

# Event Session

## Working Collaboratively for Resilient Communities

Date: September 12, 2024

00:00:01 --> 00:00:04: It's my it's my pleasure to introduce our second keynote  
 00:00:04 --> 00:00:08: speaker for this afternoon, Abby Sullivan, who is the Chief  
 00:00:08 --> 00:00:12: Resilience Officer for the City of Philadelphia Office of  
 Sustainability.  
 00:00:13 --> 00:00:17: In this role, Abby leads Philadelphia citywide resilience  
 planning.  
 00:00:17 --> 00:00:21: Previously, she served as environmental scientist at the  
 Philadelphia Water  
 00:00:22 --> 00:00:25: Department, where she worked on their green storm water  
 infrastructure  
 00:00:25 --> 00:00:29: program and LED the department's coastal flood resilience  
 efforts with  
 00:00:29 --> 00:00:31: the Climate Change Adaption Program.  
 00:00:32 --> 00:00:34: So we're very excited to hear from Abby and then  
 00:00:34 --> 00:00:37: from a panel of of a number of neighborhood experts.  
 00:00:37 --> 00:00:39: So, Abby, thank you so much for joining us and  
 00:00:39 --> 00:00:39: welcome.  
 00:00:44 --> 00:00:45: Thank you.  
 00:00:46 --> 00:00:47: I'm very excited to be here.  
 00:00:47 --> 00:00:47: Can you hear me?  
 00:00:48 --> 00:00:48: Yeah.  
 00:00:48 --> 00:00:49: OK.  
 00:00:49 --> 00:00:51: All right.  
 00:00:51 --> 00:00:55: So I'm going to start off 1st with some acknowledgments.  
 00:00:56 --> 00:00:59: There's a lot of amazing people in the Office of  
 00:00:59 --> 00:01:00: Sustainability.  
 00:01:00 --> 00:01:01: We're a small but really mighty team.  
 00:01:02 --> 00:01:05: And I just want to acknowledge the great leadership we  
 00:01:05 --> 00:01:07: have with Liz Lankenau, who's here.  
 00:01:07 --> 00:01:08: She's the head of our office.

00:01:09 --> 00:01:11: And also want to credit Slim Chapman, who was the  
00:01:11 --> 00:01:12: CRO before me.  
00:01:12 --> 00:01:15: A lot of what we're presenting was, you know, visions  
00:01:15 --> 00:01:17: that he had and started and put in place.  
00:01:18 --> 00:01:22: And then the climate resilience team, you know, there's  
about  
00:01:22 --> 00:01:25: five of us doing this work and we're doing a  
00:01:25 --> 00:01:25: lot.  
00:01:25 --> 00:01:27: Hopefully you're going to see some of that today.  
00:01:27 --> 00:01:30: But there's also a lot of other staff in the  
00:01:30 --> 00:01:33: office that their work touches on climate adaptation and  
resilience  
00:01:33 --> 00:01:33: as well.  
00:01:33 --> 00:01:37: So just acknowledging that, you know, we have my colleague  
00:01:37 --> 00:01:40: Genevieve who leads our environmental justice work, my  
colleague Niddy  
00:01:40 --> 00:01:43: Christian who leads climate solutions work.  
00:01:43 --> 00:01:46: So it's a lot of the just transition looking at  
00:01:46 --> 00:01:50: energy poverty, which is related to resilience for our  
communities.  
00:01:51 --> 00:01:53: And then some folks from our energy office who, you  
00:01:53 --> 00:01:56: know, a lot of this work when it comes to  
00:01:56 --> 00:01:58: the built environment, there's this overlap with energy.  
00:01:58 --> 00:02:02: So I was going to start off and talk about  
00:02:02 --> 00:02:04: why Philadelphia's vulnerable.  
00:02:04 --> 00:02:07: And I think Glenn has set the stage really nicely.  
00:02:08 --> 00:02:09: I just want to note a few things that are  
00:02:10 --> 00:02:11: particular about Philadelphia.  
00:02:11 --> 00:02:14: So one is that we're at the bottom of two  
00:02:14 --> 00:02:15: large watersheds.  
00:02:15 --> 00:02:17: So I think that really gives us a disadvantage when  
00:02:17 --> 00:02:18: it comes to flooding.  
00:02:18 --> 00:02:21: So, you know, we can't control the development upstream.  
00:02:22 --> 00:02:24: We can't really, you know, control how much rain is  
00:02:24 --> 00:02:27: falling in other well, we can't control where the rain  
00:02:27 --> 00:02:30: falls anyway, but it could be falling, you know, not  
00:02:30 --> 00:02:31: on Philadelphia at all.  
00:02:31 --> 00:02:33: There could be a really intense rainstorm way up in  
00:02:33 --> 00:02:36: New York State in the Delaware watershed, and we could  
00:02:36 --> 00:02:37: see flooding.  
00:02:37 --> 00:02:40: So that's one of the big disadvantages.  
00:02:40 --> 00:02:43: Another key thing I think people don't realize is that  
00:02:43 --> 00:02:44: we're coastal, right?

00:02:44 --> 00:02:47: So we have tidal rivers and creeks, and our land  
00:02:47 --> 00:02:49: is sinking while the oceans are rising.  
00:02:50 --> 00:02:52: So there's a global average of sea level rise.  
00:02:52 --> 00:02:55: And in Philadelphia, our rate of sea level rise is  
00:02:55 --> 00:02:58: almost twice the global average and that's because our land  
00:02:58 --> 00:02:59: is sinking at the same time.  
00:03:01 --> 00:03:04: Another thing, and this is probably something I could learn  
00:03:04 --> 00:03:06: from you in the audience about, is just how the  
00:03:06 --> 00:03:09: built environment has made us more vulnerable and  
impacted our  
00:03:10 --> 00:03:10: vulnerability.  
00:03:10 --> 00:03:12: So we've capped over our rivers and creeks.  
00:03:13 --> 00:03:16: We have this dense urban environment where we have low  
00:03:16 --> 00:03:17: canopy cover.  
00:03:17 --> 00:03:20: We know that that leads to these urban heat islands,  
00:03:20 --> 00:03:24: lots of impervious surface that leads that inland flooding or  
00:03:24 --> 00:03:26: that pluvial rainfall driven flooding.  
00:03:26 --> 00:03:28: We have really old infrastructure.  
00:03:28 --> 00:03:31: When I was at the water department, there was construction  
00:03:31 --> 00:03:35: projects where they literally found wooden pipes  
underground still.  
00:03:35 --> 00:03:37: So I mean, we're talking about a very old city,  
00:03:37 --> 00:03:39: very old infrastructure.  
00:03:40 --> 00:03:42: And then this one, I feel like, again, everybody in  
00:03:42 --> 00:03:46: this room probably knows this, but Philadelphia has really  
high  
00:03:46 --> 00:03:47: rates of poverty.  
00:03:47 --> 00:03:50: And that directly leads to us having higher rates of  
00:03:50 --> 00:03:54: vulnerability because it's our most vulnerable populations  
that are impacted  
00:03:54 --> 00:03:56: first and worst by climate change.  
00:03:56 --> 00:04:00: And I really like this graphic that I found is  
00:04:00 --> 00:04:03: by Islam and Winkle from 2017.  
00:04:03 --> 00:04:06: And I like it because it really kind of hits  
00:04:06 --> 00:04:10: home the triple whammy that these underserved populations  
and frontline  
00:04:10 --> 00:04:11: communities feel.  
00:04:11 --> 00:04:15: So they have greater exposure, greater susceptibility to  
damage, and  
00:04:15 --> 00:04:16: less ability to cope.  
00:04:16 --> 00:04:20: So let's let's take the example of extreme heat.  
00:04:21 --> 00:04:23: We know that the areas in our communities that are  
00:04:23 --> 00:04:26: disadvantaged and low income, they tend to have low

canopy  
00:04:26 --> 00:04:26: cover.  
00:04:26 --> 00:04:28: They tend to be the places where we have those  
00:04:28 --> 00:04:29: urban heat islands, right?  
00:04:29 --> 00:04:33: So they're more exposed, they have greater susceptibility to  
damage.  
00:04:33 --> 00:04:36: We have higher rates of asthma in those communities.  
00:04:36 --> 00:04:40: We have more chronic health diseases, we have worse  
housing  
00:04:40 --> 00:04:40: conditions.  
00:04:41 --> 00:04:43: And that that leads to that less ability to cope.  
00:04:44 --> 00:04:46: They probably don't have air conditioning or if they do,  
00:04:46 --> 00:04:49: they might not be able to afford it, right?  
00:04:49 --> 00:04:50: That energy burden piece.  
00:04:50 --> 00:04:53: So it's sort of this triple whammy that really makes  
00:04:53 --> 00:04:55: this disproportionate impact.  
00:04:55 --> 00:04:57: So again, you guys probably all know this, but I  
00:04:57 --> 00:04:58: like framing it in this way.  
00:05:00 --> 00:05:02: And actually before I move on, I want to say  
00:05:02 --> 00:05:05: I'm like, so honored to even be in the same  
00:05:05 --> 00:05:07: room as Glenn Hurricane Schwartz.  
00:05:07 --> 00:05:10: And I really appreciated his presentation.  
00:05:10 --> 00:05:14: But I do want to note that everything he presented  
00:05:14 --> 00:05:14: is true.  
00:05:14 --> 00:05:16: And it's really scary.  
00:05:16 --> 00:05:20: But when I started working on adaptation in 2016, we  
00:05:20 --> 00:05:24: all used the worst case emission scenario for planning, right.  
00:05:26 --> 00:05:31: Every report you see probably RCP 8.5 or SSP 8.5.  
00:05:31 --> 00:05:34: It's jargon, but we're talking about a worst case climate  
00:05:34 --> 00:05:35: emission scenario.  
00:05:36 --> 00:05:39: People think now that there's no way we could even  
00:05:39 --> 00:05:40: see that future.  
00:05:40 --> 00:05:43: OK, that means like five times the amount of coal  
00:05:43 --> 00:05:45: production that we have right now.  
00:05:45 --> 00:05:48: Today, we are not on that trajectory anymore.  
00:05:48 --> 00:05:50: And that's really good news.  
00:05:50 --> 00:05:52: And the truth is scary enough.  
00:05:53 --> 00:05:55: So it's not, it's not good news in that like  
00:05:55 --> 00:05:57: things are OK, they're getting worse and we need to  
00:05:58 --> 00:05:59: curb our emissions more.  
00:05:59 --> 00:06:02: But at least we're not on that like absolute worst  
00:06:02 --> 00:06:03: case path.  
00:06:03 --> 00:06:05: So for me, there's hope and I'm the cynic on

00:06:05 --> 00:06:06: my team.

00:06:06 --> 00:06:09: You can ask my teammates, but I, I really do

00:06:09 --> 00:06:12: think we're seeing changes in policy and pledges.

00:06:13 --> 00:06:16: You know, with policies and pledges, we're on track.

00:06:17 --> 00:06:19: We could see two degrees of warming by the end

00:06:19 --> 00:06:20: of the century.

00:06:20 --> 00:06:22: That worst case scenario is 4 1/2 to five degrees

00:06:23 --> 00:06:23: of warming.

00:06:23 --> 00:06:25: So we're talking about double the warming.

00:06:25 --> 00:06:27: So I do think there's a message of hope in

00:06:27 --> 00:06:29: here and that we are on the right trajectory.

00:06:29 --> 00:06:32: And seeing all of you passionate about these things gives

00:06:32 --> 00:06:33: me hope as well.

00:06:35 --> 00:06:37: So just a really quick note on the cost of

00:06:37 --> 00:06:38: current of climate change.

00:06:38 --> 00:06:41: I'm not going to go into all the stats on

00:06:41 --> 00:06:45: this slide, but the estimated cost of damage for Ida

00:06:45 --> 00:06:49: alone SO1 storm event in Philadelphia was calculated to be

00:06:49 --> 00:06:50: \$1.3 billion.

00:06:53 --> 00:06:54: We can't afford it.

00:06:54 --> 00:06:56: We can't afford these costs.

00:06:57 --> 00:07:00: And I think one of the tricky things about making

00:07:00 --> 00:07:04: the business case for resilience is that those costs are

00:07:04 --> 00:07:05: spread out, right?

00:07:05 --> 00:07:09: So I'm trying to get Philadelphia's government to take more

00:07:09 --> 00:07:13: action and build resilience, but they don't see these savings

00:07:13 --> 00:07:14: necessarily, right?

00:07:14 --> 00:07:17: It's the business owners, it's the homeowners that see the

00:07:17 --> 00:07:17: savings.

00:07:17 --> 00:07:19: So it's a really tricky calculus.

00:07:19 --> 00:07:22: So there is a business case, but it's really hard

00:07:22 --> 00:07:26: in a very resource constrained city to, you know, where

00:07:26 --> 00:07:29: we can't even afford to fund our libraries and our

00:07:29 --> 00:07:31: parks and to get them air conditioning.

00:07:31 --> 00:07:34: It's really hard to be like, well, we should be

00:07:34 --> 00:07:37: earmarking money to be proactive for climate resilience.

00:07:37 --> 00:07:39: So it's it's just a really big challenge.

00:07:40 --> 00:07:43: But I want to show something and I know statistics

00:07:43 --> 00:07:47: can be off putting and return periods are really hard

00:07:48 --> 00:07:51: to understand, but Ida was not 100 year event or

00:07:51 --> 00:07:53: a 1% chance storm.

00:07:53 --> 00:07:56: It was estimated to be a 65 year event.

00:07:57 --> 00:07:59: That's using FEMA's flow data.

00:07:59 --> 00:08:02: So you can we normally hear about return periods associated

00:08:02 --> 00:08:03: with a flood.

00:08:03 --> 00:08:06: You could do a return using statistics for rain, you

00:08:06 --> 00:08:09: could do it for wind, you could do it for

00:08:09 --> 00:08:09: anything.

00:08:09 --> 00:08:13: It's really just statistically trying to determine what's the likelihood

00:08:14 --> 00:08:15: of something happening in one year.

00:08:16 --> 00:08:18: So a 1% chance storm or that 100 year storm

00:08:18 --> 00:08:21: is kind of the risk tolerance that we as a

00:08:21 --> 00:08:23: society have agreed upon, right?

00:08:23 --> 00:08:26: That's what we regulate to with floodplain regulations.

00:08:26 --> 00:08:29: It's what we generally build to with a safety factor.

00:08:30 --> 00:08:33: So Ida, all that damage was not even a 100

00:08:33 --> 00:08:36: year event according to Pneuma's outdated flow data.

