

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:	Annualy remains ready to support implementation of those

	tap recommendations,
00:05:22> 00:05:25:	which are thoughtful, innovative and action oriented.
00:05:25> 00:05:30:	RULI National member advisory team worked through the pandemic for
00:05:30> 00:05:34:	nearly a year as they applied for the grant that
00:05:34> 00:05:37:	supported art app identified the scope of it,
00:05:37> 00:05:41:	shared their expertise and framing the process,
00:05:41> 00:05:45:	and developed a comprehensive. Briefing materials and virtual tour for
00:05:45> 00:05:48:	our panel so they could get quickly up to speed.
00:05:48> 00:05:51:	So now join me in welcoming the ULI National Technical
00:05:51> 00:05:56:	Assistance Panel on Equitable Development and Design responses to extreme
00:05:56> 00:05:57:	heat threats,
00:05:57> 00:06:01:	and I'm always amazed at how much incredible work can
00:06:01> 00:06:04:	get done by these teams of UI experts and a
00:06:04> 00:06:07:	remarkably short bit of time.
00:06:07> 00:06:09:	So I'll go back to Leah.
00:06:11> 00:06:13:	Thank you so much Kim.
00:06:13> 00:06:16:	So if you aren't familiar with who you will lie,
00:06:16> 00:06:20:	is the Urban Land Institute is a nonprofit membership organization
00:06:20> 00:06:23:	with more than 45,000 members worldwide within you alive their
00:06:23> 00:06:25:	urban resilience program focuses on how buildings,
00:06:25> 00:06:28:	communities and cities can be more resilient to the to
00:06:29> 00:06:33:	the impacts of climate change considering preparedness for climate risks
00:06:33> 00:06:36:	and the role of the real estate sector in addressing
00:06:36> 00:06:39:	them these resilience, technical assistance panels leverage the expertise and
00:06:39> 00:06:41:	perspectives of the ULI membership to provide.
00:06:41> 00:06:46:	Land use development strategies. Assess policy opportunities and craft strategies
00:06:46> 00:06:49:	for implementation and funding for resilience going forward.
00:06:49> 00:06:54:	Next slide please. The National Virtual Technical Assistance Panel is
00:06:54> 00:06:57:	part of a larger series of Resilience,
00:06:57> 00:07:00:	technical assistance and learning opportunities called the Resilient Land use
00:07:00> 00:07:00:	cohort.
00:07:00> 00:07:04:	The cohort has been generously supported by JP Morgan Chase
00:07:04> 00:07:07:	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
00:07:13> 00:07:14:	development strategies.
00:07:13> 00:07:14: 00:07:14> 00:07:17:	C C
	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 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
	resilience.
00:11:13> 00:11:16:	In Tallahassee. Sadhu Johnston, who is the recently retired
00:11:16> 00:11:18:	city manager of Vancouver
00:11:18> 00:11:21:	manager of Vancouver, 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 and some of us are not,
00:11:29> 00:11:30:	
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 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 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 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 environment?
00:14:13> 00:14:17:	You know, you can see that the the bottom graphic
00:14:17> 00:14:19:	there it is getting hotter.
00:14:19> 00:14:22:	It's that heat disproportionately is impacting cities,
00:14:22> 00:14:25:	and that is producing widespread public health risk,
00:14:25> 00:14:29:	and that risk can be mitigated to some extent by
00:14:29> 00:14:34:	taking proactive steps to address the concerns and by taking
00:14:34> 00:14:35:	these on you.
00:14:35> 00:14:37:	Really help your own city to be more resilient to
00:14:37> 00:14:40:	all of the different impacts that might might come as
00:14:40> 00:14:42:	a result of climate change.
00:14:42> 00:14:45:	Next slide. So the good news is that most of
00:14:45> 00:14:49:	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 understand it's embargoed
00:16:18> 00:16:18:	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 water
00:17:03> 00:17:06:	features for people so that you can provide opportunities 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 communities
00:17:10> 00:17:13:	and economic competitive of Nashville and add tremendous 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 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 greenhouse
00:17:46> 00:17:47:	gas emissions.
00:17:47> 00:17:50:	In climate risks, or it increases them inadvertently or deliberately,
00:17:50> 00:17:53:	and that's certainly true in the case of all the

