17: | future next. |
| 00:10:19> 00:10:21: | The Hurricane Center puts out a lot of information. |
| 00:10:21> 00:10:23: | We work closely with them. |
| 00:10:23> 00:10:25: | They have storm surge products, |
| 00:10:25> 00:10:26: | national storm surge hazard maps. |
| 00:10:26> 00:10:28: | You may have looked at, |
| 00:10:28> 00:10:31: | and they also put out a real time forecast of |
| 00:10:31> 00:10:33: | potential storm surge maps. |
| 00:10:33> 00:10:37: | Our office has helped them provide them with the most |
| 00:10:37> 00:10:41: | latest up-to-date elevation information and some of the methodologies we |
| 00:10:41> 00:10:44: | helped work with them on producing those maps, |
| 00:10:44> 00:10:47: | so that's something that's out there and sort of in |

| 00:10:47> 00:10:49: | the real time water level. |
|---------------------|--|
| 00:10:49> 00:10:51: | Products that you can use next. |
| 00:10:53> 00:10:56: | We also and now look at sea level trends. |
| 00:10:56> 00:11:01: | We operate the national water level Observation Network Series 122 |
| 00:11:02> 00:11:02: | gauges, |
| 00:11:02> 00:11:05: | but it's also part of a global network and you |
| 00:11:05> 00:11:08: | can see that we've been monitoring sea level trends over |
| 00:11:08> 00:11:09: | quite a long time, |
| 00:11:09> 00:11:12: | up to like 186 plus years in San Francisco. |
| 00:11:12> 00:11:14: | And you can see that the rates of sea level |
| 00:11:14> 00:11:16: | rise have been increasing. |
| 00:11:16> 00:11:18: | Some places are going down up in the northern parts |
| 00:11:18> 00:11:19: | of the country in the South, |
| 00:11:20> 00:11:22: | and places like Louisiana. There have been increasing on the |
| 00:11:22> 00:11:23: | order of three feet. |
| 00:11:23> 00:11:25: | In the last 100 years, |
| 00:11:25> 00:11:28: | most areas have seen on the order of 100 about |
| 00:11:28> 00:11:30: | a foot over the last 100 years next. |
| 00:11:32> 00:11:34: | And we're also seeing cell C level. |
| 00:11:34> 00:11:38: | Rate increasing this is just an example in Charleston, |
| 00:11:38> 00:11:42: | SC. This is where I'm getting into that nonstationarity. |
| 00:11:42> 00:11:45: | It used to be kind of a withdrawal regression line |
| 00:11:45> 00:11:48: | through all of the trend data and give us a |
| 00:11:48> 00:11:48: | rate, |
| 00:11:48> 00:11:50: | but we've seen that rate increase. |
| 00:11:50> 00:11:53: | We're starting to see more of a quadratic trend, |
| 00:11:53> 00:11:56: | meaning more of a curve and therefore we're following some |
| 00:11:56> 00:11:58: | of the sea level projections which are in themselves curves, |
| 00:11:58> 00:12:02: | and so we're starting to see the rate increase as |
| 00:12:02> 00:12:03: | we go forward next. |
| 00:12:05> 00:12:06: | What we're trying to do now, |
| 00:12:06> 00:12:08: | and we're actually in the process of updating this report. |
| 00:12:08> 00:12:12: | This came from the the fourth national climate assessment were |
| 00:12:12> 00:12:13: | going through an update process. |
| 00:12:13> 00:12:16: | Where are we going to be in the future? |
| 00:12:16> 00:12:19: | Based on some of the greenhouse gas scenarios we're trying |
| 00:12:19> 00:12:22: | to predict where sea level is going to be in |
| 00:12:22> 00:12:23: | the next report, |
| 00:12:23> 00:12:25: | I'll go into and put it at the end. |
| 00:12:25> 00:12:27: | You can see that the average range, |

| 00:12:27> 00:12:31: | their route one at 1.5 meters by 2100, |
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| 00:12:31> 00:12:35: | is more likely next. And communities want to know what |
| 00:12:35> 00:12:40: | scenario to use for higher risk tolerance areas work that |
| 00:12:40> 00:12:43: | you can stand to be flooded like open areas. |
| 00:12:43> 00:12:47: | We can probably use a lower scenario for planning, |
| 00:12:47> 00:12:50: | but areas like this is San Francisco Airport. |
| 00:12:50> 00:12:52: | Here you have lower risk tolerance. |
| 00:12:52> 00:12:57: | We're going to have to use a higher scenario based |
| 00:12:57> 00:13:02: | on the criticality and service life of the project next. |
| 00:13:02> 00:13:05: | So selecting this scenario needs to kind of be a |
| 00:13:06> 00:13:08: | an iterative process and constantly updated. |
| 00:13:08> 00:13:10: | This is borrowing from the city of Charleston. |
| 00:13:10> 00:13:14: | You're going to hear from the Resilience Officer today |
| 00:13:14> 00:13:17: | looking |
| | out at 50 years and looking at a two to |
| 00:13:17> 00:13:18: 00:13:18> 00:13:20: | three foot range. |
| | That kind of follows this intermediate curve, |
| 00:13:20> 00:13:22: | but that's going to be updated every time there's a |
| 00:13:22> 00:13:26: | new science update which follows along with the national climate |
| 00:13:26> 00:13:28: | assessment process of round every five years next. |
| 00:13:31> 00:13:33: | Noah provides a lot of information on sea level rise. |
| 00:13:33> 00:13:35: | I mentioned a couple of them. |
| 00:13:35> 00:13:37: | We have our trends. We have a sea level rise |
| 00:13:37> 00:13:40: | viewer that incorporates the projections in there as well, |
| 00:13:40> 00:13:44: | and a coastal flood exposure map or project that I'm |
| 00:13:44> 00:13:45: | sorry product. |
| 00:13:45> 00:13:48: | Next slide. Going through a lot here, |
| 00:13:48> 00:13:51: | high tide flooding is something that is occurring in a |
| 00:13:51> 00:13:52: | lot of coastal communities. |
| 00:13:52> 00:13:56: | Next slide. This happens in even when it's sunny outside. |
| 00:13:56> 00:13:58: | We do map that and we've been working on counting |
| 00:13:58> 00:14:01: | the number of high tide flood events we're seeing around |
| 00:14:01> 00:14:01: | the country. |
| 00:14:01> 00:14:05: | Places like Charleston, Norfolk, others that are experiencing flooding even |
| 00:14:05> 00:14:06: | during high tides. |
| 00:14:06> 00:14:08: | That rate of flooding has been going up as well. |
| 00:14:08> 00:14:13: | Coming up following that sea level trend next. |
| 00:14:13> 00:14:16: | We have a lot of information about that coastal nation |
| 00:14:16> 00:14:16: | dashboard. |
| 00:14:16> 00:14:21: | For real time information we have high tide Flood bulletin. |
| 00:14:21> 00:14:23: | We have a state of the high tide flood report |

| 00:14:23> 00:14:26: | that comes out annually that looks at where we are. |
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| 00:14:26> 00:14:30: | How many high tide flood events we've had and where |
| 00:14:30> 00:14:32: | we're going in the future next. |
| 00:14:32> 00:14:34: | And the issue is for coastal communities, |
| 00:14:34> 00:14:37: | is this impact of increasing water levels at the coast |
| 00:14:37> 00:14:40: | but also extreme rainfall and where they're connected through the |
| 00:14:40> 00:14:41: | storm water system? |
| 00:14:41> 00:14:45: | The storm water systems weren't designed to handle higher water |
| 00:14:45> 00:14:46: | levels going on from salt water, |
| 00:14:46> 00:14:51: | and so it's a combination which we call compound flooding. |
| 00:14:51> 00:14:53: | Olivia flooding in the urban centers. |
| 00:14:53> 00:14:57: | With this compound. Salt water impact causing a lot of |
| 00:14:57> 00:14:58: | issues next. |
| 00:14:58> 00:15:02: | We have a tool out there that we've been developing. |
| 00:15:02> 00:15:05: | Called adapting stormwater management for coastal floods, |
| 00:15:05> 00:15:06: | there's an assessed tool. Part of that. |
| 00:15:06> 00:15:10: | It's pretty interesting. You can pick thresholds and see when |
| 00:15:10> 00:15:14: | you're fresh coats will be exceeded based on the scenario |
| 00:15:14> 00:15:15: | as you pick next. |
| 00:15:15> 00:15:19: | We have just put together a coalition resources page. |
| 00:15:19> 00:15:21: | Uh, put the web address in here. |
| 00:15:21> 00:15:23: | I think it's going to be shared as well. |
| 00:15:23> 00:15:24: | This gives you a lot of information. |
| 00:15:24> 00:15:27: | All the the latest and greatest of the climate science |
| 00:15:27> 00:15:30: | reports I was talking about sea level rise and the |
| 00:15:30> 00:15:32: | tools and data access as well as access to a |
| 00:15:32> 00:15:36: | lot of training and other information next. |
| 00:15:38> 00:15:40: | In addition to that product digital coast, |
| 00:15:40> 00:15:46: | there's another fabulous. A resource called the Climate Resilience Toolkit, |
| 00:15:46> 00:15:49: | which is kind of the same idea as digital coast, |
| 00:15:49> 00:15:52: | and there's a lot of good climate information in there |
| 00:15:52> 00:15:52: | as well next. |
| 00:15:55> 00:15:58: | The idea here is to provide not just the data, |
| 00:15:58> 00:16:00: | but also to be able to download the data. |
| 00:16:00> 00:16:03: | Look at maps that that utilize that information and do |
| 00:16:03> 00:16:07: | some analysts analyzing and learning and also sharing that information. |
| 00:16:07> 00:16:10: | Next and that is done through. |
| 00:16:10> 00:16:12: | Partnerships that I'll mention also, |
| 00:16:12> 00:16:14: | we've been providing a lot of funding. |

| 00:16:14> 00:16:16: | We're going to be talking about some of the funding |
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| 00:16:17> 00:16:19: | today that may be coming through the infrastructure bill, |
| 00:16:19> 00:16:22: | but we've provided a lot of coastal resilience grants. |
| 00:16:22> 00:16:27: | The key themes we were funding or incorporating climate change |
| 00:16:27> 00:16:33: | impacts nature based solutions and natural natural infrastructure next. |
| 00:16:33> 00:16:35: | We work with a lot of partners. |
| 00:16:35> 00:16:38: | We have all kinds of different parts of Noah, |
| 00:16:38> 00:16:39: | know as a huge organization, |
| 00:16:39> 00:16:42: | as you know, but we are working together better than |
| 00:16:42> 00:16:45: | ever in terms of the line office is trying to |
| 00:16:45> 00:16:48: | resolve these these issues when it comes to Community |
| 00:16:48> 00:16:52: | and coastal resilience next. Digital codes is one of those |
| 00:16:52> 00:16:55: | you can see Urban Land Institute as a partner, |
| 00:16:55> 00:16:57: | but as we have a lot of different partners, |
| 00:16:57> 00:17:00: | these organizations have been able to work together a lot |
| 00:17:00> 00:17:02: | more through digital coast than they have in the past. |
| 00:17:02> 00:17:07: | To kind of complement their there. |
| 00:17:07> 00:17:10: | Their missions and we have. |
| 00:17:10> 00:17:12: | We really welcome that 'cause they give us a good |
| 00:17:12> 00:17:15: | feedback on where we need to go with future products |
| 00:17:15> 00:17:15: | and data. |
| 00:17:15> 00:17:19: | Next OK, so what's on the horizon? |
| 00:17:19> 00:17:21: | I can wrap up next slide. |
| 00:17:21> 00:17:25: | Just real quick, something that will be infecting everyone is |
| 00:17:25> 00:17:28: | we're going to be updating our new reference network, |
| 00:17:29> 00:17:32: | basically going as if you're a vertical datum person from |
| 00:17:32> 00:17:33: | Naby or net, |
| 00:17:33> 00:17:36: | a North American vertical datum in 1988 to a new |
| 00:17:36> 00:17:39: | data that will be happening by around 2025. |
| 00:17:39> 00:17:42: | That's going to impact a lot of surveying, |
| 00:17:42> 00:17:44: | but that's going to get us all on the same |
| 00:17:44> 00:17:47: | page in terms of other places like Hawaii and Alaska |
| 00:17:47> 00:17:50: | that are not able to use that same vertical datum. |
| 00:17:50> 00:17:52: | Pacific islands. As well also, |
| 00:17:52> 00:17:55: | we're going to be updating the national title data mapping |
| 00:17:55> 00:17:56: | in the same time frame. |
| 00:17:56> 00:17:59: | So mean high water and places where we are building |
| 00:17:59> 00:18:02: | along with marine construction are going to have to adapt |
| 00:18:02> 00:18:04: | and and use the new datums. |
| 00:18:04> 00:18:07: | And that's going to be higher than in the past |

| 00:18:07> 00:18:10: | because of sea level rise next. |
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| 00:18:10> 00:18:13: | As I mentioned, the next climate assessments coming out |
| | there |
| 00:18:13> 00:18:13: | is a know, |
| 00:18:13> 00:18:16: | a technical report that's being worked on almost finished. |
| 00:18:16> 00:18:19: | Now we're going to have new projections in their updated. |
| 00:18:19> 00:18:23: | We're not going to see as high or extremes we |
| 00:18:23> 00:18:27: | did last time they were going to see some extrapolated |
| 00:18:27> 00:18:29: | trends from 1970 to 2020. |
| 00:18:29> 00:18:33: | Fifty thanks to NASA helping us out on that and |
| 00:18:33> 00:18:37: | some better information on grid extreme water levels expected to |
| 00:18:37> 00:18:38: | be released in 2023, |
| 00:18:38> 00:18:41: | but one of the things I think Jack wanted me |
| 00:18:41> 00:18:42: | to cover is. |
| 00:18:42> 00:18:44: | This is going to be a continual process of better |
| 00:18:44> 00:18:47: | information every time we go through the climate assessment, |
| 00:18:47> 00:18:51: | but the key is to keep your whatever scenarios you're |
| 00:18:51> 00:18:53: | using for planning, |
| 00:18:53> 00:18:56: | updated and flexible enough using multiple different scenarios. |
| 00:18:56> 00:19:00: | Maybe not being prescriptive to one particular paper. |
| 00:19:00> 00:19:02: | We're going through an update process like that with some |
| 00:19:03> 00:19:04: | of the federal regulations as well, |
| 00:19:04> 00:19:09: | because this is going to continuously change and hopefully continue |
| 00:19:09> 00:19:13: | to give us better information for planning next. |
| 00:19:13> 00:19:17: | Lastly, we're working on trying to update some projects and |
| 00:19:17> 00:19:19: | provide better information, |
| 00:19:19> 00:19:21: | not just at our tide gauges. |
| 00:19:21> 00:19:23: | We're working on more on grid information, |
| 00:19:23> 00:19:26: | so if you happen to have a location in between |
| 00:19:26> 00:19:28: | are tide gauges you can get information there. |
| 00:19:28> 00:19:32: | Uhm, and also a sort of a coastal data information |
| 00:19:32> 00:19:32: | system. |
| 00:19:32> 00:19:37: | Better information on water level probabilities as well next. |
| 00:19:37> 00:19:38: | I think this might be last. |
| 00:19:38> 00:19:42: | Finally, all of Noah is now engaged in the service |
| 00:19:42> 00:19:44: | delivery framework and model, |
| 00:19:44> 00:19:47: | which is where we want to have continuous user engagement |
| 00:19:47> 00:19:48: | in the upfront. |

| 00:19:48> 00:19:51: | What are the needs before we go and develop a |
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| 00:19:51> 00:19:53: | new model or a new process in a new product? |
| 00:19:53> 00:19:56: | Get their input up front from folks like you guys |
| 00:19:56> 00:19:59: | and you lie to the back end is constantly looking |
| 00:19:59> 00:20:03: | at are we meeting your needs and constantly keeping that |
| 00:20:03> 00:20:05: | kind of that wheel working? |
| 00:20:05> 00:20:07: | Next I think that's it. |
| 00:20:07> 00:20:09: | There's For more information for me. |
| 00:20:09> 00:20:10: | I hope this was helpful, |
| 00:20:10> 00:20:12: | and I think we're going to go into some questions. |
| 00:20:14> 00:20:14: | And again, I want |
| 00:20:14> 00:20:20: | to emphasize that the. A chat is the means to |
| 00:20:20> 00:20:22: | ask questions on going. |
| 00:20:22> 00:20:24: | I failed to mention that verbally, |
| 00:20:24> 00:20:26: | but did put it in the chat so we'll keep |
| 00:20:26> 00:20:27: | an eye open. |
| 00:20:27> 00:20:30: | A number of us to see if there's anyone to |
| 00:20:30> 00:20:30: | share, |
| 00:20:30> 00:20:33: | but one of the first questions you know I've got. |
| 00:20:33> 00:20:36: | Having done some research on the real estate side, |
| 00:20:36> 00:20:39: | it's really clear that the land owners you know, |
| 00:20:39> 00:20:43: | the real estate developers, the homeowners really understand this coastal |
| 00:20:43> 00:20:43: | challenge, |
| 00:20:43> 00:20:46: | and you know, given what you're seeing on the coast |
| 00:20:46> 00:20:48: | of North America in particular. |
| 00:20:48> 00:20:51: | Doug, you know? What can they do themselves to assist |
| 00:20:51> 00:20:52: | in the big picture? |
| 00:20:52> 00:20:54: | Not? We'll talk a lot about later, |
| 00:20:54> 00:20:56: | you know where they might find funding and where they |
| 00:20:56> 00:20:57: | can get in the big picture. |
| 00:20:57> 00:20:59: | But if they were to target, |
| 00:20:59> 00:21:00: | as we've done some research, |
| 00:21:00> 00:21:02: | they really want to do something both about their property. |
| 00:21:02> 00:21:04: | But do something that helps the community. |
| 00:21:04> 00:21:07: | Where would you start? Where would you go to find |
| 00:21:07> 00:21:08: | information etc. |
| 00:21:08> 00:21:11: | And then I'll follow up with some of the other |
| 00:21:11> 00:21:12: | questions coming in. |
| 00:21:12> 00:21:12: | Sure. |
| 00:21:14> 00:21:17: | Well, there's a lot of communities that we've seen cities |
| 00:21:17> 00:21:21: | that have already have already kind of started bite off |
| · · · - · · · · · | , , , |

| 00:21:21> 00:21:22: | this issue right? |
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| 00:21:22> 00:21:24: | And we've seen, like Miami Beach and the the mayor |
| 00:21:24> 00:21:27: | there run ran on the platform he was going to |
| 00:21:27> 00:21:28: | fix flooding. |
| 00:21:28> 00:21:30: | We've had our mayor and here in Charleston, |
| 00:21:30> 00:21:32: | SC where I am and where Dale is. |
| 00:21:32> 00:21:35: | You know, one of the biggest issues we face is |
| 00:21:35> 00:21:36: | is flooding as well. |
| 00:21:36> 00:21:39: | So real dollars are being spent now on fixing the |
| 00:21:39> 00:21:40: | existing problem, |
| 00:21:40> 00:21:42: | trying to get the water off of the streets. |
| 00:21:42> 00:21:44: | You know the pluvial issue and to. |
| 00:21:44> 00:21:46: | Drains and pumped out, and so there's a lot of |
| 00:21:46> 00:21:48: | money being spent on that, |
| 00:21:48> 00:21:49: | but we're we're realizing we are. |
| 00:21:49> 00:21:53: | We have antiquated systems that were not designed to |
| | handle |
| 00:21:53> 00:21:54: | rising, |
| 00:21:54> 00:21:58: | especially sea level rise. So we're seeing more effort and |
| 00:21:58> 00:22:03: | input into more sophisticated modeling efforts and more focused on |
| 00:22:03> 00:22:06: | getting better data on our existing systems. |
| 00:22:06> 00:22:08: | You know which in some cases means going back and |
| 00:22:08> 00:22:09: | repairing things. |
| 00:22:09> 00:22:12: | Uhm, but then trying to build in and look at |
| 00:22:12> 00:22:16: | changing our stormwater plans and things like that in cities |
| 00:22:16> 00:22:18: | too to factor this input in. |
| 00:22:18> 00:22:22: | Some some provisions in there for free board or for |
| 00:22:22> 00:22:26: | increased runoff things like this so we we know that |
| 00:22:26> 00:22:29: | things are changing the past 100 years. |
| 00:22:29> 00:22:31: | Of record is not going to be the next 100 |
| 00:22:31> 00:22:32: | years. |
| 00:22:32> 00:22:34: | The trend within the past is not going to be |
| 00:22:34> 00:22:34: | the same, |
| 00:22:34> 00:22:37: | so we need to build build that into design and |
| 00:22:37> 00:22:39: | start to change our regulations now. |
| 00:22:39> 00:22:40: | So I think that's that's the main thing. |
| 00:22:40> 00:22:43: | And then the guidance. You know there's a lot of |
| 00:22:43> 00:22:45: | uncertainty when it comes to sea level rise and and |
| 00:22:45> 00:22:48: | particularly when you get into river in flooding. |
| 00:22:48> 00:22:50: | There's even probably more uncertainty. |
| 00:22:50> 00:22:54: | Not not. Waiting on better information may not be the |
| | |