00:08:37 --> 00:08:40: The water department looked at the last 20 years of

00:08:40 --> 00:08:43: flow data on this Google and it's actually a 30

00:08:43 --> 00:08:44: year event.

00:08:45 --> 00:08:48: So a 30 year event has a 50% chance of

00:08:48 --> 00:08:51: occurring again over the next 25 years.

00:08:51 --> 00:08:53: So it, it gets really confusing.

00:08:53 --> 00:08:56: But the point is these events, these massive big events

00:08:56 --> 00:08:58: are becoming more likely.

00:08:58 --> 00:09:02: And if we use that worst case climate change scenario

00:09:02 --> 00:09:04: that RCP 8.5 or SSP 58.5 by the end of

00:09:04 --> 00:09:07: century, that would become a six year event.

00:09:09 --> 00:09:12: So we know that there's a business case for resilience,

00:09:12 --> 00:09:13: right?

00:09:13 --> 00:09:16: We know that, you know, for every dollar invested in

00:09:16 --> 00:09:18: resilience, 6 are saved.

00:09:18 --> 00:09:21: You know, the World Bank says it's around 4:00 to

00:09:21 --> 00:09:21: 1:00.

00:09:22 --> 00:09:25: We've also heard from colleagues in Miami that have been

00:09:25 --> 00:09:29: tracking this with their capital planning programs that to add

00:09:29 --> 00:09:33: the add resilience into a project actually only takes about

00:09:33 --> 00:09:33: 5% extra cost.

00:09:34 --> 00:09:37: So it's really worth the investment, especially for a new

00:09:37 --> 00:09:38: capital project.

00:09:38 --> 00:09:41: And then I'm going to talk a bit more about

00:09:41 --> 00:09:42: Eastwick in a second.

00:09:42 --> 00:09:45: But the Army Corps estimated that if we do install

00:09:45 --> 00:09:49: Levy in Eastwick, it would save \$128 million over the  
00:09:49 --> 00:09:50: next 50 years.  
00:09:54 --> 00:09:54: Really quickly.  
00:09:54 --> 00:09:58: Before I dive into this slide, I just want to  
00:09:58 --> 00:10:02: mention that our resilience team in the Office of  
Sustainability,  
00:10:02 --> 00:10:04: we work at multiple scales.  
00:10:04 --> 00:10:06: So I often have a slide, I didn't put it  
00:10:06 --> 00:10:09: in here, but we're, we're, we're almost like Russian nesting  
00:10:09 --> 00:10:10: dolls, right?  
00:10:10 --> 00:10:13: So we have teams that are working down in the  
00:10:13 --> 00:10:18: neighborhood levels that beat the heat guide that was  
mentioned.  
00:10:18 --> 00:10:20: That's kind of like what we call a place based  
00:10:20 --> 00:10:20: initiative.  
00:10:20 --> 00:10:23: We also have a place based initiative in Eastwick right  
00:10:23 --> 00:10:25: now, which I'm going to talk about.  
00:10:25 --> 00:10:28: But then we also have sort of hazard level programming.  
00:10:28 --> 00:10:31: So my colleague Elaine Montez is here in the office.  
00:10:31 --> 00:10:35: She leads our flood resilience and compliance strategy  
program.  
00:10:35 --> 00:10:38: So looking at flood resilience across the city, we also  
00:10:38 --> 00:10:42: have heat resilience work happening across the city at like  
00:10:42 --> 00:10:43: a policy level.  
00:10:43 --> 00:10:46: But then we also do sort of city wide planning  
00:10:46 --> 00:10:49: where we're updating the city's resilience plan and doing a  
00:10:50 --> 00:10:52: lot of assessments at like the city level.  
00:10:52 --> 00:10:56: So just noting that we work at multiple scales and  
00:10:56 --> 00:11:01: at different typologies, everything from trying to help people  
retrofit  
00:11:01 --> 00:11:04: their home to policies about heat and trying to set  
00:11:04 --> 00:11:08: a maximum threshold for heat in different facilities.  
00:11:09 --> 00:11:10: Sorry.  
00:11:10 --> 00:11:13: So one of the things that our team does a  
00:11:13 --> 00:11:17: lot is interagency coordination because we don't own this.  
00:11:17 --> 00:11:19: We're a very small team.  
00:11:19 --> 00:11:21: There's so much work I could highlight happening at the  
00:11:21 --> 00:11:24: water department, at the health department, at Parks and  
Recreation,  
00:11:24 --> 00:11:26: and you're going to hear more about that later.  
00:11:27 --> 00:11:28: So I'm very excited that Erica's here.  
00:11:29 --> 00:11:32: But a lot of what we do is interagency coordination.  
00:11:32 --> 00:11:35: So we have all these different interagency groups and we

00:11:35 --> 00:11:36: work really hard.

00:11:36 --> 00:11:39: It's extremely difficult, but we work really hard to align

00:11:39 --> 00:11:40: our planning processes.

00:11:40 --> 00:11:43: So right now we have the resilience plan update happening,

00:11:43 --> 00:11:47: our comprehensive plan update happening, and our hazard mitigation plan

00:11:47 --> 00:11:50: update happening, and they all overlap and they all want

00:11:50 --> 00:11:51: to feature climate change.

00:11:51 --> 00:11:54: So it's a lot of work to sort of, you

00:11:54 --> 00:11:57: know, go to the public and engage with them and

00:11:57 --> 00:12:00: to try to not give them fatigue when they're doing

00:12:00 --> 00:12:02: all these different planning processes.

00:12:03 --> 00:12:05: So I'm going to speed up.

00:12:05 --> 00:12:07: So we're doing a lot of work in Eastwick.

00:12:07 --> 00:12:08: Why are we working in Eastwick?

00:12:08 --> 00:12:11: Because it's an environmental justice community.

00:12:11 --> 00:12:14: It's a fence line community to the former refinery.

00:12:14 --> 00:12:17: It's next to landfills and Superfund sites.

00:12:18 --> 00:12:19: It has highways that were built through it.

00:12:19 --> 00:12:23: It was an urban renewal project in the 1960s that

00:12:23 --> 00:12:25: displaced over 8000 people.

00:12:25 --> 00:12:27: It just, you know, through eminent domain took their homes.

00:12:28 --> 00:12:31: And when they, when the city rebuilt their homes and

00:12:32 --> 00:12:34: had this plan, they put homes too close to the

00:12:34 --> 00:12:36: rivers and creeks.

00:12:36 --> 00:12:39: So in a sense, you know, city urban planning decisions

00:12:39 --> 00:12:43: have led directly to the vulnerability of this community.

00:12:43 --> 00:12:47: And that's why, you know, we feel very strongly about

00:12:47 --> 00:12:50: investing in Eastwick and trying to build resilient solutions.

00:12:51 --> 00:12:53: And I just want to mention, I really like the

00:12:53 --> 00:12:55: comments from the first panel about greenways.

00:12:55 --> 00:12:58: Yes, in theory, let's move people out of the floodplain

00:12:58 --> 00:13:02: and let's use that for storage for these extreme events.

00:13:02 --> 00:13:04: But these are real humans that live here, that love

00:13:04 --> 00:13:06: their home and that don't want to leave.

00:13:07 --> 00:13:09: So we can't do what we did in the 60s

00:13:09 --> 00:13:11: and just kick people out again.

00:13:11 --> 00:13:14: So it's really, really challenging.

00:13:14 --> 00:13:16: So in theory we can all agree on these things,

00:13:16 --> 00:13:18: but when it comes down to it, in reality, it's

00:13:19 --> 00:13:20: really messy and really hard to do.

00:13:22 --> 00:13:24: So we have this place based team, they're doing a

00:13:24 --> 00:13:25: fantastic job.

00:13:26 --> 00:13:28: They do a whole of government approach, meaning they don't

00:13:28 --> 00:13:30: just go in and talk about flooding.

00:13:30 --> 00:13:34: We have Taylor is our community navigator, so her whole

00:13:34 --> 00:13:37: role is really to address other quality of life issues.

00:13:37 --> 00:13:40: So if we go down and we're holding a meeting

00:13:40 --> 00:13:42: about flooding and somebody's like, but the street lights are

00:13:42 --> 00:13:45: out, well, we have somebody who's going to follow up

00:13:45 --> 00:13:47: and make sure that we as a city are responding

00:13:47 --> 00:13:48: to these needs.

00:13:49 --> 00:13:54: We've brought in nearly \$4 million for funding this work

00:13:54 --> 00:13:55: in Eastwick.

00:13:55 --> 00:13:58: And a huge part of this program is making decisions

00:13:58 --> 00:13:59: with the community.

00:14:00 --> 00:14:02: And what that means is we actually have to support

00:14:02 --> 00:14:05: them so that they have the capacity to be there

00:14:05 --> 00:14:06: at the table.

00:14:06 --> 00:14:09: So we've re granted almost \$1,000,000 to Eastwick United

00:14:09 --> 00:14:13: and Eastwick Friends and Neighbors Coalition that allows them to

00:14:13 --> 00:14:16: hire staff to work on projects themselves.

00:14:16 --> 00:14:20: They set up a flood recovery program Isaias.

00:14:20 --> 00:14:22: So this is a key part of this program is

00:14:22 --> 00:14:25: that we re grant funds and build that capacity at

00:14:25 --> 00:14:26: the community level.

00:14:27 --> 00:14:29: We do a lot of other work there.

00:14:29 --> 00:14:32: We're working with Army Corps, We've worked with ULI on

00:14:32 --> 00:14:34: a really great study looking at a lamb swap idea.

00:14:35 --> 00:14:38: We do community days, tons of public engagement and we're

00:14:39 --> 00:14:42: working on near term solutions and long term solutions.

00:14:42 --> 00:14:44: So we are looking into a levy and as well

00:14:44 --> 00:14:46: as other nature based solutions.

00:14:46 --> 00:14:49: We're working very closely with John Heinz on nature based

00:14:50 --> 00:14:50: solutions.

00:14:50 --> 00:14:53: And then in the near term we're looking to install

00:14:53 --> 00:14:53: HESCO barriers.

00:14:54 --> 00:14:57: They're these interim measure, this temporary barrier that

00:14:57 --> 00:15:00: would be in the same alignment as the levy, but there's a

00:15:00 --> 00:15:03: lot of coordination that happens at the federal, state and

00:15:03 --> 00:15:04: local level.

00:15:04 --> 00:15:06: So you can see some of the partners over there

00:15:06 --> 00:15:07: on the left.

00:15:08 --> 00:15:11: And then we also have this flood resilience and compliance

00:15:11 --> 00:15:12: strategy program.

00:15:12 --> 00:15:14: We share floodplain management duties.

00:15:15 --> 00:15:19: Elaine runs the flood risk management task force, Joseph runs

00:15:19 --> 00:15:20: our Clean Waters task force.

00:15:20 --> 00:15:23: We have flood mitigation programming that we're doing.

00:15:23 --> 00:15:25: So Elaine has done a ton of work to try

00:15:25 --> 00:15:29: to set up a property level flood mitigation program in

00:15:29 --> 00:15:29: Philadelphia.

00:15:30 --> 00:15:33: There's other places that have this, other examples that we

00:15:33 --> 00:15:36: are using and trying to build off of, you know,

00:15:36 --> 00:15:38: a proof of concept essentially to say we can do

00:15:38 --> 00:15:42: this in Philadelphia and then work with our housing

00:15:42 --> 00:15:43: department

00:15:42 --> 00:15:43: to make that happen.

00:15:44 --> 00:15:47: We also do a lot of coordination on the community

00:15:47 --> 00:15:51: development block grant, disaster relief coordination, which is a big

00:15:51 --> 00:15:52: lift as well.

00:15:53 --> 00:15:56: So here's just some of those examples that property level

00:15:57 --> 00:15:59: pilot program that Elaine is lifting up.

00:15:59 --> 00:16:03: We also do a lot on risk communication and development

00:16:03 --> 00:16:06: review and then we're doing a lot on municipal resilience

00:16:06 --> 00:16:08: planning more generally.

00:16:08 --> 00:16:10: So we do infrastructure resilience.

00:16:10 --> 00:16:14: So a pilot project, again that Elaine was involved with

00:16:14 --> 00:16:17: was getting a cool streets pilot off the ground in

00:16:17 --> 00:16:18: Hunting Park.

00:16:18 --> 00:16:21: So just the other week we worked with the streets

00:16:22 --> 00:16:26: department and we're testing out a cool surface technology

00:16:26 --> 00:16:28: on

00:16:26 --> 00:16:28: a pathway through Hunting Park.

00:16:28 --> 00:16:30: We didn't want to put it on the roads because

00:16:30 --> 00:16:32: we don't know how it will hold up with icing

00:16:32 --> 00:16:34: or salting in the winter.

00:16:34 --> 00:16:37: We don't know what that freeze thaws, you know, cycle

00:16:37 --> 00:16:39: that we see how it's going to hold up.

00:16:39 --> 00:16:42: So this is a test we're working with researchers at

00:16:42 --> 00:16:44: Upenn to try to understand and monitor this and see

00:16:45 --> 00:16:47: if it's something that we could then scale up and  
00:16:47 --> 00:16:51: use in things like cool corridor projects, Capital planning.  
00:16:51 --> 00:16:55: We're trying to embed more resilience, like actually give it  
00:16:55 --> 00:16:58: teeth in the capital planning program where you have to  
00:16:58 --> 00:17:02: do a risk screening for big capital investments that are  
00:17:02 --> 00:17:04: vulnerable to climate change.  
00:17:04 --> 00:17:08: We do departmental support, so we have a climate resilience  
00:17:08 --> 00:17:11: fund where we can work with other departments to add  
00:17:11 --> 00:17:13: on to their projects to make them resilient.  
00:17:13 --> 00:17:17: So an example, our energy office, I've been working with  
00:17:17 --> 00:17:20: them to do an audit of our cooling centers to  
00:17:20 --> 00:17:23: make sure the HVAC systems are working well.  
00:17:23 --> 00:17:27: And we're actually developing designs to replace and  
upgrade the  
00:17:27 --> 00:17:30: HVAC system at Martin Luther King Recreation Center.  
00:17:31 --> 00:17:34: We also have planning tools and resources.  
00:17:34 --> 00:17:38: So we've purchased data from an entity called 1st St.  
00:17:38 --> 00:17:38: Foundation.  
00:17:39 --> 00:17:43: It's not perfect, it's modeled information, but it gives gives  
00:17:43 --> 00:17:46: us a lot of information about that inland flooding.  
00:17:46 --> 00:17:49: So if you look at FEMA's flood maps, you'll see  
00:17:49 --> 00:17:51: flooding along the rivers and creeks.  
00:17:51 --> 00:17:53: Well, we flood everywhere in Philadelphia.  
00:17:53 --> 00:17:55: So we purchased that first St.  
00:17:55 --> 00:17:58: Foundation data and we've done trainings and have a  
resource  
00:17:58 --> 00:18:02: library for staff so that they can use that information  
00:18:02 --> 00:18:03: in their planning.  
00:18:04 --> 00:18:06: I'm going to kind of go by this and just  
00:18:06 --> 00:18:09: say last thing I will focus on because I know  
00:18:09 --> 00:18:12: I'm running short on time, is that we're leading the  
00:18:12 --> 00:18:14: update to the city's climate resilience plan.  
00:18:14 --> 00:18:17: And that really is 3 buckets of work.  
00:18:17 --> 00:18:20: So there's a climate science update and we're developing  
application  
00:18:20 --> 00:18:21: guidance.  
00:18:21 --> 00:18:22: So we're working with ICF.  
00:18:22 --> 00:18:24: One of my colleagues is here in the room today.  
00:18:25 --> 00:18:27: So it's not just going to be a report that  
00:18:27 --> 00:18:30: says here's the range of projections that you might see  
00:18:30 --> 00:18:33: in Philadelphia in the mid century and end of century.  
00:18:33 --> 00:18:36: It explains, and we're doing trainings with staff on how  
00:18:36 --> 00:18:39: do you then choose the appropriate projection for the project

00:18:39 --> 00:18:40: that you're working on?