ssing today. Is you know, u require or incentivize features to tect residents, n cities throughout the world.
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quire cool roofs on new buildings.
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still makes up a huge percentage of
and many of the things that
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oking at reflective coatings or green
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' That's a fantastic project.
oossible on existing buildings,
egions or other retrofit reasons.
pating.
lding in New York City
ing 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
00.22.27 00.22.30.	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.
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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 sod 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: 00:29:16> 00:29:16:	amount of energy will start to incur fees or additional 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 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 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 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 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 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 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 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 developers
00:45:50> 00:45:53:	and municipalities for economic development incentives.
00:45:53> 00:45:56:	Energy incentives are like a patchwork quilt.
00:45:56> 00:45:58:	They don't come from one place.
00:45:58> 00:46:03:	There are as listed in the slide programs that come
00:46:03> 00:46:04:	out of HUD.
00:46:04> 00:46:07:	There are a host of tax credits,
00:46:07> 00:46:10:	historic tax credits, low income tax credits,
00:46:10> 00:46:15:	new market tax credits, and other QQ funding mechanisms that
00:46:15> 00:46:17:	you don't go to one place.
00:46:17> 00:46:20:	To learn about these and implement these,
00:46:20> 00:46:24:	so we're recommending developing of financing resourcing hub where people,
00:46:24> 00:46:28:	developers, missile Paletti could come not only to learn about
00:46:28> 00:46:29:	these,
00:46:29> 00:46:32:	but also provide technical assistance and how they would be
00:46:32> 00:46:37:	applied to a specific project and then finally public buildings
00:46:37> 00:46:38:	are very important,
00:46:38> 00:46:41:	but public buildings don't often have available to them the
00:46:41> 00:46:46:	same incentives that commercial properties or residential properties have,
00:46:46> 00:46:49:	so we are in a unique part of.
00:46:49> 00:46:53:	History where we have significant funds available from the CARES
00:46:53> 00:46:54:	Act,
00:46:54> 00:46:58:	and significant funds available from the American Rescue plan that
00:46:58> 00:47:02:	we are advocating the allocated and used to fund resiliency
00:47:02> 00:47:04:	programs of public buildings.
00:47:04> 00:47:08:	So those are our four ideas that could be implemented
00:47:04> 00:47:08: 00:47:08> 00:47:10:	So those are our four ideas that could be implemented with relative ease and they,
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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 imagine would benefit
00:57:37> 00:57:39:	and serve those residents.
00:57:39> 00:57:42:	Well, and we're pretty confident that if you expand on
00:57:42> 00:57:44:	these same ones across the entire city,
00:57:44> 00:57:48:	you will have really great options and solutions for everyone
00:57:48> 00:57:48:	else.
00:57:48> 00:57:51:	And so that's that's the equity lens that is so
00:57:51> 00:57:54:	critical in the work that you do.
00:57:54> 00:57:57:	But really, as you prioritize projects where you begin to
00:57:57> 00:57:58:	ask yourself questions,
00:57:58> 00:58:01:	it's highly recommended that you begin with who is the
00:58:01> 00:58:04:	most vulnerable and and the benefits will play out really
00:58:04> 00:58:06:	well for everyone else.
00:58:07> 00:58:10:	Thing I was struck by is 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
00:58:15> 00:58:18:	with Brown Creek with schools there we saw some pictures
00:58:18> 00:58:13:	of some pocket parks and weren't able to travel to
00:58:18> 00:58:21:	them. But most of that infrastructure and amenities are single
00:58:21> 00:58:24:	use.
00:58:24> 00:58:24:	
	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
	code,
00:59:30> 00:59:32:	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
	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 Barns 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 seated 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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