

Video

ULI Nashville Resilient Land Use Cohort Technical Assistance Panel

Presentation

Date: June 11, 2021

00:00:04 --> 00:00:08: Well, welcome everybody. Good morning or afternoon depending on where

00:00:08 --> 00:00:08: you are.

00:00:08 --> 00:00:11: Thank you so much for joining us today and welcome

00:00:11 --> 00:00:15: to the ULI National Nashville Virtual Technical Assistance Panel's final

00:00:15 --> 00:00:19: presentation of their recommendations on how to equitably address extreme

00:00:19 --> 00:00:22: heat will get started in just a few moments here.

00:00:22 --> 00:00:24: But before we kick it off,

00:00:24 --> 00:00:28: just want to provide a quick reminder to please stay

00:00:28 --> 00:00:28: muted.

00:00:28 --> 00:00:30: And if you have any questions,

00:00:30 --> 00:00:34: we look forward to answering them just after.

00:00:34 --> 00:00:36: The presentation is over and will end our chair.

00:00:36 --> 00:00:40: John Vick will start to answer them at that time.

00:00:40 --> 00:00:44: To get us started I'm I'm very honored to welcome

00:00:44 --> 00:00:47: Mayor Cooper to provide some opening remarks.

00:00:47 --> 00:00:47: Mayor Oh

00:00:47 --> 00:00:51: well. Leah, thank you very much and welcome to everybody.

00:00:51 --> 00:00:56: I'm grateful to join the conversation to grateful to hear

00:00:56 --> 00:00:58: your report in conclusions.

00:00:58 --> 00:01:00: As all of us in Nashville,

00:01:00 --> 00:01:05: now we're building a. Change city and billions of dollars

00:01:05 --> 00:01:08: of permits are happening every year,

00:01:08 --> 00:01:13: so the ability to build for a sustainable future is

00:01:13 --> 00:01:18: extremely important and is opportunity we have to seize.

00:01:18 --> 00:01:21: So with that, I want to thank everybody for their

00:01:21 --> 00:01:25: participation and hard work on this and it'll be exciting

00:01:25 --> 00:01:28: to hear the conclusions 'cause we we have a mission
00:01:28 --> 00:01:31: here. That's just right in front of us.
00:01:31 --> 00:01:33: This is happening right now.
00:01:33 --> 00:01:36: How do we? How do we get that done?
00:01:36 --> 00:01:38: And how do we build and create a safe,
00:01:38 --> 00:01:42: sustainable future? Is has to be foremost on everybody's
thinking.
00:01:42 --> 00:01:44: So thank you, Leah, grateful to be here.
00:01:46 --> 00:01:50: Thank you, mayor. Uhm, and now hand it over to
00:01:50 --> 00:01:53: Kim Hawkins to welcome us on behalf of ULI National
00:01:53 --> 00:01:54: District Council.
00:01:54 --> 00:01:58: OK, thanks Leah and and thank you Mayor Cooper for
00:01:58 --> 00:02:01: joining us today and I can't tell you how meaningful
00:02:01 --> 00:02:04: it is for you to be here and to have
00:02:04 --> 00:02:07: the support of the city for this effort.
00:02:07 --> 00:02:09: So good morning to all of you.
00:02:09 --> 00:02:12: And welcome to ULI Nashville's presentation of you,
00:02:12 --> 00:02:14: think Nashville's hot just wait,
00:02:14 --> 00:02:18: so our recommendations for an equitable development and
design responses
00:02:18 --> 00:02:18: to extreme heat.
00:02:18 --> 00:02:22: I'm Kim Hawkins. I'm the chair of Uli Nashville for
00:02:22 --> 00:02:26: just three more weeks until Ed Henley takes my place
00:02:26 --> 00:02:28: and grateful for that.
00:02:28 --> 00:02:31: And I'm happy to welcome you as we explore these
00:02:31 --> 00:02:34: recommendations of utilized technical assistance.
00:02:34 --> 00:02:38: Panel of experts. I think I'd be safe to assume
00:02:38 --> 00:02:42: that all of us have been affected by the impacts
00:02:42 --> 00:02:43: of extreme heat.
00:02:43 --> 00:02:46: I know it is hit very close to home for
00:02:46 --> 00:02:50: me with our office experiencing two events.
00:02:50 --> 00:02:53: The 2010 downtown flood and just last year in March
00:02:54 --> 00:02:54: of 2020,
00:02:54 --> 00:02:58: a tornado that destroyed our office and there have been
00:02:58 --> 00:03:02: about a dozen other hundred year flood events and Davidson
00:03:02 --> 00:03:04: County since the 2010 flood,
00:03:04 --> 00:03:07: including just a few months ago.
00:03:07 --> 00:03:11: Uhm, my family felt the first hand impact of Hurricane
00:03:11 --> 00:03:14: Katrina in 20 in 2005 and the hurricane season and
00:03:14 --> 00:03:18: this year a week before hurricane season even started.
00:03:18 --> 00:03:22: We had our first name storm and it's expected to
00:03:22 --> 00:03:26: be another above average season due to the higher sea

00:03:27 --> 00:03:28: surface temperatures.

00:03:28 --> 00:03:32: And we also know that our most vulnerable communities feel

00:03:32 --> 00:03:34: these impacts even more,

00:03:34 --> 00:03:39: not just through weather, but also through health impacts.

00:03:39 --> 00:03:41: So how do we change the tide?

00:03:41 --> 00:03:45: Today we'll hear from 8 national and local experts who

00:03:45 --> 00:03:47: are convened by you,

00:03:47 --> 00:03:51: lies, Urban Resilience Center. Over the past three days,

00:03:51 --> 00:03:55: that technical Assistance Panel has really worked diligently together to

00:03:55 --> 00:03:58: consider equitable responses through land use,

00:03:58 --> 00:04:03: development design. New construction and retrofits to mitigate extreme heat

00:04:03 --> 00:04:07: and the health threats on our community and its people.

00:04:07 --> 00:04:11: Our panel is chaired by Uline National member Doctor John

00:04:11 --> 00:04:11: Vick,

00:04:11 --> 00:04:14: who has done a remarkable job.

00:04:14 --> 00:04:16: Thank you so much, John.

00:04:16 --> 00:04:19: The evaluation, he's the evaluation and assessment director for the

00:04:20 --> 00:04:23: Office of Primary Prevention at the Tennessee Department of Health.

00:04:23 --> 00:04:27: John works at the intersection of public health and the

00:04:27 --> 00:04:30: built environment and facilitating the development of health,

00:04:30 --> 00:04:35: promoting equitable, livable communities. So he's just the right person

00:04:35 --> 00:04:36: for this job.

00:04:36 --> 00:04:40: He was uniquely positioned to do this and to pull

00:04:40 --> 00:04:42: together this blue chip panel.

00:04:42 --> 00:04:44: Uhm, all of our panelists will be introduced in this

00:04:44 --> 00:04:46: morning's presentation,

00:04:46 --> 00:04:49: but I really want to personally thank them all for

00:04:49 --> 00:04:53: their dedication to excellence and their willingness to share their

00:04:53 --> 00:04:57: time and their insights and their expertise with our community.

00:04:57 --> 00:05:01: This tap was made possible through a grant from JP

00:05:01 --> 00:05:05: Morgan Chase and the Urban Land Institute and has had

00:05:05 --> 00:05:09: the valuable support of core development Mayor Cooper's office within

00:05:09 --> 00:05:13: Metro Nashville and the GNRC.

00:05:13 --> 00:05:17: They will be receiving the final panel report and recommendations.

00:05:17 --> 00:05:22: Annually remains ready to support implementation of those

00:05:22 --> 00:05:25: tap recommendations,

00:05:25 --> 00:05:30: which are thoughtful, innovative and action oriented.

00:05:30 --> 00:05:34: RULI National member advisory team worked through the

00:05:34 --> 00:05:37: pandemic for

00:05:37 --> 00:05:41: nearly a year as they applied for the grant that

00:05:41 --> 00:05:45: supported art app identified the scope of it,

00:05:45 --> 00:05:48: shared their expertise and framing the process,

00:05:48 --> 00:05:51: and developed a comprehensive. Briefing materials and

00:05:51 --> 00:05:56: virtual tour for

00:05:56 --> 00:05:57: our panel so they could get quickly up to speed.

00:05:57 --> 00:06:01: So now join me in welcoming the ULI National Technical

00:06:01 --> 00:06:04: Assistance Panel on Equitable Development and Design

00:06:04 --> 00:06:07: responses to extreme

00:06:07 --> 00:06:09: heat threats,

00:06:09 --> 00:06:13: and I'm always amazed at how much incredible work can

00:06:13 --> 00:06:16: get done by these teams of UI experts and a

00:06:16 --> 00:06:20: remarkably short bit of time.

00:06:20 --> 00:06:23: So I'll go back to Leah.

00:06:23 --> 00:06:25: Thank you so much Kim.

00:06:25 --> 00:06:28: So if you aren't familiar with who you will lie,

00:06:28 --> 00:06:33: is the Urban Land Institute is a nonprofit membership

00:06:33 --> 00:06:36: organization

00:06:36 --> 00:06:39: with more than 45,000 members worldwide within you alive

00:06:39 --> 00:06:41: their

00:06:41 --> 00:06:46: urban resilience program focuses on how buildings,

00:06:46 --> 00:06:49: communities and cities can be more resilient to the to

00:06:49 --> 00:06:54: the impacts of climate change considering preparedness for

00:06:54 --> 00:06:57: climate risks

00:06:57 --> 00:07:00: and the role of the real estate sector in addressing

00:07:00 --> 00:07:04: them these resilience, technical assistance panels leverage

00:07:04 --> 00:07:07: the expertise and

00:07:07 --> 00:07:10: perspectives of the ULI membership to provide.

00:07:10 --> 00:07:13: Land use development strategies. Assess policy

00:07:13 --> 00:07:16: opportunities and craft strategies

00:07:16 --> 00:07:19: for implementation and funding for resilience going forward.

00:07:19 --> 00:07:22: Next slide please. The National Virtual Technical Assistance

00:07:22 --> 00:07:25: Panel is

00:07:25 --> 00:07:28: part of a larger series of Resilience,

00:07:28 --> 00:07:31: technical assistance and learning opportunities called the

00:07:31 --> 00:07:34: Resilient Land use

00:07:34 --> 00:07:37: cohort.

00:07:37 --> 00:07:40: The cohort has been generously supported by JP Morgan

00:07:40 --> 00:07:43: Chase

00:07:43 --> 00:07:46: through the UI Foundation and our luck brings together 8

00:07:07 --> 00:07:10: ULI District Councils to work with city and agency partners
00:07:10 --> 00:07:13: on enhancing resilience and equity through land use and
development
00:07:13 --> 00:07:14: strategies.
00:07:14 --> 00:07:17: With that I'll hand it over to Doctor John Vick,
00:07:17 --> 00:07:20: our chair to kick off the panel's recommendations.
00:07:20 --> 00:07:32: Thank you. John, I think you're muted.
00:07:32 --> 00:07:32: Thanks,
00:07:32 --> 00:07:35: sorry about that happens all the time.
00:07:35 --> 00:07:37: Thanks Leah. Good morning everyone.
00:07:37 --> 00:07:39: Thank you for being here.
00:07:39 --> 00:07:42: I did want to extend a thank you again to
00:07:42 --> 00:07:44: our sponsors.
00:07:44 --> 00:07:47: JP Morgan Chase the Greater Nashville Regional Council,
00:07:47 --> 00:07:51: Metro Nashville government and courted element without
whom our technical
00:07:51 --> 00:07:53: assistance panel would not have been possible.
00:07:53 --> 00:07:59: So thank you. So a little bit about what our
00:07:59 --> 00:08:01: panel was tasked with.
00:08:01 --> 00:08:05: Our scope was to think about building and site scale
00:08:05 --> 00:08:08: landscape design for heat resilience strategies.
00:08:08 --> 00:08:11: We want to make sure that as we're making
recommendations
00:08:11 --> 00:08:12: for Nashville,
00:08:12 --> 00:08:15: particularly about around building retrofits and land use,
00:08:15 --> 00:08:18: that were also thinking about equity,
00:08:18 --> 00:08:21: and we want to make sure that our recommendations reflect
00:08:21 --> 00:08:22: that,
00:08:22 --> 00:08:25: and that implementation happens in an equitable manner.
00:08:25 --> 00:08:27: And we'll talk a little bit.
00:08:27 --> 00:08:31: More about that later were also thinking about longer term.
00:08:31 --> 00:08:35: A benchmarking for a heat mitigation and energy efficiency
goals,
00:08:35 --> 00:08:38: and then also thinking about the financing mechanisms,
00:08:38 --> 00:08:41: which of course is a critical piece of this as
00:08:41 --> 00:08:42: well,
00:08:42 --> 00:08:45: and then also just how future city policy can encourage
00:08:45 --> 00:08:50: local property owners and developers to mitigate extreme
heating cold
00:08:50 --> 00:08:53: in their projects and in open spaces in Nashville in
00:08:53 --> 00:08:57: order to focus our panel a little bit on the
00:08:57 --> 00:08:59: task at hand.
00:08:59 --> 00:09:02: Our sponsor team decided to focus in on one portion