00:18:41 --> 00:18:44: If you're paving a street and it's useful, life is

00:18:44 --> 00:18:46: 15 years and it can flood and then dry out

00:18:46 --> 00:18:47: and be OK.

00:18:47 --> 00:18:50: You want to use different projections and you want to

00:18:50 --> 00:18:54: use different adaptation strategies and management principles than something like

00:18:54 --> 00:18:57: a drinking water treatment plant that's right next to a

00:18:57 --> 00:19:00: river and Creek that's providing, you know, a critical resource

00:19:00 --> 00:19:02: to half of Philadelphia's population.

00:19:02 --> 00:19:04: So for the Baxter water plant, we would use a

00:19:04 --> 00:19:07: higher emission scenario to plan for the worst and hope

00:19:07 --> 00:19:08: for the best.

00:19:10 --> 00:19:13: And then we're also updating the city's climate vulnerability assessments.

00:19:13 --> 00:19:16: We're doing a heat vulnerability assessment and a citywide flood

00:19:16 --> 00:19:17: vulnerability assessment.

00:19:18 --> 00:19:20: And then we're updating our resilience plan.

00:19:20 --> 00:19:24: The goal is to have it updated by summer, fall

00:19:25 --> 00:19:27: of 2026, so 2 years from now.

00:19:28 --> 00:19:30: And we really feel that we need a two year

00:19:30 --> 00:19:34: planning process to have an equitable engagement across the city.

00:19:35 --> 00:19:37: This is really expensive to do.

00:19:38 --> 00:19:40: So luckily we got some grant funding and I'll talk

00:19:40 --> 00:19:41: about that in a little bit.

00:19:41 --> 00:19:45: But oh, there's just talking about that climate science update.

00:19:45 --> 00:19:49: And then for our vulnerability assessments, I'm really excited.

00:19:49 --> 00:19:53: This work is nearly complete, but we did a really

00:19:53 --> 00:19:58: comprehensive screening of risk geospatially with our assets.

00:19:59 --> 00:20:01: But I want to I want to stress that this

00:20:01 --> 00:20:02: is not just municipal.

00:20:02 --> 00:20:04: We also looked community wide.

00:20:04 --> 00:20:10: So we have asset list like communication technology, health centers,

00:20:10 --> 00:20:11: dialysis centers.

00:20:11 --> 00:20:15: We we screened risk against many, many different assets within

00:20:15 --> 00:20:18: the community that aren't just municipal.

00:20:19 --> 00:20:21: So that's coming out really soon.

00:20:21 --> 00:20:22: We're very excited about that.

00:20:23 --> 00:20:25: And then we also developed a flood vulnerability index.

00:20:25 --> 00:20:28: Some of you might be familiar that the city has  
00:20:28 --> 00:20:29: a heat vulnerability index.  
00:20:29 --> 00:20:31: We did the same for flood vulnerability.  
00:20:31 --> 00:20:34: So here you can see the areas that are darkest  
00:20:34 --> 00:20:39: blue are where we have the highest social sensitivity using  
00:20:39 --> 00:20:44: indicators like socio demographic indicators, health  
00:20:44 --> 00:20:45: indicators, housing type and  
00:20:44 --> 00:20:45: then exposure.  
00:20:46 --> 00:20:48: And again, it was key that we use that first  
00:20:48 --> 00:20:48: St.  
00:20:48 --> 00:20:53: Foundation information because this map would look very  
00:20:53 --> 00:20:56: different if  
00:20:53 --> 00:20:56: we didn't have that inland flood risk information.  
00:20:56 --> 00:20:59: So again, it may not be perfect, but it gives  
00:20:59 --> 00:21:02: us some place to start to understand and to communicate  
00:21:02 --> 00:21:06: to residents that there's risk in your neighborhood, even if  
00:21:06 --> 00:21:08: you're not near a river and Creek.  
00:21:09 --> 00:21:11: We're doing a heat vulnerability assessment.  
00:21:11 --> 00:21:14: So we're doing a citywide survey to understand who has  
00:21:14 --> 00:21:15: access to cooling.  
00:21:16 --> 00:21:18: And if you do have air conditioning, can you afford  
00:21:18 --> 00:21:19: to use it?  
00:21:19 --> 00:21:23: We're also looking very high level at vulnerability to the  
00:21:23 --> 00:21:26: grid and then also how temperature increases are going to  
00:21:26 --> 00:21:27: impact air quality.  
00:21:28 --> 00:21:30: And this is that heat vulnerability index.  
00:21:30 --> 00:21:32: This has been out for a few years, but a  
00:21:32 --> 00:21:34: great tool again, to look at that overlap of where  
00:21:34 --> 00:21:38: are our frontline communities that are experiencing these  
00:21:38 --> 00:21:39: climate impacts  
00:21:38 --> 00:21:39: the most.  
00:21:40 --> 00:21:42: So the last thing I'm going to end with is  
00:21:42 --> 00:21:45: just that we are kicking off this resilience plan update.  
00:21:45 --> 00:21:48: And I'm really glad I have this captive audience because  
00:21:48 --> 00:21:51: we're putting out a job description really soon.  
00:21:51 --> 00:21:54: So if you know anybody who's great, we're looking for  
00:21:54 --> 00:21:57: a climate resilience planner, an engagement specialist.  
00:21:58 --> 00:22:01: So this will be somebody who will really help shepherd  
00:22:01 --> 00:22:03: this engagement process over the next two years.  
00:22:04 --> 00:22:07: We got really great support from the William Penn  
00:22:07 --> 00:22:10: Foundation  
00:22:07 --> 00:22:10: and we also have some disaster relief funds that are  
00:22:10 --> 00:22:11: funding this work.

00:22:11 --> 00:22:15: So we're going to have consultants, we're going to put  
00:22:15 --> 00:22:17: out two pretty large RF PS in the next few  
00:22:17 --> 00:22:17: months.  
00:22:18 --> 00:22:20: We're going to have a resident comprised steering  
committee.  
00:22:20 --> 00:22:23: We're going to Co produce our engagement strategy and  
finalize  
00:22:23 --> 00:22:24: that with them.  
00:22:24 --> 00:22:27: We have an ambassador program where again, that steering  
committee  
00:22:27 --> 00:22:30: and the ambassador program will be getting paid for  
00:22:30 --> 00:22:32: their work and for their expertise.  
00:22:33 --> 00:22:36: We applied for grant funding to have a Youth Climate  
00:22:36 --> 00:22:39: Council, so not sure if that's going to get funded  
00:22:39 --> 00:22:42: or not, but hopefully we'll have that Youth Climate Council  
00:22:43 --> 00:22:43: piece as well.  
00:22:44 --> 00:22:47: We're going to have 18 in person and virtual engagements  
00:22:47 --> 00:22:50: across the city, so one in person and virtual in  
00:22:50 --> 00:22:52: each of the 18 planning districts.  
00:22:53 --> 00:22:55: And then we are going to then identify like 5  
00:22:56 --> 00:23:00: key frontline communities where we'll do deeper  
engagements with workshops  
00:23:00 --> 00:23:02: and shreds and community build days.  
00:23:03 --> 00:23:05: And then we also have funds earmarked to do an  
00:23:05 --> 00:23:06: art and poetry competition.  
00:23:08 --> 00:23:10: And then again, just going back to the fact that  
00:23:10 --> 00:23:13: I'm highlighting the work out of our office, but so  
00:23:13 --> 00:23:15: much of this work in the city is also happening  
00:23:16 --> 00:23:18: in other departments that often don't get credit.  
00:23:18 --> 00:23:22: I mean, the health department is really leading when it  
00:23:22 --> 00:23:26: comes to educating people about heat and the the risk  
00:23:26 --> 00:23:26: of heat.  
00:23:26 --> 00:23:29: So and then emergency response, of course, our Office of  
00:23:29 --> 00:23:33: Emergency Management, again, our water department, we  
have things like  
00:23:33 --> 00:23:36: a storm water fee that funds our green storm water  
00:23:36 --> 00:23:37: infrastructure program.  
00:23:38 --> 00:23:39: And then you're going to hear a little bit more  
00:23:39 --> 00:23:42: about the fantastic work happening with the Philly Tree plan  
00:23:42 --> 00:23:44: and efforts with the Parks and Recreation Department soon.  
00:23:45 --> 00:23:46: So thank you.  
00:23:59 --> 00:24:02: We have one question online right now.  
00:24:02 --> 00:24:02: I know.

00:24:02 --> 00:24:03: We're a little.

00:24:03 --> 00:24:05: Tight on time, so we'll just stick with that one.

00:24:06 --> 00:24:09: Abby, can you talk more about the stat you shared

00:24:09 --> 00:24:12: that resiliency only adds 5% more to project cost?

00:24:14 --> 00:24:14: Yeah.

00:24:14 --> 00:24:18: I mean, this is, it's, well, it is published.

00:24:18 --> 00:24:21: There's a case study through the Water Utility Climate Alliance

00:24:21 --> 00:24:23: that published this stat.

00:24:23 --> 00:24:26: But it's, it was really through conversations.

00:24:26 --> 00:24:29: I was doing a lot of coastal resiliency work and

00:24:29 --> 00:24:34: was talking with my counterparts at Miami-Dade and they were

00:24:34 --> 00:24:38: saying they have really pretty stringent design guidance and our

00:24:38 --> 00:24:40: water utility now does too.

00:24:40 --> 00:24:44: We have climate resilient design standards, but at the time

00:24:44 --> 00:24:47: we didn't and it was just talking with the staff

00:24:47 --> 00:24:50: at Miami-Dade and they said they've been tracking it over

00:24:50 --> 00:24:51: the last few years.

00:24:51 --> 00:24:55: Once they put those climate resilience standards in place, if

00:24:55 --> 00:24:58: it's a new investment, it really only has been adding

00:24:58 --> 00:25:01: about 5% of the cost to build to those higher,

00:25:01 --> 00:25:05: you know, elevations to protect from storm surge, etcetera.

00:25:06 --> 00:25:07: Thanks so much, Abby.

00:25:07 --> 00:25:10: And now we're really excited to welcome our panelists to

00:25:10 --> 00:25:12: the front of the room as well to look at

00:25:12 --> 00:25:15: how some of this is being put into action.

00:25:15 --> 00:25:18: So we're excited to be joined by Michelle Feldman from

00:25:18 --> 00:25:22: the East Falls Neighborhood Development Corporation,

00:25:22 --> 00:25:26: Karen Thompson from the Delaware River Waterfront Corporation, and Caleb Stratton from the City

00:25:26 --> 00:25:26: of Hoboken.

00:25:27 --> 00:25:28: So welcome and thank you for joining us.

00:25:42 --> 00:25:48: All right, so this panel is focused on sort of

00:25:48 --> 00:25:57: community and collaborate, collaboration that leads to resilience.

00:25:57 --> 00:26:00: So I'm really excited to chat with all of you.

00:26:00 --> 00:26:02: So the first question is kind of an easy one.

00:26:02 --> 00:26:03: It's going to go to all of you.

00:26:04 --> 00:26:07: It's can you highlight a recent win or a challenge

00:26:08 --> 00:26:09: and or a challenge.

00:26:11 --> 00:26:14: So you know what, I'm sorry, I dove right into  
00:26:14 --> 00:26:15: questions.  
00:26:16 --> 00:26:17: I messed it all up.  
00:26:17 --> 00:26:18: I'm really sorry.  
00:26:19 --> 00:26:22: We're going to take 5 minutes from each person, each  
00:26:22 --> 00:26:25: panelist to explain who they are and what their work  
00:26:25 --> 00:26:25: is.  
00:26:25 --> 00:26:26: So I apologize.  
00:26:27 --> 00:26:30: Let's start with Michelle Feldman from East Falls  
Neighborhood Development  
00:26:30 --> 00:26:31: Corporation.  
00:26:32 --> 00:26:33: So should I sit right here or should I?  
00:26:35 --> 00:26:36: I'm going to sit right here.  
00:26:36 --> 00:26:37: We're going to keep it informal.  
00:26:37 --> 00:26:37: Hi everyone.  
00:26:38 --> 00:26:40: So my name is Michelle, I'm with the East Falls  
00:26:40 --> 00:26:43: Development Corporation, and I want to 1st thank you and  
00:26:43 --> 00:26:45: I for having me today to talk about the work  
00:26:45 --> 00:26:47: that we've done over the past three years around flooding  
00:26:47 --> 00:26:48: and flood mitigation.  
00:26:49 --> 00:26:51: So to sort of set the scene, East Falls is  
00:26:51 --> 00:26:56: a beautiful neighborhood in Northwest Philadelphia of about  
10,000 residents,  
00:26:56 --> 00:26:57: but growing rapidly.  
00:26:58 --> 00:27:02: We have 4 new mixed-use developments that have come  
online  
00:27:02 --> 00:27:03: in the past year.  
00:27:03 --> 00:27:06: So we're looking at at least another 4 or 500  
00:27:06 --> 00:27:08: residents, all within a floodplain.  
00:27:09 --> 00:27:13: So we are right on the Schuylkill River, which is,  
00:27:13 --> 00:27:15: for us both a huge asset.  
00:27:16 --> 00:27:19: It's a destination, and people come, they bike, they run,  
00:27:19 --> 00:27:23: they bird, they fish, and it's obviously a huge challenge.  
00:27:23 --> 00:27:26: I mean, listening to some of those numbers from Hurricane  
00:27:26 --> 00:27:28: Ida, it certainly brings me back to three years ago  
00:27:28 --> 00:27:32: when floodwaters went where people in the neighborhood  
who'd lived  
00:27:32 --> 00:27:35: there their entire lives did not think floodwaters would go.  
00:27:35 --> 00:27:39: So after Ida became pretty apparent to us that it  
00:27:39 --> 00:27:42: was more than time to be proactive.  
00:27:42 --> 00:27:44: And we hooked up with our friends at the Manioc  
00:27:44 --> 00:27:48: Development Corporation, which is a neighborhood adjacent  
to us but

00:27:48 --> 00:27:49: also right on the School River.