| 00:22:54> 00:22:57: | only you know you should try to plan based on |
|--|---|
| 00:22:57> 00:22:58: | your risk tolerance, |
| 00:22:58> 00:23:01: | but also build in some some some you know if |
| 00:23:02> 00:23:04: | you want to call it like a factor of safety |
| 00:23:05> 00:23:05: | in there, |
| 00:23:05> 00:23:07: | right? 'cause we know things are going to change in |
| 00:23:07> 00:23:07: | the future, |
| 00:23:07> 00:23:10: | we do it a lot with with engineering structures like |
| 00:23:10> 00:23:13: | bridges we build a factor of safety and 'cause it |
| 00:23:13> 00:23:14: | cannot fail. |
| 00:23:14> 00:23:15: | We just need to start doing that. |
| 00:23:15> 00:23:17: | 'cause you know things are definitely changing. |
| 00:23:17> 00:23:19: | Great yes say two quick questions. |
| 00:23:19> 00:23:23: | How does Noah consider or evaluate groundwater impacts in the |
| 00:23:23> 00:23:24: | SLR context? |
| 00:23:25> 00:23:27: | That's a that's a tricky one. |
| 00:23:27> 00:23:31: | No one is certainly not an expert in groundwater hydrology. |
| 00:23:31> 00:23:33: | We we probably refer to our USGS colleagues mostly on |
| 00:23:34> 00:23:34: | that. |
| 00:23:34> 00:23:35: | There are a lot of. |
| 00:23:35> 00:23:39: | Places like in Miami and Southern Florida where you have, |
| 00:23:39> 00:23:42: | you know limestone substrate and so with fresh water right |
| 00:23:42> 00:23:45: | there at the surface basically sitting on top of saltwater |
| 00:23:45> 00:23:49: | as you have saltwater intrusion that the water level water |
| 00:23:49> 00:23:49: | table is going to rise. |
| 00:23:50> 00:23:52: | And that's going to basically cause more areas to be |
| 00:23:52> 00:23:52: | wet all the time. |
| 00:23:52> 00:23:53: 00:23:53> 00:23:57: | |
| | Kind of like they already are in the Everglades. |
| 00:23:57> 00:23:59: | So that is a factor and a lot of areas |
| 00:23:59> 00:24:02: | on the coast rely on drinking water from from groundwater |
| 00:24:03> 00:24:06: | wells and increasing sea level rise is going to start |
| 00:24:06> 00:24:10: | encroaching on that. Freshwater lens as that it moves inland |
| 00:24:10> 00:24:12: | and that's going to start an impact. |
| 00:24:12> 00:24:14: | That and that has to do with you know, |
| 00:24:14> 00:24:18: | already having some withdrawal using, |
| 00:24:18> 00:24:19: | you know, the cone of depression kind of thing around |
| 00:24:19> 00:24:20: | these areas. |
| 00:24:20> 00:24:22: | It's going to draw in more salt water. |
| 00:24:24> 00:24:27: | Another question, how would a local government or developer give |
| 00:24:27> 00:24:30: | Noah feedback on what it needs for resilience planning? |
| | 1 0 |

| 00:24:32> 00:24:34: | That's a great. That's a great question. |
|---------------------|--|
| 00:24:34> 00:24:38: | I think we are. We are trying to gather information |
| 00:24:38> 00:24:43: | from stakeholders right now about some of our future climate |
| 00:24:43> 00:24:44: | timescale products. |
| 00:24:44> 00:24:47: | And we're trying to engage all of the different sectors, |
| 00:24:47> 00:24:51: | and so there isn't even Realty. |
| 00:24:51> 00:24:54: | And you know, planning. So any kind of we're going |
| 00:24:54> 00:24:58: | to be having some workshops and anything like. |
| 00:24:58> 00:25:01: | When we're working with Digital Coast partners, |
| 00:25:01> 00:25:02: | what we're hoping to get his feedback on. |
| 00:25:02> 00:25:05: | Hey, these are the kinds of tools we need. |
| 00:25:05> 00:25:07: | This is what we want you. |
| 00:25:07> 00:25:09: | We want Noah to provide or these are the groups |
| 00:25:10> 00:25:11: | we need you guys to work with, |
| 00:25:11> 00:25:15: | so that's where we're constantly trying to miss that whole |
| 00:25:15> 00:25:16: | service delivery model. |
| 00:25:16> 00:25:19: | You know, check in with our customers more than we |
| 00:25:19> 00:25:21: | have in the past where we would just decide, |
| 00:25:21> 00:25:23: | OK, we're going to do this product because it, |
| 00:25:23> 00:25:25: | you know it meets our needs, |
| 00:25:25> 00:25:27: | so we are also serving a lot of the other |
| 00:25:27> 00:25:29: | federal agencies. |
| 00:25:29> 00:25:32: | As a science agency, Noah provides information to the other |
| 00:25:32> 00:25:36: | agencies which make important decisions and things like like DOT |
| 00:25:36> 00:25:37: | and the core of engineers, |
| 00:25:37> 00:25:40: | GSA and others who are constantly working with right now |
| 00:25:40> 00:25:42: | and some of the federal standards. |
| 00:25:43> 00:25:45: | So speaking as a citizen of the Gulf Coast along |
| 00:25:45> 00:25:46: | Texas, |
| 00:25:46> 00:25:48: | your your insights and valuable thank you Doug, |
| 00:25:48> 00:25:51: | as we wrap up a couple of quick things with |
| 00:25:51> 00:25:51: | the recordings, |
| 00:25:51> 00:25:54: | the slide deck that Doug shared of Noah. |
| 00:25:54> 00:25:56: | Next steps will be also shared. |
| 00:25:56> 00:25:58: | Also Augie has put in the chat a number of |
| 00:25:59> 00:26:02: | the really amazing resources that that Doug had talked about |
| 00:26:02> 00:26:05: | in terms of some of the Noah recent releases. |
| 00:26:05> 00:26:09: | And with that, again, thank you Doug and again back |
| 00:26:09> 00:26:13: | to the main conversation going to be introducing Alan Kratz |
| 00:26:13> 00:26:13: | to. |
| 00:26:13> 00:26:15: | Kick off the next panel I believe. |

| 00:26:15> 00:26:17: | And with that thanks everyone. |
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| 00:26:17> 00:26:20: | Look forward to the remaining time together. |
| 00:26:20> 00:26:20: | So |
| 00:26:20> 00:26:24: | thank you very much, Reeves and. |
| 00:26:24> 00:26:28: | That was really great and welcome to panel one, |
| 00:26:28> 00:26:31: | preparing communities for federal resilience funding. |
| 00:26:31> 00:26:34: | My name is Alan Kratz and I help communities secure |
| 00:26:34> 00:26:36: | funding for climate resilience, |
| 00:26:36> 00:26:39: | planning and implementation, and the three questions that you see |
| 00:26:39> 00:26:41: | on this screen and that screen. |
| 00:26:41> 00:26:44: | Here are the ones that are going to be the |
| 00:26:44> 00:26:46: | focus of our four panelists. |
| 00:26:46> 00:26:49: | Josh source. Lack of the Global Resilience Institute. |
| 00:26:49> 00:26:54: | Jonathan Altenburg, executive director of by national initiative that encompasses. |
| 00:26:54> 00:26:57: | The length of the Saint Lawrence River to the Great |
| 00:26:57> 00:26:57: | Lakes. |
| 00:26:57> 00:27:02: | Julie Wormser, who heads the Resilient Mystic Collaborative 21 towns |
| 00:27:02> 00:27:05: | on the Mystic River in Greater Boston and Jim Finch, |
| 00:27:05> 00:27:08: | the director of finance for the coastal town of Branford, |
| 00:27:08> 00:27:12: | CT, on the Long Island Sound and it might work |
| 00:27:12> 00:27:15: | along the Atlantic Coast from Maine to New Jersey. |
| 00:27:15> 00:27:17: | I'm now helping my communities. |
| 00:27:17> 00:27:21: | My clients qualify for funding from the resilience provisions in |
| 00:27:21> 00:27:24: | the infrastructure bill that the President. |
| 00:27:24> 00:27:26: | Time 2 1/2 weeks ago. |
| 00:27:26> 00:27:29: | It really does offer opportunities for climate resilience funding, |
| 00:27:29> 00:27:33: | primarily from three federal entities, |
| 00:27:33> 00:27:36: | the EPA, US DOT and the Department of Energy. |
| 00:27:36> 00:27:39: | So here is a one minute summary. |
| 00:27:39> 00:27:43: | The Act directs EPA to fund resilience of wastewater treatment |
| 00:27:43> 00:27:44: | facilities. |
| 00:27:44> 00:27:48: | It also provides grants of \$75,000 to nonprofits to hire. |
| 00:27:48> 00:27:53: | Yes, that's the word circuit riders to provide technical assistance |
| 00:27:53> 00:27:55: | to small wastewater works. |
| 00:27:55> 00:27:59: | USDOT will provide grants for community resilience and evacuation routes |
| 00:27:59> 00:28:01: | for coastal highway adaptation. |
| 00:28:01> 00:28:03: | There will be grants for strengthening, |

| 00:28:03> 00:28:09: | stabilizing, hardening, elevating, relocating, vulnerable highways and as mitigation, |
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| 00:28:09> 00:28:14: | healthy streets grants will enable communities to deploy porous pavement |
| 00:28:14> 00:28:16: | and expand pre cover. |
| 00:28:16> 00:28:20: | The law supports Co benefits reducing flood risk along |
| | highways |
| 00:28:20> 00:28:24: | by increasing the health of adjacent marches and reducing greenhouse |
| 00:28:24> 00:28:29: | gas emissions by funding electric recharging and low emission buses. |
| 00:28:29> 00:28:32: | Energy Department will provide funding to states to establish revolving |
| 00:28:32> 00:28:34: | loan funds for loans and grants for energy audits and |
| 00:28:34> 00:28:35: | in the same vein, |
| 00:28:35> 00:28:39: | the department will fund training for certification to support energy |
| 00:28:39> 00:28:41: | audits and energy efficient buildings. |
| 00:28:41> 00:28:43: | So how do we as practitioners, |
| 00:28:43> 00:28:47: | policymakers, public officials, and communities address these questions as a |
| 00:28:47> 00:28:49: | lead into our panelists views? |
| 00:28:49> 00:28:51: | Here's what I've been advising. |
| 00:28:51> 00:28:56: | My clients number one assess community needs and document those |
| 00:28:56> 00:28:59: | number 2 review the law if. |
| 00:28:59> 00:29:02: | Keyword searchable, the text is easily researched. |
| 00:29:02> 00:29:06: | Talked to public officials to see how specific community needs |
| 00:29:06> 00:29:09: | align with the funds and the programs that they're going |
| 00:29:09> 00:29:10: | to be responsible for enhancing, |
| 00:29:10> 00:29:14: | administering, and establishing. So all of our panelists I know |
| 00:29:14> 00:29:15: | start with number one, |
| 00:29:15> 00:29:18: | 'cause we're going to start with our first panelist, |
| 00:29:18> 00:29:21: | Josh Slack Josh. We're eager to hear commute for your |
| 00:29:21> 00:29:22: | 5 minute presentation. |
| 00:29:24> 00:29:27: | Thank you Alan and thanks to you life for inviting |
| 00:29:27> 00:29:28: | me today. |
| 00:29:28> 00:29:31: | I'm going to talk about resilience from the macro level |
| 00:29:31> 00:29:35: | and then my excellent Co panelists are going to give |
| 00:29:35> 00:29:37: | you some more details on the efforts. |
| 00:29:37> 00:29:40: | Doug talked a lot about the data and you know |
| 00:29:40> 00:29:43: | how it shows that climate threats and vulnerabilities are. |
| 00:29:43> 00:29:45: | Are, you know, facing us right now. |

| 00:29:45> 00:29:48: | So let's start there and Noah and the other federal |
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| 00:29:48> 00:29:51: | science agencies as well as a growing number of private |
| 00:29:51> 00:29:55: | entities and academic institutions have developed and are developing some |
| 00:29:55> 00:29:58: | amazing tools. But the point I want to make today |
| 00:29:58> 00:30:01: | is that you need to use this information in a |
| 00:30:01> 00:30:03: | coordinated and comprehensive way. |
| 00:30:03> 00:30:07: | Next slide, please. Now I love Venice food art. |
| 00:30:07> 00:30:10: | Architecture history I try to go in the late fall |
| 00:30:10> 00:30:13: | when it's a little less crowded and maybe even catch |
| 00:30:13> 00:30:14: | the end of the Benali. |
| 00:30:14> 00:30:17: | But whenever you go, you always face the risk of |
| 00:30:17> 00:30:20: | flooding in the streets from high tides. |
| 00:30:20> 00:30:23: | What the Venetians call Aqua alta. |
| 00:30:23> 00:30:26: | About 30 years ago they decided that they were going |
| 00:30:26> 00:30:30: | to build a massive title gate called the Mosaic Barrier |
| 00:30:30> 00:30:33: | and it's almost done and the gates can be closed |
| 00:30:33> 00:30:36: | when the threat is the highest and protect the title |
| 00:30:36> 00:30:38: | level in the Venetian. |
| 00:30:38> 00:30:42: | Lagoon and reopened after the threat passes to facilitate marinetraffic |
| 00:30:42> 00:30:46: | and the natural flushing action that is critical to the |
| 00:30:46> 00:30:47: | ecosystem. |
| 00:30:47> 00:30:51: | What Moset won't address is sea level rise. |
| 00:30:51> 00:30:53: | This was not the problem they were concerned with when |
| 00:30:53> 00:30:54: | they planned the project, |
| 00:30:54> 00:30:57: | but it will be something they face in the future. |
| 00:30:57> 00:31:02: | So so sometimes you need to address problems incrementally. |
| 00:31:02> 00:31:06: | Understand that, but you also must think comprehensively or you |
| 00:31:06> 00:31:09: | may find the solution you've developed and spend a lot |
| 00:31:09> 00:31:13: | of money on becomes obsolete and you have to start |
| 00:31:13> 00:31:17: | all over again. Next, slide a little closer to home. |
| 00:31:17> 00:31:19: | South Florida, it's pretty flat. |
| 00:31:19> 00:31:23: | It's pretty low lying, so the concentration of human and |
| 00:31:23> 00:31:25: | financial risk is very high now. |
| 00:31:25> 00:31:28: | Just in case you don't think this is relevant to |
| 00:31:28> 00:31:28: | you, |
| 00:31:28> 00:31:31: | I would point out that the National Flood Insurance program |
| 00:31:31> 00:31:33: | that FEMA runs covers much of this risk. |
| 00:31:33> 00:31:37: | And unlike traditional insurance, this program is backed by the |

| 00:31:37> 00:31:39: | full faith and credit of the United States, |
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| 00:31:39> 00:31:42: | which is a fancy way of saying taxpayers like you |
| 00:31:42> 00:31:43: | and me. |
| 00:31:43> 00:31:46: | So last year, along with some colleagues from Florida Atlantic |
| 00:31:46> 00:31:47: | University, |
| 00:31:47> 00:31:49: | we looked at the risk and the state and local |
| 00:31:50> 00:31:53: | governance issues that affect that risk in South Florida and |
| 00:31:53> 00:31:56: | one of the things we found is the risk is |
| 00:31:56> 00:31:58: | starting to be priced by the market. |
| 00:31:58> 00:32:01: | We're not there yet, but we are starting to see |
| 00:32:01> 00:32:01: | that, |
| 00:32:01> 00:32:05: | but also that it's shared across the public and private |
| 00:32:05> 00:32:05: | sectors. |
| 00:32:05> 00:32:08: | And finally that land use is really a major driver |
| 00:32:08> 00:32:09: | of that risk. |
| 00:32:09> 00:32:12: | And since land used is controlled at the local level |
| 00:32:12> 00:32:12: | in EU. |
| 00:32:12> 00:32:14: | S new models of governments. |
| 00:32:14> 00:32:17: | Governance and cooperation are needed to develop a solution comprehensive |
| 00:32:18> 00:32:18: | solution. |
| 00:32:18> 00:32:21: | Next slide, let me move West a little bit in |
| 00:32:21> 00:32:24: | the Gulf Coast into a beautiful scenic area known as |
| 00:32:24> 00:32:28: | Lower Alabama and what I want to talk about is |
| 00:32:28> 00:32:31: | that little dot, just inland of the barrier island called |
| 00:32:31> 00:32:34: | Perdido Beach and the Obama administration. |
| 00:32:34> 00:32:36: | We put a task force of state, |
| 00:32:36> 00:32:39: | local tribal leaders together to help us think about these |
| 00:32:39> 00:32:40: | issues. |
| 00:32:40> 00:32:42: | Lots of high profile stuff but we had smaller community |
| 00:32:43> 00:32:43: | as well. |
| 00:32:43> 00:32:44: | One was the mayor of Perdido. |
| 00:32:44> 00:32:48: | Beach and she represented about 500 residents and the first |
| 00:32:48> 00:32:50: | thing Mayor Parker told us was they don't know what |
| 00:32:50> 00:32:53: | they don't know and they didn't have the staff to |
| 00:32:53> 00:32:56: | figure it out. So not everywhere is New York City, |
| 00:32:56> 00:32:59: | Miami, Venice. Lot of Perdido Beach is in the coastal |
| 00:32:59> 00:32:59: | zone. |
| 00:32:59> 00:33:02: | We have to make these programs work for them. |
| 00:33:02> 00:33:05: | Next slide. So I've used up, |
| 00:33:05> 00:33:07: | I think four of my 5 minutes, |

| 00:33:07> 00:33:09: | so let me let me leave you with a couple |
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| 00:33:09> 00:33:10: | of thoughts. |
| 00:33:10> 00:33:14: | First, make sure that your risk analysis and planning or |
| 00:33:14> 00:33:18: | comprehensive Venice had all the players at the table, |
| 00:33:18> 00:33:20: | but they were only looking at part of the risk |
| 00:33:20> 00:33:21: | in South Florida. |
| 00:33:21> 00:33:24: | The communities understand the comprehensive risk, |
| 00:33:24> 00:33:27: | but the various players tend to make important land use |
| 00:33:28> 00:33:31: | decisions independently of others in the same watershed. |
| 00:33:31> 00:33:36: | Second, federal programs. Complicated and they were generally not designed |
| 00:33:36> 00:33:38: | to work with other federal programs, |
| 00:33:39> 00:33:41: | but in many cases they can staff and the agencies |
| 00:33:41> 00:33:43: | may not know how to do it. |
| 00:33:43> 00:33:45: | But there are folks who can help you. |
| 00:33:45> 00:33:48: | So review the tools that Doug discussed and the new |
| 00:33:48> 00:33:52: | technical assistance and the infrastructure bill that Alan talked about, |
| 00:33:52> 00:33:56: | talked to other communities, participate in groups like this like |
| 00:33:56> 00:33:57: | the UI Coastal Forum, |
| 00:33:57> 00:34:01: | share information and advice with your with your friends and |
| 00:34:01> 00:34:01: | neighbors. |
| 00:34:01> 00:34:03: | There is help out there, |
| 00:34:03> 00:34:05: | but sometimes you gotta dig. |
| 00:34:05> 00:34:09: | And third, remember that these risks are shared across the |
| 00:34:09> 00:34:10: | public and private sectors. |
| 00:34:10> 00:34:14: | So if you engage early on and you engage broadly, |
| 00:34:14> 00:34:17: | that broader coalition is going to have more opportunity to |
| 00:34:17> 00:34:18: | build solutions. |
| 00:34:18> 00:34:19: | So let me end it there. |
| 00:34:19> 00:34:23: | I added some more recent online resources that you'll be |
| 00:34:23> 00:34:26: | able to see in the in the copy of the |
| 00:34:26> 00:34:28: | presentation you get. |
| 00:34:28> 00:34:29: | And with that I'll throw it back to Alan. |
| 00:34:29> 00:34:32: | Thanks so much, Josh, and thanks for staying within the |
| 00:34:32> 00:34:32: | five minutes. |
| 00:34:32> 00:34:35: | Then yes, let's go now to a much. |
| 00:34:35> 00:34:38: | Really wide swath of territory up to the Great Lakes |
| 00:34:38> 00:34:40: | and the Saint Lawrence with John go ahead. |
| 00:34:44> 00:34:45: | Good |
| 00:34:45> 00:34:48: | afternoon, my name is John Altenburg and I'm here on |
| 00:34:48> 00:34:52: | behalf of the Great Lakes in Saint Lawrence Cities Initiative, |