00:09:02 --> 00:09:05: of the city where we could wrap our head around
00:09:05 --> 00:09:10: what these recommendations might look like for specific sites and
00:09:10 --> 00:09:13: at the neighborhood scale with the goal of ultimately making
00:09:13 --> 00:09:16: recommendations for the entire city and the region,
00:09:16 --> 00:09:19: our group chose to focus on an area of South
00:09:19 --> 00:09:23: Nashville just South of downtown that includes the Chestnut Hill
00:09:23 --> 00:09:24: neighborhood,
00:09:24 --> 00:09:27: the Wedgewood Houston neighborhood, and the Fairgrounds redevelopment site.
00:09:27 --> 00:09:30: And we chose. The site for two reasons.
00:09:30 --> 00:09:33: One was data we looked to find out what parts
00:09:33 --> 00:09:37: of the city were most vulnerable to extreme heat.
00:09:37 --> 00:09:39: We looked at the socio economic variables.
00:09:39 --> 00:09:43: We looked at the health risk and we also looked
00:09:43 --> 00:09:46: at tree cover and surface temperature and we zeroed in
00:09:47 --> 00:09:50: on this part of the county because we felt like
00:09:50 --> 00:09:54: this is an area that could really benefit from some
00:09:54 --> 00:09:57: of these interventions that we can implement.
00:09:57 --> 00:10:00: We also know that this area of town,
00:10:00 --> 00:10:02: like many areas of town in Nashville,
00:10:02 --> 00:10:05: is experiencing rapid development. There are a lot of large
00:10:05 --> 00:10:09: scale projects and small scale projects happening all at once
00:10:09 --> 00:10:12: and so it gave us the opportunity as a panel
00:10:12 --> 00:10:14: to think about some of these adaptive reuse projects.
00:10:14 --> 00:10:17: Single family home development and the fairgrounds redevelopment.
00:10:17 --> 00:10:20: Many different scales of development that are happening to
00:10:20 --> 00:10:21: help frame our recommendations.
00:10:24 --> 00:10:29: So next slide please. So this is our panel.
00:10:29 --> 00:10:32: I'm deeply honored and humbled to be chairing this panel.
00:10:32 --> 00:10:36: It's been great working with and getting to know each
00:10:36 --> 00:10:38: of them throughout this week.
00:10:38 --> 00:10:41: We've had some long days working fast and furious and
00:10:41 --> 00:10:43: they've really come through.
00:10:43 --> 00:10:47: There's a a diverse set of perspectives and backgrounds represented
00:10:47 --> 00:10:47: here.
00:10:47 --> 00:10:50: I represent the the public health department and the public
00:10:50 --> 00:10:52: health perspective.
00:10:52 --> 00:10:53: We also have Kevin Augustine,

00:10:53 --> 00:10:57: who is with DBRS Morningstar in Chicago.

00:10:57 --> 00:11:01: We have Clay Hines who is the founder of public

00:11:01 --> 00:11:03: square here in Nashville.

00:11:03 --> 00:11:06: Jillian Burgess with RWD I in Philadelphia.

00:11:06 --> 00:11:10: We have Adam Freda, principal with Bloomberg Associates.

00:11:10 --> 00:11:13: Albina, or just Ohio director of Housing and community

00:11:13 --> 00:11:16: resilience.

00:11:13 --> 00:11:16: In Tallahassee. Sadhu Johnston, who is the recently retired

00:11:16 --> 00:11:18: city

00:11:16 --> 00:11:18: manager of Vancouver,

00:11:18 --> 00:11:21: BC and Erica Weeks, also here in Nashville with Hastings

00:11:21 --> 00:11:24: architecture so you can see we have a diverse set

00:11:24 --> 00:11:25: of backgrounds,

00:11:25 --> 00:11:29: expertise and perspectives. Some of us are here in Nashville

00:11:29 --> 00:11:30: and some of us are not,

00:11:30 --> 00:11:34: but we all dedicated our time to thinking about how

00:11:34 --> 00:11:37: we can address heat mitigation here in the city.

00:11:40 --> 00:11:43: I also sincerely want to thank the UI staff Leah

00:11:43 --> 00:11:44: Kelly and Aaron,

00:11:44 --> 00:11:47: who have made all of this possible and they've worked

00:11:47 --> 00:11:50: incredibly hard to help us to craft these recommendations

00:11:50 --> 00:11:53: and

00:11:50 --> 00:11:53: this presentation and the forthcoming report for you.

00:11:53 --> 00:11:56: I'm also, of course, a huge thanks to Rose and

00:11:56 --> 00:11:58: Kate hide here with you all.

00:11:58 --> 00:12:02: I Nashville. And of course we want to thank our

00:12:03 --> 00:12:08: stakeholders so our panel interviewed this week over 40 local

00:12:08 --> 00:12:11: stakeholders who represent government,

00:12:11 --> 00:12:13: academia, nonprofits, the business sector,

00:12:13 --> 00:12:17: and a variety of different sets of expertise from planning

00:12:17 --> 00:12:20: and architecture and design to environmental justice,

00:12:20 --> 00:12:25: sustainability and resilience. We're very thankful for each

00:12:25 --> 00:12:28: stakeholder who

00:12:25 --> 00:12:28: took a few minutes of their time this week to

00:12:29 --> 00:12:29: talk with us,

00:12:29 --> 00:12:32: share their expertise and their perspectives.

00:12:32 --> 00:12:34: And help us to understand what they see is the

00:12:34 --> 00:12:38: priorities around mitigating heat and climate impacts here in

00:12:38 --> 00:12:43: Nashville.

00:12:38 --> 00:12:43: So thank you stakeholders. So now I want to turn

00:12:43 --> 00:12:46: it over to my fellow panelists.

00:12:46 --> 00:12:49: Saudi Johnston, who's going to talk a little bit about

00:12:49 --> 00:12:50: the problems that we were facing.

00:12:52 --> 00:12:55: Great thanks John. So yeah we just a couple of

00:12:55 --> 00:12:58: slides to set the context here.

00:12:58 --> 00:13:01: Uh, because Nashville is not alone in dealing with these

00:13:01 --> 00:13:02: issues.

00:13:02 --> 00:13:05: 70% of cities across the globe are dealing with the

00:13:05 --> 00:13:08: impacts of climate change be they flooding,

00:13:08 --> 00:13:10: urban heat Island Air quality,

00:13:10 --> 00:13:13: that sort of thing. And so cities are really stepping

00:13:13 --> 00:13:17: up its world class cities are embracing these strategies and

00:13:17 --> 00:13:20: from our perspective and not being from Nashville but getting

00:13:20 --> 00:13:23: to look at what's happening there.

00:13:23 --> 00:13:26: Nashville is becoming a world class city and has the

00:13:26 --> 00:13:29: opportunity to really embrace these approaches as well.

00:13:29 --> 00:13:32: Cities are taking this on in two ways.

00:13:32 --> 00:13:35: The first is to reduce their impact on climate change.

00:13:35 --> 00:13:37: So that's called the mitigation,

00:13:37 --> 00:13:40: and they can reduce climate emissions and help to prevent

00:13:40 --> 00:13:42: climate change impacts.

00:13:42 --> 00:13:45: The second is adaptation, and that's really preparing for the

00:13:45 --> 00:13:46: impacts of climate change.

00:13:46 --> 00:13:48: And we're already seeing them.

00:13:48 --> 00:13:52: Kim mentioned a number of the impacts that are that

00:13:52 --> 00:13:54: are happening for Nashville.

00:13:54 --> 00:13:56: And it's really jeopardizing the viability of our communities.

00:13:56 --> 00:14:00: And so cities are recognizing they need to step up

00:14:00 --> 00:14:02: and take this on directly next slide,

00:14:02 --> 00:14:05: please. So how is that?

00:14:05 --> 00:14:09: How how is climate change impacting our cities,

00:14:09 --> 00:14:13: and in particular, with extreme heat and the built

00:14:13 --> 00:14:17: environment?

00:14:17 --> 00:14:19: You know, you can see that the the bottom graphic

00:14:19 --> 00:14:22: there it is getting hotter.

00:14:22 --> 00:14:25: It's that heat disproportionately is impacting cities,

00:14:25 --> 00:14:29: and that is producing widespread public health risk,

00:14:29 --> 00:14:34: and that risk can be mitigated to some extent by

00:14:34 --> 00:14:35: taking proactive steps to address the concerns and by taking

00:14:35 --> 00:14:37: these on you.

00:14:37 --> 00:14:40: Really help your own city to be more resilient to

00:14:40 --> 00:14:42: all of the different impacts that might might come as

00:14:42 --> 00:14:45: a result of climate change.

00:14:45 --> 00:14:49: Next slide. So the good news is that most of

00:14:49 --> 00:14:52: the solutions are pretty readily available.

00:14:49 --> 00:14:52: It's not rocket science, and they have been tested.

00:14:52 --> 00:14:55: I was in the mayor's office in Chicago right after

00:14:55 --> 00:14:57: we had a pretty extreme heat wave.

00:14:57 --> 00:14:59: We had over 700 deaths,

00:14:59 --> 00:15:01: and so the mayor at the time and and the

00:15:01 --> 00:15:05: Council were really committed to finding solutions to reduce the

00:15:05 --> 00:15:07: impact of urban heat island.

00:15:07 --> 00:15:10: And there you can see the rooftop of City Hall,

00:15:10 --> 00:15:12: the green roof on one side.

00:15:12 --> 00:15:14: The county building was that.

00:15:14 --> 00:15:16: The black roof there and you can see the temperature

00:15:16 --> 00:15:17: difference.

00:15:17 --> 00:15:20: The green roof is about 70 degrees and the black

00:15:20 --> 00:15:21: roof is about 150 degrees.

00:15:21 --> 00:15:24: So simple solutions like that can really help to reduce

00:15:24 --> 00:15:27: the temperature in the city and you see the graphic

00:15:27 --> 00:15:28: there.

00:15:28 --> 00:15:30: What happens is during the day the sun heats up

00:15:30 --> 00:15:31: the asphalt,

00:15:31 --> 00:15:34: the black groups all of the materials heat up normally

00:15:34 --> 00:15:35: at night.

00:15:35 --> 00:15:37: That heat then dissipates in the city.

00:15:37 --> 00:15:39: Can cool down. People can kind of recover,

00:15:39 --> 00:15:42: but what what's happening is that all the black materials,

00:15:42 --> 00:15:44: the asphalts and whatnot are.

00:15:44 --> 00:15:47: Absorbing that heat and then letting it out at night,

00:15:47 --> 00:15:49: which doesn't allow that the city to cool.

00:15:49 --> 00:15:51: So a lot of the simple,

00:15:51 --> 00:15:52: simple solutions are readily available.

00:15:52 --> 00:15:56: Green roofs. Reflective roofs on the buildings can really help.

00:15:56 --> 00:15:59: Reflective pavements and you'll see some images of these strategic

00:15:59 --> 00:16:01: landscaping solutions and then thinking.

00:16:01 --> 00:16:04: Neighborhood wide about St reallocations and greening on in in

00:16:05 --> 00:16:05: the neighborhood,

00:16:05 --> 00:16:08: so a lot of these solutions are readily available.

00:16:08 --> 00:16:11: Our first recommendation as a panel.

00:16:11 --> 00:16:13: We had a chance to take a look at Mayor

00:16:13 --> 00:16:17: Cooper's sustainable advisory committees report and we

00:16:18 --> 00:16:18: understand it's embargoed at this point,

00:16:18 --> 00:16:21: but our first recommendation is to adopt it.

00:16:21 --> 00:16:24: It's got a lot of great stuff in it and

00:16:24 --> 00:16:27: it'll really help to move Nashville.

00:16:27 --> 00:16:29: Forward, so kudos to you Mayor Cooper for bringing that

00:16:29 --> 00:16:30: group together.

00:16:30 --> 00:16:33: Our first recommendation is adopt that report and then you'll

00:16:33 --> 00:16:35: see in the upcoming slides.

00:16:35 --> 00:16:38: We've got a number of other recommendations that will help

00:16:38 --> 00:16:41: Nashville to really be a global leader in this topic,

00:16:41 --> 00:16:43: so I'm going to hand it over now to Adam

00:16:43 --> 00:16:45: Freid with Bloomberg Associates.