00:27:50 --> 00:27:52: And we were able to find very generous funding from

00:27:52 --> 00:27:56: the Pennsylvania Department of Community and Economic Development to conduct

00:27:56 --> 00:27:59: a flood mitigation and preparation study with AKRF engineers.

00:27:59 --> 00:28:02: So I know AKRF is in the house, so thank

00:28:03 --> 00:28:04: you to AKRF as well.

00:28:05 --> 00:28:07: And we were able to work with the city, with

00:28:08 --> 00:28:11: Abby and her colleagues, as well as various other city

00:28:11 --> 00:28:15: agencies and state agencies as well to sort of shepherd

00:28:15 --> 00:28:18: through a pretty hefty but pretty comprehensive study.

00:28:18 --> 00:28:21: That for us is a framework and a toolkit for

00:28:21 --> 00:28:24: the next two to three years to ensure that we

00:28:24 --> 00:28:27: are being as proactive as possible and as diligent as

00:28:27 --> 00:28:31: possible in terms of protecting our commercial properties, but also

00:28:31 --> 00:28:33: our residential properties.

00:28:33 --> 00:28:37: Because it's not only our small businesses and that are

00:28:37 --> 00:28:40: and have been impacted by flooding, it's also our residents

00:28:40 --> 00:28:41: as well.

00:28:41 --> 00:28:44: So we are really excited about the work to come

00:28:44 --> 00:28:48: and we're, you know, very mindful of some of the

00:28:48 --> 00:28:51: stats that have been, you know, sort of used over

00:28:51 --> 00:28:54: the course of the day in terms of what flooding

00:28:54 --> 00:28:57: will mean in these falls moving forward.

00:28:57 --> 00:28:59: And So what we are really eager to do is

00:29:00 --> 00:29:02: to keep working with the city and all of the

00:29:02 --> 00:29:06: city's partners and to make sure that we're sort of

00:29:06 --> 00:29:09: ticking through the various recommendations in the plan.

00:29:10 --> 00:29:13: And, and those recommendations range from what might

00:29:13 --> 00:29:17: seem easy,

00:29:17 --> 00:29:20: but we know it's hard in terms of additional communication

00:29:20 --> 00:29:22: and coordination with public agencies all the way through

00:29:22 --> 00:29:26: various

00:29:26 --> 00:29:29: larger engineering projects.

00:29:29 --> 00:29:31: So no, we will not be raising Kelly Drive anytime

00:29:31 --> 00:29:35: soon, but it's in the plan as something to study

00:29:35 --> 00:29:37: and, and, and to look at.

00:29:37 --> 00:29:41: So, you know, we are just grateful to have this

00:29:41 --> 00:29:44: toolbox and this toolkit.

00:29:44 --> 00:29:48: And, you know, it's really, it's been quite an interesting

00:29:48 --> 00:29:52: public engagement process as well.

00:29:44 --> 00:29:46: So I wanted to make sure and touch on and  
00:29:46 --> 00:29:49: sort of how we did the work of that study.  
00:29:49 --> 00:29:52: And two and sort of in tandem and we did  
00:29:52 --> 00:29:55: a data collection process with ACRF and the city.  
00:29:55 --> 00:29:58: We looked at climate projections.  
00:29:58 --> 00:29:59: We also looked at past flooding.  
00:30:00 --> 00:30:02: And in tandem, we did a public engagement process as  
00:30:02 --> 00:30:03: well.  
00:30:03 --> 00:30:06: So we held two large community meetings, one in Maniac  
00:30:06 --> 00:30:09: to kick off the study with Glenn and one in  
00:30:09 --> 00:30:13: East Falls to close out the study and get additional  
00:30:13 --> 00:30:15: feedback on some of the recommendations.  
00:30:16 --> 00:30:18: And then and in between we did four different focus  
00:30:18 --> 00:30:21: groups that were all centered on various important themes.  
00:30:21 --> 00:30:24: So health being one of them where we talked about  
00:30:24 --> 00:30:27: not just physical health and the impact on physical health  
00:30:27 --> 00:30:31: from flooding, but mental and, and social health, emotional  
00:30:31 --> 00:30:32: health  
00:30:31 --> 00:30:32: as well.  
00:30:32 --> 00:30:36: You know, Ida, the anniversary, three-year anniversary is  
00:30:36 --> 00:30:37: actually.  
00:30:37 --> 00:30:40: And it is still a traumatic experience for those in  
00:30:41 --> 00:30:44: the neighborhood who who were there that day and the  
00:30:44 --> 00:30:45: days after.  
00:30:45 --> 00:30:50: In the aftermath, we also looked at transportation,  
00:30:51 --> 00:30:53: engineering and  
00:30:53 --> 00:30:57: utilities as well as commerce.  
00:30:57 --> 00:31:00: So using those two larger community meetings, one to sort  
00:31:00 --> 00:31:03: of set the scene 1 to gain feedback, followed by  
00:31:03 --> 00:31:03: surveys for those who are not able to attend that  
00:31:03 --> 00:31:05: meeting.  
00:31:05 --> 00:31:07: And then those were focus groups.  
00:31:07 --> 00:31:09: We, we wanted to make sure that we weren't just  
00:31:09 --> 00:31:13: you know, sitting in an office looking at data, but  
00:31:13 --> 00:31:16: talking to people and continuing the conversation, starting the  
00:31:16 --> 00:31:20: conversation  
00:31:20 --> 00:31:21: I should say, and then continuing the conversation as well.  
00:31:21 --> 00:31:22: So we are excited to officially release the study in  
00:31:23 --> 00:31:26: the next week or so.  
00:31:23 --> 00:31:26: It was finalized over the summer.  
00:31:23 --> 00:31:26: So the Manning Development Corporation and the East Falls  
Development

00:31:26 --> 00:31:28: Corporation will be officially releasing the study.  
00:31:28 --> 00:31:30: It's going to be on our website, it'll be in  
00:31:30 --> 00:31:32: some of our social media, etcetera, etcetera.  
00:31:33 --> 00:31:35: So if anybody does want a copy of it before  
00:31:35 --> 00:31:38: that happens the next few days, our website folks are  
00:31:38 --> 00:31:41: working on and I promise you can come and see  
00:31:41 --> 00:31:44: me afterwards and I, I can e-mail you a copy  
00:31:44 --> 00:31:45: of, of the study.  
00:31:45 --> 00:31:48: And I'm just again, thankful to be here and and  
00:31:48 --> 00:31:52: to, you know, hopefully help answer some questions.  
00:31:52 --> 00:31:53: Thank you.  
00:31:53 --> 00:31:54: All right.  
00:31:54 --> 00:31:57: Karen Thompson from the Delaware River Waterfront  
Corporation.  
00:31:58 --> 00:32:00: Hi, thanks for having me as well.  
00:32:01 --> 00:32:04: So I'm going to talk about a little bit about  
00:32:04 --> 00:32:06: DRWC and kind of where we fit in all of  
00:32:06 --> 00:32:07: this.  
00:32:07 --> 00:32:10: For those of you who don't know us, we are  
00:32:10 --> 00:32:11: A5O1C3 nonprofit.  
00:32:12 --> 00:32:16: We were created by the city of Philadelphia, but we're  
00:32:16 --> 00:32:19: we're not a city agency by any means to oversee.  
00:32:19 --> 00:32:22: We were created in 2009 to oversee the completion and  
00:32:22 --> 00:32:26: the implementation of the master plan for the Central  
Delaware,  
00:32:26 --> 00:32:27: which we completed in 2011.  
00:32:28 --> 00:32:31: And our planning purview is about 6 miles from Oregon  
00:32:31 --> 00:32:31: Ave.  
00:32:31 --> 00:32:34: in South Philly to Allegheny Ave.  
00:32:34 --> 00:32:37: in Port Richmond, I-95 to the water, so 6 miles,  
00:32:37 --> 00:32:39: about 1100 acres.  
00:32:39 --> 00:32:42: And so within that, like I said, we oversee the  
00:32:42 --> 00:32:42: planning of that.  
00:32:44 --> 00:32:47: We oversee the design, construction and maintenance of  
waterfront public  
00:32:47 --> 00:32:48: spaces.  
00:32:48 --> 00:32:51: We've done quite a few over the years, Race St.  
00:32:51 --> 00:32:53: Pier, Pier 68, Cherry St.  
00:32:53 --> 00:32:56: Pier, We're working on the South Wetlands Park.  
00:32:57 --> 00:33:00: We've got a concept for Graffiti Pier and so those  
00:33:00 --> 00:33:04: spaces, we also have other spaces like Summerfest,  
Winterfest, St.  
00:33:04 --> 00:33:07: Harbor Park that I hope everyone is familiar with.

00:33:07 --> 00:33:11: And we program those spaces throughout the year in different

00:33:11 --> 00:33:12: ways.

00:33:12 --> 00:33:15: And we also operate and maintain all of these spaces.

00:33:15 --> 00:33:16: We provide security.

00:33:16 --> 00:33:21: We repair the spaces that we control and some spaces

00:33:21 --> 00:33:25: we don't control, like the medians in Columbus Blvd.

00:33:25 --> 00:33:28: with the gorgeous cherry trees, but the rest of it

00:33:28 --> 00:33:29: is privately held.

00:33:29 --> 00:33:30: It's about I don't.

00:33:30 --> 00:33:34: The current percentage, 8085% is in private hands that DRWC

00:33:34 --> 00:33:38: doesn't actually have any actual control over.

00:33:38 --> 00:33:41: We operate like a Business Improvement District, but we are

00:33:41 --> 00:33:43: not a Business Improvement District and we don't have that

00:33:43 --> 00:33:44: revenue.

00:33:45 --> 00:33:48: We are not a registered community organization and we are

00:33:48 --> 00:33:49: not a regulatory authority.

00:33:49 --> 00:33:53: We're a very strange, strange organization in the best way

00:33:53 --> 00:33:54: possible.

00:33:55 --> 00:33:58: But in the implementation of that master plan and the

00:33:58 --> 00:34:01: building of all these spaces, we have seen and proven

00:34:01 --> 00:34:04: that people want to be by the water, give them

00:34:04 --> 00:34:06: things to do, give them places to be, give them

00:34:06 --> 00:34:09: some nice drinks and food, and they are going to

00:34:09 --> 00:34:11: be very happy and they're going to come.

00:34:12 --> 00:34:15: And that has resulted as the master plan predicted and

00:34:15 --> 00:34:19: as we hoped, we're seeing more private development on the

00:34:19 --> 00:34:22: waterfront on all these formerly industrial spaces.

00:34:23 --> 00:34:26: Again, except for a few acres of land that DRWC

00:34:26 --> 00:34:27: controls.

00:34:27 --> 00:34:28: It is all privately held.

00:34:29 --> 00:34:32: And since we're not a regulatory authority, we certainly want

00:34:32 --> 00:34:35: to see best practices in green building in public space

00:34:35 --> 00:34:36: and resilient infrastructure.

00:34:37 --> 00:34:41: But we don't have the opportunity to do much more

00:34:41 --> 00:34:44: than, hey, can you build green projects?

00:34:45 --> 00:34:49: And developers do meet with us, but other than what's

00:34:49 --> 00:34:52: required by city code, it's hard maybe because of financials,

00:34:52 --> 00:34:55: the, you know, the way these projects pencil out to

00:34:55 --> 00:34:58: kind of move private development in that direction.

00:34:59 --> 00:35:00: It's easier on projects we control.

00:35:02 --> 00:35:06: And some wins that we've had recently or throughout this,

00:35:06 --> 00:35:09: we were able to, we helped write the Central Delaware  
00:35:09 --> 00:35:10: zoning overlay.  
00:35:11 --> 00:35:14: And through part of that that was to codify the  
00:35:14 --> 00:35:17: master plan, We were able to not only ensure development  
00:35:17 --> 00:35:20: bonuses for green building, but to help the city redefine  
00:35:20 --> 00:35:22: green building and expand it.  
00:35:22 --> 00:35:25: Not just for the building itself, but for things like  
00:35:25 --> 00:35:29: lead, for neighborhood development, sustainable sites, to  
expand what it  
  
00:35:29 --> 00:35:31: meant to have green building to get bonuses for that,  
00:35:31 --> 00:35:34: which we thought was a really positive thing.  
00:35:35 --> 00:35:37: So we've been, like I said, we've been building these  
00:35:37 --> 00:35:40: parks and projects and the current thing that we will  
00:35:40 --> 00:35:43: be kicking off later this year, which I'm very excited  
00:35:43 --> 00:35:46: about, is a waterfront sustainability and resiliency plan.  
00:35:46 --> 00:35:49: And part of that, you know, again, we're just 6  
00:35:49 --> 00:35:50: miles.  
00:35:50 --> 00:35:51: We're not an agency.  
00:35:51 --> 00:35:55: So we're looking for a plan that helps us not  
00:35:55 --> 00:35:59: only become sustainable as an organization, but help us  
think  
  
00:35:59 --> 00:36:03: about our own capital public realm projects as a system,  
00:36:03 --> 00:36:06: not just as a singular peer or a singular trail,  
00:36:06 --> 00:36:07: trail segment.  
00:36:08 --> 00:36:10: But how can those all fit together into a more  
00:36:10 --> 00:36:11: resilient system?  
00:36:12 --> 00:36:15: And then again, because this is so much is out  
00:36:15 --> 00:36:18: of our control as a small nonprofit, what are the  
00:36:18 --> 00:36:21: issues that we can partner with the city on or  
00:36:21 --> 00:36:24: other organizations to advocate for?  
00:36:24 --> 00:36:27: What else needs to fall into place for the next  
00:36:27 --> 00:36:31: 10 years of waterfront public space to help get those  
00:36:31 --> 00:36:35: to be a more sustainable and resilient place to be?  
00:36:37 --> 00:36:37: Thank you.  
00:36:38 --> 00:36:41: Next, Caleb Stratton, who's the chief resilience officer in the  
00:36:41 --> 00:36:43: city of Hoboken in New Jersey.  
00:36:44 --> 00:36:46: So I just wanted to start by saying thank you  
00:36:46 --> 00:36:49: for having me and this is a unique experience for  
00:36:49 --> 00:36:51: me because I don't get to meet CR OS out  
00:36:51 --> 00:36:51: in the wild very.  
00:36:51 --> 00:36:52: Often.  
00:36:53 --> 00:36:56: It's kind of the unique experience and just based on