| | both as a as the leader of the organization. |
|--|--|
| 00:34:56> 00:34:59: | Today I'm going to discuss our organization's approach, |
| 00:34:59> 00:35:01: | climate resilience over the past year, |
| 00:35:01> 00:35:06: | including efforts through our Mayor's Advisory Council on coastal resilience |
| 00:35:06> 00:35:08: | and other programs. |
| 00:35:08> 00:35:10: | We could move to the next slide. |
| 00:35:13> 00:35:17: | Our organization is made up of about 135 US and |
| 00:35:17> 00:35:22: | Canadian mayors working to advance protection, |
| 00:35:22> 00:35:25: | restoration of the Great Lakes and Saint Lawrence River. |
| 00:35:25> 00:35:28: | Currently, we're focusing heavily on COVID relief, |
| 00:35:28> 00:35:34: | but also water equity, water infrastructure funding and coastal resilience. |
| 00:35:34> 00:35:40: | Next slide, please. Really have to understand the problem. |
| 00:35:40> 00:35:43: | It's not just an issue of what's happening on our |
| 00:35:43> 00:35:44: | coastlines, |
| 00:35:44> 00:35:47: | this is on the East and West Coast on our |
| 00:35:47> 00:35:47: | oceans. |
| 00:35:47> 00:35:49: | But it's also our lakes, |
| 00:35:49> 00:35:53: | our our water levels in the Great Lakes and Saint |
| 00:35:53> 00:35:57: | Lawrence River basin are naturally variable and cyclical when it |
| | |
| 00:35:57> 00:35:59: | comes to highs and lows. |
| 00:35:57> 00:35:59: 00:35:59> 00:36:05: | comes to highs and lows. But over the last couple decades we've seen climate change |
| | 5 |
| 00:35:59> 00:36:05: | But over the last couple decades we've seen climate change |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: 00:36:13> 00:36:15: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last few years. |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: 00:36:13> 00:36:15: 00:36:15> 00:36:17: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last few years. But we've also seen low water levels. |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: 00:36:13> 00:36:15: 00:36:15> 00:36:17: 00:36:17> 00:36:23: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last few years. But we've also seen low water levels. This is caused considerable damage and also the results of significant severe storm storm actions have caused great |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: 00:36:13> 00:36:15: 00:36:15> 00:36:17: 00:36:17> 00:36:23: 00:36:23> 00:36:31: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last few years. But we've also seen low water levels. This is caused considerable damage and also the results of significant severe storm storm actions have caused great erosion across |
| 00:35:59> 00:36:05: 00:36:05> 00:36:07: 00:36:07> 00:36:13: 00:36:13> 00:36:15: 00:36:15> 00:36:17: 00:36:17> 00:36:23: 00:36:23> 00:36:31: 00:36:31> 00:36:32: | But over the last couple decades we've seen climate change exacerbates these. Fluctuations. Reaching high record levels of water over the last few years. But we've also seen low water levels. This is caused considerable damage and also the results of significant severe storm storm actions have caused great erosion across our lakes. |
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| 00:37:14> 00:37:18: | of losing water pressure for that community and for that |
|---------------------|--|
| 00:37:19> 00:37:19: | facility. |
| 00:37:19> 00:37:23: | So these are really severe issues that are affecting our |
| 00:37:23> 00:37:27: | communities in the Great Lakes and Saint Lawrence rivers. |
| 00:37:27> 00:37:31: | Because of our concerns that we've heard from our members |
| 00:37:31> 00:37:33: | of our communities, |
| 00:37:33> 00:37:38: | we conducted a study about a year ago. |
| 00:37:38> 00:37:41: | With over 300 communities around the Great Lakes and Saint |
| 00:37:41> 00:37:42: | Lawrence, |
| 00:37:42> 00:37:46: | both in EU S and in Canada to identify the |
| 00:37:46> 00:37:52: | issues around climate change and the issue of of shoreline |
| 00:37:52> 00:37:53: | resilience, |
| 00:37:53> 00:37:58: | our preliminary findings show that kulkyne communities anticipate. |
| 00:37:58> 00:38:02: | That there will be a huge financial needs over the |
| 00:38:02> 00:38:07: | next five to 10 years that will impact these communities. |
| 00:38:07> 00:38:12: | Based on the responsiveness of over 300 survey participants, |
| 00:38:12> 00:38:15: | we found that we are expecting over \$2 billion in |
| 00:38:16> 00:38:20: | damages that have to be addressed over the next five |
| 00:38:20> 00:38:20: | years. |
| 00:38:20> 00:38:25: | That's 1.95 billion in EU S and about .26 billion |
| 00:38:26> 00:38:27: | in Canada. |
| 00:38:27> 00:38:30: | Now this is only. Public sector properties. |
| 00:38:30> 00:38:33: | You could triple that when you start looking at private |
| 00:38:34> 00:38:37: | properties is what our estimates are the major issues, |
| 00:38:37> 00:38:42: | especially in recognizing that there are many communities that weren't |
| 00:38:42> 00:38:44: | represented in this need. |
| 00:38:44> 00:38:49: | Are all around resilience challenges that will likely persist way |
| 00:38:49> 00:38:52: | beyond this five year time frame. |
| 00:38:52> 00:38:56: | We also found that funding for mitigation projects and planning |
| 00:38:56> 00:39:01: | are highly are high priorities for our responding communities. |
| 00:39:01> 00:39:06: | Wherever existing funding opportunities at this point do not meet |
| 00:39:06> 00:39:12: | the need for these communities and specifically non federal matching |
| 00:39:12> 00:39:14: | is a significant problem. |
| 00:39:14> 00:39:20: | For our communities we have first hand information on these |
| 00:39:20> 00:39:20: | issues. |
| 00:39:20> 00:39:24: | Uh and most and powerful advocates of her federal funding |
| 00:39:24> 00:39:28: | that would really driving towards that financial need. |

| 00:39:28> 00:39:31: | And we've seen some of that result coming out with |
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| 00:39:31> 00:39:33: | the most recent infrastructure bill, |
| 00:39:33> 00:39:35: | where we're dealing with some of these issues, |
| 00:39:35> 00:39:37: | but it's still not going to be close to enough |
| 00:39:37> 00:39:41: | to deal with the coastal resilience issues that we're seeing |
| 00:39:41> 00:39:42: | across the lakes. |
| 00:39:42> 00:39:43: | Go to the next slide. |
| 00:39:45> 00:39:47: | So yes, it's going to be there at the end |
| 00:39:47> 00:39:48: | of the five minutes. |
| 00:39:48> 00:39:51: | I'm just going to say this is great and your |
| 00:39:51> 00:39:53: | slide and this can be and the deck or he |
| 00:39:53> 00:39:56: | will make this available to everybody. |
| 00:39:56> 00:40:01: | You've really identified the huge issue of underrepresented unmet needs |
| 00:40:01> 00:40:05: | and will go from 300 communities to 21 much larger |
| 00:40:05> 00:40:07: | river to a smaller one with Julie, |
| 00:40:07> 00:40:10: | so Julie, could you take us to the Mystic River |
| 00:40:10> 00:40:12: | outside of Boston please. |
| 00:40:12> 00:40:13: | Thanks John. |
| 00:40:13> 00:40:14: | Yep, thank you. |
| 00:40:18> 00:40:21: | We share my screen. Yep. |
| 00:40:30> 00:40:31: | Thank you very much for having me. |
| 00:40:33> 00:40:35: | l work for a nonprofit. |
| 00:40:35> 00:40:38: | I'm one of those circuit riders you we heard about |
| 00:40:38> 00:40:41: | briefly and this is what it looks like to actually |
| 00:40:41> 00:40:42: | have. |
| 00:40:42> 00:40:48: | Nonprofits and municipalities work together on regional climate resilience. |
| 00:40:48> 00:40:51: | So we have a major governance challenge that you may |
| 00:40:51> 00:40:52: | not all have, |
| 00:40:52> 00:40:56: | which is basically Massachusetts does not have functioning counties. |
| 00:40:56> 00:40:59: | So our watershed is about the size of Brooklyn, |
| 00:40:59> 00:41:02: | NY or Amsterdam, about the same number of people, |
| 00:41:02> 00:41:06: | but instead of one city or even one borough, |
| 00:41:06> 00:41:10: | we have 21 municipalities, each with their own budgets and |
| 00:41:10> 00:41:14: | cultures and politics and zoning ordinances, |
| 00:41:14> 00:41:19: | which makes it very challenging to tackle a collective action |
| 00:41:19> 00:41:20: | challenge. |
| 00:41:20> 00:41:23: | We came together for years ago to form the Resilient |
| 00:41:23> 00:41:24: | Mystic Collaborative. |
| 00:41:24> 00:41:28: | This is not regulatory. This is fully voluntary. |
| 00:41:28> 00:41:32: | This covers virtually the entire watershed and to date we |

| 00:41:32> 00:41:36: | have been able to secure \$5 million in public and |
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| 00:41:37> 00:41:37: | and. |
| 00:41:37> 00:41:42: | Philanthropic funding or regional climate resilience. |
| 00:41:42> 00:41:47: | Our theory of change is basically overcoming a governance barrier. |
| 00:41:47> 00:41:51: | We only look at those projects to make changes on |
| 00:41:51> 00:41:55: | the ground that individual municipalities cannot do themselves were data |
| 00:41:56> 00:41:57: | driven or action oriented. |
| 00:41:57> 00:42:01: | We're optimistic we support each other and we are a |
| 00:42:01> 00:42:06: | learning community where we try intelligent failure and try again. |
| 00:42:06> 00:42:09: | If it doesn't work. So we're not afraid to try |
| 00:42:09> 00:42:10: | new things. |
| 00:42:10> 00:42:15: | Are we have a steering committee predominantly made up of |
| 00:42:15> 00:42:17: | municipal leaders, |
| 00:42:17> 00:42:20: | engineers, senior engineer senior planners, |
| 00:42:20> 00:42:24: | but our work really takes place in working groups for |
| 00:42:24> 00:42:25: | these specific projects. |
| 00:42:25> 00:42:29: | Coastal resilience is in our lower watershed flood, |
| 00:42:29> 00:42:34: | stormwater, flood resilience in our upper watershed and advocacy and |
| 00:42:34> 00:42:36: | social resilience throughout. |
| 00:42:36> 00:42:39: | So I want to give you just a specific specific |
| 00:42:39> 00:42:41: | example of how we go from. |
| 00:42:41> 00:42:45: | A theory of change like we should manage climate at |
| 00:42:45> 00:42:49: | a watershed level to actually being in the UM. |
| 00:42:49> 00:42:52: | Position of getting 10s of millions of dollars in federal |
| 00:42:52> 00:42:54: | funding over the next few years. |
| 00:42:56> 00:43:01: | So one of our first goals was to manage stormwater |
| 00:43:01> 00:43:08: | flooding with when extreme precipitation hits old stormwater infrastructure. |
| 00:43:08> 00:43:11: | Because we have Cambridge in our watershed, |
| 00:43:11> 00:43:17: | they had done \$1,000,000 very sophisticated hydro hydrologic model just |
| 00:43:17> 00:43:20: | to look at their own blood challenges. |
| 00:43:20> 00:43:23: | But then they gave that model to the rest of |
| 00:43:23> 00:43:28: | the watershed who then both added their stormwater systems and |
| 00:43:28> 00:43:29: | did some ground truthing. |
| 00:43:29> 00:43:32: | We now have a watershed wide model. |
| 00:43:32> 00:43:35: | Where we can test our potential solutions to see if |
| 00:43:35> 00:43:39: | will make a difference in terms of actual flooding on |

| 00:43:39> 00:43:39: | the ground? |
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| 00:43:39> 00:43:43: | So our first thought was let's create more stormwater wetlands. |
| 00:43:43> 00:43:48: | We ve found almost 500 candidates and we are funding the |
| 00:43:49> 00:43:53: | first three to then start storing water upstream. |
| 00:43:53> 00:43:55: | The second goal was coastal flooding. |
| 00:43:55> 00:43:59: | Boston made the mistake of filling in its coastal marshes |
| 00:43:59> 00:43:59: | not very much and building a lot of expensive stuff |
| 00:44:03> 00:44:04: | |
| 00:44:03> 00:44:04: | on top of it. |
| | So within 50 years we will flood regularly. |
| 00:44:09> 00:44:15: | These Gray areas contain much of the the critical infrastructure |
| 00:44:15> 00:44:18: | for Greater Boston and will flood, |
| 00:44:18> 00:44:22: | on average more than every other year. |
| 00:44:22> 00:44:25: | What we found, however, by working together, |
| 00:44:25> 00:44:27: | is that there were some key, |
| 00:44:27> 00:44:33: | much less expensive flood pathways where if blocked. |
| 00:44:33> 00:44:38: | We could go from this kind of extensive saltwater flooding. |
| 00:44:38> 00:44:42: | In a 1% storm 50 years from now to blocking |
| 00:44:42> 00:44:43: | this mush, |
| 00:44:43> 00:44:46: | uh, and that's, uh, that's less than a half a |
| 00:44:46> 00:44:47: | billion dollars of investment. |
| 00:44:47> 00:44:51: | Probably quite a bit less than a half million dollars |
| 00:44:51> 00:44:51: | investment. |
| 00:44:51> 00:44:53: | And given this is a major metropolitan region. |
| 00:44:56> 00:45:00: | So where we went from establishing ourselves three years ago? |
| 00:45:00> 00:45:05: | To gaining the money needed to do initial data gathering |
| 00:45:05> 00:45:06: | and goal setting, |
| 00:45:06> 00:45:09: | we now have about a half a billion dollars of |
| 00:45:10> 00:45:14: | shovel worthy regional projects of highest priority to to tap |
| 00:45:14> 00:45:19: | infrastructure and hopefully build back better funding over the next |
| 00:45:19> 00:45:22: | several years. So we know what we want to tackle |
| 00:45:22> 00:45:25: | this year and will be applying for funding will be |
| 00:45:25> 00:45:30: | applying for state funding to develop additional projects that |
| | are |
| 00:45:30> 00:45:34: | not quite shovel ready. But we've already gained the local |
| 00:45:34> 00:45:36: | support to move these projects forward. |
| 00:45:36> 00:45:39: | Because of this collaborative. |
| 00:45:40> 00:45:45: | Thanks, that's a great example of Interlocal cooperation and really |
| 00:45:45> 00:45:47: | timing yourself. |
| 00:45:47> 00:45:49: | Getting ready for all the influx of funding, |

| I'm going to turn now. |
|--|
| Thanks so much. It'll turn out that Jim Finch, |
| who will take it very local in Branford, |
| CT, who's done some very innovative work and financing resilience |
| in his community. |
| So Jim, it's your |
| OK. OK, thank you Alan. |
| I appreciate that I'm going to be telling a little |
| bit of a story about the town of Branford in |
| the next 6 to 7 minutes. |
| So I want to cover Branford experience in setting up |
| a coastal resiliency fund. |
| I want to talk about our legislative efforts and I |
| want to talk about how this funding could be used |
| in the future to leverage grants and also be used |
| to leverage any legislative initiatives in Connecticut which would involve |
| using non property tax revenues and I do have a |
| model which I'll try to get you through the presentation. |
| So, so why Branford as Allen pointed out we are |
| located in Long Island Sound. |
| We're about 28,000 people. We us being a coastal community, |
| we certainly have our exposure with rising sea level in |
| terms of how it impacts the town, |
| roads, infrastructure, etc. This was a fact that was not |
| lost on our plan of conservation and development who incorporated |
| a number of studies, |
| but they came out with what I would consider at |
| first glance. |
| It very provocative statement in which they said that the |
| scope of the issues associated with sea level rise. |
| Is so extensive and expensive that it will be difficult |
| if not impossible for the town of Branford to address |
| them all so we could advance to the next slide. |
| And that's the quote that I was talking about. |
| It has an element of gloom and doom to that, |
| so please advance to the next slide. |
| So I asked, are we depressed yet? |
| And I don't think it was the intent of the |
| conservation development folks to depress us. |
| |

| 00:47:39> 00:47:42: | I think it really was sort of a call to |
|---------------------|--|
| 00:47:42> 00:47:46: | action on the part of local leaders to try to |
| 00:47:46> 00:47:50: | come up with creative ways to address the situation. |
| 00:47:50> 00:47:53: | So we go the next slide. |
| 00:47:53> 00:47:54: | I love this quote from Arthur Ashe, |
| 00:47:54> 00:47:58: | because while I don't believe Arthur Ashe was necessarily talking |
| 00:47:58> 00:48:00: | about sea level rise and climate issues, |
| 00:48:00> 00:48:05: | I think it provides a good philosophical underpinning for the |
| 00:48:05> 00:48:06: | approach to take, |
| 00:48:06> 00:48:08: | and I couldn't help but think during Doug slide on |
| 00:48:08> 00:48:11: | coastal inundacion that it has some of the elements that |
| 00:48:11> 00:48:13: | he pointed to get started. |
| 00:48:13> 00:48:16: | Access data visualized, communicate and take action so we could |
| 00:48:16> 00:48:17: | go to the next slide. |
| 00:48:20> 00:48:23: | So as we begin thinking about brainstorming about ideas, |
| 00:48:23> 00:48:24: | one of the thoughts and again, |
| 00:48:24> 00:48:27: | I'm a finance person, so I'm kind of looking at |
| 00:48:27> 00:48:29: | it through the lens of a finance director. |
| 00:48:29> 00:48:32: | Is what if we towns and cities could establish a |
| 00:48:32> 00:48:32: | fund, |
| 00:48:32> 00:48:36: | invest the assets similar to a pension plan to provide |
| 00:48:36> 00:48:40: | an additional funding source to combat the future liabilities associated |
| 00:48:41> 00:48:42: | with climate change, |
| 00:48:42> 00:48:44: | and I think that's an important way to frame it |
| 00:48:44> 00:48:47: | when you're when you're making a pitch to financial quotes, |
| 00:48:47> 00:48:50: | especially appropriating bodies, is it real? |
| 00:48:50> 00:48:52: | Well, we're really doing is we're funding a liability, |
| 00:48:52> 00:48:56: | and in doing so not kicking that liability down the |
| 00:48:56> 00:48:59: | road and being faithful to future generations. |
| 00:48:59> 00:49:03: | Next slide, please. So before you can invest money like |
| 00:49:03> 00:49:04: | a pension fund, |
| 00:49:04> 00:49:05: | you have to save it first. |
| 00:49:05> 00:49:08: | You have to say before you invest in. |
| 00:49:08> 00:49:12: | Fortunately, Branford has a financial culture where we're very good |
| 00:49:12> 00:49:15: | at funding are what we don't deem as liabilities are |
| 00:49:15> 00:49:15: | pensions. |
| 00:49:15> 00:49:20: | Other post employment benefits. We run self insurance funds so. |
| 00:49:20> 00:49:24: | In early 2019 that bought a financing RTM took \$1,000,000 |

| 00:49:24> 00:49:28:from reserves and created a coastal resiliency fund.00:49:28> 00:49:31:Next slide please. Now, as I said,00:49:31> 00:49:34:we were looking to invest that money so that money00:40:24 -> 00:49:37:construction of the state for the sta | |
|---|-------|
| 00:49:31> 00:49:34: we were looking to invest that money so that money | |
| o y y | |
| 00:49:34> 00:49:37: can grow and match future liabilities. | |
| 00:49:37> 00:49:39: However, we did not have the ability to do so | |
| 00:49:40> 00:49:43: because Connecticut law needed to change for us to cro | ate |
| 00:49:43 > 00:49:46: climate change and coastal resiliency funds. | Jaio |
| 00:49:46 > 00:49:49: And so we worked very hard myself, | |
| 00:49:49> 00:49:52: the first selectman. Our state delegation. | |
| 5 | |
| , , , , , , , , , , , , , , , , , , , | |
| 00:49:56 > 00:49:59: up in Hartford and it was signed into law by | |
| 00:49:59> 00:50:01: Governor Lamont in 2019. | |
| 00:50:01> 00:50:05: And that law is go to the next slide is | |
| 00:50:05> 00:50:05: PA 1977. | |
| 00:50:05> 00:50:08: I'm not going to read every item there, | |
| 00:50:08> 00:50:10: but some of the important takes away is. | |
| 00:50:10> 00:50:13: It does recognize that climate change is a long term | |
| 00:50:13> 00:50:13: liability. | |
| 00:50:13> 00:50:16: We should invest today for that future. | |
| 00:50:16> 00:50:18: It provides another tool in addition to grants, | |
| 00:50:18> 00:50:21: bonds pay as you go on low return sinking funds | |
| 00:50:21> 00:50:23: that allows you to invest up to 50% | |
| 00:50:23> 00:50:26: in equities, which based on a 2017 study by the | |
| 00:50:26> 00:50:28: Vanguard group showed that 50% | |
| 00:50:28> 00:50:32: stock and bond portfolio on average can earn an 8.4%. | |
| 00:50:32> 00:50:34: And will return not a bad return when you're trying | |
| 00:50:35> 00:50:38: to combat the liabilities associated with climate change. | |
| 00:50:38> 00:50:41: And it's also very important is when when folks like | |
| 00:50:41> 00:50:45: Branford issues debt as a state or other entities. | |
| 00:50:45> 00:50:50: The bond rating agencies are applying different standar their | ds to |
| 00:50:50> 00:50:53: towns and their issuers called ESG environmental, | |
| 00:50:53> 00:50:58: social and governance and setting up a coastal resilient | у |
| fund | mo |
| 00:50:58> 00:51:03: is actually something that they look favorably upon in te | ms |
| 00:51:03> 00:51:04: of their ESG. | |
| 00:51:04 > 00:51:06: A review of the town of Bradford, | |
| 00:51:06> 00:51:07: so we go to the next slide. | |
| 00:51:10> 00:51:13: So this past legislative session, | |
| 00:51:13> 00:51:15: there was a Bill 6441 which did a lot of | |
| 00:51:16> 00:51:16: good things. | |
| 00:51:16> 00:51:20: Most of them passed, but one part that didn't pass | |
| 00:51:20> 00:51:24: was to have a real estate conveyance fee that could | |