00:16:46 --> 00:16:49: Great thanks, I do and the exciting thing about you

00:16:49 --> 00:16:51: know the work that we had before us is that

00:16:51 --> 00:16:55: Assad who said the solutions are known in relatively simple

00:16:55 --> 00:16:58: and just to summarize, adding greenery and shade to areas

00:16:58 --> 00:16:59: throughout the city,

00:16:59 --> 00:17:02: lightning, the color of pavement and rooftops and adding

00:17:03 --> 00:17:06: water

00:17:03 --> 00:17:06: features for people so that you can provide opportunities

00:17:06 --> 00:17:07: from

00:17:06 --> 00:17:07: the cool off.

00:17:07 --> 00:17:10: Now these are common sense solutions that enhance the

00:17:10 --> 00:17:13: communities

00:17:10 --> 00:17:13: and economic competitive of Nashville and add tremendous

00:17:13 --> 00:17:14: value even

00:17:13 --> 00:17:14: without climate change.

00:17:14 --> 00:17:16: They make sense and it will be particularly.

00:17:16 --> 00:17:20: Critical is Nashville. Summertime temperatures are predicted

00:17:20 --> 00:17:23: to increase 5

00:17:20 --> 00:17:23: degrees over the next 30 years and it'll last year

00:17:23 --> 00:17:24: and the year before.

00:17:24 --> 00:17:27: You're already breaking records of days over 90 degrees and

00:17:27 --> 00:17:29: that trend is going to be continuing now.

00:17:29 --> 00:17:31: One of the mayors that I've worked with,

00:17:31 --> 00:17:34: and I had the fortune of spending four years with

00:17:34 --> 00:17:37: Nashville as a client in previous administrations.

00:17:37 --> 00:17:40: But another mayor that I've worked with has said that

00:17:40 --> 00:17:43: every action that their city takes is a climate action.

00:17:43 --> 00:17:46: And you know anything that they do either reduces

00:17:46 --> 00:17:47: greenhouse

00:17:46 --> 00:17:47: gas emissions.

00:17:47 --> 00:17:50: In climate risks, or it increases them inadvertently or

00:17:47 --> 00:17:50: deliberately,

00:17:50 --> 00:17:53: and that's certainly true in the case of all the

00:17:53 --> 00:17:54: recommendations,

00:17:54 --> 00:17:56: we're going to be discussing today.

00:17:56 --> 00:17:58: So for new constructions you know,

00:17:58 --> 00:18:00: we recommend that you require or incentivize features to cool

00:18:00 --> 00:18:02: neighborhoods and protect residents,

00:18:02 --> 00:18:05: and this is being done in cities throughout the world.

00:18:05 --> 00:18:08: Chicago and Vancouver require green roofs and new large scale

00:18:08 --> 00:18:09: developments,

00:18:09 --> 00:18:12: or at least it assessment of the opportunities for that

00:18:12 --> 00:18:14: Los Angeles in New York City,

00:18:14 --> 00:18:17: where I spent about 20 years working on urban.

00:18:17 --> 00:18:20: Sustainability issues require cool roofs on new buildings.

00:18:20 --> 00:18:23: Oftentimes they'll exempt high slope roofs or single family homes,

00:18:23 --> 00:18:26: but in many cases it makes sense to include those

00:18:26 --> 00:18:28: when it comes to cool roofs.

00:18:28 --> 00:18:31: Louisville offers a cool roof incentives to new developments,

00:18:31 --> 00:18:33: so there are ways. If you're not going to require

00:18:34 --> 00:18:37: them to incentivize it and get developers to look at

00:18:37 --> 00:18:38: the opportunities,

00:18:38 --> 00:18:41: many of which will save the money over the lifespan

00:18:41 --> 00:18:42: of the building.

00:18:42 --> 00:18:44: I'll talk pass this on to Erica who's going to

00:18:44 --> 00:18:47: talk about how to retrofit existing buildings.

00:18:47 --> 00:18:48: With many of these features.

00:18:51 --> 00:18:55: Thanks, Adam. As as important as it is to to

00:18:55 --> 00:18:57: focus on our new new construction,

00:18:57 --> 00:19:00: existing building stock still makes up a huge percentage of

00:19:00 --> 00:19:03: our building energy use and many of the things that

00:19:03 --> 00:19:06: we're doing on new construction can be implemented on existing

00:19:06 --> 00:19:09: buildings as well. So looking at reflective coatings or green

00:19:09 --> 00:19:09: roofs,

00:19:09 --> 00:19:12: so here we see an image of the of Chicago

00:19:12 --> 00:19:14: City Hall that green roof that said,

00:19:14 --> 00:19:17: who mentioned earlier? That's a fantastic project.

00:19:17 --> 00:19:20: Graders aren't always possible on existing buildings,

00:19:20 --> 00:19:23: you know, for for load regions or other retrofit reasons.

00:19:23 --> 00:19:25: So a simple cool roof coating.

00:19:25 --> 00:19:28: Here you can see a building in New York City

00:19:28 --> 00:19:32: where they're just painting on a reflective coating that helps

00:19:32 --> 00:19:35: cool everything in in the immediate area that he was
00:19:35 --> 00:19:38: mentioning earlier. And these things this is we're showing a
00:19:38 --> 00:19:41: commercial building here where this reflective coatings being
installed,
00:19:41 --> 00:19:44: but these could be installed on single family and duplex
00:19:44 --> 00:19:47: is particularly in in these neighborhoods.
00:19:47 --> 00:19:48: In Nashville that we're looking at,
00:19:48 --> 00:19:51: there's a huge swath of these starting to age.
00:19:51 --> 00:19:54: Aging, single family and duplex homes with residents who
have
00:19:54 --> 00:19:56: been living there for a long time,
00:19:56 --> 00:19:59: and so a pilot program painting these roofs with a
00:19:59 --> 00:20:02: reflective coating could go a long way to reducing their
00:20:02 --> 00:20:03: utility bills,
00:20:03 --> 00:20:07: specially their cooling bills. Aging homes also weren't built at
00:20:07 --> 00:20:10: a time where we needed as much insulation or as
00:20:10 --> 00:20:11: much air tightness,
00:20:11 --> 00:20:14: and so we want to focus on on making these
00:20:14 --> 00:20:18: buildings more airtight and better thermally insulated to help
reduce
00:20:18 --> 00:20:19: their utility bills.
00:20:19 --> 00:20:22: But there's also a term we talked about in resiliency,
00:20:22 --> 00:20:24: which is called passive survivability,
00:20:24 --> 00:20:27: and that is how long can somebody stay in their
00:20:27 --> 00:20:31: home during a critical weather event or a catastrophic event.
00:20:31 --> 00:20:33: Short term power outages during peak loads?
00:20:33 --> 00:20:36: Are there rolling utility? How to do his work,
00:20:36 --> 00:20:38: where where air conditioning is going to go off,
00:20:38 --> 00:20:41: particularly at the hottest times of the day,
00:20:41 --> 00:20:44: and so a really well insulated or really airtight home
00:20:44 --> 00:20:45: is going to stay cool for longer,
00:20:45 --> 00:20:47: particularly during those peak times.
00:20:47 --> 00:20:49: It's also going to go a long way as we
00:20:49 --> 00:20:51: start to upgrade this.
00:20:51 --> 00:20:53: This existing building stock to reducing those utility bills for
00:20:53 --> 00:20:54: long term residents,
00:20:54 --> 00:20:56: and that money is it can be better spent on
00:20:56 --> 00:20:58: upgrading their heating and cooling systems,
00:20:58 --> 00:21:01: and so the third thing we want to start to
00:21:01 --> 00:21:04: think about is after we've tightened up the building,
00:21:04 --> 00:21:07: we've made it really. Energy efficient in a passive way.
00:21:07 --> 00:21:10: We want to incentivize some of those high efficiency heating
00:21:10 --> 00:21:12: and cooling systems like heat pumps.

00:21:12 --> 00:21:15: Heat pumps also moved heating and cooling back onto the
00:21:15 --> 00:21:16: electric grid,
00:21:16 --> 00:21:20: which is something that we can start to pursue cleaner
00:21:20 --> 00:21:21: energies.
00:21:21 --> 00:21:23: As we start to reach intensifies,
00:21:23 --> 00:21:25: those high high efficiency heating and cooling,
00:21:25 --> 00:21:26: we tighten up the envelope.
00:21:26 --> 00:21:28: We're going to reduce the peak loads.
00:21:28 --> 00:21:31: It will reduce the reliance on the utilities and on
00:21:31 --> 00:21:32: the grid,
00:21:32 --> 00:21:35: particularly during peak times when that when the grid is
00:21:35 --> 00:21:37: really strained and when we start to see those rolling
00:21:37 --> 00:21:39: rolling power outages during heat waves.
00:21:39 --> 00:21:42: Really at the critical time when when you need your
00:21:42 --> 00:21:43: the most air conditioning,
00:21:43 --> 00:21:46: the grid can get overwhelmed and we start to see
00:21:46 --> 00:21:47: outages,
00:21:47 --> 00:21:49: and so reducing our reliance on that,
00:21:49 --> 00:21:51: reducing making that grid more resilient by.
00:21:51 --> 00:21:55: Making all of the end building uses more resilient will
00:21:55 --> 00:21:59: help help ease those peak times and help everybody can
00:21:59 --> 00:22:03: have a more reliable heating and cooling and electric grid.
00:22:03 --> 00:22:05: So there are sort of a Fitbit scale of the
00:22:05 --> 00:22:08: building recommendations I'm going to hand it back to Adam
00:22:08 --> 00:22:10: is going to start to take us up into the
00:22:10 --> 00:22:13: up into the site scale and to the neighborhood scale
00:22:13 --> 00:22:13: of recommendations.
00:22:13 --> 00:22:17: Thanks Jillian. And I I apologize for calling out Erica
00:22:17 --> 00:22:19: instead of you.
00:22:19 --> 00:22:20: So we want to, you know,
00:22:20 --> 00:22:24: make sure that within Nashville were thinking outside of the
00:22:24 --> 00:22:26: box and the four walls of our buildings to the
00:22:26 --> 00:22:27: broader site,
00:22:27 --> 00:22:30: which offers a really tremendous opportunity to cool
neighborhoods and
00:22:30 --> 00:22:33: provide a number of amenities that address equity concerns
as
00:22:33 --> 00:22:36: well as well as the economic competitiveness of the cities.
00:22:36 --> 00:22:38: So cities like Washington DC,
00:22:38 --> 00:22:41: Philadelphia and Detroit are requiring on site stormwater
management for
00:22:41 --> 00:22:41: new developments,
00:22:41 --> 00:22:43: which is helping reduce flood risk.

00:22:43 --> 00:22:46: But all also adding a lot of greenery and D

00:22:46 --> 00:22:47: paving sites,

00:22:47 --> 00:22:50: New York City actually has a separate green parking standards

00:22:50 --> 00:22:52: for parking lots that introduces St trees,

00:22:52 --> 00:22:54: stormwater management and permeable surfaces,

00:22:54 --> 00:22:57: and other things that can help reduce flood risks.

00:22:57 --> 00:23:01: And again cool neighborhoods and improve air quality where you

00:23:01 --> 00:23:02: may have a lot of traffic.

00:23:02 --> 00:23:06: Cities like LA in Phoenix or using cool pavements and

00:23:06 --> 00:23:09: you can see a picture here of a pilot that

00:23:09 --> 00:23:12: was being done in LA by their streets department that

00:23:12 --> 00:23:16: not only cool streets, but they're creating cool quarters throughout

00:23:16 --> 00:23:19: neighborhoods and can lower surface temperatures by over 20 degrees.

00:23:19 --> 00:23:22: So a really significant impact that can have within the

00:23:22 --> 00:23:26: neighborhoods that are happening there and increase the lifespan and

00:23:26 --> 00:23:28: ability to keep infrastructure operating.

00:23:28 --> 00:23:31: So I'll now actually pass it to Erica to talk

00:23:31 --> 00:23:35: about how to take these actions into a neighborhood scale.

00:23:36 --> 00:23:39: Thanks Adam. We know that there are many factors in

00:23:39 --> 00:23:43: selecting a project site and that the site design effects

00:23:43 --> 00:23:46: our need to account for many factors like public access,

00:23:46 --> 00:23:48: parking needs and stormwater management.

00:23:48 --> 00:23:51: But if we're only thinking about what happens on our

00:23:51 --> 00:23:53: own unique individual site,

00:23:53 --> 00:23:56: we may be a little short sighted to how we

00:23:56 --> 00:23:56: are

00:23:56 --> 00:23:59: affecting neighborhood properties and downstream water conveyance.