00:36:56 --> 00:36:59: what I'm hearing, I think that you guys are all  
00:36:59 --> 00:37:01: in really good hands pulling all this stuff together.  
00:37:05 --> 00:37:08: Pulling all this stuff together can be challenging and I  
00:37:08 --> 00:37:11: kind of had something that I wanted to say, but  
00:37:11 --> 00:37:13: I'm going to throw that out the window because I  
00:37:13 --> 00:37:16: think that talking about a a challenge and an opportunity  
00:37:16 --> 00:37:17: is a little bit more interesting.  
00:37:18 --> 00:37:22: And so AKRFOL and there's, I'm sure there's other people  
00:37:22 --> 00:37:25: in the room in, in Concord, we've all worked with  
00:37:25 --> 00:37:27: on our resiliency challenges.  
00:37:27 --> 00:37:31: And one of the biggest projects we just built was  
00:37:31 --> 00:37:32: a five part.  
00:37:32 --> 00:37:33: It was, it was paved over.  
00:37:33 --> 00:37:36: And on a personal level, I was like, this is  
00:37:36 --> 00:37:38: an opportunity for me to show my family what I  
00:37:38 --> 00:37:39: do for work.  
00:37:40 --> 00:37:41: So we bring them.  
00:37:41 --> 00:37:44: There's the governor's there and the senator and the mayor  
00:37:44 --> 00:37:45: and the elected officials.  
00:37:46 --> 00:37:48: And I'm, I see my wife sitting and I'm looking  
00:37:48 --> 00:37:48: around.  
00:37:48 --> 00:37:50: I can't find my daughter anywhere.  
00:37:50 --> 00:37:51: She's missing the entire show.  
00:37:52 --> 00:37:54: And so this was taking place on a pavilion that  
00:37:54 --> 00:37:55: we had just built.  
00:37:55 --> 00:37:56: Below us.  
00:37:56 --> 00:37:59: There's a 1,000,000 gallon tank that cost \$30 million that  
00:37:59 --> 00:38:00: FEMA helped us finance.  
00:38:01 --> 00:38:03: And I and I figure it out finally that from  
00:38:03 --> 00:38:05: the pavilion that we were on, my wife could see  
00:38:05 --> 00:38:07: my daughter playing on the playground.  
00:38:08 --> 00:38:10: And it was just this amazing experience.  
00:38:10 --> 00:38:14: She completely missed like the biggest moment of my  
00:38:17 --> 00:38:19: career.  
00:38:17 --> 00:38:19: And, and, and not only that, with the news crews,  
00:38:19 --> 00:38:22: they're there to cover it didn't take any pictures of  
00:38:22 --> 00:38:23: me.  
00:38:23 --> 00:38:25: It was pictures of her playing on the playground.  
00:38:27 --> 00:38:30: And so from my seat, and I think the purpose  
00:38:30 --> 00:38:33: of this conversation today, I see the display behind you  
00:38:34 --> 00:38:38: looking at universities going into elementary schools to talk  
00:38:38 --> 00:38:42: about  
vision, to talk about opportunity and the parks and the

00:38:42 --> 00:38:46: projects that we're building in Hoboken are resilience projects.

00:38:46 --> 00:38:49: They are mitigation projects, but they're a place where the

00:38:49 --> 00:38:52: community comes on blue sky, blue sky days to create

00:38:52 --> 00:38:55: experiences and have social cohesion and all the things that

00:38:55 --> 00:38:56: we're talking about.

00:38:57 --> 00:38:59: And So what what I want you to take away

00:38:59 --> 00:39:02: is a success is that we're building those projects and

00:39:02 --> 00:39:04: they're performing and functioning well.

00:39:05 --> 00:39:06: And a challenge that we have now is that they're

00:39:06 --> 00:39:07: functioning so well.

00:39:07 --> 00:39:11: People don't realize that there's flood risk in Hoboken, that

00:39:11 --> 00:39:14: more than \$2 billion worth of properties and more than

00:39:14 --> 00:39:16: 80% of the community is at risk from coastal storm,

00:39:16 --> 00:39:18: surgery, rainfall, flooding.

00:39:18 --> 00:39:22: So we're now having to literally develop education curriculum

00:39:22 --> 00:39:25: in

00:39:22 --> 00:39:25: the public schools to talk about what happened during Irene

00:39:25 --> 00:39:27: and Sandy were 12 years later.

00:39:27 --> 00:39:29: There's a short institutional memory.

00:39:29 --> 00:39:31: So I think that you guys have lightning in a

00:39:31 --> 00:39:33: bottle a little bit right now with what occurred during

00:39:33 --> 00:39:36: Ida and Philadelphia because our projects performed during

00:39:36 --> 00:39:38: that storm

00:39:36 --> 00:39:38: and we were drying one tight cycle.

00:39:38 --> 00:39:41: And when the news crews came to talk about Hoboken

00:39:41 --> 00:39:44: as a poster child flooding, they left empty handed.

00:39:44 --> 00:39:47: They're like you're the cleanest community in the tri-state

00:39:47 --> 00:39:49: because

00:39:47 --> 00:39:49: we had garbage collection that night.

00:39:49 --> 00:39:52: And then the, the, the bigger story is and what

00:39:52 --> 00:39:56: I think about resilience, it's not just the impact that

00:39:56 --> 00:39:59: occurs, it's the duration it takes to recover.

00:39:59 --> 00:40:02: It's the return to quality of life and business as

00:40:02 --> 00:40:02: usual.

00:40:02 --> 00:40:04: Hosting an arts and music festival on Sunday when we

00:40:04 --> 00:40:06: have a severe rate event on Friday.

00:40:07 --> 00:40:09: So I, I, I just am so appreciated to be

00:40:09 --> 00:40:10: here and share our message.

00:40:10 --> 00:40:13: And I think that, you know, like I said before,

00:40:13 --> 00:40:14: you guys are in good hands.

00:40:14 --> 00:40:15: So thank you.

00:40:17 --> 00:40:17: Thank you.

00:40:18 --> 00:40:22: All right, And Erica Smith Fitchman, what's your new title?  
00:40:22 --> 00:40:24: Sorry, City Forester.  
00:40:24 --> 00:40:27: It's the coolest title from the Philadelphia Parks and Recreation  
00:40:27 --> 00:40:28: Department.  
00:40:29 --> 00:40:30: Thanks everyone.  
00:40:30 --> 00:40:32: Erica Smith, Fishman City Forester.  
00:40:33 --> 00:40:35: I am from the Parks and Rec department.  
00:40:35 --> 00:40:38: I oversee our urban forestry unit.  
00:40:38 --> 00:40:41: So in Philadelphia we have over 10,000 acres of park  
00:40:41 --> 00:40:45: system and we the Parks Department also manages all of  
00:40:45 --> 00:40:46: the street trees.  
00:40:46 --> 00:40:48: There are 130,000 of them.  
00:40:49 --> 00:40:54: So we have arborists and contract managers on staff along  
00:40:54 --> 00:40:58: with an amazing community forestry program.  
00:40:59 --> 00:41:00: Kate is here in the front.  
00:41:00 --> 00:41:02: Who is the manager of that program?  
00:41:02 --> 00:41:03: She doesn't like attention.  
00:41:03 --> 00:41:07: So everyone clap for Kate and we have a small  
00:41:07 --> 00:41:10: but mighty group and I am here to talk to  
00:41:10 --> 00:41:15: you about the Philly Tree Plan, which our department led  
00:41:15 --> 00:41:19: the creation of, and about the outreach that we did  
00:41:20 --> 00:41:24: to ensure that the people in the highest priority areas  
00:41:24 --> 00:41:29: that have low tree canopy, high heat, low income and  
00:41:29 --> 00:41:33: other factors had a voice in the creation of the  
00:41:33 --> 00:41:37: plan and have a voice in implementation of the plan  
00:41:37 --> 00:41:38: as well.  
00:41:39 --> 00:41:42: So on the slide, you can see some of a  
00:41:42 --> 00:41:46: very broad graphic of how we did our prioritization as  
00:41:46 --> 00:41:47: part of the plan.  
00:41:48 --> 00:41:51: I think I'll go into a little more detail on  
00:41:51 --> 00:41:55: this in response to some questions, but the Philly Tree  
00:41:55 --> 00:41:58: Plan is a 10 year strategic plan for the equitable  
00:41:58 --> 00:42:02: growth and care of our urban forest here in Philadelphia.  
00:42:02 --> 00:42:06: That includes all of the trees because trees don't know  
00:42:06 --> 00:42:08: political boundaries.  
00:42:08 --> 00:42:11: We looked at all trees growing in the city, not  
00:42:11 --> 00:42:15: just public trees, yard trees, vacant lots, alleyways.  
00:42:16 --> 00:42:18: And we tried to come up with a plan that  
00:42:19 --> 00:42:23: addressed the joys and the challenges and burdens that  
00:42:23 --> 00:42:26: trees  
00:42:23 --> 00:42:26: provide to people in in the neighborhoods.

00:42:26 --> 00:42:29: And I, I think Chris said it in the first  
00:42:29 --> 00:42:32: panel about how a lot of times people see trees  
00:42:32 --> 00:42:35: as providing disservices actually.  
00:42:35 --> 00:42:38: And so we, we really got into that in the  
00:42:38 --> 00:42:40: Philly Tree plan because we wanted it to be a  
00:42:40 --> 00:42:43: voice for people, not just our tree lovers and tree  
00:42:43 --> 00:42:47: huggers across the city, but everyone who is encountering  
trees  
00:42:47 --> 00:42:49: in their daily life, which is everyone.  
00:42:50 --> 00:42:53: And we wanted to get real information from them about  
00:42:53 --> 00:42:54: what they were encountering.  
00:42:56 --> 00:43:00: So the the plan was released in February of 2023.  
00:43:00 --> 00:43:03: One of the very first things we did was create  
00:43:03 --> 00:43:07: a community voices steering committee of folks who  
participated in  
00:43:07 --> 00:43:12: this prioritization process, helping us identify which variables  
should be  
00:43:12 --> 00:43:14: included in our prioritization.  
00:43:14 --> 00:43:18: So we, we included heat, we included asthma rates, we  
00:43:18 --> 00:43:23: included cancer rates, air quality, industrial activity, income,  
and a  
00:43:23 --> 00:43:25: couple of other variables.  
00:43:25 --> 00:43:31: We had this amazing group of people whose neighborhoods  
were  
00:43:31 --> 00:43:35: not necessarily going to be identified as priority.  
00:43:35 --> 00:43:37: Michelle knows some of them very well.  
00:43:37 --> 00:43:41: In East Falls, we have amazing tree lovers and we  
00:43:41 --> 00:43:45: wanted to make sure that we were polling these people  
00:43:45 --> 00:43:48: about what are the variables?  
00:43:48 --> 00:43:50: What are the things we should be considering, not just  
00:43:50 --> 00:43:53: vote for my neighborhood, vote for my neighborhood.  
00:43:53 --> 00:43:58: And so we, we went through this exhaustive prioritization  
process  
00:43:58 --> 00:44:01: to make sure that we knew which areas of the  
00:44:01 --> 00:44:05: city we wanted to be very proactive about engaging people  
00:44:05 --> 00:44:05: in.  
00:44:05 --> 00:44:09: Because when you talk about trees in the city, you're  
00:44:09 --> 00:44:12: going to get your usual suspects from high high income,  
00:44:12 --> 00:44:14: high tree canopy neighborhoods.  
00:44:14 --> 00:44:18: And we really wanted it to be a very broad  
00:44:18 --> 00:44:18: process.  
00:44:21 --> 00:44:24: So we did have a number of different tools that  
00:44:24 --> 00:44:27: we use to get feedback from folks.

00:44:27 --> 00:44:31: In addition to the Community Voices committee, we had a  
00:44:31 --> 00:44:33: neighborhood ambassador program.  
00:44:33 --> 00:44:35: So I'm really excited to talk to Abby and we  
00:44:36 --> 00:44:38: have talked many times about the process we went through  
00:44:38 --> 00:44:41: and the process they're going to go through.  
00:44:41 --> 00:44:43: I'm stealing everything they did.  
00:44:43 --> 00:44:45: That's, you know what it is.  
00:44:45 --> 00:44:46: I saw the slide and I was like check, check,  
00:44:46 --> 00:44:46: check.  
00:44:48 --> 00:44:53: But the neighborhood ambassador program is so extremely  
important because  
00:44:53 --> 00:44:56: when you have a planner or a city, city staff  
00:44:56 --> 00:45:00: person going out to priority areas and saying tell us  
00:45:00 --> 00:45:04: about how you're experiencing this or tell us your opinions  
00:45:04 --> 00:45:07: on this, they will tell you things.  
00:45:07 --> 00:45:09: But it's not the same things that they will tell  
00:45:09 --> 00:45:13: their neighbor or they're, you know, someone who goes to  
00:45:13 --> 00:45:15: the same church as them or their cousin.  
00:45:15 --> 00:45:19: So we identified folks from these priority areas to be  
00:45:19 --> 00:45:23: ambassadors to the plan from the neighborhoods.  
00:45:23 --> 00:45:27: And then we taught them how to how to interview  
00:45:27 --> 00:45:31: their peers, how to do visual storytelling, taking pictures of  
00:45:31 --> 00:45:36: what they're experiencing with trees in the city and that  
00:45:36 --> 00:45:40: and then they conducted 62 peer interviews that we  
transcribed.  
00:45:40 --> 00:45:43: That all went into the way that we formed the  
00:45:43 --> 00:45:44: plan.  
00:45:47 --> 00:45:50: One other thing we did to make sure that we  
00:45:50 --> 00:45:54: were hearing from people in the high priority areas is  
00:45:54 --> 00:45:57: that we took time during our outreach to pause, see  
00:45:57 --> 00:46:01: where responses were coming from to our survey and to  
00:46:01 --> 00:46:05: our other outreach efforts and to put a little extra  
00:46:05 --> 00:46:09: money into outreach in the neighborhoods that we were not  
00:46:09 --> 00:46:11: seeing the responses from.  
00:46:11 --> 00:46:15: So we hung door signs, we did yard signs, we  
00:46:15 --> 00:46:19: did text messages and phone calls to encourage people to  
00:46:19 --> 00:46:21: participate in our survey.  
00:46:22 --> 00:46:24: And at the end of all of this, we did  
00:46:24 --> 00:46:29: receive 60% of our responses from high and medium priority  
00:46:29 --> 00:46:32: areas in the city, which we were very, very proud  
00:46:32 --> 00:46:33: of.  
00:46:33 --> 00:46:37: Over 7000 people filled out our survey and it had

00:46:37 --> 00:46:39: a lot of open-ended questions.