| 00:51:24> 00:51:28: | be used to support and fund climate change initiatives. |
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| 00:51:28> 00:51:31: | So the question then that we asked ourselves in Branford, |
| 00:51:31> 00:51:33: | is there a way we could look at the real |
| 00:51:33> 00:51:37: | estate conveyance we could look at our existing coastal resiliency |
| 00:51:37> 00:51:38: | fund and what other tools? |
| 00:51:38> 00:51:43: | We have available to leverage federal resiliency funds, |
| 00:51:43> 00:51:46: | so we go to the next slide. |
| 00:51:46> 00:51:48: | So I'm not going to read all of this, |
| 00:51:48> 00:51:50: | but this is here for a resource. |
| 00:51:50> 00:51:53: | This kind of tells you the how the Coastal Resiliency |
| 00:51:53> 00:51:56: | Fund would would receive the dollars from the real estate |
| 00:51:56> 00:51:57: | conveyance fee. |
| 00:51:57> 00:52:01: | The different bend points in terms of how that tax |
| 00:52:01> 00:52:04: | would be applied and how those funds could be used. |
| 00:52:04> 00:52:07: | As I said, they could be used to deposit at |
| 00:52:07> 00:52:09: | coastal Resiliency Fund next slide. |
| 00:52:11> 00:52:14: | And one of the key components of that is that |
| 00:52:14> 00:52:18: | it could also be used these dollars from a convenience |
| 00:52:18> 00:52:22: | fee into the Coastal Resiliency Fund to finance projects with |
| 00:52:22> 00:52:24: | debt. So in other words, |
| 00:52:24> 00:52:27: | the dollars coming in from those resources could be used |
| 00:52:27> 00:52:30: | to pay principal and interest on municipal borrowing, |
| 00:52:30> 00:52:32: | so that that's the leveraging piece, |
| 00:52:32> 00:52:37: | which is, which is very important so. |
| 00:52:37> 00:52:38: | So we'll go to the next slide, |
| 00:52:38> 00:52:41: | please. And this this is. |
| 00:52:41> 00:52:42: | This is a key thing. |
| 00:52:42> 00:52:44: | This kind of gives you an idea of how this |
| 00:52:44> 00:52:45: | would work, |
| 00:52:45> 00:52:47: | so this is a hypothetical project. |
| 00:52:47> 00:52:51: | \$17 million project getting a 65% |
| 00:52:51> 00:52:55: | FEMA funding. And essentially I used 65% |
| 00:52:56> 00:53:00: | because we're looking at this that that we could have |
| 00:53:00> 00:53:02: | roughly ineligible costs, |
| 00:53:02> 00:53:05: | and then that would be 5 million 950. |
| 00:53:05> 00:53:07: | We borrow it 200 quarter percent. |
| 00:53:07> 00:53:10: | I'm using estimated revenues from the convenience fees. |
| 00:53:10> 00:53:11: | And when you kind of play that out, |
| 00:53:11> 00:53:14: | you can see we have our beginning balance in the |
| 00:53:14> 00:53:15: | Coastal Resiliency Fund. |
| 00:53:15> 00:53:18: | We have our general fund contributions to conveyance fee, |

| 00:53:18> 00:53:20: | the bond proceeds, the long and short of it. |
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| 00:53:20> 00:53:21: | You look at the error. |
| 00:53:21> 00:53:24: | We're doing a \$17 million project without any additional tax |
| 00:53:25> 00:53:27: | revenue and the ending balance. |
| 00:53:27> 00:53:29: | You can see the assets in the fund are growing, |
| 00:53:29> 00:53:31: | so we go to the last slide. |
| 00:53:31> 00:53:36: | Next two slides, please. Any one more? |
| 00:53:36> 00:53:38: | Trying to catch up on time and so so so |
| 00:53:38> 00:53:42: | there's a lot of stuff in terms of the attachments |
| 00:53:42> 00:53:42: | and links, |
| 00:53:42> 00:53:45: | but I think there's two quotes I think really embodies |
| 00:53:45> 00:53:48: | some of the philosophy you see them there as society |
| 00:53:48> 00:53:49: | grows great when it's older. |
| 00:53:49> 00:53:52: | Citizens plant trees under whose shade they know they'll |
| | never |
| 00:53:52> 00:53:52: | sit in, |
| 00:53:52> 00:53:55: | or planting the seeds for the future in our coastal |
| 00:53:55> 00:53:55: | resiliency fund. |
| 00:53:55> 00:53:58: | And then the other is a creation of 1000 forests, |
| 00:53:58> 00:54:01: | isn't 18 corn today's mighty oak is just yesterday is |
| 00:54:01> 00:54:02: | not that held its ground. |
| 00:54:02> 00:54:04: | The best time to plant a tree is 20 years |
| 00:54:04> 00:54:04: | ago, |
| 00:54:04> 00:54:06: | the second best time is now. |
| 00:54:06> 00:54:10: | And with that, there's some link to additional resources, |
| 00:54:10> 00:54:13: | and I'll await the questions. |
| 00:54:13> 00:54:16: | Thanks, Jim. This is very fascinating. |
| 00:54:16> 00:54:18: | This is really great. I appreciate the detail. |
| 00:54:18> 00:54:22: | Let's actually start with a really challenging question. |
| 00:54:22> 00:54:25: | You mentioned that. That real estate conveyance fee was taken |
| 00:54:26> 00:54:28: | out of the bill at the last moment. |
| 00:54:28> 00:54:30: | I think you've said that that was in part because |
| 00:54:30> 00:54:33: | they were made in large part because of the real |
| 00:54:33> 00:54:35: | estate community and in Connecticut. |
| 00:54:35> 00:54:37: | So throwing this question to |
| 00:54:37> 00:54:38: | all of the panelists. |
| 00:54:39> 00:54:40: | If this is a good idea, |
| 00:54:40> 00:54:45: | how does that sort of opposition get overcome? |
| 00:54:45> 00:54:47: | Jim up, throw it back you first, |
| 00:54:47> 00:54:49: | I mean, do you have any sense of how you |
| 00:54:49> 00:54:51: | might overcome this in the next legislature? |
| 00:54:51> 00:54:53: | And I mentioned this because I talked to a member |

| 00:54:53> 00:54:55: | of City Council and another large city who's also a |
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| 00:54:55> 00:54:55: | realtor. |
| 00:54:55> 00:54:58: | She said, you know, the incremental cost of this is |
| 00:54:58> 00:55:00: | really nothing on a conveyance. |
| 00:55:00> 00:55:02: | It really ought to be an easy lift for a |
| 00:55:02> 00:55:03: | purchase of a home, |
| 00:55:03> 00:55:06: | especially for new. They're investing and in resilience. |
| 00:55:06> 00:55:08: | So what's your next step in getting us through? |
| 00:55:09> 00:55:11: | Well, I'm not. I'm not an expert on politics, |
| 00:55:11> 00:55:13: | but I think that you build a coalition. |
| 00:55:13> 00:55:16: | We have groups like ULI. |
| 00:55:16> 00:55:20: | The Sierra Club, Connecticut Conference municipalities a whole host of |
| 00:55:20> 00:55:21: | different groups. |
| 00:55:21> 00:55:24: | I think we need to start early and we started |
| 00:55:24> 00:55:26: | need to engage the real estate community. |
| 00:55:26> 00:55:30: | There were other bills that involved resiliency financing in the |
| 00:55:30> 00:55:31: | last session, |
| 00:55:31> 00:55:35: | some of which were actually supported by the Connecticut Association |
| 00:55:35> 00:55:36: | or Realtors. |
| 00:55:36> 00:55:40: | So I think early engagement is important early in the |
| 00:55:40> 00:55:44: | process and and maybe we can show them some things |
| 00:55:44> 00:55:46: | like the model you just saw. |
| 00:55:46> 00:55:49: | And maybe can create a compelling narrative to allow them |
| 00:55:49> 00:55:51: | to kind of get behind this if they, |
| 00:55:51> 00:55:53: | and if they see it in a long term interest, |
| 00:55:53> 00:55:56: | then I think you know that that's a good approach |
| 00:55:56> 00:55:56: | to take, |
| 00:55:56> 00:55:59: | but I think absent some aggressive engagement, |
| 00:55:59> 00:55:59: | I think it's going to be. |
| 00:55:59> 00:56:02: | It's going to be a another barrier. |
| 00:56:02> 00:56:03: | Julie |
| 00:56:03> 00:56:06: | or John or Josh. Give any comments to add to |
| 00:56:06> 00:56:06: | that. |
| 00:56:06> 00:56:08: | Thinking of your own local efforts. |
| 00:56:09> 00:56:11: | I, I mean, I think that's a good approach. |
| 00:56:11> 00:56:12: | I think we have to. |
| 00:56:12> 00:56:13: | You have to build the coalition. |
| 00:56:13> 00:56:17: | You have to make it clear to the political leadership |
| 00:56:17> 00:56:19: | that you know there's a benefit to this, |
| 00:56:19> 00:56:23: | and there aren't downsides to them politically, |
| | ······································ |

| 00:56:23> 00:56:25: | and that's generally how you get stuff through. |
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| 00:56:25> 00:56:29: | Usually things get held up either because they don't understand |
| 00:56:29> 00:56:33: | it or because somebody feels that they are disadvantaged by |
| 00:56:33> 00:56:33: | it. |
| 00:56:33> 00:56:37: | And you have to kind of understand the politics around |
| 00:56:37> 00:56:39: | it because it makes sense. |
| 00:56:40> 00:56:41: | And went up to our questions in the chat. |
| 00:56:41> 00:56:43: | Maybe we can see it. |
| 00:56:43> 00:56:45: | Is this model Jimmy you're talking about? |
| 00:56:45> 00:56:47: | Seems to look at just economic benefits. |
| 00:56:47> 00:56:50: | And yet there are potential Co benefits that could be |
| 00:56:50> 00:56:52: | calculated to better public health outcomes, |
| 00:56:52> 00:56:57: | lower commuting times. So perhaps that's also a step |
| 00.30.32> 00.30.37. | forward |
| 00:56:57> 00:57:01: | in the creating a constituency of advocates for this sort |
| 00:57:01> 00:57:02: | of thing. |
| 00:57:02> 00:57:05: | Want to turn to Julie? |
| 00:57:05> 00:57:08: | Could you talk Julie a little bit more about the |
| 00:57:08> 00:57:08: | UM, |
| 00:57:08> 00:57:12: | is it necessary to have a standing regional coalition in |
| 00:57:12> 00:57:14: | order to do regional climate projects? |
| 00:57:14> 00:57:18: | I'm interested in the puts and takes of assembling a |
| 00:57:18> 00:57:20: | coalition as you did. |
| 00:57:20> 00:57:22: | Can you run you got you're not |
| 00:57:22> 00:57:24: | good? I |
| 00:57:24> 00:57:28: | think it's very easy to have a coalition that doesn't |
| 00:57:28> 00:57:29: | do very well, |
| 00:57:29> 00:57:33: | but I would say a high functioning coalition is essential |
| 00:57:33> 00:57:35: | for doing these cross boundary. |
| 00:57:35> 00:57:41: | Efforts that require trust and collaboration and mutual benefit. |
| 00:57:41> 00:57:44: | One of the things we did when we set up |
| 00:57:44> 00:57:48: | the resilient Mr Collaborative is we first went to thought |
| 00:57:48> 00:57:51: | leaders in each of the lead communities in the watershed |
| 00:57:51> 00:57:55: | and said what can't you do within your own boundaries? |
| 00:57:55> 00:57:58: | And how can a collaborative nonprofit help? |
| 00:57:58> 00:58:00: | And they said we got enough training. |
| 00:58:00> 00:58:04: | We've got enough planning. We want to do stuff on |
| 00:58:04> 00:58:06: | the ground and we have no staff. |
| 00:58:06> 00:58:09: | To help us work with their neighbors might as well |
| 00:58:09> 00:58:10: | be there be Dragons. |
| 00:58:10> 00:58:13: | So the way we work is it's really municipal lead |
| 00:58:13> 00:58:18: | and I would say that if municipalities were organized |
| | |

| | effectively |
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| 00:58:18> 00:58:22: | it would overcome real estate lobbying because I think |
| | municipalities |
| 00:58:22> 00:58:25: | do have that centrist moral authority. |
| 00:58:25> 00:58:29: | Uhm, but having municipalities work together long term with staff |
| 00:58:29> 00:58:31: | to take the effort off their plates. |
| 00:58:31> 00:58:33: | So it's really about decision making, |
| 00:58:33> 00:58:35: | not worker bees. It's very, |
| 00:58:35> 00:58:39: | very effective. And it does get the mayor's very easily |
| 00:58:39> 00:58:40: | engaged in in our efforts. |
| 00:58:42> 00:58:43: | John open per give her. |
| 00:58:43> 00:58:47: | We've heard Julie talk about the technical assistance and |
| | how |
| 00:58:47> 00:58:48: | sometimes it's hard, |
| 00:58:48> 00:58:52: | especially for smoking entities to even get the wherewithal to |
| 00:58:52> 00:58:55: | put together a grant proposal to get funding. |
| 00:58:55> 00:58:57: | What's been your experience and how does that relate to |
| 00:58:57> 00:59:00: | what we're looking at in terms of the federal funding |
| 00:59:00> 00:59:01: | that's coming forward? |
| 00:59:01> 00:59:03: | What advice do you have in a practice for? |
| 00:59:03> 00:59:07: | For the practical aspect of qualifying and getting application in? |
| 00:59:08> 00:59:12: | Of the cities that we we we interviewed with on |
| 00:59:12> 00:59:12: | the research, |
| 00:59:12> 00:59:16: | we saw a big difference between smaller and medium sized |
| 00:59:16> 00:59:17: | cities and large cities. |
| 00:59:17> 00:59:21: | When it comes to capabilities to even engage with federal |
| 00:59:21> 00:59:24: | government to try to receive funding, |
| 00:59:24> 00:59:26: | they just don't have the resources. |
| 00:59:26> 00:59:27: | They don't have the people, |
| 00:59:27> 00:59:29: | they don't have the understanding of the situation, |
| 00:59:29> 00:59:33: | so getting back to what we were talking about about |
| 00:59:33> 00:59:35: | collaboration between communities, |
| 00:59:35> 00:59:37: | that's what we're trying to do, |
| 00:59:37> 00:59:41: | which is to. Uh, have each community work with each |
| 00:59:41> 00:59:45: | other to go after funding jointly and finding joint solutions |
| 00:59:45> 00:59:49: | to be able to even apply for this funding, |
| 00:59:49> 00:59:53: | let alone having an understanding of how to engage and |
| 00:59:53> 00:59:59: | actually take this funding and develop solutions so collaborations is |
| 00:59:59> 01:00:01: | going to be extremely important. |
| 01:00:03> 01:00:05: | And just turning to you. |
| | |

| 04.00.05 > 04.00.07. | Therefore, John Turning to you |
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| 01:00:05> 01:00:07: | Thank you John. Turning to you. What's the sort of a model for the coastal communities |
| 01:00:07> 01:00:11: | |
| 01:00:11> 01:00:17: | could adopt to effectively plan and implement resilience project? |
| 01:00:17> 01:00:20: | Is there some sort of especially good model that you |
| 01:00:20> 01:00:21: | would advocate? |
| 01:00:22> 01:00:25: | Thanks, Alan, you know there's there's no silver bullet in |
| 01:00:25> 01:00:26: | this. |
| 01:00:26> 01:00:28: | I think you know I always get calls from folks |
| 01:00:28> 01:00:30: | who were like what's the, |
| 01:00:30> 01:00:31: | you know? What's the model? |
| 01:00:31> 01:00:34: | What's the the one size fits all approach? |
| 01:00:34> 01:00:36: | For this and then there are a lot of folks |
| 01:00:36> 01:00:37: | out there trying to sell that. |
| 01:00:37> 01:00:40: | But what we find is each community is different. |
| 01:00:40> 01:00:43: | You know, some states or Dillon rule States and |
| | municipalities |
| 01:00:44> 01:00:45: | don't have control, |
| 01:00:45> 01:00:46: | they have to go to the state to get it. |
| 01:00:46> 01:00:49: | Some states are home rule States and they have more |
| 01:00:49> 01:00:50: | control. |
| 01:00:50> 01:00:52: | It really depends on where you are. |
| 01:00:52> 01:00:57: | Some have a robust business economy where they will |
| | invest |
| 01:00:57> 01:00:58: | in it, |
| 01:00:58> 01:01:01: | and that's the difference. Is you really have to look |
| 01:01:01> 01:01:04: | at your own situation and kind of build something. |
| 01:01:04> 01:01:07: | That's unique to your problem. |
| 01:01:07> 01:01:09: | If I I wish I had the perfect answer, |
| 01:01:09> 01:01:11: | 'cause I could probably sell that all over town. |
| 01:01:12> 01:01:16: | Well, I think the lesson here is we're all building |
| 01:01:16> 01:01:19: | our our our individual answers through enter through our own |
| 01:01:19> 01:01:24: | particular community needs and also collaborating as Julian and others |
| 01:01:24> 01:01:26: | have pointed out in this call, |
| 01:01:26> 01:01:29: | and I think it's really important as we think of |
| 01:01:29> 01:01:29: | resilience. |
| 01:01:29> 01:01:32: | So we saw a definition on the screen earlier and |
| 01:01:32> 01:01:33: | I like the one. |
| 01:01:33> 01:01:36: | I hope that Kevin Bush is going to use it |
| 01:01:36> 01:01:39: | in panel number two because I've heard him use this |
| 01:01:39> 01:01:42: | definition on the sandy beach of Staten Island at the |
| 01:01:42> 01:01:46: | inauguration of a HUD. Fronted resilience Project and Kevin |
| | |

| | Bush |
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| 01:01:46> 01:01:49: | said resilience is the immune system of the community, |
| 01:01:49> 01:01:51: | and I think that's really important, |
| 01:01:51> 01:01:55: | and I think it's important as we look at the |
| 01:01:55> 01:01:57: | environmental justice. |
| 01:01:57> 01:02:00: | The equity issue Jim, you mentioned this as part of |
| 01:02:00> 01:02:03: | something that Wall Street is looking about and he, |
| 01:02:03> 01:02:07: | SG or Julie, what are you finding in the way |
| 01:02:07> 01:02:12: | of the challenge of making sure that the frontline communities |
| 01:02:12> 01:02:13: | or engaged? |
| 01:02:13> 01:02:15: | As you look at the water line. |
| 01:02:17> 01:02:17: | It |
| 01:02:17> 01:02:22: | it's a dramatically different process to engage frontline communities. |
| 01:02:22> 01:02:26: | When we did, a vulnerability assessment of our coastal communities, |
| 01:02:26> 01:02:30: | we spent fully half of it on surveys in people's |
| 01:02:30> 01:02:31: | first languages. |
| 01:02:31> 01:02:33: | For those folks who are very low income and at |
| 01:02:34> 01:02:35: | risk of losing everything. |
| 01:02:35> 01:02:39: | And we wouldn't have gotten the kind of insights regard |
| 01:02:39> 01:02:43: | had we done that through public workshops where only really |
| 01:02:43> 01:02:44: | resilient people, |
| 01:02:44> 01:02:46: | often who are paid to be there, |
| 01:02:46> 01:02:49: | give us insights. I don't have the insight of somebody |
| 01:02:49> 01:02:52: | who's really living on the edge because I don't. |
| 01:02:52> 01:02:54: | So, uhm, particulare |
| 01:02:54> 01:02:58: | insight that you can you share a particular insight. |
| 01:02:58> 01:02:58: | There was a real |
| 01:02:58> 01:03:03: | absolutely, so we worked with infrastructure facilities to look at |
| 01:03:03> 01:03:07: | what how they would fall apart if Boston got a |
| 01:03:07> 01:03:08: | Superstorm Sandy. |
| 01:03:08> 01:03:11: | And there were things like losing our harbor tunnels, |
| 01:03:11> 01:03:13: | losing the subway, losing the grid, |
| 01:03:13> 01:03:16: | you know they were sort of things you'd expect. |
| 01:03:16> 01:03:18: | But for very low income people, |
| 01:03:18> 01:03:22: | we then asked them if these infrastructure facilities fell apart. |
| 01:03:22> 01:03:23: | What would happen to your lives? |
| 01:03:23> 01:03:27: | And they said. When we can't get to work because |
| 01:03:27> 01:03:30: | we are essential workers who have to be at work |
| 01:03:30> 01:03:32: | to live to to get paid, |