00:23:59 --> 00:23:59: So

00:23:59 --> 00:24:00: by thinking about

00:24:00 --> 00:24:03: each site, design features synergistically within this broader context,

00:24:03 --> 00:24:06: then we can evaluate not only how cooling.

00:24:06 --> 00:24:09: Our own individual

00:24:08 --> 00:24:09: with reflective materials,

00:24:09 --> 00:24:09: the

00:24:09 --> 00:24:10: site

00:24:09 --> 00:24:10: vapro

00:24:10 --> 00:24:14: transpiration from durable plants and the use of infiltration measures

00:24:14 --> 00:24:14: to

00:24:14 --> 00:24:18: capture water versus convey it can work as a system.

00:24:18 --> 00:24:18: A

00:24:18 --> 00:24:20: means for having multipurpose infrastructure,

00:24:20 --> 00:24:22: creating

00:24:20 --> 00:24:21: bike and pedestrian

00:24:21 --> 00:24:22: green shaded

00:24:22 --> 00:24:26: pathways between all of the amazing destination developments that we're

00:24:26 --> 00:24:30: creating within our city and the communities that surround us.

00:24:30 --> 00:24:33: These and become links in the greater chain that make

00:24:33 --> 00:24:36: up our neighborhoods and communities.

00:24:36 --> 00:24:43: Lakeside please. One example of a neighborhood scale recommendation would

00:24:43 --> 00:24:46: be in New York City over 2000.

00:24:46 --> 00:24:49: Areas that are sort of these in between areas have

00:24:49 --> 00:24:53: been replanted to be able to have underutilized areas of

00:24:53 --> 00:24:55: pavement taken over by green,

00:24:55 --> 00:24:59: durable landscape. I'm going to hand it back to Adam.

00:24:59 --> 00:25:00: Right,

00:25:00 --> 00:25:03: thank you. Now we know trees have been a heated

00:25:03 --> 00:25:04: topic in Nashville,

00:25:04 --> 00:25:07: particularly with the 2019 update to the Tree Ordinance,

00:25:07 --> 00:25:10: but there's a lot more work that still needs to

00:25:10 --> 00:25:11: be done in some regards,

00:25:11 --> 00:25:14: Nashville is ahead of the game than other cities,

00:25:14 --> 00:25:15: but the root national campaign.

00:25:15 --> 00:25:18: This is the public private partnership to plant 500,000 trees

00:25:18 --> 00:25:21: across the city already with a data driven focus on

00:25:21 --> 00:25:24: neighborhoods that are hotter than average and with higher concentrations

00:25:24 --> 00:25:27: of vulnerable populations. And this is a program I use

00:25:27 --> 00:25:30: as a best practice when talking to other cities around

00:25:30 --> 00:25:31: the world.

00:25:31 --> 00:25:34: There's actually an inspiration for a program that started in

00:25:34 --> 00:25:34: Milan,

00:25:34 --> 00:25:36: but that program needs to be funded and so who

00:25:36 --> 00:25:40: talked about not only adopting sustainability plan and the city's

00:25:40 --> 00:25:41: climate adaptation plan,

00:25:41 --> 00:25:44: but funding needs to be brought behind those efforts to

00:25:44 --> 00:25:47: make sure that they can be implemented quickly and at
00:25:47 --> 00:25:49: a scale to have impact for residents.
00:25:49 --> 00:25:52: There's also a lot more that needs to be done
00:25:52 --> 00:25:53: to bring your tree ordinance.
00:25:53 --> 00:25:56: More in line with what other cities are requiring of
00:25:56 --> 00:25:57: their developers.
00:25:57 --> 00:26:00: This means requiring more from developers in terms of the
00:26:00 --> 00:26:01: number of trees.
00:26:01 --> 00:26:04: That they're planting and as well as the size of
00:26:04 --> 00:26:07: the trees that are being planted and fees that are
00:26:07 --> 00:26:10: paid in lieu of planting trees or for penalties when
00:26:10 --> 00:26:14: clear cutting occurs. Particularly bringing in and addressing
the gap
00:26:14 --> 00:26:15: with single family and duplex homes,
00:26:15 --> 00:26:18: which is a huge gap in an area where the
00:26:18 --> 00:26:21: city is losing a lot of trees given the real
00:26:21 --> 00:26:24: estate demand in Nashville and the strong local economy,
00:26:24 --> 00:26:27: we think that you have a very strong hand and
00:26:27 --> 00:26:30: an urgent need to ask more from developers.
00:26:30 --> 00:26:33: And despite what folks? May tell you they're being asked
00:26:33 --> 00:26:36: to do this in other cities and are very willing
00:26:36 --> 00:26:38: to do it in places that have less of a
00:26:38 --> 00:26:40: strong market in the natural.
00:26:40 --> 00:26:43: So we we think that there is an expectation that
00:26:43 --> 00:26:44: they can do more,
00:26:44 --> 00:26:46: and a willingness if they're asked to do it.
00:26:46 --> 00:26:48: Jillian will talk about how this can apply within the
00:26:48 --> 00:26:50: building code environment.
00:26:52 --> 00:26:52: Thanks
00:26:52 --> 00:26:54: Adam, right so following with Adam said a lot of
00:26:54 --> 00:26:58: these developers are following these building codes
requirements in other
00:26:58 --> 00:27:01: cities and so many of these recommendations that we've
already
00:27:01 --> 00:27:04: made actually exist in one way or another in the
00:27:04 --> 00:27:07: code in your building code or in your zoning code
00:27:07 --> 00:27:07: already.
00:27:07 --> 00:27:10: Maybe developers are getting around by variances or?
00:27:10 --> 00:27:13: Or maybe it's just because as codes have been updated
00:27:13 --> 00:27:14: rapidly over the past few years,
00:27:14 --> 00:27:18: it's very difficult for code reviewers and code enforcement to
00:27:18 --> 00:27:20: keep keep up with all of the various sort of
00:27:20 --> 00:27:23: subtleties that are that are within the building.

00:27:23 --> 00:27:26: Particularly when it comes to the energy Code,

00:27:26 --> 00:27:30: energy code updates have gotten incredibly complex with energy modeling

00:27:30 --> 00:27:34: and all kinds of various ways of methods of compliance.

00:27:34 --> 00:27:37: It can be very difficult for code reviewers to understand

00:27:37 --> 00:27:39: all of those nuances.

00:27:39 --> 00:27:42: Some things that other jurisdictions are doing are implementing third

00:27:42 --> 00:27:45: party permit reviews or additional oversight.

00:27:45 --> 00:27:49: For larger projects. This brings in professionals and peers to

00:27:49 --> 00:27:52: review the documents were a lot more familiar with some

00:27:52 --> 00:27:53: of the nuances.

00:27:53 --> 00:27:56: Of the energy code and all of the different modeling

00:27:56 --> 00:27:59: capabilities to meet those requirements.

00:27:59 --> 00:28:02: Other things are looking at variances and how hard do

00:28:02 --> 00:28:05: developers really need to get those variants?

00:28:07 --> 00:28:09: Approvals other things are incentive programs.

00:28:09 --> 00:28:14: Upping the requirements for incentive programs to get developers really

00:28:14 --> 00:28:17: to to engage in the neighborhood and engage in the

00:28:17 --> 00:28:20: needs of the city for the long term.

00:28:20 --> 00:28:23: And then finally, metering and reporting is becoming very popular

00:28:23 --> 00:28:24: in many major cities.

00:28:24 --> 00:28:26: Here you can see an image of a current snip

00:28:26 --> 00:28:29: from a from the website of Fillet of the Sustainability

00:28:29 --> 00:28:30: Office in Philadelphia.

00:28:30 --> 00:28:33: You can look up most large buildings and find out

00:28:33 --> 00:28:36: their current energy use for the past year and up

00:28:36 --> 00:28:39: to up to five or ten years depending on the

00:28:39 --> 00:28:42: age of the building. And you can look at their

00:28:42 --> 00:28:46: utility use byte by type and by square footage.

00:28:46 --> 00:28:49: So many cities are implementing this metering and reporting to

00:28:49 --> 00:28:51: make that knowledge public,

00:28:51 --> 00:28:54: so you can find out about who the biggest energy

00:28:54 --> 00:28:54: hogs,

00:28:54 --> 00:28:58: the biggest emitters are who's polluting our city the most,

00:28:58 --> 00:29:00: and making that our temperatures go up.

00:29:00 --> 00:29:03: New York City is actually taking this a step further

00:29:03 --> 00:29:06: and starting in 2024 they've they've set a cap on

00:29:06 --> 00:29:09: percentage of energy use by square footage,

00:29:09 --> 00:29:12: and so any building owner that uses over their allotted

00:29:12 --> 00:29:16: amount of energy will start to incur fees or additional
00:29:16 --> 00:29:16: fines.

00:29:16 --> 00:29:18: Above and beyond their their initial cap,
00:29:18 --> 00:29:21: so building owners in New York City are looking at
00:29:21 --> 00:29:22: this and saying,
00:29:22 --> 00:29:25: hey, I gotta tighten things up and and this will
00:29:25 --> 00:29:28: in the end reduce my utility bills and so investing
00:29:28 --> 00:29:31: now to reduce my utility bills is just a common
00:29:31 --> 00:29:33: common sense return on investment.
00:29:33 --> 00:29:37: But this is really just putting putting dollars to sense
00:29:37 --> 00:29:40: in terms of the energies of those buildings.
00:29:40 --> 00:29:42: I'm going to now turn it back to John,
00:29:42 --> 00:29:44: who's gonna take us? Take us up a scale and
00:29:44 --> 00:29:47: look at the health and equity requirements in in the
00:29:47 --> 00:29:48: Community empowerment.

00:29:50 --> 00:29:53: Great thanks Julie and so our group also wanted to
00:29:53 --> 00:29:58: think about health and equity when we're thinking about
mitigating
00:29:58 --> 00:29:59: heat and so you know,
00:29:59 --> 00:30:03: I want to mention first what we mean by equity
00:30:03 --> 00:30:05: within the context of heat mitigation.
00:30:05 --> 00:30:08: So when we're talking about equity,
00:30:08 --> 00:30:12: we mean that certain populations are more vulnerable to the
00:30:12 --> 00:30:16: health and the economic and the safety impacts that can
00:30:16 --> 00:30:20: happen as a result of extreme heat and climate change.
00:30:20 --> 00:30:22: If you are a senior,
00:30:22 --> 00:30:24: if you are low income,
00:30:24 --> 00:30:27: or if you're at a black and brown community,
00:30:27 --> 00:30:30: you are much more likely to feel the effects and
00:30:30 --> 00:30:33: have negative health impacts or economic impacts,
00:30:33 --> 00:30:35: or have your safety put at risk.
00:30:35 --> 00:30:38: And so we want to think about how can we
00:30:38 --> 00:30:43: empower and protect those communities as we're making
these recommendations.

00:30:43 --> 00:30:46: So First off, we're looking at a community empowerment
recommendations.

00:30:46 --> 00:30:50: So one thing that we heard when we talked with
00:30:50 --> 00:30:51: our stakeholders.
00:30:51 --> 00:30:55: The importance of education. So this is education for
developers
00:30:55 --> 00:30:58: for nonprofits and for community members about urban heat
issues
00:30:58 --> 00:30:59: and solutions.

00:30:59 --> 00:31:01: We heard from developers who said,
00:31:01 --> 00:31:03: we know this is important,
00:31:03 --> 00:31:06: but it's really not on our radar when we're
00:31:06 --> 00:31:07: developing projects.
00:31:07 --> 00:31:10: And, you know, we would do more if we knew
00:31:11 --> 00:31:14: what to do and we we had it elevated as
00:31:14 --> 00:31:15: a priority for us.
00:31:15 --> 00:31:19: And so I think you online Nashville is uniquely positioned
00:31:19 --> 00:31:21: to do that and to educate developers.
00:31:21 --> 00:31:24: About heat mitigation strategies. Similarly,
00:31:24 --> 00:31:28: we can educate nonprofits and foundations about the
importance and
00:31:28 --> 00:31:32: urgency of this to make it a priority for them,
00:31:32 --> 00:31:34: and then also community members.
00:31:34 --> 00:31:38: Of course, we need to educate community members about
how
00:31:38 --> 00:31:42: heat issues are impacting them and potential solutions which
leads
00:31:42 --> 00:31:44: into our second recommendation,
00:31:44 --> 00:31:48: which is around using citizen science as a teaching tool
00:31:48 --> 00:31:52: for community members about heat impact and solutions.
00:31:52 --> 00:31:54: So this is a way that we can engage citizens
00:31:55 --> 00:31:58: on the ground in their neighborhoods and empower them
with
00:31:58 --> 00:32:02: data and knowledge around the the different design issues
and
00:32:02 --> 00:32:05: their neighborhoods and how that may be increasing
temperatures in
00:32:05 --> 00:32:06: their neighborhoods.
00:32:06 --> 00:32:10: And what are some potential solutions for those so that
00:32:10 --> 00:32:13: they can advocate for those solutions?
00:32:13 --> 00:32:16: And 3rd, we also wanted to acknowledge a development
rubric
00:32:16 --> 00:32:20: that was developed in our study area about a Wedgewood
00:32:20 --> 00:32:21: Houston neighborhood.
00:32:21 --> 00:32:24: This is a rubric you can see it here to
00:32:25 --> 00:32:25: the right.
00:32:25 --> 00:32:28: It's fairly straightforward, but it's very powerful,
00:32:28 --> 00:32:32: and this was something that was created by the
neighborhood
00:32:32 --> 00:32:36: to help empower residents to shape development in their
neighborhoods.
00:32:36 --> 00:32:39: So as developers come to the neighborhood and look for
00:32:40 --> 00:32:42: support for their development.