00:46:39 --> 00:46:41: It took people on average 20 minutes to fill it

00:46:41 --> 00:46:42: out.

00:46:42 --> 00:46:45: So you can imagine the amount of stories and we

00:46:45 --> 00:46:48: even got poems and folk tales and all sorts of

00:46:48 --> 00:46:52: amazing stuff that we eventually want to make a coffee

00:46:52 --> 00:46:55: table book about because just the amount of information we

00:46:55 --> 00:46:57: got was so incredible.

00:46:58 --> 00:47:03: So the priority areas were incredibly important for creating the

00:47:03 --> 00:47:03: plan.

00:47:03 --> 00:47:08: And then in implementation of the plan, they are really

00:47:08 --> 00:47:10: a key aspect as well.

00:47:11 --> 00:47:14: So we recently were awarded a Forest Service grant from

00:47:14 --> 00:47:18: the Inflation Reduction Act money for \$12 million to implement

00:47:18 --> 00:47:19: the tree plan.

00:47:20 --> 00:47:23: All of that money is going to the see just

00:47:23 --> 00:47:27: areas, those those are the climate justice areas that overlap

00:47:27 --> 00:47:29: entirely with our priority areas.

00:47:29 --> 00:47:32: So all of that investment is going to those neighborhoods.

00:47:33 --> 00:47:37: We are also extremely intentional about when we do community

00:47:37 --> 00:47:41: forestry projects, we work in those neighborhoods to do community

00:47:41 --> 00:47:45: LED tree planting and care projects and all of the

00:47:45 --> 00:47:49: implementation of the plan is being done in close coordination

00:47:49 --> 00:47:50: with communities.

00:47:52 --> 00:47:55: So I think that was just my overview of the

00:47:55 --> 00:47:57: the work we've been doing with the tree plan and

00:47:58 --> 00:48:00: how it overlaps with prioritization.

00:48:00 --> 00:48:02: But I'm excited to answer some more questions about this

00:48:02 --> 00:48:02: work.

00:48:03 --> 00:48:04: Thank you.

00:48:04 --> 00:48:08: All right now we will dive into questions.

00:48:09 --> 00:48:12: So if you could talk about a recent win and

00:48:12 --> 00:48:16: or challenge, do you want to kick things off when

00:48:16 --> 00:48:18: you just go down the road?

00:48:21 --> 00:48:21: OK.

00:48:21 --> 00:48:22: A recent win for us.

00:48:22 --> 00:48:25: I did just mention we will be later this year

00:48:25 --> 00:48:29: starting a waterfront sustainability and resiliency plan and

that's a  
00:48:29 --> 00:48:30: huge win for us.  
00:48:31 --> 00:48:35: I'm excited to add to the master plan, expand the  
00:48:35 --> 00:48:39: master plan and have the opportunity rather than sort of  
00:48:39 --> 00:48:43: project by project, but look really holistically about resiliency  
on  
00:48:43 --> 00:48:45: the waterfront.  
00:48:45 --> 00:48:48: We got funding from the William Penn Foundation to do  
00:48:48 --> 00:48:50: this with the help of some work that we've done  
00:48:50 --> 00:48:53: through the UL is resilient land use cohort and an  
00:48:53 --> 00:48:56: advisory services panel that all helped us build the case  
00:48:56 --> 00:48:58: for funding this this planning project.  
00:48:58 --> 00:49:02: So we're, we're incredibly excited about that and a challenge  
00:49:02 --> 00:49:05: that we're seeing that we're experiencing.  
00:49:05 --> 00:49:08: It's not surprising running public spaces, you were affected  
by  
00:49:08 --> 00:49:11: the weather when your public spaces are all outside.  
00:49:11 --> 00:49:16: But obviously, the increasing increasingly unpredictable  
weather is really throwing  
00:49:16 --> 00:49:19: us for a loop and it's starting and then it  
00:49:19 --> 00:49:22: impacts, it impacts our revenue, the way that we fund  
00:49:22 --> 00:49:26: our free programming, the way that we fund our operations.  
00:49:27 --> 00:49:29: When you suddenly have to close the park for a  
00:49:29 --> 00:49:33: week because there are these crazy storms or there's this  
00:49:33 --> 00:49:36: crazy heat wave, it's having all these knock on effects  
00:49:36 --> 00:49:39: that I think are all really starting to really affect  
00:49:39 --> 00:49:41: the bottom line basically.  
00:49:42 --> 00:49:44: And then on top of that, Elaine already brought up  
00:49:44 --> 00:49:46: operations and maintenance.  
00:49:47 --> 00:49:51: How do we maintain the resilient infrastructure components  
of spaces  
00:49:51 --> 00:49:52: that we're building?  
00:49:52 --> 00:49:54: That's just more funding.  
00:49:54 --> 00:49:57: And again, when you can't, your parks aren't open, you're  
00:49:57 --> 00:49:59: not selling your food, that effects all of that.  
00:49:59 --> 00:50:02: So that's a current challenging that we're a challenge that  
00:50:02 --> 00:50:04: we're really trying to figure out and hope this plan  
00:50:04 --> 00:50:06: helps us figure that part out too.  
00:50:13 --> 00:50:16: So about 3 years ago, we finished construction on what  
00:50:16 --> 00:50:20: we affectionately call the East Falls River landing and which  
00:50:20 --> 00:50:23: is a boat launch on the 4400 block of Kelly  
00:50:23 --> 00:50:24: Drive.  
00:50:24 --> 00:50:27: And we happened to finish construction on that boat launch

00:50:28 --> 00:50:32: for non motorized boating, fishing, birding, paddling, recreation of all

00:50:32 --> 00:50:32: kinds.

00:50:33 --> 00:50:35: We finished that about three weeks before Idaho literally.

00:50:36 --> 00:50:39: So I think, you know, when I sort of tell

00:50:39 --> 00:50:42: the story, I call it the Little River Landing that

00:50:42 --> 00:50:42: could.

00:50:43 --> 00:50:47: And I think it's sort of encapsulates both the incredible

00:50:47 --> 00:50:51: opportunity that we have being by the river and it's

00:50:51 --> 00:50:54: a huge win for us to finish a, you know,

00:50:54 --> 00:50:56: half \$1,000,000 capital project, right?

00:50:57 --> 00:50:59: We are, we're a small organization.

00:50:59 --> 00:51:01: I'm the only full time staff member.

00:51:01 --> 00:51:04: So for us to finish something like that actually with

00:51:04 --> 00:51:08: William Penn funding and PA fish and boat funding primarily

00:51:08 --> 00:51:08: was huge.

00:51:09 --> 00:51:12: And thank goodness we didn't make it a floating dock

00:51:12 --> 00:51:15: because we've heard, we heard some horror stories of floating

00:51:15 --> 00:51:16: docks during Ida.

00:51:17 --> 00:51:20: So for us, I think that Encapolate encapsulates both, you

00:51:20 --> 00:51:21: know, a huge win for us.

00:51:22 --> 00:51:24: And River Landing has become a site where people from

00:51:25 --> 00:51:27: as far away as Allentown have come to visit, which

00:51:27 --> 00:51:28: is amazing to me.

00:51:28 --> 00:51:32: To fish or to bird and just a child's first

00:51:32 --> 00:51:35: of maintenance itself of the site.

00:51:36 --> 00:51:39: But then you know, sort of the challenge of of

00:51:39 --> 00:51:42: what we know will be more violent and more frequent

00:51:42 --> 00:51:43: storms.

00:51:43 --> 00:51:47: And so as we look to the future, specifically, one

00:51:47 --> 00:51:50: of the things that we we want to do is

00:51:50 --> 00:51:56: to keep building that site, to keep building active programming

00:51:56 --> 00:52:00: and to keep fundraising for maintenance of that site, but

00:52:01 --> 00:52:04: also to be able to use our life that is,

00:52:04 --> 00:52:08: but to keep building upon sort of the energy and

00:52:08 --> 00:52:11: momentum around that site as well.

00:52:11 --> 00:52:14: So, you know, we hope that some of the recommendations

00:52:14 --> 00:52:16: from our site with a care off will help us

00:52:16 --> 00:52:18: to do that too and and making our entire community

00:52:18 --> 00:52:19: more resilient.

00:52:24 --> 00:52:27: So I'm going to answer that question briefly and then

00:52:27 --> 00:52:28: ask you a question.

00:52:28 --> 00:52:32: So for us, Hoboken's really small, it's only a mile

00:52:32 --> 00:52:33: square.

00:52:33 --> 00:52:37: But what I'm seeing that throughout the state of New

00:52:37 --> 00:52:41: Jersey is we're having a tough time replicating success, whether

00:52:41 --> 00:52:46: that's internal capacity, funding partners or just the nature of

00:52:46 --> 00:52:52: trying to develop bespoke interventions that address climate action issues.

00:52:52 --> 00:52:56: What is looking at it from your CRO perspective, what

00:52:56 --> 00:53:00: are impediments that you see to success and like what

00:53:00 --> 00:53:04: are, where's their tension between where the politics are or

00:53:04 --> 00:53:08: where the money is and actually getting projects done?

00:53:10 --> 00:53:10: Yeah.

00:53:10 --> 00:53:12: Thanks for turning back to me.

00:53:15 --> 00:53:19: I mean, I think Elaine's question kind of alluded to

00:53:19 --> 00:53:21: this, but we're really struggling.

00:53:21 --> 00:53:24: You know, I think we're able to see some federal

00:53:24 --> 00:53:28: funding opportunities to maybe get something implemented, but it's that

00:53:28 --> 00:53:29: long term maintenance.

00:53:29 --> 00:53:32: So we're looking at installing that levy in Eastwick.

00:53:32 --> 00:53:35: It has a \$13 million price tag and we'll do

00:53:35 --> 00:53:37: a cost share with the Army Corps if we end

00:53:37 --> 00:53:38: up doing that.

00:53:39 --> 00:53:42: But it's, you know, estimated to be at least 65,000

00:53:42 --> 00:53:43: a year for maintenance.

00:53:43 --> 00:53:45: Whose budget is that coming out of?

00:53:46 --> 00:53:48: You know, we just determined that it will be a

00:53:48 --> 00:53:50: Parks and Recreation asset.

00:53:50 --> 00:53:52: It surely shouldn't come out of their tiny budget.

00:53:52 --> 00:53:59: So we need funding that's sort of dedicated for resilience.

00:53:59 --> 00:54:01: I think that's one of the biggest challenges that I

00:54:01 --> 00:54:01: see.

00:54:02 --> 00:54:05: So a a quick and short hack that might work

00:54:05 --> 00:54:08: and I talked about this before is a question that

00:54:08 --> 00:54:09: came up earlier.

00:54:10 --> 00:54:15: The EPA's program in the state revolving loan fund allows

00:54:15 --> 00:54:21: part of your project cost to be capitalizing establishment periods.

00:54:22 --> 00:54:25: And So what that means for green infrastructure nature based

00:54:25 --> 00:54:28: solutions is that the same way you would Commission a

00:54:28 --> 00:54:32: sewage authority over time that in the project that I  
00:54:32 --> 00:54:35: referenced earlier, we paid for two years of maintenance in  
00:54:35 --> 00:54:38: our bond and we're able to at least defray the  
00:54:38 --> 00:54:41: answer to that question in the short term while also  
00:54:41 --> 00:54:44: committing that we would be able to fund the maintenance  
00:54:44 --> 00:54:45: of the project.  
00:54:45 --> 00:54:47: So it's not a complete solve for that, but it's  
00:54:48 --> 00:54:51: definitely something that I would encourage anyone who's  
familiar with  
00:54:51 --> 00:54:54: the EPA's clean water programs to to check out because  
00:54:54 --> 00:54:56: it's, it's definitely something you can use.  
00:54:56 --> 00:54:56: OK, thanks.  
00:55:00 --> 00:55:02: Think we got the same grant as you guys too.  
00:55:03 --> 00:55:05: For a service hiring dollar grant, Nice.  
00:55:05 --> 00:55:06: Yeah, that's very good.  
00:55:06 --> 00:55:06: What?  
00:55:07 --> 00:55:09: What I was going to ask is everyone that sees  
00:55:09 --> 00:55:11: that we got money, they're like, how many trees are  
00:55:11 --> 00:55:11: you planting?  
00:55:11 --> 00:55:13: And we're like, no.  
00:55:13 --> 00:55:14: No, thank you.  
00:55:14 --> 00:55:15: That's not the point.  
00:55:15 --> 00:55:15: Yeah.  
00:55:16 --> 00:55:19: Inventory analysis, hiring an arborist, and then actually  
looking at  
00:55:19 --> 00:55:22: how to strategically use that money over a long period  
00:55:22 --> 00:55:22: of time.  
00:55:22 --> 00:55:25: So that's incredible, \$12 million is a lot of money.  
00:55:25 --> 00:55:26: We only got like \$1,000,000.  
00:55:27 --> 00:55:31: Well, I thought you meant you got 12 and I  
00:55:31 --> 00:55:35: was like, congratulations on \$1,000,000.  
00:55:35 --> 00:55:39: It is actually, I wanted to talk about a win  
00:55:39 --> 00:55:43: related to that money so that that money really is  
00:55:43 --> 00:55:45: about creating systems.  
00:55:45 --> 00:55:51: The Philly Tree Plan is about creating systems, hiring staff,  
00:55:51 --> 00:55:53: doing maintenance.  
00:55:53 --> 00:55:57: That is crucial for trust building in neighborhoods where  
people  
00:55:57 --> 00:55:59: do not want to plant new trees because they see  
00:55:59 --> 00:56:01: the way that the existing trees look.  
00:56:03 --> 00:56:06: We need to maintain what we have both mature trees  
00:56:06 --> 00:56:10: and the newly planted trees that we the the new  
00:56:10 --> 00:56:11: trees, right?