| 01:03:32> 01:03:36: | our lives fall apart so fast so we need buses |
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| 01:03:36> 01:03:39: | to run and subways to be plowed right away. |
| 01:03:39> 01:03:42: | They also don't have the funds to have a wife |
| 01:03:43> 01:03:44: | Wi-Fi at home, |
| 01:03:44> 01:03:47: | so they totally rely on their cell phones for Internet |
| 01:03:47> 01:03:47: | access. |
| 01:03:47> 01:03:50: | So thinking about how can we keep the grid up? |
| 01:03:50> 01:03:51: | How can we get keep cell phones up, |
| 01:03:51> 01:03:55: | particularly cell service off, particularly in low income? |
| 01:03:55> 01:03:59: | Neighborhoods and how can we help people get to work? |
| 01:03:59> 01:04:02: | Those didn't show up in our infrastructure assessment. |
| 01:04:02> 01:04:04: | Alan, if I can jump in for one second, |
| 01:04:04> 01:04:08: | but the value of infrastructure is different to different people |
| 01:04:08> 01:04:11: | and this is something that we really have to kind |
| 01:04:11> 01:04:12: | of look at, |
| 01:04:12> 01:04:15: | and I think that the administration needs to look at |
| 01:04:15> 01:04:16: | this in how they look at that. |
| 01:04:16> 01:04:21: | Their Justice 40 initiative. Because when you accrue value |
| 01:04:21> 01:04:23: | too low income and minority populations, |
| 01:04:23> 01:04:25: | it's not just you know, |
| 01:04:25> 01:04:29: | the the power plant serves everybody but. |
| 01:04:29> 01:04:31: | You know, rich people can go stay in a hotel |
| 01:04:31> 01:04:34: | or go to their other house or other things poor |
| 01:04:34> 01:04:36: | people if the power's out. |
| 01:04:36> 01:04:37: | If the water is out. |
| 01:04:37> 01:04:39: | If the cell service is out, |
| 01:04:39> 01:04:40: | they can't get to work. |
| 01:04:40> 01:04:44: | They can't feed their families and their cold and so |
| 01:04:45> 01:04:46: | those are important. |
| 01:04:46> 01:04:49: | They are more important to different people and we have |
| 01:04:49> 01:04:50: | to look at that value. |
| 01:04:52> 01:04:53: | Go ahead Julie, |
| 01:04:53> 01:04:56: | and that's where just looking at financial benefit. |
| 01:04:56> 01:04:59: | Cost analysis is really backwards because you're not necessarily. |
| 01:04:59> 01:05:02: | You don't have as much total. |
| 01:05:02> 01:05:04: | Money at risk, but you have a higher percentage of |
| 01:05:05> 01:05:06: | people's livelihoods at risk. |
| 01:05:07> 01:05:10: | I appreciate those comments. I was in a call yesterday |
| 01:05:10> 01:05:13: | where someone said the challenge for us in our field |
| 01:05:13> 01:05:16: | is that we not lovingly and importantly, |
| 01:05:16> 01:05:20: | create new infrastructure. That's a barrier for frontline |
| | |

| | communities, |
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| 01:05:20> 01:05:22: | so I think on that note, |
| 01:05:22> 01:05:25: | I'm going to call this panel to a conclusion. |
| 01:05:25> 01:05:28: | Thank you all, and now I'm going to turn it |
| 01:05:28> 01:05:30: | over to Miss Honeycutt, |
| 01:05:30> 01:05:32: | who's going to be the moderator. |
| 01:05:32> 01:05:35: | Our next panel. She's from the office of Science and |
| 01:05:35> 01:05:36: | Technology policies, |
| 01:05:36> 01:05:40: | so here we go. Maria. |
| 01:05:42> 01:05:43: | Alright, |
| 01:05:43> 01:05:47: | good afternoon. I'm trying to in my zoom challenged environment. |
| 01:05:47> 01:05:49: | See if I'm actually showing up. |
| 01:05:49> 01:05:51: | OK good. You are, yeah, |
| 01:05:51> 01:05:54: | the White House film has some extra layers of security |
| 01:05:54> 01:05:56: | on zoom so you never quite know if it's it'll |
| 01:05:56> 01:05:57: | work when you need it. |
| 01:05:57> 01:06:01: | So thank you, Alan. Alright, |
| 01:06:01> 01:06:05: | so good afternoon again. Let me echo others in welcome, |
| 01:06:05> 01:06:10: | being a glad to be participating in this ULI Coastal |
| 01:06:10> 01:06:10: | forum, |
| 01:06:10> 01:06:13: | Allen said on Doctor Maria Honeycutt. |
| 01:06:13> 01:06:16: | I am the assistant Director for Resilience Science and technology |
| 01:06:16> 01:06:19: | at the White House Office of Science and Technology Policy. |
| 01:06:19> 01:06:21: | It's a lot of work OSTPA, |
| 01:06:21> 01:06:25: | and again, I'm really grateful for the opportunity to come |
| 01:06:25> 01:06:26: | and participate in lead. |
| 01:06:26> 01:06:31: | This second panel, federal opportunities for coastal resilience. |
| 01:06:31> 01:06:34: | l see my job here as being twofold. |
| 01:06:34> 01:06:37: | First, to help us hear from 4 great speakers and |
| 01:06:37> 01:06:40: | engage in what I hope will be a lively Q&A, |
| 01:06:40> 01:06:45: | but also wearing my OTP hat to listen to, |
| 01:06:45> 01:06:49: | learn to take back perspectives to my day job. |
| 01:06:49> 01:06:52: | I think Josh just threw one out there for me |
| 01:06:52> 01:06:53: | to take back to, |
| 01:06:53> 01:06:56: | so I I will say a little bit more about |
| 01:06:56> 01:06:57: | that job in a moment, |
| 01:06:57> 01:07:00: | but I really see this as as two rolls than |
| 01:07:00> 01:07:02: | I am serving in today. |
| 01:07:02> 01:07:04: | Our lineup are as you can see from the slide |
| 01:07:04> 01:07:05: | that is on the screen. |

| 01:07:05> 01:07:08: | We will lead off with Kevin Bush who is the |
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| 01:07:08> 01:07:11: | Deputy assistant secretary for grant programs at HUD. |
| 01:07:11> 01:07:12: | He will be followed by Dale Morris, |
| 01:07:12> 01:07:15: | who is the chief Resilience officer with the City of |
| 01:07:15> 01:07:15: | Charleston, |
| 01:07:15> 01:07:19: | SC. Then we will turn to. |
| 01:07:19> 01:07:22: | Excuse me, Steven Bingler, who is the founder and CEO |
| 01:07:22> 01:07:23: | of Concordia and batting cleanup, |
| 01:07:23> 01:07:27: | will be Dan preset, the executive director for the Environmental |
| 01:07:27> 01:07:29: | and Energy Study Institute. |
| 01:07:29> 01:07:32: | So before I turn the mic over to Kevin, |
| 01:07:32> 01:07:35: | I wanted to just let you know a little bit |
| 01:07:35> 01:07:37: | about what that day job is and hopefully you will |
| 01:07:37> 01:07:39: | come away understanding why. |
| 01:07:39> 01:07:42: | I truly believe that's like this are so vitally important |
| 01:07:42> 01:07:45: | in bringing together diverse perspectives, |
| 01:07:45> 01:07:48: | diverse sectors that need to be at the table to |
| 01:07:48> 01:07:50: | contribute towards national resilience. |
| 01:07:50> 01:07:54: | So in that day job I am responsible for providing |
| 01:07:54> 01:07:57: | leadership and providing subject matter expertise. |
| 01:07:57> 01:08:01: | An application of science, technology and innovation, |
| 01:08:01> 01:08:03: | whether it be federal or otherwise. |
| 01:08:03> 01:08:06: | To help build community resilience to a wide array of |
| 01:08:06> 01:08:10: | acute shocks and chronic stress is so including natural hazards. |
| 01:08:10> 01:08:12: | Many of the things that we are talking about here |
| 01:08:12> 01:08:12: | today, |
| 01:08:12> 01:08:17: | flooding and wind and earthquakes and and the others but |
| 01:08:17> 01:08:19: | also to man-made threats, |
| 01:08:19> 01:08:21: | whether they be accidents. Or deliberate acts, |
| 01:08:21> 01:08:24: | and so that's a really diverse set of things to |
| 01:08:24> 01:08:27: | have to think about building resilience against. |
| 01:08:27> 01:08:30: | And I I will readily admit it's not easy. |
| 01:08:30> 01:08:33: | But I it's important and I think one of the |
| 01:08:34> 01:08:38: | greatest lessons that I took from the pandemic was this |
| 01:08:38> 01:08:42: | extent to which we recognize that shocks and stresses don't. |
| 01:08:42> 01:08:45: | They are courteous, they don't hit us one at a |
| 01:08:45> 01:08:45: | time, |
| 01:08:45> 01:08:48: | and so part of our role is scientists just to |
| 01:08:48> 01:08:50: | try to help people, |
| 01:08:50> 01:08:54: | communities understand that there are these concurrent and cascading incidents |

| 01:08:54> 01:08:55: | and we need we. |
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| 01:08:55> 01:08:59: | We might make different decisions with that type of |
| | perspective |
| 01:08:59> 01:09:00: | and the other is that many. |
| 01:09:00> 01:09:04: | Of those resources, whether they be physical or financial or |
| 01:09:05> 01:09:05: | social, |
| 01:09:05> 01:09:08: | there are those resources are vulnerable to more than one |
| 01:09:08> 01:09:09: | set of shocks and stresses. |
| 01:09:09> 01:09:11: | And again, Josh, I think hit on this that you |
| 01:09:11> 01:09:14: | can't just plan for the title flooding which you have |
| 01:09:14> 01:09:15: | to look for sea level rise to. |
| 01:09:15> 01:09:17: | Well, you need to plan for flooding, |
| 01:09:17> 01:09:21: | but also the biggest employer in your community shutting down |
| 01:09:21> 01:09:23: | because of for whatever reason so. |
| 01:09:23> 01:09:26: | Part of our, again, our role and my role is |
| 01:09:26> 01:09:27: | resilience. |
| 01:09:27> 01:09:30: | Assistant director is to try and help understand and tease |
| 01:09:30> 01:09:33: | out some of those commonalities and independencies, |
| 01:09:33> 01:09:36: | so that we are providing information for people to prioritize |
| 01:09:36> 01:09:37: | those resources. |
| 01:09:37> 01:09:41: | Those assets that are most vulnerable and most important terms |
| 01:09:41> 01:09:43: | of building community resilience. |
| 01:09:43> 01:09:46: | So while a lot of my day today is deep |
| 01:09:46> 01:09:50: | in the weeds of bureaucratic things like coordinating and crossing |
| 01:09:50> 01:09:51: | policy and plans, |
| 01:09:51> 01:09:54: | I really love to get down into putting where the |
| 01:09:54> 01:09:58: | rubber meets the road trying to bring in infuse actionable |
| 01:09:58> 01:10:01: | science into decision making in a variety of levels. |
| 01:10:01> 01:10:04: | Really though, locally whether that be an individual, |
| 01:10:04> 01:10:10: | family, household, or community, because resilience is is rod in |
| 01:10:10> 01:10:11: | my view is. |
| 01:10:11> 01:10:13: | I'm not necessarily done by employer. |
| 01:10:13> 01:10:16: | But Brazilian is not a top down federal mandate. |
| 01:10:16> 01:10:18: | It truly is a grassroots effort. |
| 01:10:18> 01:10:20: | It has to be from the bottom up. |
| 01:10:20> 01:10:22: | That's not to say that the federal government doesn't have |
| 01:10:22> 01:10:22: | a role, |
| 01:10:22> 01:10:25: | and I think that's where we we are transitioning here |
| 01:10:25> 01:10:27: | to this particular panel. |

| 01:10:27> 01:10:28: | There are things that we can provide, |
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| 01:10:28> 01:10:30: | whether that is actionable science. |
| 01:10:30> 01:10:32: | So I think some of the things that you heard |
| 01:10:32> 01:10:32: | from Doug Marcie, |
| 01:10:32> 01:10:36: | some of that is grants funding expertise, |
| 01:10:36> 01:10:39: | technical assistance. We have a role to facilitate here, |
| 01:10:39> 01:10:42: | and sometimes we do it well. |
| 01:10:42> 01:10:43: | And there are places we can do better, |
| 01:10:43> 01:10:46: | and I'm really. Eager to hear from our four panelists |
| 01:10:46> 01:10:49: | today on what they had seen and what opportunities we |
| 01:10:49> 01:10:50: | we can take to do better. |
| 01:10:50> 01:10:53: | So with that, I'll let the UI staff transition over |
| 01:10:53> 01:10:56: | to Kevin and remind you to keep your eye on |
| 01:10:56> 01:10:59: | the chat and both look for the resources that are |
| 01:10:59> 01:11:02: | being provided as well as feeding information to help support |
| 01:11:02> 01:11:03: | the Q&A. |
| 01:11:03> 01:11:04: | So thanks, Kevin. If you're there, |
| 01:11:04> 01:11:05: | take it away. |
| 01:11:05> 01:11:09: | Great thanks, Maria. And good afternoon everybody. |
| 01:11:09> 01:11:11: | Thank you to the Urban Land Institute. |
| 01:11:11> 01:11:13: | Of course, for hosting this important conversation and my fellow |
| 01:11:14> 01:11:14: | panelists. |
| 01:11:14> 01:11:17: | Excited to hear what you have to say and Maria, |
| 01:11:17> 01:11:19: | I want to pick up where you left off. |
| 01:11:19> 01:11:22: | I really appreciated your your opening remarks. |
| 01:11:22> 01:11:25: | You know around the different shocks and stresses or acute |
| 01:11:25> 01:11:27: | events and underlying wonder abilities. |
| 01:11:27> 01:11:29: | However, you want to frame it. |
| 01:11:29> 01:11:31: | You know when the administration came into office, |
| 01:11:31> 01:11:35: | the president was very clear that we had for overlapping |
| 01:11:35> 01:11:38: | crises to deal with climate change COVID. |
| 01:11:38> 01:11:43: | The resulting economic crisis and then the racial and economic |
| 01:11:43> 01:11:45: | inequality that those three crises. |
| 01:11:45> 01:11:49: | Laid bare and they've also these responding to these crises |
| 01:11:49> 01:11:52: | have really presented an opportunity, |
| 01:11:52> 01:11:56: | an incredible opportunity for our communities to build more resilient, |
| 01:11:56> 01:12:00: | equitable and inclusive futures. And at HUD we also hope |
| 01:12:00> 01:12:01: | with quality, |
| 01:12:01> 01:12:05: | affordable homes for all we've already seen some inspiring examples |

| 01:12:05> 01:12:09: | of resilience and adaptation projects across Hudson portfolio of grantees |
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| 01:12:09> 01:12:11: | from hurricane resilient. |
| 01:12:11> 01:12:16: | Affordable housing in Louisiana to stormwater management parks in California. |
| 01:12:16> 01:12:21: | And even multi use place structures that provide flood protection |
| 01:12:21> 01:12:23: | in New York City. |
| 01:12:23> 01:12:26: | Next slide please. So I want to talk today a |
| 01:12:26> 01:12:30: | little bit about some HUD programs that support coastal resilience |
| 01:12:30> 01:12:32: | and adaptation projects. |
| 01:12:32> 01:12:36: | Our Community development block grants for disaster recovery and mitigation |
| 01:12:36> 01:12:39: | are great example of how HUD funding can support local |
| 01:12:39> 01:12:40: | climate action. |
| 01:12:40> 01:12:44: | CDBG der is arguably one of the world's largest climate |
| 01:12:44> 01:12:49: | adaptation programs focused exclusively on low and moderate income populations |
| 01:12:49> 01:12:53: | through CDBG are we spend billions of dollars every year |
| 01:12:53> 01:12:58: | helping low income communities. Recover from and and build resilience |
| 01:12:58> 01:13:01: | to the most devastating disasters. |
| 01:13:01> 01:13:05: | The portfolio right now stands at about \$72 billion of |
| 01:13:05> 01:13:07: | active grants under management, |
| 01:13:07> 01:13:11: | creating real outcomes for people across the country and thanks |
| 01:13:11> 01:13:16: | to CDBG meant we've been transforming traditional disaster recovery by |
| 01:13:16> 01:13:18: | investing in adaptation and resilience, |
| 01:13:18> 01:13:24: | planning, assisting vulnerable communities to mitigate the impacts of natural |
| 01:13:24> 01:13:26: | disasters before they strike. |
| 01:13:26> 01:13:30: | Couple of examples on the next slide after Hurricane Katrina, |
| 01:13:30> 01:13:33: | the city of Gulfport, Ms invested in the restoration and |
| 01:13:33> 01:13:36: | hardening and facilities at the airport to build resilience to |
| 01:13:36> 01:13:39: | future storms and in this investment allowed the port to |
| 01:13:39> 01:13:42: | continue operating. During Hurricane Ida, |
| 01:13:42> 01:13:46: | one of the most rewarding things for me having been |
| 01:13:46> 01:13:46: | here, |
| 01:13:46> 01:13:51: | was getting sent several YouTube videos after Hurricane idea of |
| 01:13:51> 01:13:54: | DAR funded housing and infrastructure. |
| 01:13:54> 01:13:59: | Literally weathering another. And I think the our ability to |

| important important in shown just in the repeat disasters that have hit 01:14:08 -> 01:14:12: many of our communities in Galveston TX. 01:14:12 -> 01:14:16: CDBG Dr is helping fund new flood resilient affordable housing, 01:14:11 -> 01:14:19: and there's a few more details on the screen there. 01:14:21 -> 01:14:21: I know we're past for pressed for time, 01:14:21 -> 01:14:23: so I'll just move to the next slide. 01:14:23 -> 01:14:33: so I'll just move to the next slide. 01:14:33 -> 01:14:33: So I talked a little bit about Dar. 01:14:33 -> 01:14:33: So I talked a little bit about Dar. 01:14:34 -> 01:14:41: annual program called CDBG and the Section 108 Loan Guarantee 01:14:41 -> 01:14:46: Program allows grantees to leverage their annual CDBG grant at 01:14:47 -> 01:14:46: Program allows grantees to leverage their annual CDBG grant at 01:14:47 -> 01:14:46: Program allows grantees to leverage their annual CDBG grant at 01:14:47 -> 01:14:51: enabling them to pursue larger scale resilient. 01:14:51 -> 01:14:51: You can find them at at HUD Gov slash climate 01:15:14 -> 01:15:04: that helps communities figure out how to use these block 01:15:04 -> 01:15:04: that helps communities figure out how to use these block 01:15:15 -> 01:15:20: Provide a little bit more detail on that. 01:15:21 -> 01:15:21: provide a little bit more detail on that. 01:15:23 -> 01:15:23: The resources are really anchored around what we're calling a callor on the set on they colling a callor on how to use they colling a callor on they colling a callor on they colling a callor on how to 01:15:23 -> 01:1 | 01:13:59> 01:14:04: | bake in resilience and adaptation to recovery is tremendously |
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| 01:15:49> 01:15:56: Programs we're publishing a citizen participation and | 01:15:43> 01:15:46: | nature based solutions and cool roofs, |
| 5 1 5 1 1 | 01:15:46> 01:15:49: | programs, and even low income homeowner retrofit. |
| · | 01:15:49> 01:15:56: | |

| 01:15:56> 01:15:56: | as well, |
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| 01:15:56> 01:16:00: | to help grantees effectively and meaningfully engage citizens and communities |
| 01:16:01> 01:16:02: | throughout the life of their grant. |
| 01:16:02> 01:16:06: | We think this kind of intentional community engagement is critical |
| 01:16:06> 01:16:07: | to advancing equity, |
| 01:16:07> 01:16:12: | particularly for historically underserved communities. |
| 01:16:12> 01:16:16: | Yeah, and in closing you know I want to come, |
| 01:16:16> 01:16:20: | you know, briefly highlight that this isn't it. |
| 01:16:20> 01:16:23: | We we have even more resources coming our way. |
| 01:16:23> 01:16:27: | We recently received another \$5 billion for the CDBG. |
| 01:16:27> 01:16:30: | Our program for disasters in 2020 and 2021, |
| 01:16:31> 01:16:33: | and the President's build back. |
| 01:16:33> 01:16:36: | Better plan includes a number of significant investments. |
| 01:16:36> 01:16:40: | Recognizing that housing is an important part of infrastructure across |
| 01:16:40> 01:16:41: | the country, |
| 01:16:41> 01:16:43: | so we're thrilled to partner. |
| 01:16:43> 01:16:47: | Uh, with communities across the country to think creatively about |
| 01:16:47> 01:16:49: | how to build equitable climate, |
| 01:16:49> 01:16:53: | resilience in big cities, small towns were all in tribal |
| 01:16:53> 01:16:57: | areas in every corner of America and that website I |
| 01:16:57> 01:16:58: | mentioned earlier, |
| 01:16:58> 01:17:05: | hud.gov/climate. Showcases and summarizes Hud's first climate and environmental justice |
| 01:17:05> 01:17:06: | strategy, |
| 01:17:06> 01:17:09: | which lays out a series of actions that the department |
| 01:17:09> 01:17:10: | is taking across every office, |
| 01:17:10> 01:17:12: | not just the one I work in, |
| 01:17:12> 01:17:15: | to deliver on the President's commitment to climate action. |
| 01:17:15> 01:17:18: | So thank you for your partnership and look forward to |
| 01:17:18> 01:17:20: | hearing from other panelists. |
| 01:17:22> 01:17:26: | Kevin, thank you. We're going to turn right straightaway into |
| 01:17:26> 01:17:29: | Dale to take us to Charleston perspective. |
| 01:17:33> 01:17:37: | Great, thank you everyone. Thank you again for putting this |
| 01:17:37> 01:17:38: | on. |
| 01:17:38> 01:17:41: | It's a wonderful exposition here and we're all trying to |
| 01:17:41> 01:17:43: | work together to improve the communities we live in. |
| 01:17:43> 01:17:46: | So thank you for all your efforts and thanks for |
| 01:17:46> 01:17:47: | your again for hosting this. |
| 01:17:47> 01:17:49: | I'm Dale Morris the new CRO for the city of |