00:32:42 --> 00:32:46: The The Neighborhood Association shares this with the developers and

00:32:46 --> 00:32:49: says this is how we're going to score your project

00:32:49 --> 00:32:51: to see if we want to support it as the

00:32:51 --> 00:32:53: neighborhood. Because if it doesn't score well,

00:32:53 --> 00:32:56: we don't feel like it's going to be something that

00:32:56 --> 00:32:59: we want to support and so you can see here.

00:32:59 --> 00:33:02: If you look at the 4th row on the rubric,

00:33:02 --> 00:33:05: there's a section specifically around sustainability and this would be

00:33:06 --> 00:33:09: a great place to incorporate something like heat mitigation strategies

00:33:09 --> 00:33:12: into a scoring to make sure that developers are aware.

00:33:12 --> 00:33:15: And could think about ways that they could mitigate heat

00:33:16 --> 00:33:17: in their development.

00:33:17 --> 00:33:19: We feel like this is something that could be replicated

00:33:19 --> 00:33:22: in other neighborhoods around the city as a way to

00:33:22 --> 00:33:25: empower communities to advocate for heat negation strategies and so

00:33:25 --> 00:33:27: we wanted to share that.

00:33:27 --> 00:33:29: And for our next slide,

00:33:29 --> 00:33:30: I'm going to pass it over to Abina to talk

00:33:30 --> 00:33:32: about neighborhood response recommendations.

00:33:35 --> 00:33:35: Alright.

00:33:36 --> 00:33:39: Thank you John, and so as we continue to talk

00:33:39 --> 00:33:41: about health inequity,

00:33:41 --> 00:33:44: well, we all know in our line of work is

00:33:44 --> 00:33:48: that the best way to ensure lasting changes to bring

00:33:48 --> 00:33:52: as many people as long as possible and the way

00:33:52 --> 00:33:55: we do that is to bring these efforts closer to

00:33:55 --> 00:33:56: their home.

00:33:56 --> 00:34:00: And so a series of our recommendations following this one

00:34:00 --> 00:34:03: would be focused on how we can bring the impacts

00:34:03 --> 00:34:07: of adaptation and the effects and all the benefits.

00:34:07 --> 00:34:10: As close as possible to the people we found in

00:34:10 --> 00:34:12: the work that we do.

00:34:12 --> 00:34:14: That investing at the neighborhood level,

00:34:14 --> 00:34:16: whether it's through programming or infrastructure,

00:34:16 --> 00:34:19: really is some of the fastest ways we can advance

00:34:19 --> 00:34:23: equity and and we can improve the quality of life

00:34:23 --> 00:34:24: for more residents.

00:34:24 --> 00:34:27: And so we wanted to highlight three opportunities for Nashville.

00:34:27 --> 00:34:30: The first is also recognized in some of the work
00:34:30 --> 00:34:33: that the advisory councils have already done and that is
00:34:33 --> 00:34:36: to establish neighborhood resilience hubs.
00:34:36 --> 00:34:39: These are really effective. Ways to not only enhance a
00:34:39 --> 00:34:42: public asset that already exists in the Community,
00:34:42 --> 00:34:46: but to layer on multiple benefits and services that can
00:34:46 --> 00:34:49: really bring up the quality of life in the surrounding
00:34:49 --> 00:34:50: neighborhoods.
00:34:50 --> 00:34:54: We will highlight a little bit more of what that
00:34:54 --> 00:34:57: looks like in some examples and the next slide.
00:34:57 --> 00:35:01: But the second recommendation is to implement a
Community focus
00:35:01 --> 00:35:02: Volunteer resilience program.
00:35:02 --> 00:35:06: You may have seen examples of work for emergency
response
00:35:06 --> 00:35:07: for disaster recovery.
00:35:07 --> 00:35:11: Where we empower individuals to be part of the recovery
00:35:11 --> 00:35:14: and to be part of bringing it on vulnerable residents
00:35:14 --> 00:35:17: and those that have a high health risk,
00:35:17 --> 00:35:18: particularly for extreme weather events.
00:35:18 --> 00:35:23: Volunteer Resilience program would intentionally pair up
individuals that are
00:35:23 --> 00:35:25: willing to be leaders in this area and pair them
00:35:26 --> 00:35:28: up with those that are vulnerable and to check on
00:35:28 --> 00:35:31: them and to ensure that they are part of the
00:35:31 --> 00:35:35: recovery and the response effort and and they're not left
00:35:35 --> 00:35:35: behind.
00:35:35 --> 00:35:38: This works really well at the neighborhood.
00:35:38 --> 00:35:42: Association level or you can train trainers and they can
00:35:42 --> 00:35:45: pass it on and it can live on for many
00:35:45 --> 00:35:46: many years.
00:35:46 --> 00:35:50: It is also very cost effective way to translate the
00:35:50 --> 00:35:52: benefits of your resilience planning.
00:35:52 --> 00:35:56: Thirdly, we want to encourage misting stations in public
spaces
00:35:56 --> 00:35:59: and these are small ways that we can introduce reprieve
00:35:59 --> 00:36:02: and and cooling throughout neighborhoods.
00:36:02 --> 00:36:06: And of course we would want you to prioritize vulnerable
00:36:06 --> 00:36:08: areas in your community.
00:36:08 --> 00:36:11: We know that those that are vulnerable may not have
00:36:11 --> 00:36:14: the best options in their own home,
00:36:14 --> 00:36:17: or maybe spending a lot of their working days outside,
00:36:17 --> 00:36:20: and so having as many access points to cool down

00:36:20 --> 00:36:23: throughout the city is going to be a great benefit
00:36:23 --> 00:36:25: to the community.
00:36:25 --> 00:36:28: Next, we wanted to just highlight the Resilience Hub idea.
00:36:28 --> 00:36:31: I'm I'm from Tallahassee and one of the ways that
00:36:31 --> 00:36:34: really had been a game changer for us in terms
00:36:34 --> 00:36:36: of our resilience,
00:36:36 --> 00:36:38: planning and adaptation is to implement these resilience.
00:36:38 --> 00:36:40: Pops and as I mentioned,
00:36:40 --> 00:36:44: the idea of resilience hubs is that they are key
00:36:44 --> 00:36:44: assets.
00:36:44 --> 00:36:48: Before a crisis happens, they serve the community well
during
00:36:48 --> 00:36:51: a crisis and they come in play immediately after,
00:36:51 --> 00:36:53: and and sometimes long after.
00:36:53 --> 00:36:56: So imagine your typical recreational center.
00:36:56 --> 00:36:59: You layer on top of that health and social services
00:36:59 --> 00:37:03: that are beneficial and a normal day year round.
00:37:03 --> 00:37:07: You enhance the asset itself with sustainable features and
climate
00:37:07 --> 00:37:09: responsive design to make the building.
00:37:09 --> 00:37:12: Itself safe and secure and in a place that you
00:37:12 --> 00:37:15: can trust to be available to the community when they
00:37:15 --> 00:37:16: are meeting it.
00:37:16 --> 00:37:19: And then you add services and resources,
00:37:19 --> 00:37:20: even materials for emergency preparedness,
00:37:20 --> 00:37:23: and altogether you build an asset that is again trusted
00:37:23 --> 00:37:26: that it is proximate to neighborhoods,
00:37:26 --> 00:37:29: and it is a place that will serve them much
00:37:29 --> 00:37:31: better than a lot of times.
00:37:31 --> 00:37:33: What we do with our public assets.
00:37:33 --> 00:37:36: They serve one time, or therefore particular seasonal period,
00:37:36 --> 00:37:38: and they are no longer in use,
00:37:38 --> 00:37:42: or they're vacant. For a significant portion of time,
00:37:42 --> 00:37:44: so this really maximizes those assets,
00:37:44 --> 00:37:47: and they're also a great opportunity to leverage partnerships
across
00:37:47 --> 00:37:48: different sectors.
00:37:48 --> 00:37:51: School districts with public with the municipality.
00:37:51 --> 00:37:54: We've seen this even in church facilities,
00:37:54 --> 00:37:56: and so it's a great way.
00:37:56 --> 00:38:00: And we've also found some success leveraging financial
opportunities through
00:38:00 --> 00:38:03: FEMA through HUD to really enhance these assets.

00:38:03 --> 00:38:06: And so we encourage you to implement that part of
00:38:06 --> 00:38:07: your recommendation.
00:38:07 --> 00:38:11: Next slide. We wanted to highlight of course the the
00:38:11 --> 00:38:15: biggest part about advancing equity is to ensure that those
00:38:15 --> 00:38:19: that are already there in your neighborhoods get the
00:38:19 --> 00:38:23: advantage
00:38:19 --> 00:38:23: and the benefits of all the investments that you're making
00:38:23 --> 00:38:26: that they are not displaced that they're not left with
00:38:26 --> 00:38:28: less resources than they started with,
00:38:28 --> 00:38:31: and they are empowered to pass these benefits on to
00:38:31 --> 00:38:33: future generations.
00:38:33 --> 00:38:36: And so these three recommendations highlight ways that you
00:38:36 --> 00:38:38: can
00:38:36 --> 00:38:38: use strategic investments to prevent displacement.
00:38:38 --> 00:38:42: First is to provide. Resources that will allow vulnerable
00:38:42 --> 00:38:44: residents
00:38:42 --> 00:38:44: to take advantage of energy efficiency upgrades,
00:38:44 --> 00:38:47: regardless of how how much you can do at the
00:38:47 --> 00:38:50: utility scale or at the commercial building scale if it
00:38:50 --> 00:38:52: doesn't translate at home.
00:38:52 --> 00:38:55: And if it's not taken advantage of with high efficient
00:38:56 --> 00:38:56: homes,
00:38:56 --> 00:38:59: it won't make the debt that you were expecting,
00:38:59 --> 00:39:02: and so we encourage you to support and invest in
00:39:02 --> 00:39:05: ways where a low income households can also take
00:39:05 --> 00:39:07: advantage
00:39:05 --> 00:39:07: of energy efficiency.
00:39:07 --> 00:39:10: Second, there will be a need and we found this.
00:39:10 --> 00:39:14: Across the nation for financial assistance for certain
00:39:14 --> 00:39:17: household.
00:39:14 --> 00:39:17: So that as you invest in these improvements,
00:39:17 --> 00:39:19: the property values would do go up.
00:39:19 --> 00:39:21: And that's a great thing.
00:39:21 --> 00:39:24: We want that wealth creation to happen.
00:39:24 --> 00:39:27: However, we do not want that improvement to force some
00:39:27 --> 00:39:29: homeowners to be displaced,
00:39:29 --> 00:39:33: and so you might consider financial assistance that allows
00:39:33 --> 00:39:34: that
00:39:33 --> 00:39:34: to happen.
00:39:34 --> 00:39:37: And we'll share an example right after this of how
00:39:37 --> 00:39:39: Atlanta is doing that.
00:39:39 --> 00:39:42: And lastly, acquiring land in strategic locations.
00:39:42 --> 00:39:45: It's a really key way for the public sector to
00:39:45 --> 00:39:48: ensure that assets that support cooler cities that improve the

00:39:49 --> 00:39:50: quality of life remain public.

00:39:50 --> 00:39:53: They remain available to as many people as possible,

00:39:53 --> 00:39:57: and so you have to position your organizations with the

00:39:57 --> 00:40:00: resources to be able to acquire land when that opportunity

00:40:00 --> 00:40:01: is there,

00:40:01 --> 00:40:05: but also to do it intentionally placed throughout the

Community

00:40:05 --> 00:40:08: in such a way that benefits all we want to

00:40:08 --> 00:40:11: really highlight the wisdom that has come already from your

00:40:11 --> 00:40:15: sustainability. Advisory Council on equity and that is to

always

00:40:15 --> 00:40:18: consider the procedural equity and bring folks along as

you're

00:40:18 --> 00:40:23: planning and implementing this work to ensure that there's

distributional

00:40:23 --> 00:40:26: equity, meaning that you pay attention to where resources

are

00:40:26 --> 00:40:28: going and coming from.