00:56:11 --> 00:56:13: They need to be watered during the first two to  
00:56:13 --> 00:56:14: three years.  
00:56:15 --> 00:56:19: So what we're very excited about with this grant is  
00:56:19 --> 00:56:23: that it's going to allow us to implement some parts  
00:56:23 --> 00:56:27: of the plan to create establishment tree care in the  
00:56:27 --> 00:56:32: first few first few years after the trees are planted.  
00:56:32 --> 00:56:36: And those programs will be neighborhood based programs  
so that  
00:56:37 --> 00:56:41: folks in the neighborhoods where the trees are being planted  
00:56:41 --> 00:56:44: are the ones being hired to care for the trees.  
00:56:45 --> 00:56:48: We have an amazing program that we've already been  
working  
00:56:48 --> 00:56:51: on in partnership with the Department of Commerce where  
we  
00:56:52 --> 00:56:55: are planting new street trees along commercial quarters in  
our  
00:56:55 --> 00:56:56: priority areas.  
00:56:56 --> 00:57:00: And then for two years after they're planted, the taking  
00:57:00 --> 00:57:05: care of business ambassadors, which already operate on  
those commercial  
00:57:05 --> 00:57:10: corridors, mostly doing trash pickup and other things are  
being  
00:57:10 --> 00:57:13: trained and then paid to plant to water those trees  
00:57:13 --> 00:57:15: in the first two years.  
00:57:15 --> 00:57:18: And we have a lot of potential to expand that  
00:57:19 --> 00:57:23: program and make a huge impact on our commercial  
corridors  
00:57:23 --> 00:57:25: if we can get the staff to do so.  
00:57:25 --> 00:57:27: So that's one challenge is staffing.  
00:57:28 --> 00:57:32: Another thing that I'm very excited about with this grant  
00:57:32 --> 00:57:35: is that we are going to be creating a coalition  
00:57:35 --> 00:57:39: that formalizes implementation of the Philly Tree Plan  
amongst all  
00:57:40 --> 00:57:43: of the partners so that it's not owned by one  
00:57:43 --> 00:57:44: or another of the partners.  
00:57:45 --> 00:57:49: We in Philadelphia, sometimes I have a hard time working  
00:57:49 --> 00:57:54: together and we have had tree planting and tree campaigns  
00:57:54 --> 00:57:56: that have come and gone.  
00:57:56 --> 00:57:59: And so we're very excited to be able to hire  
00:57:59 --> 00:58:02: some staff who will be focused on implementing the plan  
00:58:02 --> 00:58:07: through coordinating activities, fundraising and  
communicating about it.  
00:58:07 --> 00:58:11: So the tree plan, the initial wins that we've had  
00:58:12 --> 00:58:18: are about coordinating better between the stakeholders and

the institutions  
00:58:18 --> 00:58:23: doing the work and between the institutions and each other.  
00:58:24 --> 00:58:29: We were also able to hire a city Forester, which  
00:58:29 --> 00:58:32: is the job that I have now, which is a  
00:58:32 --> 00:58:38: brand new position, very exciting and also less flashy.  
00:58:38 --> 00:58:41: We've been able to hire customer service, full time customer  
00:58:41 --> 00:58:45: service people in our urban forestry unit because the vast  
00:58:45 --> 00:58:49: majority of the 311 requests and other communication that  
comes  
00:58:49 --> 00:58:51: to the Parks Department is about trees.  
00:58:52 --> 00:58:55: So we have multiple full time customer service people who  
00:58:55 --> 00:58:58: are in the urban forestry unit able to communicate with  
00:58:58 --> 00:59:02: people about their tree requests and we're getting to a  
00:59:02 --> 00:59:05: place where we'll be able to be be more proactive  
00:59:05 --> 00:59:07: with that in the future, which is a really big  
00:59:07 --> 00:59:08: goal of ours.  
00:59:11 --> 00:59:13: Thank you, Christina.  
00:59:13 --> 00:59:14: How are we doing on time?  
00:59:14 --> 00:59:18: Just want to another 5 minutes.  
00:59:18 --> 00:59:18: OK.  
00:59:19 --> 00:59:19: All right.  
00:59:19 --> 00:59:21: So we have four more questions.  
00:59:21 --> 00:59:23: So I don't think we're going to get there.  
00:59:23 --> 00:59:24: So I'm going to pick and choose.  
00:59:26 --> 00:59:26: All right.  
00:59:26 --> 00:59:30: So one of the challenges that we face is that  
00:59:30 --> 00:59:35: anything that makes the, you know, building development  
more difficult  
00:59:35 --> 00:59:37: overlays, things like that.  
00:59:38 --> 00:59:41: Politically, it's really hard to do because it's seen as  
00:59:41 --> 00:59:42: anti growth.  
00:59:42 --> 00:59:44: Philadelphia has high rates of poverty.  
00:59:45 --> 00:59:46: Development is a good thing.  
00:59:46 --> 00:59:48: It means jobs, it's great.  
00:59:48 --> 00:59:53: So it can sometimes seem that resilience measures are anti  
00:59:53 --> 00:59:54: growth.  
00:59:54 --> 00:59:58: So I'm curious, Michelle and Karen, how do you sort  
00:59:58 --> 01:00:02: of balance that tension between growth and resilience?  
01:00:05 --> 01:00:07: So, I mean, I should have mentioned this earlier, but  
01:00:07 --> 01:00:10: the East Falls Development Corporation is pretty much laser  
focused  
01:00:10 --> 01:00:12: on our small business community.  
01:00:12 --> 01:00:15: And so it's, it's why we built the River Landing

01:00:15 --> 01:00:18: to bring people to shop at our small businesses.

01:00:18 --> 01:00:23: And it's why we did the flood resilience study because

01:00:23 --> 01:00:28: our floodplain hits our main commercial corridor and Ridge Ave.

01:00:29 --> 01:00:32: So for us, yes, of course there's tension.

01:00:32 --> 01:00:33: We want people to build, right?

01:00:33 --> 01:00:35: We want more density so we have more shoppers.

01:00:36 --> 01:00:39: But we also recognize that nobody should be building in

01:00:39 --> 01:00:40: a floodplain.

01:00:41 --> 01:00:44: You know, that's you should be doing smart developments, put

01:00:44 --> 01:00:44: it that way.

01:00:44 --> 01:00:47: You're doing smart development along a floodplain because that ultimately

01:00:47 --> 01:00:49: doesn't help our businesses.

01:00:49 --> 01:00:50: It doesn't help bring in new residents.

01:00:51 --> 01:00:55: So I think there's a recognition in East Falls that

01:00:55 --> 01:00:58: while there may be tension between the two, both are

01:00:58 --> 01:01:03: necessary to pursue and they're not necessarily mutually exclusive.

01:01:03 --> 01:01:07: You can do development in our neighborhood.

01:01:07 --> 01:01:09: We we have some great new buildings up with some

01:01:09 --> 01:01:11: great new commercial spaces.

01:01:11 --> 01:01:13: So if anybody wants to open a business, come see

01:01:13 --> 01:01:14: me.

01:01:15 --> 01:01:18: But we also, you know, know, and the developers to

01:01:18 --> 01:01:20: know where they're building.

01:01:20 --> 01:01:22: And so they've, they've done it in a smart way

01:01:22 --> 01:01:24: and they've done design in a smart way.

01:01:25 --> 01:01:28: So I would say that we definitely acknowledge the tension

01:01:28 --> 01:01:30: and it's there, but I think we recognize that first,

01:01:30 --> 01:01:33: you know, our, our community is not going to grow

01:01:33 --> 01:01:34: if it's not resilient.

01:01:34 --> 01:01:36: And if we don't tackle some of the flooding issues

01:01:36 --> 01:01:40: and aren't proactive about it, our businesses won't thrive, Our

01:01:40 --> 01:01:43: residents won't, new residents won't come and breathe, you know,

01:01:43 --> 01:01:45: additional life into the neighborhood.

01:01:45 --> 01:01:48: And so we we recognize the tension, but we also

01:01:48 --> 01:01:50: know that there doesn't have to be tension.

01:01:56 --> 01:01:57: I think she said.

01:01:58 --> 01:01:59: But I'll add to that.

01:01:59 --> 01:02:02: I mean, obviously the waterfront and the master plan wants

01:02:02 --> 01:02:03: more development on the waterfront.

01:02:03 --> 01:02:05: We want more people living on the waterfront.

01:02:06 --> 01:02:09: We want that density, that critical mass of people so

01:02:09 --> 01:02:11: that we can have the transit and the shopping and

01:02:11 --> 01:02:14: the, you know, wonderful public spaces that we have in

01:02:14 --> 01:02:17: addition to bringing everybody else from the city to the

01:02:17 --> 01:02:18: waterfront.

01:02:18 --> 01:02:22: And for DRWCI think, we obviously recognize attention building on

01:02:22 --> 01:02:26: the waterfront is just extra hard than it is building

01:02:26 --> 01:02:28: in many other parts of the city.

01:02:28 --> 01:02:30: And it's hard in the city anyways.

01:02:31 --> 01:02:33: And So what we've tried to do when we've had

01:02:33 --> 01:02:36: success on a number of places up and down the

01:02:36 --> 01:02:39: river is to offer ourselves as a resource and offer

01:02:39 --> 01:02:41: creative how to put it.

01:02:41 --> 01:02:45: We have worked with developers to basically through grants from

01:02:45 --> 01:02:50: the Department of Conservation and Natural Resources, we will acquire

01:02:50 --> 01:02:52: their 50 foot along the river.

01:02:52 --> 01:02:54: They can't build there, but they're not forced to do

01:02:54 --> 01:02:55: to do anything else there.

01:02:55 --> 01:02:58: We want to build a trail and we've talked about

01:02:58 --> 01:03:00: how greenways are resilient infrastructure.

01:03:00 --> 01:03:02: And so we offer ourselves as let's do this partnership.

01:03:03 --> 01:03:06: We'll through grant funding, you'll get a tax write off.

01:03:06 --> 01:03:07: We'll take that on.

01:03:07 --> 01:03:09: We'll design, build and maintain it.

01:03:09 --> 01:03:11: Trails are good for development.

01:03:11 --> 01:03:13: Public space is good for development.

01:03:13 --> 01:03:16: So let's let DRW do some of that and start

01:03:16 --> 01:03:20: to build out that network and let the developer focus

01:03:20 --> 01:03:22: on the actual building itself.

01:03:22 --> 01:03:24: And so that's what we've been trying to do for

01:03:24 --> 01:03:24: the last.

01:03:24 --> 01:03:25: Few years.

01:03:26 --> 01:03:26: OK, thanks.

01:03:27 --> 01:03:27: All right.

01:03:27 --> 01:03:30: Last question because I think we're probably out of time

01:03:30 --> 01:03:31: and then take audience questions.

01:03:32 --> 01:03:34: So this one would be for Erica and Caleb.

01:03:34 --> 01:03:37: This is about stakeholder engagement.

01:03:37 --> 01:03:40: So you can choose to focus on either community engagement

01:03:40 --> 01:03:44: and how you elevate the voices of community members or

01:03:44 --> 01:03:47: doing this work is really hard across departments and levels

01:03:47 --> 01:03:48: of government.

01:03:48 --> 01:03:50: So choose which one you want to talk about.

01:03:54 --> 01:03:56: I can elaborate on some of the ways that we

01:03:56 --> 01:03:58: did outreach for the Philly Tree plan.

01:03:58 --> 01:04:02: So we had a project team of institutions, other city

01:04:03 --> 01:04:08: departments, state and federal groups like the Forest Service, DCNR,

01:04:08 --> 01:04:12: and then we had a steering committee of similar folks

01:04:12 --> 01:04:15: that were kind of at a higher level.

01:04:15 --> 01:04:17: So Liz was on our steering committee and, and lots

01:04:17 --> 01:04:19: of other folks in the city.

01:04:19 --> 01:04:23: And then we had that Community Voices steering committee, which

01:04:23 --> 01:04:26: in addition to helping us do the prioritization, they got

01:04:26 --> 01:04:28: checked us along the way.

01:04:28 --> 01:04:32: So they approved the the community engagement plan as a

01:04:32 --> 01:04:35: whole that the consultant submitted to us.

01:04:35 --> 01:04:38: They beta tested our survey to make sure that it

01:04:38 --> 01:04:41: wasn't too full of jargon, that it was understandable.

01:04:42 --> 01:04:44: And they did a lot of things as we were

01:04:45 --> 01:04:48: drafting the goals to, we presented them to them along

01:04:48 --> 01:04:51: the way so that they could make sure that they

01:04:51 --> 01:04:53: saw themselves reflected back in the plan.

01:04:54 --> 01:04:57: Those folks were a lot of the folks that are

01:04:57 --> 01:04:58: already super involved.

01:04:58 --> 01:05:01: They are the president of the civic association or the

01:05:01 --> 01:05:04: Business Association or the friends group.

01:05:04 --> 01:05:08: So there is the risk of engagement fatigue like Abby

01:05:08 --> 01:05:13: referenced earlier, they were given stipends to participate, which is

01:05:13 --> 01:05:16: one way to to try to address that.

01:05:17 --> 01:05:20: And then when we did our neighborhood ambassadors, we

01:05:20 --> 01:05:22: wanted

01:05:20 --> 01:05:22: to make sure that we were looking at people who

01:05:23 --> 01:05:26: are not already serving on different committees and super

01:05:26 --> 01:05:29: involved.

01:05:26 --> 01:05:29: And so we asked the people who are the go

01:05:29 --> 01:05:33: to people in those neighborhoods for their recommendations of five

01:05:33 --> 01:05:38: other people within the neighborhood who have leadership interests, who

01:05:38 --> 01:05:41: have interest in the subject, but who are not already

01:05:41 --> 01:05:43: on all the committees.

01:05:43 --> 01:05:47: And again, the neighborhood ambassador program involved a stipend to

01:05:47 --> 01:05:51: participate and it was a very specific six week program.

01:05:51 --> 01:05:54: They, because it was in May of 2021, they all

01:05:54 --> 01:05:57: received iPads so that we could ensure that they were

01:05:57 --> 01:06:00: able to participate and virtual meetings and things like that.

01:06:01 --> 01:06:04: And so we really tried to figure out how to

01:06:04 --> 01:06:09: identify folks who were, you know, leaders from communities, but

01:06:09 --> 01:06:13: then other folks who don't necessarily see themselves as leaders,

01:06:13 --> 01:06:17: compensate them for their time and make sure that we

01:06:17 --> 01:06:21: were looking at people who were in those highest priority

01:06:21 --> 01:06:22: neighborhoods.

01:06:23 --> 01:06:25: I'm happy to talk about all of this in much

01:06:25 --> 01:06:27: more depth separately if you all want to.

01:06:27 --> 01:06:29: I just don't think I have enough time to go

01:06:29 --> 01:06:31: into all the different ways that we did engagement here.