| 01:17:50> 01:17:50: | Charleston, |
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| 01:17:50> 01:17:52: | but I've worked around the US over the last 15 |
| 01:17:52> 01:17:54: | or 20 years with a lot of cities. |
| 01:17:54> 01:17:57: | Looking at these sort of flood risk hazards and challenges. |
| 01:17:57> 01:18:00: | And how do we adapt to those going forward? |
| 01:18:00> 01:18:03: | Fortunately not, I know most of the people on this |
| 01:18:03> 01:18:04: | panel or in this call. |
| 01:18:04> 01:18:07: | Presenting today, and it's just a wonderful group to be |
| 01:18:07> 01:18:08: | part of something, |
| 01:18:08> 01:18:10: | probably a little bit of context here for Charleston, |
| 01:18:10> 01:18:12: | then that is a sort of a request to to |
| 01:18:12> 01:18:14: | Maria and the rest of the folks in the federal |
| 01:18:14> 01:18:17: | government and pushing the federal government to ponder. |
| 01:18:17> 01:18:20: | So here's, you know, that's the City of Charleston. |
| 01:18:20> 01:18:22: | It's on the coast of South Carolina. |
| 01:18:22> 01:18:25: | It's got fairly serious water problems and we have them |
| 01:18:25> 01:18:25: | all. |
| 01:18:25> 01:18:28: | We have surged, we have tidal wave river Rhein risk. |
| 01:18:28> 01:18:29: | We have stormwater risk, groundwater, |
| 01:18:29> 01:18:32: | wins and then compound risks when those things occur together. |
| 01:18:32> 01:18:34: | Steve over eyes is not going to make that. |
| 01:18:34> 01:18:36: | Any better so we have to prepare for it and |
| 01:18:36> 01:18:39: | the city is doing its best with its limited resources |
| 01:18:39> 01:18:41: | to manage these flood rates. |
| 01:18:41> 01:18:43: | And again this is just it's essential for us to |
| 01:18:43> 01:18:45: | be able to stay here going forward. |
| 01:18:45> 01:18:48: | So a lot of these risks there and the city |
| 01:18:48> 01:18:50: | you know is across a number of these islands that |
| 01:18:51> 01:18:52: | you see in this map. |
| 01:18:52> 01:18:55: | Next slide please. And the most important part of the |
| 01:18:55> 01:18:55: | city, |
| 01:18:55> 01:19:00: | perhaps men, economic base and historical foundation or historical basis, |
| 01:19:00> 01:19:02: | the peninsula of Charleston. For those of you who've been |
| 01:19:02> 01:19:02: | here, |
| 01:19:02> 01:19:04: | you know what this is? |
| 01:19:04> 01:19:07: | This is the heart. Charles thinks the medical district is |
| 01:19:07> 01:19:09: | the College of Charleston Citadel. |
| 01:19:09> 01:19:12: | The Port of Charleston and the largest historic district in |
| 01:19:12> 01:19:13: | the nation, |
| 01:19:13> 01:19:14: | and we have a surge risk. |

| 01:19:14> 01:19:17: | And were, you know, quite wonderful were quite pleased that |
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| 01:19:17> 01:19:19: | the army core engineers tied up a coastal storm. |
| 01:19:19> 01:19:22: | Risk management study for us to quantify risk and help |
| 01:19:22> 01:19:23: | us to mitigate that, |
| 01:19:23> 01:19:26: | and I'm part of a larger group of of cities |
| 01:19:26> 01:19:29: | that are talking together about how you know what are |
| 01:19:29> 01:19:32: | we doing with in these CSRM projects with the army |
| 01:19:32> 01:19:35: | core engineers trying to compare notes. |
| 01:19:35> 01:19:37: | And maybe make suggestions on how we improve them. |
| 01:19:37> 01:19:40: | I see some other cities online here and what we |
| 01:19:40> 01:19:43: | want to note is you know there's policy sclerosis here |
| 01:19:43> 01:19:46: | you know we're handicapped in some ways to do the |
| 01:19:47> 01:19:50: | best. The best things we can to optimize and make |
| 01:19:50> 01:19:53: | the most efficient investments across our flood risks. |
| 01:19:53> 01:19:56: | You know, there's information about there just in Charleston. |
| 01:19:56> 01:19:58: | And in nor folk in Miami you know the number |
| 01:19:58> 01:20:01: | of team ties or nuisance flooding that we used to |
| 01:20:01> 01:20:01: | have. |
| 01:20:01> 01:20:03: | You know that we used to be by for 10A |
| 01:20:03> 01:20:03: | year. |
| 01:20:03> 01:20:05: | If three a year. And you know, |
| 01:20:05> 01:20:08: | two years ago in Charleston it was 89 and this |
| 01:20:08> 01:20:10: | is repeated elsewhere. |
| 01:20:10> 01:20:14: | So while we're at the Charleston CSRM project is focusing |
| 01:20:14> 01:20:15: | only on served, |
| 01:20:15> 01:20:18: | and we're thankful that we need to find a better |
| 01:20:18> 01:20:22: | way with our federal partners to make investments that will |
| 01:20:22> 01:20:26: | optimize those investments across the various flood risks. |
| 01:20:26> 01:20:28: | And we are unable to do that right now. |
| 01:20:28> 01:20:32: | Next light please. So here's quantifier for your fears. |
| 01:20:32> 01:20:33: | The peninsula of Charleston, you know, |
| 01:20:33> 01:20:35: | the deeper orange. This is our. |
| 01:20:35> 01:20:37: | This is our category three storm surge. |
| 01:20:37> 01:20:39: | You can see the entire peninsula is underwater, |
| 01:20:39> 01:20:42: | so we need to manage this surge risk. |
| 01:20:42> 01:20:46: | Obviously next slide please. And you know the army core |
| 01:20:46> 01:20:49: | engineers is working with us. |
| 01:20:49> 01:20:50: | You know we're doing our best to get some. |
| 01:20:50> 01:20:53: | You know, multiple storm water or some groundwater |
| | management benefits |
| 01:20:53> 01:20:54: | in here. |
| 01:20:54> 01:20:57: | But you know the CSR project because it focuses solely |

| 01:20:57> 01:20:58: | on surge. |
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| 01:20:58> 01:21:00: | We are unable to do that. |
| 01:21:00> 01:21:04: | Still, the cost benefit of this project has a 10.2 |
| 01:21:04> 01:21:08: | to one cost benefit ratio or benefit cost ratio. |
| 01:21:08> 01:21:10: | It's the highest in the nation of its time. |
| 01:21:10> 01:21:12: | It shows you what kind of surgery is here, |
| 01:21:12> 01:21:14: | so we're thankful for this effort. |
| 01:21:14> 01:21:16: | But we also know very clearly that. |
| 01:21:16> 01:21:18: | This structure, if the Army court was, |
| 01:21:18> 01:21:21: | was allowed to consider that it could help us manage |
| 01:21:21> 01:21:22: | tides, |
| 01:21:22> 01:21:25: | and he could also help us manage stormwater if we |
| 01:21:25> 01:21:29: | build the internal pumps right and create more stormwater storage |
| 01:21:29> 01:21:31: | places within that next slide, |
| 01:21:31> 01:21:35: | please. So here you can see this is the European |
| 01:21:35> 01:21:37: | Hurricane Hugo storm surge in blue. |
| 01:21:37> 01:21:40: | Here it shows you what it looked like and with |
| 01:21:40> 01:21:42: | this wall in place on on the slide on the |
| 01:21:42> 01:21:44: | right you can see how much of historic area gets |
| 01:21:44> 01:21:46: | protected. So this thing will work, |
| 01:21:46> 01:21:48: | but it is only working against one risk. |
| 01:21:48> 01:21:52: | Next slide please. And you know this project. |
| 01:21:52> 01:21:55: | It is the number one recommended project for a by |
| 01:21:55> 01:21:58: | the armored core engineers for the entire S Atlantic Division, |
| 01:21:58> 01:22:01: | which goes from North Carolina to lead to Mississippi. |
| 01:22:01> 01:22:03: | So we feel very good we're going to get funded |
| 01:22:03> 01:22:03: | for this, |
| 01:22:03> 01:22:06: | but we know we're leaving something on the table and |
| 01:22:06> 01:22:07: | this is not to criticize. |
| 01:22:07> 01:22:10: | The armor engineer is this is to criticize this cratic |
| 01:22:10> 01:22:12: | federal policy that needs to be updated. |
| 01:22:12> 01:22:13: | So there's a challenge for you. |
| 01:22:13> 01:22:16: | Maria next slide, please. So again, |
| 01:22:16> 01:22:18: | we have these challenges. We want to work. |
| 01:22:18> 01:22:20: | We want to do the best we can. |
| 01:22:20> 01:22:23: | There are multiple risks we have. |
| 01:22:23> 01:22:24: | There are compound fighters we have. |
| 01:22:24> 01:22:27: | We are designing a structure that is not looking at |
| 01:22:27> 01:22:30: | some of the Seahawks sea level rise curves and the |
| 01:22:30> 01:22:33: | stormwater curves that we know are coming at us. |
| 01:22:33> 01:22:34: | That, Doug, you know, showed at the beginning. |

| 01:22:34> 01:22:37: | We are unable to use those and we think that |
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| 01:22:37> 01:22:40: | is an inefficient use of resources and again rock criticizing |
| 01:22:40> 01:22:41: | the core. |
| 01:22:41> 01:22:42: | But we can do better. |
| 01:22:42> 01:22:44: | We want to do that and one final thing. |
| 01:22:44> 01:22:47: | Just leave it at this natural nature based features. |
| 01:22:47> 01:22:50: | These are wonderful things. We know how they work for |
| 01:22:50> 01:22:51: | various types of. |
| 01:22:51> 01:22:53: | Flood risk they don't work well for all of them. |
| 01:22:53> 01:22:56: | They work well very well for some of them. |
| 01:22:56> 01:23:00: | Right now. The federal policy is really shortsighted regarding the |
| 01:23:00> 01:23:04: | quantification of ecosystem services and then the social and environment |
| 01:23:04> 01:23:08: | environmental benefits that they could add to projects so we |
| 01:23:08> 01:23:11: | could make a 10.2 BCR project get up to 15. |
| 01:23:11> 01:23:14: | Probably if we were able to quantify those benefits we |
| 01:23:14> 01:23:17: | meeting the project team with your armor engineers. |
| 01:23:17> 01:23:19: | They are not able to do that right now. |
| 01:23:19> 01:23:21: | We have the science we need to change. |
| 01:23:21> 01:23:24: | These BSA policies I'm talking to hide him. |
| 01:23:24> 01:23:27: | I'm talking to FEMA. I'm talking to EPA and everyone |
| 01:23:27> 01:23:29: | else we need centralized those policy. |
| 01:23:29> 01:23:32: | Get a standard quantification of benefits from ecosystem services or |
| 01:23:33> 01:23:36: | nature based features and then enable them to be applied |
| 01:23:36> 01:23:39: | across the portfolio of projects at the federal government. |
| 01:23:39> 01:23:42: | Manages on flood risk and I'll leave it at that. |
| 01:23:42> 01:23:42: | Thank you. |
| 01:23:44> 01:23:46: | Alright, thank you very much, |
| 01:23:46> 01:23:49: | Dale. We're going to keep plugging along. |
| 01:23:49> 01:23:51: | We're going to turn it over to Stephen and keep |
| 01:23:51> 01:23:53: | it keeping an eye on time, |
| 01:23:53> 01:23:54: | so take it away, Steven. |
| 01:24:01> 01:24:01: | Steven, you're on mute. |
| 01:24:15> 01:24:16: | Still on me to see them. |
| 01:24:19> 01:24:20: | Can you hear me now? |
| 01:24:21> 01:24:22: | Yes, that's great. Thank you. |
| 01:24:22> 01:24:22: | OK, |
| 01:24:23> 01:24:27: | sorry. Hello, I'm truly grateful for the opportunity to talk |
| 01:24:27> 01:24:29: | with her about it today, |
| 01:24:29> 01:24:31: | about two climate change planning strategies. |
| 01:24:31> 01:24:35: | The first strategy is to build up better resilience to |

| 01:24:35> 01:24:39: | extreme weather conditions and the second is to look at |
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| 01:24:39> 01:24:42: | managed retreat and resettlement. |
| 01:24:42> 01:24:45: | By now we are all aware of all the climate |
| 01:24:45> 01:24:47: | changes that are happening. |
| 01:24:47> 01:24:50: | And the vertical bar is where we are now. |
| 01:24:50> 01:24:53: | So on the left is the blue arrow that shows |
| 01:24:53> 01:24:56: | what everybody already knows is the path that we've taken, |
| 01:24:56> 01:24:59: | and then the steep red bar on the right is |
| 01:24:59> 01:25:03: | obviously where we're headed for the next eight years. |
| 01:25:03> 01:25:07: | So my own experience in climate change planning started after |
| 01:25:07> 01:25:11: | Hurricane Katrina and where we did the recovery plan for |
| 01:25:11> 01:25:12: | the city. |
| 01:25:12> 01:25:17: | That process included about 9000 residents participation, |
| 01:25:17> 01:25:20: | 64% of whom were African Americans. |
| 01:25:20> 01:25:23: | But New Orleans is only one of many of the |
| 01:25:23> 01:25:26: | Gulf Coast communities that are facing these challenges, |
| 01:25:26> 01:25:30: | like the loss of a football field of land every |
| 01:25:30> 01:25:31: | 100 minutes. |
| 01:25:31> 01:25:34: | This is a map of what the landmass of South |
| 01:25:34> 01:25:36: | Louisiana looked like in 1967. |
| 01:25:36> 01:25:40: | And this is what the landmass will look like in |
| 01:25:40> 01:25:40: | 2067. |
| 01:25:40> 01:25:44: | Assuming only two feet of sea level rise. |
| 01:25:44> 01:25:47: | Thankfully, you always is now fortified by a \$14 billion |
| 01:25:47> 01:25:51: | federal investment in post Katrina levee upgrades, |
| 01:25:51> 01:25:53: | but the rest of the coast is still very, |
| 01:25:53> 01:25:59: | very vulnerable. So in this recent project called Safe that |
| 01:25:59> 01:26:02: | was funded by NDRC Grant from EU. |
| 01:26:02> 01:26:05: | S. Department of Housing and Urban Development's Challenge was to |
| 01:26:06> 01:26:10: | replicate the New Orleans Community Center planning process across six |
| 01:26:10> 01:26:11: | coastal parishes. |
| 01:26:11> 01:26:13: | To be sure that everybody had a seat at the |
| 01:26:13> 01:26:14: | table, |
| 01:26:14> 01:26:18: | we have 71 community meetings that included more than 2800 |
| 01:26:18> 01:26:19: | local residents. |
| 01:26:19> 01:26:22: | There are series of hands-on planning meetings, |
| 01:26:22> 01:26:26: | presidents works to work together to develop strategies and identify |
| 01:26:26> 01:26:30: | a total of 11 projects that could make their communities |

| 01:26:30> 01:26:32: | more resilient to floods and storm surges. |
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| 01:26:32> 01:26:36: | The total cost of those eleven projects will be about |
| 01:26:36> 01:26:37: | \$93 million. |
| 01:26:37> 01:26:42: | The second climate change strategy is resettlement. |
| 01:26:42> 01:26:44: | And as you can see from the photos at the |
| 01:26:44> 01:26:45: | bottom of this slide, |
| 01:26:45> 01:26:49: | virtually every homeowner's first choice is to hunker down and |
| 01:26:49> 01:26:51: | protect their homeland. |
| 01:26:51> 01:26:55: | These homes are actually in Plaquemines Parish in South Louisiana. |
| 01:26:55> 01:27:00: | But many coastal residents have already started to migrate northward. |
| 01:27:00> 01:27:03: | The last time our country faced these kinds of climate |
| 01:27:03> 01:27:06: | migrations was during the Dust Bowl in the 1930s, |
| 01:27:06> 01:27:09: | where 7000 people died. Too many people were left homeless |
| 01:27:09> 01:27:14: | and the whole nation's food production economy was seriously threatened. |
| 01:27:14> 01:27:17: | This map shows the footprint of the Dust Bowl compared |
| 01:27:17> 01:27:18: | to the footprint, |
| 01:27:18> 01:27:22: | the Hurricanes inland flooding, earthquakes and droughts that have been |
| 01:27:22> 01:27:26: | forecast over the next 80 years due to catastrophic impacts |
| 01:27:26> 01:27:27: | of climate change. |
| 01:27:27> 01:27:31: | A large number of these communities are located within 100 |
| 01:27:31> 01:27:34: | miles of the coastline with the quality of light that |
| 01:27:34> 01:27:37: | would continue to be challenged by postal and flooding. |
| 01:27:37> 01:27:40: | One strategy that could prove to be successful is to |
| 01:27:40> 01:27:44: | move forward now with comprehensive climate change planning for cities |
| 01:27:44> 01:27:46: | and towns located on higher ground, |
| 01:27:46> 01:27:49: | let's say 100 to 200 miles inland. |
| 01:27:49> 01:27:52: | In fact, our firm is currently implementing a new comprehensive |
| 01:27:52> 01:27:53: | plan for the town of Andalusia, |
| 01:27:53> 01:27:57: | Alabama, where new zoning and land use regulations will provide |
| 01:27:57> 01:28:00: | for higher commercial and residential densities. |
| 01:28:00> 01:28:04: | The plan also targets more than 28 historic downtown buildings |
| 01:28:04> 01:28:04: | for public, |
| 01:28:04> 01:28:07: | private tax credit funded renovations, |
| 01:28:07> 01:28:12: | expanded infrastructure for parks and transportation projects |

| | will also add |
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| 01:28:12> 01:28:15: | to the quality of life of the Andalusian community. |
| 01:28:15> 01:28:19: | The planning now for increasing housing densities will allow the |
| 01:28:19> 01:28:23: | town to expand its population with minimal minimal disruption going |
| 01:28:23> 01:28:23: | forward. |
| 01:28:23> 01:28:27: | And finally, a new report called see changes that that |
| 01:28:27> 01:28:28: | that we we were, |
| 01:28:28> 01:28:31: | we directed is now available as a guide for the |
| 01:28:31> 01:28:35: | robust and equity centered planning solutions that would be needed |
| 01:28:35> 01:28:39: | to support local government and elected officials in making all |
| 01:28:39> 01:28:42: | of this possible. The board is developed by an international |
| 01:28:42> 01:28:46: | team of climate change planners with a lot of valuable |
| 01:28:46> 01:28:47: | input from local stakeholders. |
| 01:28:47> 01:28:52: | Ending with a set of five community centered planning principles |
| 01:28:52> 01:28:55: | that can determine any project success or failure. |
| 01:28:55> 01:29:01: | The challenge is real. Professional and Equity center planning is |
| 01:29:01> 01:29:02: | always a good idea, |
| 01:29:02> 01:29:07: | especially when we can do it ahead of time. |
| 01:29:07> 01:29:09: | And that time is now. |
| 01:29:09> 01:29:11: | So let's roll. |
| 01:29:15> 01:29:18: | Alright, thank you Stephen very much. |
| 01:29:18> 01:29:20: | We're going to turn it now to our last speaker, |
| 01:29:20> 01:29:21: | Dan. Please take it away. |
| 01:29:22> 01:29:25: | Great, thank you so much Maria and thanks to my |
| 01:29:25> 01:29:28: | Co panelists and ULI and especially Jack, |
| 01:29:28> 01:29:31: | Leah, Emily and Augie. For all the thought leadership leading |
| 01:29:31> 01:29:33: | up to today and all the logistics support and the |
| 01:29:33> 01:29:35: | rest of the organizers of the Coastal Forum. |
| 01:29:35> 01:29:38: | Next slide please in 2019. |
| 01:29:38> 01:29:42: | In 2020, ESI organized 16 congressional briefings to help educate |
| 01:29:42> 01:29:46: | policymakers about coastal resilience challenges by highlighting solutions from around |
| 01:29:47> 01:29:47: | the country. |
| 01:29:47> 01:29:50: | We featured 42 practitioner scientists, |
| 01:29:50> 01:29:52: | community leaders and other experts. |
| 01:29:52> 01:29:56: | Stakeholders, including representatives from federal agencies. |

| 01:29:56> 01:29:57: | And as we went along, |
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| 01:29:57> 01:29:59: | we realized that the solutions and the experiences of the |
| 01:29:59> 01:30:03: | communities we featured were extraordinary and very special and that |
| 01:30:03> 01:30:04: | made us ask ourselves a few questions, |
| 01:30:04> 01:30:08: | notably how to ensure more people like you all. |
| 01:30:08> 01:30:11: | Today I hear more about what our panelists had to |
| 01:30:11> 01:30:11: | say, |
| 01:30:11> 01:30:14: | and also how to ensure that policy makers heard what |
| 01:30:14> 01:30:15: | our panelists have to say. |
| 01:30:15> 01:30:18: | Even if they weren't in our briefing audience on any |
| 01:30:18> 01:30:19: | given day. |
| 01:30:19> 01:30:22: | Next slide, please. So we went through every presentation and |
| 01:30:22> 01:30:27: | identified all the findings and recommendations discussed during the series, |
| 01:30:27> 01:30:30: | and we published a report based on these recommendations and |
| 01:30:30> 01:30:33: | we came up with 30 specific federal policy recommendations for |
| 01:30:33> 01:30:34: | coastal resilience. |
| 01:30:34> 01:30:35: | And when you read the report, |
| 01:30:35> 01:30:39: | I hope you will. You will notice how the recommendations |
| 01:30:39> 01:30:42: | are organized with our policymaking audience in mind. |
| 01:30:42> 01:30:46: | Next slide please. And so for today I'd like to |
| 01:30:46> 01:30:50: | focus on a couple of the recommendations, |
| 01:30:50> 01:30:53: | and there's really no way to overestimate or overemphasize the |
| 01:30:53> 01:30:55: | importance of these case studies. |
| 01:30:55> 01:30:58: | The strength of the entire effort was really derived by |
| 01:30:58> 01:31:00: | the solutions and the experiences of our 42 panelists, |
| 01:31:00> 01:31:03: | and the stories of the coastal communities they told, |
| 01:31:03> 01:31:06: | and so each of the 30 federal policy recommendations we |
| 01:31:06> 01:31:09: | came up with is specifically illustrated by a case study |
| 01:31:09> 01:31:12: | featured during a briefing and the first set of the |
| 01:31:12> 01:31:15: | recommendations, I want to focus on today. |
| 01:31:15> 01:31:19: | Deals with the question how can federal agencies help communities |
| 01:31:19> 01:31:23: | access resources for coastal resilience and climate adaptation. |
| 01:31:23> 01:31:26: | It turns out that there are many federal resources available. |
| 01:31:26> 01:31:27: | We've heard about many of them today, |
| 01:31:27> 01:31:29: | but a lot of complicated, |
| 01:31:29> 01:31:31: | some there are expensive to access, |