00:40:28 --> 00:40:31: And make sure that those nobody is left behind.

00:40:31 --> 00:40:35: And lastly, to really start to breakdown those structural

elements,

00:40:35 --> 00:40:38: those things that are deeply embedded in the way we

00:40:38 --> 00:40:39: do business,

00:40:39 --> 00:40:43: such that we can start to really bring households up.

00:40:43 --> 00:40:45: And to correct historical wrongs.

00:40:45 --> 00:40:48: And now I'll pass it on to Adam,

00:40:48 --> 00:40:50: who will talk about the Westside future fund.

00:40:50 --> 00:40:51: Great,

00:40:51 --> 00:40:53: thanks for being, and I just put a finer point

00:40:53 --> 00:40:57: on what you were saying and emphasizing with the direct

00:40:57 --> 00:41:01: connection between some of the systemic racism issues that

we've

00:41:01 --> 00:41:03: seen in cities, and in particular where a number of

00:41:03 --> 00:41:07: studies have been done that show neighborhoods that were

historically

00:41:07 --> 00:41:11: redlined can be 20 degrees hotter than comparable

neighborhoods within

00:41:11 --> 00:41:14: their city because of the types of design.

00:41:14 --> 00:41:18: And infrastructure, that's who brought their one of the

examples

00:41:18 --> 00:41:20: we want to lift up because we know many of

00:41:20 --> 00:41:24: the things we've talked about today can bring fears of

00:41:24 --> 00:41:27: displacement as property values and rents increase because

of investments

00:41:27 --> 00:41:28: in neighborhood amenities.

00:41:28 --> 00:41:32: In Atlanta. Westside Future Fund is a philanthropic effort that

00:41:32 --> 00:41:35: actually has an anti displacement tax fund for legacy residents

00:41:35 --> 00:41:39: of particular neighborhoods that will pay in some cases up

00:41:39 --> 00:41:42: for 20 years. Any of the property tax increases that

00:41:42 --> 00:41:44: happen for income qualified families.

00:41:44 --> 00:41:47: That are legacy homeowners in that neighborhood so that they

00:41:47 --> 00:41:50: can continue to stay in and benefit from the changes

00:41:50 --> 00:41:52: that are occurring in their neighborhood.

00:41:52 --> 00:41:55: The quality of life improvement happening without being displaced as

00:41:55 --> 00:41:57: other people recognize the tremendous value of those communities.

00:41:57 --> 00:42:00: There are a lot of different examples of things like

00:42:00 --> 00:42:01: this.

00:42:01 --> 00:42:04: Most of them require public private partnerships and engagements of

00:42:04 --> 00:42:07: philanthropic community to help expand the scope and breadth of

00:42:07 --> 00:42:09: what government can do on their own.

00:42:09 --> 00:42:12: And this one really stands out as one of the

00:42:12 --> 00:42:12: best,

00:42:12 --> 00:42:15: so I'll pass it on to Kevin to talk.

00:42:15 --> 00:42:17: But other ways of leveraging financing for these efforts.

00:42:19 --> 00:42:23: Thanks Adam. I wanted to cover a few of the

00:42:23 --> 00:42:28: financing strategies that we came up with in the course

00:42:28 --> 00:42:31: of our work over the last few days,

00:42:31 --> 00:42:34: and I'd like to first introduce this idea of corporate

00:42:34 --> 00:42:35: sponsorship.

00:42:35 --> 00:42:39: Nashville is fortunate to have a growing corporate presence with

00:42:39 --> 00:42:44: increased employee base employed by those corporations and many of

00:42:44 --> 00:42:47: the OR at least some of the suggestions that we've

00:42:47 --> 00:42:51: made would be really. Excellent candidates for adoption by a

00:42:51 --> 00:42:54: corporation and spearheading a corporate initiative.

00:42:54 --> 00:42:59: And this is not a concept that is particularly new.

00:42:59 --> 00:43:05: Many of these companies have similar programs and funding mechanisms

00:43:05 --> 00:43:08: to take care of this work in other communities.

00:43:08 --> 00:43:13: So there are some things that would be just frankly

00:43:13 --> 00:43:18: beneficial to be have a corporate sponsorship behind them,

00:43:18 --> 00:43:21: and so we encourage the development.

00:43:21 --> 00:43:25: Of these programs, in conjunction with the corporations as well

00:43:25 --> 00:43:30: as coming up with realistic budgets and funding mechanisms to

00:43:30 --> 00:43:30: do those,

00:43:30 --> 00:43:34: the second thing I'd like to talk about is the

00:43:34 --> 00:43:35: original.

00:43:35 --> 00:43:38: The implementation of a CPS program.

00:43:38 --> 00:43:43: CPS is an acronym that stands for commercial property assessed

00:43:43 --> 00:43:47: clean energy and this is a financing mechanism that is

00:43:47 --> 00:43:51: put in place by a local taxing authority to fund

00:43:51 --> 00:43:55: energy efficiency. Improvements in both new construction and renovation of

00:43:55 --> 00:43:56: buildings,

00:43:56 --> 00:43:59: so I don't want to go into a lot of

00:43:59 --> 00:44:02: detail detail about this,

00:44:02 --> 00:44:04: but the way these work is,

00:44:04 --> 00:44:08: it's a national program, but it doesn't become operative in

00:44:08 --> 00:44:13: a state until the state adopts a broad enabling legislation.

00:44:13 --> 00:44:16: So the first step is to have the state adopt

00:44:16 --> 00:44:21: the enabling legislation for CPS program that's done on a

00:44:22 --> 00:44:23: state by state basis.

00:44:23 --> 00:44:27: Happy to report that the Tennessee has has done that

00:44:27 --> 00:44:27: recently.

00:44:27 --> 00:44:31: Has passed the state enabling ordinance and so now it's

00:44:31 --> 00:44:34: the responsibility of the local taxing authorities.

00:44:34 --> 00:44:36: I think in our cases that would be the the

00:44:37 --> 00:44:40: the county or Metro Nashville as well as the surrounding

00:44:40 --> 00:44:44: counties that we've been working with who adopt A program

00:44:44 --> 00:44:48: at the local level and the way this works simply

00:44:48 --> 00:44:51: is the local municipality works with an owner of a

00:44:51 --> 00:44:54: building to determine a budget.

00:44:54 --> 00:44:59: For energy efficient improvements, the municipality provides an assessment against

00:44:59 --> 00:45:03: the property and the loan amount for that is funded

00:45:03 --> 00:45:03: by.

00:45:03 --> 00:45:09: Typically, an institutional investor. The proceeds are given to the.

00:45:09 --> 00:45:13: Owner of the property to do the work and then

00:45:13 --> 00:45:17: the owner pays that loan back through the assessment process

00:45:17 --> 00:45:20: over a typically 20 or 25 year period.

00:45:20 --> 00:45:25: These have been worked very well in other states.

00:45:25 --> 00:45:29: And it's exciting to have this program in place in

00:45:29 --> 00:45:29: Tennessee,

00:45:29 --> 00:45:33: and it is a great source of financing for all

00:45:33 --> 00:45:35: types of energy upgrades.

00:45:35 --> 00:45:41: The third thing that we'd like to mention as.

00:45:41 --> 00:45:45: As a priority would be the development of a financing

00:45:45 --> 00:45:46: resourcing hub.

00:45:46 --> 00:45:50: The number of financing sources that are available to

00:45:50 --> 00:45:53: developers

00:45:53 --> 00:45:56: and municipalities for economic development incentives.

00:45:56 --> 00:45:58: Energy incentives are like a patchwork quilt.

00:45:58 --> 00:46:03: They don't come from one place.

00:46:03 --> 00:46:04: There are as listed in the slide programs that come

00:46:04 --> 00:46:07: out of HUD.

00:46:07 --> 00:46:10: There are a host of tax credits,

00:46:10 --> 00:46:15: historic tax credits, low income tax credits,

00:46:15 --> 00:46:17: new market tax credits, and other QQ funding mechanisms

00:46:17 --> 00:46:20: that

00:46:20 --> 00:46:24: you don't go to one place.

00:46:24 --> 00:46:28: To learn about these and implement these,

00:46:28 --> 00:46:29: so we're recommending developing of financing resourcing

00:46:29 --> 00:46:32: hub where people,

00:46:32 --> 00:46:37: developers, missile Paletti could come not only to learn about

00:46:37 --> 00:46:38: these,

00:46:38 --> 00:46:41: but also provide technical assistance and how they would be

00:46:41 --> 00:46:46: applied to a specific project and then finally public buildings

00:46:46 --> 00:46:49: are very important,

00:46:49 --> 00:46:53: but public buildings don't often have available to them the

00:46:53 --> 00:46:54: same incentives that commercial properties or residential

00:46:54 --> 00:46:58: properties have,

00:46:58 --> 00:47:02: so we are in a unique part of.

00:47:02 --> 00:47:04: History where we have significant funds available from the

00:47:04 --> 00:47:08: CARES

00:47:08 --> 00:47:10: Act,

00:47:10 --> 00:47:14: and significant funds available from the American Rescue

00:47:14 --> 00:47:15: plan that

00:47:15 --> 00:47:15: we are advocating the allocated and used to fund resiliency

00:47:15 --> 00:47:15: programs of public buildings.

00:47:15 --> 00:47:15: So those are our four ideas that could be implemented

00:47:15 --> 00:47:15: with relative ease and they,

00:47:15 --> 00:47:15: for the most part do not really conflict with with

00:47:15 --> 00:47:15: each other.

00:47:15 --> 00:47:17: The benefit of, for example,
00:47:17 --> 00:47:20: at CPS program is that a CPS.
00:47:20 --> 00:47:24: Program does not preclude the use of tax credits or
00:47:24 --> 00:47:25: other financing,
00:47:25 --> 00:47:30: financing incentives, and the opportunity get corporations
involved on specific
00:47:30 --> 00:47:31: projects that.
00:47:31 --> 00:47:34: Benefit the overall community would be it would be a
00:47:34 --> 00:47:35: wonderful thing,
00:47:35 --> 00:47:38: so thanks and I'd like to turn it over to
00:47:38 --> 00:47:42: Clay who will talk about some specific development
recommendations.
00:47:42 --> 00:47:43: Thanks,
00:47:43 --> 00:47:46: Kevin. One of our panelists said earlier that every action
00:47:46 --> 00:47:48: is a climate action,
00:47:48 --> 00:47:51: and I'd like to take that down to the UI
00:47:51 --> 00:47:55: scale and really say that every building is a climate
00:47:55 --> 00:47:55: action.
00:47:55 --> 00:47:59: And this axiom is equally true for the larger commercial
00:47:59 --> 00:48:02: developments as well as single family homes.
00:48:02 --> 00:48:05: I'd also like to draw attention to a number of
00:48:05 --> 00:48:08: the local developments that are already accounting for many
of
00:48:09 --> 00:48:11: the suggestions that we have in this report,
00:48:11 --> 00:48:15: like the core and Hines Mass timber project called P3.
00:48:15 --> 00:48:18: That's in the study area and it really just showcase
00:48:18 --> 00:48:22: that many developers aren't waiting to be told what's
required.
00:48:22 --> 00:48:24: They're leading the way and its nucleus.
00:48:24 --> 00:48:28: Our recommendations are in alignment of policy with
development to
00:48:28 --> 00:48:32: encourage the widespread adoption of many of these
strategies.
00:48:32 --> 00:48:35: It's incumbent upon the development community to make a
conscious
00:48:35 --> 00:48:38: decision about how we want to contribute to the built
00:48:38 --> 00:48:39: environment,
00:48:39 --> 00:48:41: as well as the planet as a whole.
00:48:41 --> 00:48:45: But we shouldn't just take this action because it's the
00:48:45 --> 00:48:46: right thing to do.
00:48:46 --> 00:48:49: I also personally believe that it's good for your bottom
00:48:49 --> 00:48:49: line.
00:48:49 --> 00:48:52: Most of these solutions aren't necessarily more expensive,
00:48:52 --> 00:48:55: they're just a little bit of a different approach.

00:48:55 --> 00:48:58: I believe that a green roof and a comfortable environment
00:48:58 --> 00:49:01: with well utility bills and more trees should be considered
00:49:01 --> 00:49:02: amenities.
00:49:02 --> 00:49:06: Particularly when you look at the next generation of
consumers
00:49:06 --> 00:49:08: and how hot Nashville will become.
00:49:08 --> 00:49:10: Over the last three days,
00:49:10 --> 00:49:14: I personally learned a tremendous amount from this group of
00:49:14 --> 00:49:16: experts and one action coming out of this is to
00:49:16 --> 00:49:20: connect our local chapter with the resources and knowledge
that
00:49:20 --> 00:49:23: we need to be a leader in the issues of
00:49:23 --> 00:49:24: heat mitigation,
00:49:24 --> 00:49:28: equity and climate change. Nashville is clearly growing up as
00:49:28 --> 00:49:28: a city.
00:49:28 --> 00:49:32: As such, we're attracting attention and more global stage in
00:49:32 --> 00:49:35: bringing in global companies that are mandating action on
climate
00:49:35 --> 00:49:38: change if we're to achieve our full potential as a
00:49:38 --> 00:49:42: city. Developers have a tremendous opportunity to step up to
00:49:42 --> 00:49:45: this challenge and address our extreme heat in an equitable
00:49:45 --> 00:49:46: way.
00:49:46 --> 00:49:49: This was echoed by the national panelists today.
00:49:49 --> 00:49:51: John, I'll turn it back over to you.
00:49:55 --> 00:49:55: Great,
00:49:55 --> 00:49:57: thank you so much clay.
00:49:57 --> 00:50:00: So we have too many recommendations to put on a
00:50:00 --> 00:50:04: single slide here to share with you today you've heard
00:50:04 --> 00:50:05: them.
00:50:05 --> 00:50:09: Our panel has organized all of our recommendations.
00:50:09 --> 00:50:12: At. Either the building or site scale,
00:50:12 --> 00:50:15: the neighborhood scale, city and regional scale,
00:50:15 --> 00:50:17: and then also finance and development,
00:50:17 --> 00:50:19: so that will be in the forthcoming report.
00:50:19 --> 00:50:23: There will be more information than we shared with you
00:50:23 --> 00:50:26: today in that report that comes out in September,
00:50:26 --> 00:50:29: so be sure to look for that.
00:50:29 --> 00:50:32: But I did want to emphasize and give you a
00:50:32 --> 00:50:37: sneak preview that most of the recommendations that we
have.
00:50:37 --> 00:50:40: Our short term recommendations. And that's because as
Clay said,
00:50:40 --> 00:50:44: we really can't wait to implement these recommendations.

00:50:44 --> 00:50:47: Climate change and extreme heat are happening now.

00:50:47 --> 00:50:50: Extreme weather events are increasing now and we may never

00:50:50 --> 00:50:54: see change at this scale in our cities built environment

00:50:54 --> 00:50:58: again in our lifetimes with all the development that's happening

00:50:58 --> 00:51:01: in Nashville. Uhm, it's so critical for us now to

00:51:01 --> 00:51:04: be thinking about how we're building our city.

00:51:04 --> 00:51:07: Are we building it in a way that's setting us

00:51:07 --> 00:51:10: up for success and not for disaster in the future?

00:51:10 --> 00:51:12: 'cause in the end, fundamentally,

00:51:12 --> 00:51:14: this is really all about health and livability,

00:51:14 --> 00:51:16: and the viability of our city.

00:51:16 --> 00:51:19: You've heard it mentioned twice today already and I'm I'm

00:51:19 --> 00:51:21: going to say it one more time.

00:51:21 --> 00:51:24: 'cause I think it's worth mentioning that every action is

00:51:24 --> 00:51:25: a climate action.

00:51:25 --> 00:51:27: Every building is a climate action.

00:51:27 --> 00:51:29: We say something similar in public health,

00:51:29 --> 00:51:31: which is that. All policy is health policy and it

00:51:31 --> 00:51:35: just means that everything that we're doing when we're making

00:51:35 --> 00:51:38: decisions about policies and the ways that we build our

00:51:38 --> 00:51:41: cities are impacting health and impacting climate in some way,

00:51:41 --> 00:51:44: either positive or negative, and so it's important for us

00:51:44 --> 00:51:46: to have that front and center in our minds as

00:51:46 --> 00:51:49: we're deciding what kind of city we want to build.

00:51:49 --> 00:51:51: Nashville is a world class city now,

00:51:51 --> 00:51:54: and we need to do what other world class cities

00:51:54 --> 00:51:56: are doing is Sadu said.

00:51:56 --> 00:51:58: It's not rocket science. These things are out there.

00:51:58 --> 00:52:00: Other cities are doing them.

00:52:00 --> 00:52:02: And we can do them as well.

00:52:02 --> 00:52:03: You are the development community,

00:52:03 --> 00:52:05: you're the builders and shapers of our city,

00:52:05 --> 00:52:07: and your leadership can get us there.

00:52:07 --> 00:52:09: So thank you for attending today and I'm going to

00:52:09 --> 00:52:12: turn it over to our sponsored team to see if

00:52:12 --> 00:52:14: they have thoughts or questions for our panelists.

00:52:22 --> 00:52:25: So I really like the panel is recommending short term

00:52:26 --> 00:52:26: actions,

00:52:26 --> 00:52:28: actions that are attainable now.

00:52:28 --> 00:52:31: I think that things like considering passive passive survivability.

00:52:31 --> 00:52:33: You know trying to help our residents stay in the

00:52:33 --> 00:52:37: house is particularly in the Chestnut Hill neighborhood,

00:52:37 --> 00:52:41: which has been one of the poor neighborhoods in the

00:52:41 --> 00:52:43: city is super important.

00:52:43 --> 00:52:46: I do like the thought of acquiring land strategically and

00:52:46 --> 00:52:49: again in that neighborhood which borders Browns Creek.

00:52:49 --> 00:52:53: There's a lot of strategic opportunities to create parks that

00:52:53 --> 00:52:56: will help with comfort and health and well being,

00:52:56 --> 00:52:59: but also help with resiliency.

00:52:59 --> 00:53:03: You know some of the things that you guys recommended

00:53:03 --> 00:53:05: or already in place like Route Nashville,

00:53:05 --> 00:53:10: planning 500,000 trees, but thinking about doing that faster and

00:53:10 --> 00:53:12: planning larger does make a difference.

00:53:12 --> 00:53:16: And I think something I think was recommended as identified

00:53:16 --> 00:53:17: the biggest energy hogs,

00:53:17 --> 00:53:21: and I know that siding when he became city manager

00:53:21 --> 00:53:25: identified Molson Brewery up in Vancouver and figured out a

00:53:25 --> 00:53:28: way to turn their hops into a new energy grid.

00:53:28 --> 00:53:30: Help, not just fun, you know,

00:53:30 --> 00:53:33: with the energy in that plant reducing its energy use,

00:53:33 --> 00:53:35: but also helping the entire neighborhood.

00:53:35 --> 00:53:38: So I think we can look at things sort of

00:53:38 --> 00:53:40: synergistically like that.

00:53:40 --> 00:53:43: I do like the citizen.

00:53:43 --> 00:53:46: You know, comparing the citizens in creating neighborhood resiliency hubs?

00:53:46 --> 00:53:51: I just think that's a great community building tool that's

00:53:51 --> 00:53:52: super useful for.

00:53:52 --> 00:53:54: This neighborhood that we're studying,

00:53:54 --> 00:53:55: but other urban neighborhoods in Nashville.

00:53:55 --> 00:53:58: And then I like some of the finance options,

00:53:58 --> 00:54:00: taking advantage of things like cares,

00:54:00 --> 00:54:03: Act and American rescue plan funds that are available right

00:54:03 --> 00:54:06: now and be thinking how we can pull that together

00:54:06 --> 00:54:07: to make big change now.

00:54:07 --> 00:54:10: So I think the panelists and you guys did a

00:54:10 --> 00:54:11: great job.

00:54:16 --> 00:54:18: Great thank you Mark. Well,

00:54:18 --> 00:54:20: I think we will open it up for some Q&A.

00:54:20 --> 00:54:23: We have a little bit of time left.

00:54:31 --> 00:54:33: And that Q&A is open to anyone.

00:54:44 --> 00:54:46: And Kate mentioned in the chat that you can put

00:54:46 --> 00:54:48: your question in the chat or feel free to unmute

00:54:48 --> 00:54:49: yourselves as well.

00:54:56 --> 00:55:01: This is Doug Sharp then the recommendations came across in

00:55:02 --> 00:55:06: your report is a citywide for the most part.

00:55:06 --> 00:55:11: Recommendations that were drawn from the study of what would

00:55:11 --> 00:55:14: Houston and Chestnut Hill?

00:55:14 --> 00:55:20: What might be some specific recommendations that were drawn from

00:55:20 --> 00:55:23: your study area that you can point to?

00:55:27 --> 00:55:29: Yeah, this is audio. Here.

00:55:29 --> 00:55:30: I can jump in UM,

00:55:30 --> 00:55:34: one thing that really struck us as folks that are

00:55:34 --> 00:55:36: working kind of globally.

00:55:36 --> 00:55:41: Is firstly there are some great great developments that are

00:55:41 --> 00:55:44: happening clearly in that neighborhood.

00:55:44 --> 00:55:47: And it felt like there was some real gaps in

00:55:47 --> 00:55:50: the connectivity between them and you know,

00:55:50 --> 00:55:52: felt like you kind of needed to get in your

00:55:52 --> 00:55:56: car to drive from one great development to another rather

00:55:56 --> 00:55:59: than one of the recommendations that we had was to

00:55:59 --> 00:56:01: have some green corridors to connect the neighborhood.

00:56:01 --> 00:56:05: It really felt like the connectivity between the neighborhood is

00:56:05 --> 00:56:08: missing and even simple things like sidewalks are missing and

00:56:08 --> 00:56:11: they should be sidewalks that are shaded and and allow

00:56:11 --> 00:56:14: people to walk through the neighborhood to buy their groceries.

00:56:14 --> 00:56:17: 'cause recognize that. The neighborhood is a food desert,

00:56:17 --> 00:56:19: so that was one major one.

00:56:19 --> 00:56:20: The other is, you know,

00:56:20 --> 00:56:24: we we really saw the concern for displacement and really

00:56:24 --> 00:56:27: saw that there are a good number of developments that

00:56:27 --> 00:56:31: have been approved and that will continue to risk more

00:56:31 --> 00:56:33: people being displaced from from the neighborhood.

00:56:33 --> 00:56:37: And, you know, here in Vancouver we've seen just astronomical

00:56:37 --> 00:56:40: increases in property prices and a lot of people being

00:56:40 --> 00:56:41: displaced,

00:56:41 --> 00:56:44: and it feels like there is the risk that that

00:56:44 --> 00:56:46: could really happen.

00:56:46 --> 00:56:48: In this neighborhood, and so we really felt like it

00:56:48 --> 00:56:51: was important to protect the legacy residents as well as

00:56:51 --> 00:56:54: to find ways like energy retrofits and weatherization to keep

00:56:54 --> 00:56:57: people in their homes and to enable them to be

00:56:57 --> 00:57:00: there and be to be comfortable and be able to

00:57:00 --> 00:57:02: afford their energy there.

00:57:02 --> 00:57:04: So those are a couple of the specific things I'm

00:57:04 --> 00:57:07: sure that other panelists can highlight others.

00:57:09 --> 00:57:09: Yeah,

00:57:09 --> 00:57:12: if I may I would just add that from our

00:57:12 --> 00:57:16: own resilience planning effort here and I think it resonates

00:57:16 --> 00:57:18: with a lot of other communities.

00:57:18 --> 00:57:21: We begin with the question of vulnerability,

00:57:21 --> 00:57:23: who's vulnerable and who's most vulnerable.

00:57:23 --> 00:57:26: And once we start to develop strategies for them,

00:57:26 --> 00:57:30: we realize that the outcome is better for everyone and

00:57:30 --> 00:57:31: so it is.

00:57:31 --> 00:57:33: It's been really insightful for us to look at one

00:57:33 --> 00:57:37: particular neighborhood and develop strategies that we

00:57:37 --> 00:57:39: imagine would benefit

00:57:39 --> 00:57:42: and serve those residents.

00:57:42 --> 00:57:44: Well, and we're pretty confident that if you expand on

00:57:44 --> 00:57:48: these same ones across the entire city,

00:57:48 --> 00:57:48: you will have really great options and solutions for everyone

00:57:48 --> 00:57:51: else.

00:57:51 --> 00:57:54: And so that's that's the equity lens that is so

00:57:54 --> 00:57:57: critical in the work that you do.

00:57:57 --> 00:57:58: But really, as you prioritize projects where you begin to

00:57:58 --> 00:58:01: ask yourself questions,

00:58:01 --> 00:58:04: it's highly recommended that you begin with who is the

00:58:04 --> 00:58:06: most vulnerable and and the benefits will play out really

00:58:06 --> 00:58:07: well for everyone else.