| 01:31:31> 01:31:35: | some are otherwise out of reach for different reasons, |
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| 01:31:35> 01:31:38: | and so we identified a few policy recommendations to help |
| 01:31:39> 01:31:43: | provide resources for training and technical assistance which are really |
| 01:31:43> 01:31:45: | essential along with the financial resources. |
| 01:31:45> 01:31:49: | To ensure meaningful community engagement at every step of the |
| 01:31:49> 01:31:52: | way and the case study that I'll mention is one |
| 01:31:52> 01:31:54: | that Stephen just mentioned, |
| 01:31:54> 01:31:59: | consider the Louisiana Strategic adaptations for Future Environment initiative LA |
| 01:31:59> 01:31:59: | safe. |
| 01:31:59> 01:32:03: | It's a model for investing resources in training local leaders. |
| 01:32:03> 01:32:07: | It's a community centered adaptation planning effort that relies on |
| 01:32:07> 01:32:10: | local graduates from the lead the Coast program. |
| 01:32:10> 01:32:13: | These graduates are then called on to organize and facilitate |
| 01:32:13> 01:32:16: | meetings and other forms of information sharing designed to boost |
| 01:32:16> 01:32:18: | meaningful community engagement and buy in, |
| 01:32:18> 01:32:22: | and what that means is that it uses federal resources |
| 01:32:22> 01:32:25: | and it helps mean that local resilience and adaptation planning |
| 01:32:25> 01:32:27: | and project decisions, |
| 01:32:27> 01:32:29: | including those that come from the federal government are truly |
| 01:32:30> 01:32:31: | based in the affected communities. |
| 01:32:31> 01:32:33: | And it all starts with training, |
| 01:32:33> 01:32:35: | empowering. Local leaders. Next slide, |
| 01:32:35> 01:32:38: | please. And the second set of recommendations I want to |
| 01:32:38> 01:32:42: | cover deals with the question how can federal agencies ensure |
| 01:32:42> 01:32:46: | that the available resources are actually accessible for the communities |
| 01:32:46> 01:32:48: | having resources available is great, |
| 01:32:48> 01:32:52: | but will communities and the ordinary people in local government |
| 01:32:52> 01:32:55: | actually be able to put these resources to maximum use |
| 01:32:55> 01:32:56: | as intended? |
| 01:32:56> 01:32:58: | One way to do that would be to encourage greater |
| 01:32:58> 01:33:02: | acknowledgement of cultural heritage and community resilience discussions, |
| 01:33:02> 01:33:03: | and this can be done in multiple ways, |
| 01:33:03> 01:33:07: | including by integrating archaeological contributions into Land Management. |

| 01:33:07> 01:33:11: | Or being sure culturally important sites and aspects of history |
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| 01:33:11> 01:33:14: | are part of vulnerability assessments and projects. |
| 01:33:14> 01:33:17: | It's also related to the idea of making sure climate |
| 01:33:17> 01:33:21: | data itself is understandable and useful to those who have |
| 01:33:21> 01:33:21: | to do this, |
| 01:33:21> 01:33:23: | and for example, I wanted to point to the case |
| 01:33:23> 01:33:25: | study of the Island Institute in Maine. |
| 01:33:25> 01:33:27: | They do both of these things very, |
| 01:33:27> 01:33:30: | very well. What they did was they compiled publicly available |
| 01:33:30> 01:33:34: | climate data into story maps to describe climate impacts and |
| 01:33:34> 01:33:38: | help coastal communities envision their future and what it would |
| 01:33:38> 01:33:40: | mean for their way of life. |
| 01:33:40> 01:33:43: | What that did is, it helped make critical information more |
| 01:33:43> 01:33:44: | accessible and more localized. |
| 01:33:44> 01:33:48: | And that meant it was more relatable and more identifiable |
| 01:33:48> 01:33:52: | to the people and that lead to better decisions. |
| 01:33:52> 01:33:55: | So my last slide is just a brief conclusion. |
| 01:33:55> 01:33:58: | UM, and I just wanted to thank everyone again today, |
| 01:33:58> 01:34:01: | and you can move ahead on thank you very much. |
| 01:34:01> 01:34:04: | I look forward to the rest of the discussion. |
| 01:34:04> 01:34:07: | Here's my contact information. I hope everyone will feel free |
| 01:34:07> 01:34:09: | to be in touch with me or my colleague Anna |
| 01:34:09> 01:34:10: | begin and any questions. |
| 01:34:10> 01:34:13: | And thanks again for the opportunity to share work at |
| 01:34:13> 01:34:14: | this really great event. |
| 01:34:14> 01:34:14: | Thanks, Maria. |
| 01:34:16> 01:34:20: | Fantastic Dan, I'm going to let you catch your breath, |
| 01:34:20> 01:34:21: | but while your content is fresh, |
| 01:34:21> 01:34:24: | I'm actually going to go to you first. |
| 01:34:24> 01:34:28: | We do have time for about 17 minutes or so |
| 01:34:28> 01:34:28: | for Q&A, |
| 01:34:28> 01:34:31: | and so like I said, |
| 01:34:31> 01:34:33: | I'm going to start with you Dan as you went |
| 01:34:33> 01:34:34: | through this effort. |
| 01:34:34> 01:34:38: | I know you shared a subset of the recommendations with |
| 01:34:38> 01:34:40: | us as you look across the full suite. |
| 01:34:40> 01:34:44: | Are there any that policy recommendations? |
| 01:34:44> 01:34:47: | And it's presumably aimed principally at federal agencies? |
| 01:34:47> 01:34:50: | Are there? Any that really struck you as cost effective |
| 01:34:50> 01:34:53: | in terms of delivering resilience and adaptation benefits over |
| | the |
| | |

| 01:34:54> 01:34:54: | near term. |
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| 01:34:54> 01:34:56: | Some of these are really big and media are going |
| 01:34:56> 01:34:57: | to take a while. |
| 01:34:57> 01:35:00: | Were there any of that really struck you as as |
| 01:35:00> 01:35:01: | immediate and near term? |
| 01:35:01> 01:35:02: | Yeah, I think |
| 01:35:02> 01:35:03: | generally, |
| 01:35:03> 01:35:06: | UM. A lot of the recommendations we uncovered were just |
| 01:35:06> 01:35:09: | different ways of doing things that were already doing and |
| 01:35:09> 01:35:11: | a lot of what I what I mean by things |
| 01:35:11> 01:35:12: | or things that we've actually been hearing about |
| 01:35:12> 01:35:15: | today. So, for instance, allowing |
| 01:35:15> 01:35:18: | investments in nature based solutions is a good idea. |
| 01:35:18> 01:35:22: | Nature based solutions deliver mitigation and adaptation benefits at ESI |
| 01:35:22> 01:35:24: | called them double whammies. |
| 01:35:24> 01:35:27: | And if we can make our money go twice as |
| 01:35:27> 01:35:31: | far by making these investments within existing federal programs, |
| 01:35:31> 01:35:32: | to me that feels like a cost effective |
| 01:35:32> 01:35:35: | change that we should be making. |
| 01:35:35> 01:35:37: | Dale mentioned that another thing that they mentioned was a |
| 01:35:37> 01:35:37: | change in how |
| 01:35:37> 01:35:40: | we evaluate benefits and costs. |
| 01:35:40> 01:35:43: | Those are those don't require any additional resources, |
| 01:35:43> 01:35:47: | it's just a different mindset and so with better thinking |
| 01:35:47> 01:35:50: | by thinking ahead to make sure to making sure that |
| 01:35:50> 01:35:52: | the investments we're making are |
| 01:35:52> 01:35:53: | designed to withstand |
| 01:35:53> 01:35:54: | future climate impacts, not past |
| 01:35:54> 01:35:57: | climate impacts. The Stevens earlier point is another, |
| 01:35:57> 01:35:59: | I think. Good example of how to make what we're |
| 01:35:59> 01:36:01: | already doing more cost effective |
| 01:36:01> 01:36:03: | and we could do that pretty quickly if we wanted |
| 01:36:03> 01:36:03: | to. |
| 01:36:05> 01:36:07: | Fantastic what I may do is let's give the other |
| 01:36:07> 01:36:10: | panelists a chance to chime in if they want to |
| 01:36:10> 01:36:11: | amplify some of what Dan said. |
| 01:36:11> 01:36:13: | I saw Dale nodding vigorously, |
| 01:36:13> 01:36:16: | so maybe Dale this would be a good place for |
| 01:36:16> 01:36:17: | you to return to your point on this. |
| 01:36:20> 01:36:21: | You're on mute. |

| 01:36:24> 01:36:26: | My apologies, you would think after year and half I |
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| 01:36:26> 01:36:27: | would know better, |
| 01:36:27> 01:36:30: | but so you would think you know over the over |
| 01:36:30> 01:36:34: | the last number of years the science of ecosystem services |
| 01:36:34> 01:36:39: | and the economics of ecosystem services for improved tremendously. |
| 01:36:39> 01:36:43: | So we're learning more. We're able to quantify more. |
| 01:36:43> 01:36:48: | It makes no sense whatsoever for money that's coming from |
| 01:36:48> 01:36:49: | the federal. |
| 01:36:49> 01:36:52: | Invent from the federal treasury and federal taxpayers to enable |
| 01:36:52> 01:36:53: | cities, |
| 01:36:53> 01:36:57: | localities, counties. Or whatever reduced their flood hazards, |
| 01:36:57> 01:37:00: | their flood risk, or adapt better to sea level rise. |
| 01:37:00> 01:37:05: | It makes no sense whatsoever to prevent the inclusion of |
| 01:37:05> 01:37:07: | those benefits in projects, |
| 01:37:07> 01:37:12: | and because we cannot count them in in the BCA, |
| 01:37:12> 01:37:17: | they don't get thought through in project planning, |
| 01:37:17> 01:37:21: | thus they never get optimized in project design, |
| 01:37:21> 01:37:23: | which leans. We never build that. |
| 01:37:23> 01:37:26: | So we are leaving a lot. |
| 01:37:26> 01:37:31: | Table because we are preventing the planners from looking at |
| 01:37:31> 01:37:32: | these things to say, |
| 01:37:32> 01:37:35: | hey wait, how can we include these and once we |
| 01:37:35> 01:37:38: | start doing more of these we will learn more about |
| 01:37:38> 01:37:39: | them. |
| 01:37:39> 01:37:42: | And one final thing. There is a tremendous benefit. |
| 01:37:42> 01:37:45: | Possible benefit here from blue from blue carbon. |
| 01:37:45> 01:37:48: | So we have a climate adaptation need in the country |
| 01:37:49> 01:37:50: | around around the globe. |
| 01:37:50> 01:37:52: | How do we capture carbon? |
| 01:37:52> 01:37:54: | Can we do things with it? |
| 01:37:54> 01:37:57: | We know that Marsha is in Sawgrass and mangroves. |
| 01:37:57> 01:37:59: | And and other natural features, |
| 01:37:59> 01:38:03: | they can capture carbon. We are learning more and more |
| 01:38:03> 01:38:06: | and more about how to optimize that capture and if |
| 01:38:06> 01:38:10: | we can create some form of a national carbon market, |
| 01:38:10> 01:38:14: | we will then unlock resources to enable communities to do |
| 01:38:14> 01:38:15: | more projects. |
| 01:38:15> 01:38:18: | Whether for flood risk or ecosystem restoration. |
| 01:38:18> 01:38:20: | So this isn't a massive change, |
| 01:38:20> 01:38:24: | we just need to again optimize our policy update or |

| 01:38:24> 01:38:27: | policy to the challenges we have now. |
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| 01:38:27> 01:38:29: | And we know that's not easy, |
| 01:38:29> 01:38:31: | but we think it's essential that we struggle with it |
| 01:38:31> 01:38:33: | and we hope that the the DIS administration of future |
| 01:38:33> 01:38:35: | medical administrations will. |
| 01:38:36> 01:38:39: | Maria, could I just reinforce with Dan and indelible? |
| 01:38:39> 01:38:43: | Said because I think what we're hitting on around here |
| 01:38:43> 01:38:46: | is is the difference between a linear, |
| 01:38:46> 01:38:50: | sequential way of thinking about planning and a more complex |
| 01:38:50> 01:38:53: | adaptive systems space of thinking about planning, |
| 01:38:53> 01:38:55: | and I think that's what's missing. |
| 01:38:55> 01:38:58: | And I realized that set of 30,000 foot level kind |
| 01:38:58> 01:38:59: | of looking at the whole situation. |
| 01:38:59> 01:39:03: | But I think the way we approach planning for it |
| 01:39:03> 01:39:06: | in in climate change situations needs to meet. |
| 01:39:06> 01:39:10: | More ecological. And more holistic and more systemic. |
| 01:39:10> 01:39:12: | And then we can get the where the you know, |
| 01:39:12> 01:39:15: | the the great synergy that comes when all of these |
| 01:39:15> 01:39:16: | pieces come together. |
| 01:39:19> 01:39:24: | Thank you Steven. I'm currently taking notes. |
| 01:39:24> 01:39:27: | Let me turn to Kevin and I'm going to give |
| 01:39:27> 01:39:30: | you Kevin a question that has come in for the |
| 01:39:30> 01:39:33: | field because I think it is a nice bridge to |
| 01:39:33> 01:39:35: | this and and recognizing you represent hood. |
| 01:39:35> 01:39:38: | But there are other sides at the table that probably |
| 01:39:38> 01:39:40: | need to answer this as well, |
| 01:39:40> 01:39:42: | but the question I think come in was who can |
| 01:39:42> 01:39:45: | set the policy to make sure that the resilient dollars |
| 01:39:45> 01:39:48: | that were about to spend in the next 10 years |
| 01:39:48> 01:39:51: | and how did which has a pretty big chunk of |
| 01:39:51> 01:39:53: | that portfolio with and without disasters? |
| 01:39:53> 01:39:55: | How can we assure that? |
| 01:39:55> 01:39:58: | That money that's being spent is using the forecast about |
| 01:39:58> 01:40:02: | the threats and houses that we're going to face over |
| 01:40:02> 01:40:03: | the life of the projects, |
| 01:40:03> 01:40:07: | particularly around flood risk. Maybe if you could comment a |
| 01:40:07> 01:40:09: | little bit about what you see about the role of |
| 01:40:09> 01:40:12: | the federal government and setting some of these policies and |
| 01:40:12> 01:40:15: | and ingesting that science around, |
| 01:40:15> 01:40:18: | making sure things last as long as intended, |
| 01:40:18> 01:40:18: | yeah, |

| 01:40:18> 01:40:19: | absolutely. And before |
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| 01:40:19> 01:40:22: | doing that just to go back to the past discussion, |
| 01:40:22> 01:40:25: | I couldn't agree with the folks more about the need |
| 01:40:25> 01:40:25: | for. |
| 01:40:25> 01:40:29: | Nature based solutions and that the the dual purpose is |
| 01:40:29> 01:40:32: | that those sorts of projects can provide. |
| 01:40:32> 01:40:34: | You know I mentioned, I think. |
| 01:40:34> 01:40:37: | I mentioned earlier a high funded project in New York |
| 01:40:37> 01:40:40: | that's actually having a grand opening. |
| 01:40:40> 01:40:43: | I think next week at Battery Park. |
| 01:40:43> 01:40:44: | If you looked at it, |
| 01:40:44> 01:40:47: | you would see a playground. |
| 01:40:47> 01:40:49: | And if you look at engineering drawings of it, |
| 01:40:49> 01:40:52: | you would see it a piece of flood infrastructure. |
| 01:40:52> 01:40:56: | So I think those sorts of projects that provide a, |
| 01:40:56> 01:40:58: | you know, a benefit 365 days a year to the |
| 01:40:58> 01:41:01: | Community and not just the one day a year when |
| 01:41:01> 01:41:03: | it needs to for flooding are great. |
| 01:41:03> 01:41:06: | And the good news is we actually don't require a |
| 01:41:06> 01:41:10: | benefit cost analysis for CDBG der so CDBG Dr is |
| 01:41:10> 01:41:12: | a great source of funding for |
| 01:41:12> 01:41:13: | those types of projects |
| 01:41:14> 01:41:17: | to do your question Maria. |
| 01:41:17> 01:41:20: | Uhm, you know? Couple things are ongoing and I'm going |
| 01:41:20> 01:41:23: | to go back to one of the panelists, |
| 01:41:23> 01:41:25: | uh. From the last panel, |
| 01:41:25> 01:41:27: | actually Josh sauce like I believe I'm going to put |
| 01:41:27> 01:41:29: | into this to him and he'll text me if I |
| 01:41:29> 01:41:29: | get it wrong. |
| 01:41:29> 01:41:32: | But many years ago he told me, |
| 01:41:32> 01:41:36: | you know, as a as a policymaking person here you |
| 01:41:36> 01:41:40: | can think of something as your role is either informing |
| 01:41:40> 01:41:44: | incentivizing or mandating a positive outcome and I think that's |
| 01:41:44> 01:41:46: | really useful within that lens. |
| 01:41:46> 01:41:48: | Going to go back to the HUD climate plan you |
| 01:41:48> 01:41:50: | can see where we've we've laid out, |
| 01:41:50> 01:41:53: | what we're going to do over the next couple years |
| 01:41:53> 01:41:56: | to support more climate action at the local level. |
| 01:41:56> 01:41:58: | We have informing, you know, |
| 01:41:58> 01:42:00: | we've got a set of resources that we've already started |
| 01:42:01> 01:42:03: | to put out and will continue to put out on |

| 04.40.00 > 04.40.00. | have seen up a sumflavible funde to summant alignate |
|--|---|
| 01:42:03> 01:42:06: 01:42:06> 01:42:09: | how you can use our flexible funds to support climate |
| 01:42:09> 01:42:14: | action, both on the resilience and the mitigation side. |
| 01:42:09> 01:42:14: | We have incentivizing we already have some programs like the |
| 01:42:14> 01:42:18: | FHA Multifamily Fund provides a mortgage insurance |
| | premium. |
| 01:42:18> 01:42:22: | ' If you take more sustainable behavior and how you design |
| 01:42:22> 01:42:25: | your buildings and then we also have mandate and this |
| 01:42:25> 01:42:26: | is where HUD is. |
| 01:42:26> 01:42:30: | Seriously, working my office of Energy and Environment |
| | Team is |
| 01:42:30> 01:42:33: | is working their number one priority is is to get |
| 01:42:33> 01:42:35: | out two rules and one of which is the federal |
| 01:42:35> 01:42:39: | Flood risk management standard, which I'm sure everybody |
| | on this |
| 01:42:39> 01:42:40: | phone knows about. |
| 01:42:40> 01:42:42: | But is that requirement at looking at if you're if |
| 01:42:42> 01:42:44: | you're investing federal dollars, |
| 01:42:44> 01:42:47: | we want to make sure that that investment is is |
| 01:42:47> 01:42:50: | built to laugh and not putting people in harm's way |
| 01:42:50> 01:42:50: | either. |
| 01:42:50> 01:42:53: | So we're, you know, we're working across that spectrum, |
| 01:42:53> 01:42:56: | of informing, incentivizing and mandating to get. |
| 01:42:56> 01:43:01: | More accounts. Right, |
| 01:43:01> 01:43:06: | thank you Kevin. Maybe we will turn to. |
| 01:43:09> 01:43:12: | Dale, let's go with Dale next because although you have |
| 01:43:12> 01:43:12: | chimed in, |
| 01:43:12> 01:43:15: | I didn't get to ask you something specific on your |
| 01:43:15> 01:43:16: | on your topic, |
| 01:43:16> 01:43:20: | l think. Oh wait, maybe I'm I'm gonna self edit |
| 01:43:21> 01:43:25: | right now because you did answer that question and took |
| 01:43:25> 01:43:27: | to talk turn sorry. |
| 01:43:27> 01:43:30: | East of Diet Coke. This afternoon I'm gonna actually turn |
| 01:43:30> 01:43:32: | it over to Steven and ask, |
| 01:43:32> 01:43:34: | you know, Steven, you talked. |
| 01:43:34> 01:43:37: | I know I mentioned at the beginning and others have |
| 01:43:37> 01:43:41: | touched on how important the engagement piece and |
| | communities are |
| 01:43:41> 01:43:44: | to to have the the right voices at the table. |
| 01:43:44> 01:43:46: | It's it's clearly important to the effectiveness of the long |
| 01:43:46> 01:43:46: | run. |
| 01:43:46> 01:43:50: | Do you have any suggestions for where you have seen |
| 01:43:50> 01:43:54: | or there are opportunities for local governments? |
| | |