00:58:07 --> 00:58:10: Thing I was struck by is in some ways

00:58:10 --> 00:58:12: it's an amenity rich area.

00:58:12 --> 00:58:14: Uh, you know with with the the stadium that's there

00:58:14 --> 00:58:18: with Brown Creek with schools there we saw some pictures

00:58:18 --> 00:58:21: of some pocket parks and weren't able to travel to

00:58:21 --> 00:58:24: them. But most of that infrastructure and amenities are single

00:58:24 --> 00:58:24: use.

00:58:24 --> 00:58:27: So how do you take that school and convert the

00:58:27 --> 00:58:28: school yard into a,

00:58:28 --> 00:58:31: you know, a cool space in the summer that's open
00:58:31 --> 00:58:32: to the community?
00:58:32 --> 00:58:35: How do you marry that with the idea on community
00:58:35 --> 00:58:36: hubs and resilience hubs?
00:58:36 --> 00:58:39: How do you think? About the connectivity between those and
00:58:39 --> 00:58:40: and you know,
00:58:40 --> 00:58:43: even with roadways, there where do you make sure there
00:58:43 --> 00:58:46: are bike lanes in to add to the connectivity that
00:58:46 --> 00:58:48: Soto is talking about so that you don't have single
00:58:48 --> 00:58:51: use pieces of infrastructure but multi use for new and
00:58:51 --> 00:58:54: existing residents and to really enhance the resilience of the
00:58:54 --> 00:59:03: community. Great
00:59:03 --> 00:59:06: thanks. So we do have a few questions coming through
00:59:06 --> 00:59:07: in the chat.
00:59:07 --> 00:59:10: I don't know if we'll have time to get to
00:59:10 --> 00:59:10: everything,
00:59:10 --> 00:59:13: but I didn't want to read out the ones that
00:59:14 --> 00:59:16: I can and see if we can answer a few
00:59:16 --> 00:59:18: of these before we wrap up.
00:59:18 --> 00:59:21: So we did have one question around us from Kim.
00:59:21 --> 00:59:24: Might the incentives for the recommended cool pavements,
00:59:24 --> 00:59:27: green roofs, additional trees, etc be developed similar to the
00:59:27 --> 00:59:30: bonus hike potentials that are included in the downtown
00:59:30 --> 00:59:32: code,
00:59:32 --> 00:59:33: and I don't know if anybody.
00:59:32 --> 00:59:33: Wants to tackle this one.
00:59:33 --> 00:59:35: Is this something that you've seen in other places that
00:59:35 --> 00:59:35: we could
00:59:35 --> 00:59:40: do here? Short interesting yeah short answer is yes.
00:59:40 --> 00:59:43: Other cities have done that either for density bonuses,
00:59:43 --> 00:59:46: height bonuses can offset minimum parking requirements.
00:59:46 --> 00:59:49: There's a lot of creative ways to do that.
00:59:51 --> 00:59:54: Yeah, just to to build off of that.
00:59:54 --> 00:59:57: I mean, typically what we'll do is start an incentive
00:59:57 --> 00:59:59: program to get the new approaches going.
00:59:59 --> 01:00:02: Jillian mentioned passive, for instance passive certification.
01:00:02 --> 01:00:05: We will create some incentives and then once the industry
01:00:05 --> 01:00:08: is familiar with it and people are doing it more
01:00:08 --> 01:00:09: than we mandate it.
01:00:09 --> 01:00:13: And now passive House certification is mandated for most
01:00:13 --> 01:00:13: construction
01:00:13 --> 01:00:13: in Vancouver.
01:00:13 --> 01:00:16: And so it's a way to kind of get people

01:00:16 --> 01:00:19: familiar with it and feel comfortable and through incentives.

01:00:19 --> 01:00:22: And you can deploy that strategy.

01:00:22 --> 01:00:24: With most of the things that we talked about today.

01:00:28 --> 01:00:28: Great

01:00:28 --> 01:00:30: thank you both come so.

01:00:30 --> 01:00:33: We also have a question from Eric.

01:00:33 --> 01:00:36: I often see developers scraping a site before construction in

01:00:36 --> 01:00:38: his neighborhood and Wedgewood Houston.

01:00:38 --> 01:00:42: Perhaps we can encourage developers to evaluate the existing trees

01:00:42 --> 01:00:46: and greenery on site before construction and work with designers

01:00:46 --> 01:00:48: to maintain as much as possible.

01:00:48 --> 01:00:52: So is this something that that we've seen in other

01:00:52 --> 01:00:53: places as well?

01:00:53 --> 01:00:54: Cisada nodding

01:00:56 --> 01:00:58: yeah, definitely. I mean, I,

01:00:58 --> 01:01:01: the tree protection you know you plant a tiny tree

01:01:01 --> 01:01:03: that's about this this wide.

01:01:03 --> 01:01:06: It has zero ecological benefit for probably a few years.

01:01:06 --> 01:01:09: And then a decade or more until it's actually cooling

01:01:09 --> 01:01:10: the city.

01:01:10 --> 01:01:13: If you can protect one of those trees by designing

01:01:13 --> 01:01:13: around it,

01:01:13 --> 01:01:17: people will like the development more 'cause it'll have mature

01:01:17 --> 01:01:17: trees.

01:01:17 --> 01:01:20: But it will also have all of those ecological benefits

01:01:20 --> 01:01:23: of cooling the community and actually cooling the building.

01:01:23 --> 01:01:25: And so there are pretty tree protection bylaws.

01:01:25 --> 01:01:29: I understand that. Your new ordinance has some tree protection

01:01:29 --> 01:01:29: bylaws.

01:01:29 --> 01:01:32: It just need to make sure it's being enforced,

01:01:32 --> 01:01:35: and developers designers can design around most of those trees

01:01:35 --> 01:01:36: if they're being creative,

01:01:36 --> 01:01:39: and so we have. Tree protection is absolutely critical if

01:01:39 --> 01:01:41: you want to save your tree canopy and

01:01:41 --> 01:01:43: very specifically for national tire.

01:01:43 --> 01:01:46: Remember reading at some point there's an estimation of losing

01:01:46 --> 01:01:48: about 50,000 trees a year from development.

01:01:48 --> 01:01:51: It needs to apply to single family and duplex properties

01:01:51 --> 01:01:53: where you're seeing a lot of the loss,
01:01:53 --> 01:01:57: particularly out of the downtown area and those big properties
01:01:57 --> 01:01:57: and the.
01:01:57 --> 01:01:59: In lieu fee, if you tear down a tree or
01:01:59 --> 01:02:01: don't follow the rules,
01:02:01 --> 01:02:04: the penalties are just very very low so developers can
01:02:04 --> 01:02:07: factor that into the price in Nashville and it's cheaper
01:02:07 --> 01:02:09: for them just to cut it down and either pay
01:02:09 --> 01:02:11: into the tree mitigation bank and not plant trees,
01:02:11 --> 01:02:13: or just pay the fine.
01:02:15 --> 01:02:17: Yeah, and and this did come up in our conversations
01:02:17 --> 01:02:20: as well the importance of preserving the existing tree canopy
01:02:20 --> 01:02:23: because even if you do have a strong ordinance that
01:02:23 --> 01:02:26: requires more tree planting, a lot of times those trees
01:02:26 --> 01:02:28: are fairly small and it can take years,
01:02:28 --> 01:02:30: maybe decades for them to grow to the point where
01:02:30 --> 01:02:33: they're really providing the shade and the environmental benefits they
01:02:33 --> 01:02:36: that you were getting with the those original trees that
01:02:36 --> 01:02:38: were taken out. So very important.
01:02:38 --> 01:02:44: Uhm? Let's see Leah. Do we have time for another
01:02:44 --> 01:02:45: question?
01:02:45 --> 01:02:45: Now.
01:02:46 --> 01:02:48: Let's take one or two more questions,
01:02:48 --> 01:02:49: great. So
01:02:49 --> 01:02:51: we have another question from Kim.
01:02:51 --> 01:02:54: Could some of the funding for ideas for the future
01:02:54 --> 01:02:57: fund be housed through the Barnes Housing Fund or a
01:02:57 --> 01:02:58: separate entity?
01:02:58 --> 01:02:59: So the Barnes Housing Fund,
01:02:59 --> 01:03:03: of course, is our local Housing Trust fund here in
01:03:03 --> 01:03:04: Nashville.
01:03:04 --> 01:03:06: And that's a good question.
01:03:06 --> 01:03:09: I actually don't know the answer to that.
01:03:09 --> 01:03:11: Does anyone know if that's something?
01:03:11 --> 01:03:15: Have any? Has anyone seen Housing Trust funds and something
01:03:15 --> 01:03:19: like the future fund combined together to provide support for
01:03:19 --> 01:03:23: not just housing construction but also support for keeping people
01:03:23 --> 01:03:24: in their homes?
01:03:25 --> 01:03:28: Yeah, we come in my work with the city.

01:03:28 --> 01:03:31: We also have an affordable Housing Trust fund and there

01:03:31 --> 01:03:35: was originally seeded with local resources and the way it's

01:03:35 --> 01:03:35: designed.

01:03:35 --> 01:03:38: And it's a really important thing to do is to

01:03:38 --> 01:03:40: have a policy for investment.

01:03:40 --> 01:03:43: And even if it's very high level general guidelines of

01:03:44 --> 01:03:45: how you will use those funds,

01:03:45 --> 01:03:48: we've also been able to bifurcate the fund itself,

01:03:48 --> 01:03:52: and so we found several projects out of the Trust

01:03:52 --> 01:03:52: Fund,

01:03:52 --> 01:03:55: and each of those can have different guidelines or rules.

01:03:55 --> 01:03:58: About how that can be so just sort of think

01:03:58 --> 01:03:59: of it as a subproject,

01:03:59 --> 01:04:02: but it's absolutely possible because it's also a local fund.

01:04:02 --> 01:04:05: We have a lot of flexibility with the source of

01:04:05 --> 01:04:06: the fund that we seeded with,

01:04:06 --> 01:04:09: and once it goes in there sort of changes the

01:04:09 --> 01:04:10: flavor of the money,

01:04:10 --> 01:04:12: and you can do with it as you want,

01:04:12 --> 01:04:15: especially if you can do recurring funded type of programs,

01:04:15 --> 01:04:17: you pay for something, it does it's work,

01:04:17 --> 01:04:18: you get some program income,

01:04:18 --> 01:04:21: and you're able to put that back in and recycle

01:04:21 --> 01:04:21: it.

01:04:21 --> 01:04:24: So there's a lot of creativity that you have the

01:04:24 --> 01:04:26: issue that you might run into.

01:04:26 --> 01:04:29: Our federal funds and a lot of those federal funds

01:04:29 --> 01:04:32: have really cleared guidelines of what they will and will

01:04:32 --> 01:04:35: not pay for and and they require a separation of

01:04:35 --> 01:04:37: funding that really makes it easier to audit.

01:04:37 --> 01:04:39: But aside from that, you can get a lot of

01:04:40 --> 01:04:43: creativity with your local fund and make sure to create

01:04:43 --> 01:04:45: some guidelines so that after you're gone,

01:04:45 --> 01:04:48: somebody else can use it as a waste intended.

01:04:52 --> 01:04:56: Great, well, I don't see any other questions in the

01:04:56 --> 01:04:56: chat.

01:04:56 --> 01:04:59: Do we have any other questions?

01:04:59 --> 01:05:02: Before we wrap up. Alright,

01:05:02 --> 01:05:05: I think that is a no so Leah I'm going

01:05:05 --> 01:05:05: to turn

01:05:05 --> 01:05:07: it back over to you.

01:05:07 --> 01:05:10: Hey great. Well thank you everyone for joining us today.

01:05:10 --> 01:05:12: As John said, keep an eye out for the final
01:05:12 --> 01:05:15: report that will come up a around in September that
01:05:15 --> 01:05:19: will detail these recommendations in a further way and
provide
01:05:19 --> 01:05:21: a lot of the best practices and examples that our
01:05:21 --> 01:05:24: panelists cited for their reasoning behind the
recommendations,
01:05:24 --> 01:05:27: the PowerPoint slides will also be available online.
01:05:27 --> 01:05:30: Just check out you lie Nashville site and will try
01:05:30 --> 01:05:33: to send you a link as soon as we have
01:05:33 --> 01:05:34: it available.
01:05:34 --> 01:05:36: Thank you all very much and if the panel and
01:05:36 --> 01:05:39: our sponsors could stay on for a few minutes,
01:05:39 --> 01:05:40: we'd appreciate it. Thank you.

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