| 01:43:54> 01:43:58: | Elected officials? You know, the kinds of the folks that |
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| 01:43:58> 01:43:58: | are. |
| 01:43:58> 01:44:01: | Financial actors and communities are there ways of effectively bringing |
| 01:44:01> 01:44:03: | these folks to the table that you have seen in |
| 01:44:03> 01:44:06: | your experience as you look across these different efforts. |
| 01:44:07> 01:44:10: | Yeah, as I think that that's what I was referring |
| 01:44:10> 01:44:13: | referencing earlier about a systems approach is that I think |
| 01:44:13> 01:44:15: | that's the only way to do it. |
| 01:44:15> 01:44:19: | Or two planning processes for New Orleans after Hurricane Katrina |
| 01:44:19> 01:44:21: | that took place before the third plane process, |
| 01:44:21> 01:44:24: | which we which we led. |
| 01:44:24> 01:44:27: | The first one was by the mayor, |
| 01:44:27> 01:44:29: | and the mayor had his way of doing it. |
| 01:44:29> 01:44:33: | And then that the community rejected that plan. |
| 01:44:33> 01:44:36: | The second one was done by the City Council and |
| 01:44:36> 01:44:38: | the City Council at its only only one way of |
| 01:44:38> 01:44:39: | doing it, |
| 01:44:39> 01:44:43: | and the and the community rejected that plan as well. |
| 01:44:43> 01:44:45: | The third plan was called the reason it was called |
| 01:44:46> 01:44:49: | the Unified New Orleans plan was because it took the |
| 01:44:49> 01:44:52: | best of the first two plants and added the community |
| 01:44:52> 01:44:55: | into the equation. So I think this notion of it. |
| 01:44:55> 01:44:59: | That's why I'm pushing really hard for this more systemic |
| 01:44:59> 01:45:00: | way of thinking. |
| 01:45:00> 01:45:02: | It's not just nature based, |
| 01:45:02> 01:45:05: | it's really thinking the way nature thinks, |
| 01:45:05> 01:45:07: | because nature is a complex adaptive system, |
| 01:45:07> 01:45:12: | and in nature all of those little pieces and all |
| 01:45:12> 01:45:13: | of those little. |
| 01:45:13> 01:45:17: | Microbes come together and in a way that's commute that |
| 01:45:17> 01:45:20: | that's a metaphor for community engagement, |
| 01:45:20> 01:45:23: | and also let's face it, |
| 01:45:23> 01:45:24: | it's called democracy. |
| 01:45:28> 01:45:31: | Dan or Dale, do you have anything that you would |
| 01:45:31> 01:45:33: | want to add in terms of some of best practice |
| 01:45:33> 01:45:34: | for forgetting? |
| 01:45:34> 01:45:37: | Making sure that the voices need to be in the |
| 01:45:37> 01:45:39: | decision or are part of those conversations? |
| 01:45:39> 01:45:39: | Well, |
| 01:45:39> 01:45:41: | I'd like to offer something of one of the things |

| 01:45:41> 01:45:43: | that really stuck with me over the course of our |
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| 01:45:43> 01:45:44: | briefings was something |
| 01:45:44> 01:45:47: | that one of our Louisiana panelists said to me or |
| 01:45:47> 01:45:50: | said during the briefing and he said they asked for |
| 01:45:50> 01:45:53: | my opinion before the decision was made, |
| 01:45:53> 01:45:54: | rather than asking |
| 01:45:54> 01:45:55: | my opinion about |
| 01:45:55> 01:45:58: | the decision and that I think about that all the |
| 01:45:58> 01:45:58: | time. |
| 01:45:58> 01:46:00: | It's just the timing issue, |
| 01:46:00> 01:46:02: | it's it's. It's being intentional, |
| 01:46:02> 01:46:06: | it's engaging and it's not treating a community as you |
| 01:46:06> 01:46:07: | know, |
| | |
| 01:46:07> 01:46:09: | something to work around. It's treating the community of. |
| 01:46:09> 01:46:10: | And when they work through and |
| 01:46:10> 01:46:12: | he was a faith leader, |
| 01:46:12> 01:46:12: | he |
| 01:46:12> 01:46:13: | was from South Louisiana |
| 01:46:14> 01:46:14: | and |
| 01:46:14> 01:46:15: | he was an important part of the |
| 01:46:15> 01:46:18: | project success. And I just think about that all the |
| 01:46:18> 01:46:18: | time. |
| 01:46:18> 01:46:20: | That was a. It's a really simple insight that is |
| 01:46:20> 01:46:22: | actually pretty profound. |
| 01:46:22> 01:46:28: | Issue is trust. Do we trust the community right to |
| 01:46:28> 01:46:31: | actually make these decisions? |
| 01:46:31> 01:46:33: | Do we believe in democracy? |
| 01:46:33> 01:46:36: | Do we believe that all of us are smarter than |
| 01:46:36> 01:46:37: | any of us? |
| 01:46:37> 01:46:39: | And if in fact we do? |
| 01:46:39> 01:46:43: | Then we can engage the community in an authentic and |
| 01:46:43> 01:46:45: | honest and productive way. |
| 01:46:45> 01:46:49: | But the community knows better when things start coming |
| | down |
| 01:46:49> 01:46:52: | from the top and the decisions have already been made. |
| 01:46:52> 01:46:54: | And then in that case, |
| 01:46:54> 01:46:56: | community engagement kind of goes. |
| 01:46:56> 01:47:00: | Crazy right? It goes awry. |
| 01:47:00> 01:47:05: | So the most important thing is honesty and integrity in |
| 01:47:05> 01:47:06: | the process. |
| 01:47:06> 01:47:09: | And and a genuine kind of confidence and trust. |
| 01:47:09> 01:47:12: | And this thing that we call democracy. |
| | |

| 01:47:14> 01:47:16: | I was struck by oh let me just offer that |
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| 01:47:16> 01:47:19: | you know with Dan mentioned this this idea of a |
| 01:47:19> 01:47:22: | faith leader was one of the people that gave him |
| 01:47:22> 01:47:25: | this. This inside a lot of the the voice is |
| 01:47:25> 01:47:28: | needing to be at the table and building that trust |
| 01:47:28> 01:47:31: | are are not necessarily the federal government, |
| 01:47:31> 01:47:33: | right? We we know that there are these trusted intermediaries |
| 01:47:33> 01:47:34: | that are active in communities. |
| 01:47:34> 01:47:38: | You all know who they are in your municipality, |
| 01:47:38> 01:47:42: | right? And we have studs are often well intentioned but |
| 01:47:42> 01:47:44: | don't always have the. |
| 01:47:44> 01:47:46: | The understanding and the ability to to know that wow, |
| 01:47:46> 01:47:49: | we really need to bring in the Chamber of Commerce |
| 01:47:49> 01:47:51: | or we really need to bring in this. |
| 01:47:51> 01:47:53: | You know non profit over here because they are the |
| 01:47:53> 01:47:55: | ones that show up on the very bad day and |
| 01:47:55> 01:47:57: | they need to have a say in terms of what |
| 01:47:57> 01:47:59: | we do on the not bad days. |
| 01:47:59> 01:48:01: | So let me let me give it to Dale and |
| 01:48:01> 01:48:04: | then I'm gonna have a related question that I wanted |
| 01:48:04> 01:48:06: | to post a cabin that's in this vein. |
| 01:48:08> 01:48:12: | So thank you Maria. So I've been involved with something |
| 01:48:12> 01:48:16: | called the Dutch dialogues like Co directed those around in |
| 01:48:16> 01:48:19: | various cities around the US and they are driven by |
| 01:48:19> 01:48:25: | a stakeholder and community information engagement effort to try to |
| 01:48:25> 01:48:28: | explain to people what the risks are, |
| 01:48:28> 01:48:32: | what the hazards are, what opportunities are there to solve |
| 01:48:32> 01:48:33: | those hazards, |
| 01:48:33> 01:48:36: | what their potential cost or complexity might be? |
| 01:48:36> 01:48:38: | What are the tradeoffs or the externality, |
| 01:48:38> 01:48:41: | so to speak and act in those terms? |
| 01:48:41> 01:48:45: | And these are lengthy processes and they take a year |
| 01:48:45> 01:48:45: | to do, |
| 01:48:45> 01:48:47: | but at the end of the at the end of |
| 01:48:47> 01:48:48: | the process, |
| 01:48:48> 01:48:51: | what has happened in in most of the communities that |
| 01:48:51> 01:48:54: | we've done that is now there is a vision that |
| 01:48:54> 01:48:56: | that folks can get behind, |
| 01:48:56> 01:48:59: | and now it's been democratized or socialized with with the |
| 01:49:00> 01:49:00: | community. |

| 01:49:00> 01:49:03: | And then they start to push the decision makers and |
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| 01:49:03> 01:49:06: | the federal authorities who are involved with this. |
| 01:49:06> 01:49:07: | To say this is what we want. |
| 01:49:07> 01:49:08: | And how do we get it? |
| 01:49:08> 01:49:10: | And it's just an information thing. |
| 01:49:10> 01:49:14: | These projects are complex. Flood risk management. |
| 01:49:14> 01:49:19: | Flood risk mitigation across an urban landscape is really complex |
| 01:49:20> 01:49:23: | and you need to enable the citizens. |
| 01:49:23> 01:49:25: | These are the people that are you're going to help |
| 01:49:25> 01:49:26: | or the people that are going to help pay for |
| 01:49:26> 01:49:27: | it. |
| 01:49:27> 01:49:29: | You need to enable them to understand this and so |
| 01:49:29> 01:49:33: | if we can improve the planning processes in advance of |
| 01:49:33> 01:49:36: | you know what kind of alternatives are we actually going |
| 01:49:36> 01:49:38: | to pursue and a design process. |
| 01:49:38> 01:49:39: | I think that's a wonderful, |
| 01:49:39> 01:49:43: | wonderful improvement so. Well, |
| 01:49:43> 01:49:46: | great, now I'm going to turn to Kevin to speak |
| 01:49:46> 01:49:48: | on behalf of his programs. |
| 01:49:48> 01:49:51: | You know, we've heard reference to Dutch dialogues and |
| | some |
| 01:49:51> 01:49:54: | other best practices and and opportunities that where things have |
| 01:49:54> 01:49:56: | been working well and what happens when they don't |
| | premiere |
| 01:49:56> 01:50:01: | perspective. Kevin, are there some specific ways that non |
| | governmental |
| 01:50:01> 01:50:04: | interests who are usually among you, |
| 01:50:04> 01:50:06: | know the governments are usually invited to the table? |
| 01:50:06> 01:50:09: | But do you have any recommendations on how to bring |
| 01:50:09> 01:50:12: | more of the NGO and private community to the table? |
| 01:50:12> 01:50:15: | Particularly around the context of your program. |
| 01:50:15> 01:50:16: | Yeah, and and I |
| 01:50:16> 01:50:19: | you know, even backing up a little bit to your |
| 01:50:19> 01:50:20: | question today like I do, |
| 01:50:20> 01:50:27: | having having LED neighborhood meetings in other jobs with residents. |
| 01:50:27> 01:50:30: | One of the things that I'm always struck by in |
| 01:50:30> 01:50:34: | conversations around climate resilience is usually you go into |
| | |
| 01:50:34> 01:50:38: | community and you're not usually engaging them about a gradual |
| 01:50:38> 01:50:40: | shift. However, in many communities, |

| 01:50:40> 01:50:43: | right? It's like some theoretical risk to many folks, |
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| 01:50:43> 01:50:46: | so there was a neighborhood in a community that I |
| 01:50:46> 01:50:48: | worked in where you know. |
| 01:50:48> 01:50:53: | Highest risk of flooding of anywhere in this Community hands |
| 01:50:53> 01:50:53: | down, |
| 01:50:53> 01:50:56: | right? If a hurricane came to this community, |
| 01:50:56> 01:50:58: | they would be the ones affected, |
| 01:50:58> 01:51:01: | but hurricane hadn't come yet and this is a community |
| 01:51:01> 01:51:03: | that had been asking for new parks, |
| 01:51:03> 01:51:05: | new playground streetlights, better trash pickup, |
| 01:51:05> 01:51:08: | that sort of thing, and so you know, |
| 01:51:08> 01:51:12: | I think. That's an important recognition of this. |
| 01:51:12> 01:51:14: | This field that we all work in is, |
| 01:51:14> 01:51:19: | you know, when you're going to meet with residents and |
| 01:51:19> 01:51:20: | you know, |
| 01:51:20> 01:51:23: | even if you think you're going to talk about. |
| 01:51:23> 01:51:27: | Something I need that they that you've determined that they |
| 01:51:27> 01:51:28: | have. |
| 01:51:28> 01:51:31: | They also have their own needs that they have been |
| 01:51:31> 01:51:33: | asking to be met for awhile, |
| 01:51:33> 01:51:37: | which I think is why these projects that meet multiple |
| 01:51:37> 01:51:41: | needs these projects that often include nature based features are |
| 01:51:41> 01:51:42: | so important. |
| 01:51:42> 01:51:46: | Because if you can design a project with the community |
| 01:51:46> 01:51:49: | that meets their other needs as well as the one |
| 01:51:49> 01:51:54: | that you've used science and data and engineering to determine. |
| 01:51:54> 01:51:56: | And then you're ultimately going to get better engagement because |
| 01:51:56> 01:51:58: | you're meeting them where they're at, |
| 01:51:58> 01:52:00: | and I think that's really important. |
| 01:52:00> 01:52:04: | One of the things that we've been trying to do |
| 01:52:04> 01:52:07: | in our disaster programs is. |
| 01:52:07> 01:52:09: | A little bit of context for folks on Cdr. |
| 01:52:09> 01:52:11: | It's not a permanent program, |
| 01:52:11> 01:52:15: | it's existed for 28 years on the backs of supplemental |
| 01:52:15> 01:52:16: | appropriations, |
| 01:52:16> 01:52:18: | so there's no standing authorization. |
| 01:52:18> 01:52:22: | Which means that there's no standing program requirements and regulation |
| 01:52:22> 01:52:24: | every time we get a new batch of funding, |
| 01:52:24> 01:52:27: | we have to publish other requirements in a notice. |

| 01:52:27> 01:52:32: | So what we're hoping to do with this current round |
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| 01:52:32> 01:52:36: | of funding that we have is is respond to the |
| 01:52:36> 01:52:37: | President. |
| 01:52:37> 01:52:41: | Direction on executive orders around better serving underserved communities and |
| 01:52:41> 01:52:42: | equity. |
| 01:52:42> 01:52:45: | Also on acting on climate. |
| 01:52:45> 01:52:46: | So it's not out yet. |
| 01:52:46> 01:52:47: | We hope to have it out soon, |
| 01:52:47> 01:52:50: | but you know, we're trying to use the authorities that |
| 01:52:50> 01:52:53: | we have to push the folks that spend our money |
| 01:52:53> 01:52:54: | to have deeper, |
| 01:52:54> 01:52:59: | more meaningful community engagement. That's the mandate side on the |
| 01:52:59> 01:53:00: | informed side, |
| 01:53:00> 01:53:01: | you know I referenced it earlier. |
| 01:53:01> 01:53:04: | I believe in passing, but we've been working with our |
| 01:53:04> 01:53:07: | colleagues in the office of Fair Housing and Equal Opportunity. |
| 01:53:07> 01:53:13: | To develop a UM citizen engagement toolkit for our grantees, |
| 01:53:13> 01:53:14: | and it, you know, it may sound trite, |
| 01:53:14> 01:53:17: | but you know the folks that we partner with. |
| 01:53:17> 01:53:22: | Our grantees are cities or states that just experienced a |
| 01:53:22> 01:53:23: | major disaster, |
| 01:53:23> 01:53:27: | and you know, in some cases they they themselves might |
| 01:53:27> 01:53:30: | be dealing with damage at home or going to work |
| 01:53:30> 01:53:34: | in a in a moldy building that needs repair itself. |
| 01:53:34> 01:53:38: | So you know, the the the government that's charged with |
| 01:53:38> 01:53:40: | responding to the communities. |
| 01:53:40> 01:53:42: | Is also responding to the disaster itself, |
| 01:53:42> 01:53:44: | and I think that's an important aspect that we're trying |
| 01:53:44> 01:53:45: | to to meet. |
| 01:53:45> 01:53:51: | That said, the CDBG der team manages a portfolio of |
| 01:53:51> 01:53:52: | \$72 billion, |
| 01:53:52> 01:53:55: | and it has a staff about 60. |
| 01:53:55> 01:53:58: | So we're we're also not, |
| 01:53:58> 01:54:02: | you know, really. Set up to have these deep relationships, |
| 01:54:02> 01:54:05: | so we're trying to do everything we can, |
| 01:54:05> 01:54:08: | both with the the requirements in the program and the |
| 01:54:08> 01:54:11: | technical assistance resources that we make available to equip our |
| 01:54:11> 01:54:14: | state and local government partners to have this type of |
| 01:54:14> 01:54:15: | meaningful engagement. |

| 01:54:17> 01:54:17: | Alright, |
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| 01:54:17> 01:54:21: | well that is a fantastic note to end on. |
| 01:54:21> 01:54:23: | Thank you, I know we have more questions and I |
| 01:54:23> 01:54:25: | think we we had time to but I know as |
| 01:54:25> 01:54:27: | I said I've I've taken some notes here. |
| 01:54:27> 01:54:30: | This benefit costing is just challenge. |
| 01:54:32> 01:54:35: | But again, I'd like to thank Stephen and Dan Dale |
| 01:54:35> 01:54:39: | and Kevin for your participation and input today and turn |
| 01:54:40> 01:54:43: | the con back over to ULI to close this out. |
| 01:54:43> 01:54:45: | Alright, thank you very much Maria, |
| 01:54:45> 01:54:46: | and thank you all the panelists. |
| 01:54:46> 01:54:48: | We are staying over. I don't know if any of |
| 01:54:48> 01:54:51: | the panelists can stay over to maybe answer a few |
| 01:54:51> 01:54:51: | more questions, |
| 01:54:51> 01:54:54: | but from now until 3:30 we are going to have |
| 01:54:54> 01:54:58: | an open session to discuss the Coastal forum and how |
| 01:54:58> 01:55:01: | it might be more helpful and the future between the |
| 01:55:01> 01:55:04: | two sessions. We try to have every spring and every |
| 01:55:04> 01:55:05: | fall, |
| 01:55:05> 01:55:08: | but before we open that officially and if we can |
| 01:55:08> 01:55:11: | answer any additional questions and the panelists can stay |
| | on |
| 01:55:11> 01:55:13: | now thank you very much. |
| 01:55:13> 01:55:14: | I think the staff is. |
| 01:55:14> 01:55:19: | Help put together an extremely beneficial program fitting so much |
| 01:55:19> 01:55:21: | information in such a such type. |
| 01:55:21> 01:55:26: | A tight time frame. It's very difficult really appreciate each |
| 01:55:26> 01:55:30: | panelist and the moderators for being able to synthesize the |
| 01:55:30> 01:55:34: | core information that points that need to be shared and |
| 01:55:34> 01:55:38: | raised as many questions as we have answers for because |
| 01:55:38> 01:55:42: | we're here to try to figure out how and in |
| 01:55:42> 01:55:45: | the short time we have before it's here. |
| 01:55:45> 01:55:47: | And because in some places it is here for the |
| 01:55:47> 01:55:49: | lowest lying communities, |
| 01:55:49> 01:55:51: | sea level rise chases us away from the coast. |
| 01:55:51> 01:55:54: | And how do we plan to deal with that from |
| 01:55:54> 01:55:56: | where we are to where we might need to be |
| 01:55:56> 01:55:57: | in 100 years? |
| 01:55:57> 01:56:00: | So again thanks everyone for that. |
| 01:56:00> 01:56:04: | If there is anyone who could stay and certainly appreciate |
| 01:56:04> 01:56:08: | your thoughts on how we go forward with the coastal |
| 01:56:08> 01:56:08: | form, |

| 01:56:08> 01:56:13: | but wanted to encourage you to stay abreast even if |
|---------------------|--|
| 01:56:13> 01:56:15: | you're not a member of EU Li. |
| 01:56:15> 01:56:18: | We try to make the coastal form open to more |
| 01:56:18> 01:56:21: | of an audience than just the ULI members. |
| 01:56:21> 01:56:23: | So certainly spread the word. |
| 01:56:23> 01:56:28: | Let's increase the network and therefore increase the shared knowledge |
| 01:56:28> 01:56:31: | that we happy are happy to to share as best |
| 01:56:31> 01:56:32: | we can. |
| 01:56:32> 01:56:35: | Some of the questions that we may not have had |
| 01:56:35> 01:56:38: | time to get to really dealt with the OMB or |
| 01:56:38> 01:56:43: | the other other federal policies that might kind of overarched |
| 01:56:43> 01:56:45: | some of the legislation, or some of the way that |
| 01:56:45> 01:56:46: | grants work. |
| 01:56:46> 01:56:50: | You know what are the things that communities need in |
| 01:56:50> 01:56:54: | order to have that community wide planning enabled? |
| 01:56:54> 01:56:56: | You know, is there something already there that we can |
| 01:56:57> 01:56:57: | use? |
| 01:56:57> 01:56:58: | How do we get feedback? |

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