01:06:33 --> 01:06:37: Caleb, I'll provide an example of where things went sideways for us.

01:06:37 --> 01:06:38:

01:06:38 --> 01:06:42: And the way we resolve that is we did not

01:06:42 --> 01:06:48: allow common points of dissatisfaction across uncommon groups.

01:06:49 --> 01:06:52: So what that means is that when we heard different

01:06:52 --> 01:06:56: pockets of negative feedback, as long as it didn't come

01:06:56 --> 01:06:59: from the a cogent hole, we knew that we had

01:06:59 --> 01:07:01: consensus to drive forward.

01:07:01 --> 01:07:05: So this is a 9800 linear foot project with H

01:07:05 --> 01:07:08: piles and sheet piling and sea walls and gates and

01:07:08 --> 01:07:10: levees and it runs through.

01:07:10 --> 01:07:13: There's only three places you can build, you know, coastal

01:07:14 --> 01:07:15: flood risk measure.

01:07:15 --> 01:07:16: You can do it in the water, you can do

01:07:16 --> 01:07:18: it on the waterfront, you can do it inland.

01:07:18 --> 01:07:20: And so the alignment that we had started with was

01:07:20 --> 01:07:21: on the waterfront.

01:07:21 --> 01:07:25: And basically the feedback we got was you'll never build

01:07:25 --> 01:07:25: this project.

01:07:26 --> 01:07:29: There's 1000 signatures calling for me to resign for my

01:07:29 --> 01:07:30: position.

01:07:30 --> 01:07:33: They didn't want to block access to the waterfront view

01:07:33 --> 01:07:34: sheds, all these.

01:07:34 --> 01:07:36: I think these are all issues that that this community

01:07:36 --> 01:07:37: deals with quite a lot.

01:07:37 --> 01:07:39: And So what we did is we in through the

01:07:39 --> 01:07:43: concept development when we started to meet individually, what we

01:07:43 --> 01:07:46: heard was don't build in front of me, don't build

01:07:46 --> 01:07:49: behind me, don't build in my neighborhood, don't leave us

01:07:49 --> 01:07:49: out.

01:07:51 --> 01:07:53: So as you start to put those lines on the

01:07:53 --> 01:07:56: map, what happens is is there's people that I'm building

01:07:56 --> 01:07:58: in front of it pisses them off.

01:07:58 --> 01:08:00: People I'm building behind, it pisses them off people that

01:08:00 --> 01:08:03: are I'm building in their neighborhood and pisses them off.

01:08:03 --> 01:08:07: But 90% of people are not left out so that

01:08:07 --> 01:08:11: we still have tension in where we site our practices.

01:08:11 --> 01:08:14: But what we learned was that as long as we

01:08:14 --> 01:08:19: avoided common points of dissatisfaction across uncommon groups, we were

01:08:19 --> 01:08:22: able to advance our projects through to completion.

01:08:23 --> 01:08:25: And so that's, that was, that was one of my

01:08:25 --> 01:08:28: big takeaways from the, that was like 10 years of

01:08:28 --> 01:08:28: a lesson learned.

01:08:29 --> 01:08:32: Pretty, pretty, pretty challenging.

01:08:32 --> 01:08:35: And and I think that you guys will learn similar

01:08:35 --> 01:08:35: lessons.

01:08:39 --> 01:08:39: OK.

01:08:39 --> 01:08:41: So time for Q&A from the audience.

01:08:52 --> 01:08:55: We'll start with one from online and then go to

01:08:55 --> 01:08:55: in the room.

01:08:57 --> 01:08:58: The first question is for Karen.

01:08:58 --> 01:09:02: How is DRWC able to fund the maintenance for all

01:09:02 --> 01:09:05: of your waterfront project and park projects?

01:09:05 --> 01:09:08: If you don't mind sharing, are there any grant funding

01:09:08 --> 01:09:09: that help with park maintenance?

01:09:10 --> 01:09:12: If you know of some let me know.

01:09:13 --> 01:09:17: No, so I'm very briefly mentioned our operations is funded

01:09:17 --> 01:09:22: entirely through revenue from leases, the revenue that we generate

01:09:22 --> 01:09:26: through food and beverage sales in our parks and some

01:09:26 --> 01:09:28: some parking revenue.

01:09:28 --> 01:09:29: That's it.

01:09:29 --> 01:09:31: We get a little bit of funding from the city

01:09:31 --> 01:09:32: for part of that.

01:09:32 --> 01:09:35: But you know, it's, that's been the challenge as I

01:09:35 --> 01:09:39: mentioned is as we expand these public spaces because we're

01:09:39 --> 01:09:43: not going to stop doing that, that operations and maintenance

01:09:43 --> 01:09:45: budget is, is a challenge.

01:09:45 --> 01:09:46: So I don't have a great answer for that.

01:09:46 --> 01:09:48: It's, it's, it's really hard.

01:09:48 --> 01:09:51: And as you know, the trail floods more often.

01:09:51 --> 01:09:54: That's a new kind of maintenance we didn't have to

01:09:54 --> 01:09:56: do before and having to find the right if we

01:09:56 --> 01:09:59: need a new machine, if our we need new training

01:09:59 --> 01:10:02: for our OPS guys, it's all of these, these layers

01:10:02 --> 01:10:04: that that we are trying to figure out.

01:10:12 --> 01:10:13: Hi, thanks.

01:10:13 --> 01:10:14: For handing me the mic.

01:10:15 --> 01:10:19: Question is, this could be for actually all of you,

01:10:19 --> 01:10:21: so I'm all for trees.

01:10:22 --> 01:10:27: Absolutely 1000% however many places in the city.

01:10:28 --> 01:10:33: Don't have adequate shade, particularly for little tiny children from

01:10:33 --> 01:10:35: age zero to five.

01:10:35 --> 01:10:38: And we can plant a tree, which is unbelievably wonderful

01:10:38 --> 01:10:40: to do for all the reasons that we know that

01:10:40 --> 01:10:41: trees are good.

01:10:41 --> 01:10:43: However, a 5 year old is not going to be

01:10:43 --> 01:10:46: able to get the benefit of the shade from that

01:10:46 --> 01:10:49: tree during its lifetime when it's growing up in a

01:10:49 --> 01:10:53: neighborhood, particularly a vulnerable neighborhood in Philadelphia.

01:10:54 --> 01:10:57: My organization Women for Healthy Environment just did a study

01:10:57 --> 01:11:01: looking had shade structures and the opportunity for children to

01:11:01 --> 01:11:03: play longer outside when they have shade anyway.

01:11:04 --> 01:11:08: Is there an opportunity to think about shade and shade

01:11:08 --> 01:11:11: structures for all folks until those trees get to be

01:11:11 --> 01:11:15: mature enough till they can provide that in the city?

01:11:15 --> 01:11:17: So whether that could be for any of you?

01:11:17 --> 01:11:18: Thanks.

01:11:22 --> 01:11:26: So you should talk to Marnie Burns from Olin.

01:11:26 --> 01:11:28: She's at the table, she's smiling behind you.

01:11:28 --> 01:11:29: She can wait.

01:11:30 --> 01:11:32: There's a, there's a, there's a, there's options.

01:11:33 --> 01:11:36: They were landscape architecture on, on one of our projects

01:11:36 --> 01:11:40: and we're retrofitting our playground spaces to install shade sails

01:11:40 --> 01:11:44: and other structures between where landscape features are.

01:11:44 --> 01:11:46: So, but they're they know what they're doing.

01:11:53 --> 01:11:53: Should what?

01:11:53 --> 01:11:56: What can we do besides trees to like the tree

01:11:57 --> 01:11:57: trees?

01:12:01 --> 01:12:03: What's happening in Philadelphia for shade structures?

01:12:03 --> 01:12:04: If.

01:12:04 --> 01:12:06: Somebody asked me that I would connect them to Lorna

01:12:06 --> 01:12:09: and say you should work with this great group called

01:12:09 --> 01:12:13: Women for the Healthy Environment who's advocating and working to

01:12:13 --> 01:12:15: get shade structures at daycare centers and houses.

01:12:15 --> 01:12:20: So, yeah, there's it's a need we should be doing

01:12:20 --> 01:12:21: more.

01:12:21 --> 01:12:23: I mean, somebody said it, none of our playgrounds should

01:12:23 --> 01:12:24: be asphalt.

01:12:25 --> 01:12:28: You know, these are the challenges that we're facing and

01:12:28 --> 01:12:30: there's very limited resources.

01:12:30 --> 01:12:31: But these are great ideas.

01:12:31 --> 01:12:34: And I mean, it is true, it's going to take

01:12:34 --> 01:12:37: a long time to build that canopy and shade sales

01:12:37 --> 01:12:40: are relatively cheap intervention.

01:12:40 --> 01:12:44: You know, we're also looking at, you know, different buildings,

01:12:45 --> 01:12:49: you know, they should have AC libraries, public housing, our

01:12:49 --> 01:12:49: schools.

01:12:50 --> 01:12:52: Are there other passive interventions that we could use, you

01:12:52 --> 01:12:55: know, better shading around the windows, different roof materials.

01:12:55 --> 01:12:58: We do have an ordinance for cool roofs for any

01:12:58 --> 01:13:01: new development in the city, but it could be more

01:13:01 --> 01:13:01: stringent.

01:13:01 --> 01:13:03: We should be, you know, we do have AI, Didn't

01:13:03 --> 01:13:06: get to mention it, but a cool roof pilot where

01:13:06 --> 01:13:08: we're doing it at the neighborhood scale coming up.

01:13:10 --> 01:13:11: But yeah, it's a challenge.

01:13:11 --> 01:13:14: And I truly would probably connect them to you if

01:13:14 --> 01:13:15: somebody asks me.  
01:13:16 --> 01:13:16: Well, I know.  
01:13:17 --> 01:13:18: Yes.  
01:13:20 --> 01:13:20: Yes.  
01:13:22 --> 01:13:25: We're going to do 1 online, then we'll get back  
01:13:25 --> 01:13:26: to the in person.  
01:13:27 --> 01:13:31: How is biodiversity ecology, changing climate accounted for  
when creating  
01:13:31 --> 01:13:32: the Philly Tree Plan?  
01:13:32 --> 01:13:35: How do those factors square with what people do or  
01:13:35 --> 01:13:35: don't want?  
01:13:38 --> 01:13:40: This is a great question and one of the challenges  
01:13:40 --> 01:13:43: because when you talk to people about what kind of  
01:13:43 --> 01:13:46: tree they want for their yard or in front of  
01:13:46 --> 01:13:46: their St.  
01:13:46 --> 01:13:50: in front of their house, they all want a small  
01:13:50 --> 01:13:54: flowering tree and that is not going to contribute as  
01:13:54 --> 01:13:57: much to biodiversity as large canopy trees.  
01:13:58 --> 01:14:01: And large canopy trees do the most work.  
01:14:02 --> 01:14:05: It's, I don't have like the best answer for this  
01:14:05 --> 01:14:09: question because you, you do have to meet people where  
01:14:09 --> 01:14:13: they are, especially if they are putting something on their  
01:14:13 --> 01:14:14: private property.  
01:14:15 --> 01:14:18: We have a yard tree giveaway we've been doing for  
01:14:18 --> 01:14:21: over a decade and we are extremely intentional about the  
01:14:21 --> 01:14:24: way that we choose trees for that giveaway.  
01:14:24 --> 01:14:27: So we have given away 10s of thousands of native  
01:14:27 --> 01:14:28: and fruit trees.  
01:14:30 --> 01:14:33: We try to encourage people to get the largest just  
01:14:33 --> 01:14:35: tree that their space can have.  
01:14:35 --> 01:14:38: But again, they have their own priorities for what they  
01:14:38 --> 01:14:39: want in their yard.  
01:14:40 --> 01:14:44: So we focus on providing trees that are native flowering  
01:14:44 --> 01:14:49: trees so that they have that option of the flowering  
01:14:49 --> 01:14:49: tree.  
01:14:50 --> 01:14:53: We are doing a lot of work and have recently  
01:14:53 --> 01:14:58: worked with our grower to identify southern species that are  
01:14:58 --> 01:15:02: good options for a changing climate and the changing zone  
01:15:02 --> 01:15:04: that we have here in Philadelphia.  
01:15:05 --> 01:15:08: And so where we have control over it, like when  
01:15:08 --> 01:15:11: we are giving away trees to people, we are very  
01:15:11 --> 01:15:14: intentional about the types of trees that we plant.

01:15:15 --> 01:15:17: We also have an inventory of all of our street  
01:15:17 --> 01:15:18: trees in the city.  
01:15:18 --> 01:15:21: We know what the proportions of different species in general  
01:15:21 --> 01:15:21: are.  
01:15:22 --> 01:15:24: And so we, you know, we have certain species we  
01:15:24 --> 01:15:25: will not plant.  
01:15:25 --> 01:15:29: We have certain species we will plant much less frequently  
01:15:29 --> 01:15:32: than others because of how many maples and cherries we  
01:15:32 --> 01:15:34: already have in our street tree inventory.  
01:15:35 --> 01:15:37: And so, you know, there are things that we can  
01:15:37 --> 01:15:38: do.  
01:15:38 --> 01:15:40: One of the things that we want to do in  
01:15:40 --> 01:15:44: the tree plan is to begin a contract growing effort  
01:15:44 --> 01:15:47: so that we are working directly with local nurseries to  
01:15:48 --> 01:15:51: choose the species that we want to be planting in  
01:15:51 --> 01:15:54: five years and they can start sourcing.  
01:15:54 --> 01:15:56: We can look at the provenance of all the seed  
01:15:56 --> 01:16:00: and the liners that they're getting and be very intentional  
01:16:00 --> 01:16:03: about the trees that they are growing for us and  
01:16:03 --> 01:16:06: look at southern species and all of all of those  
01:16:06 --> 01:16:06: things.  
01:16:06 --> 01:16:08: All of those things require money.  
01:16:09 --> 01:16:11: So we are, you know, we have a 10 year  
01:16:11 --> 01:16:12: plan and that is part of it.  
01:16:19 --> 01:16:20: Hi.  
01:16:21 --> 01:16:24: So yeah, I'm incredibly passionate about resilient community  
design.  
01:16:24 --> 01:16:26: I was part of the team that worked on the  
01:16:26 --> 01:16:28: flood study that Michelle was talking about, East Falls and  
01:16:28 --> 01:16:29: Manayunk.  
01:16:29 --> 01:16:33: I'm also a homeowner in Point Breeze, which if you  
01:16:33 --> 01:16:36: recall the map that Erica showed earlier, was one of  
01:16:36 --> 01:16:40: the bright bright orange heat issue areas in the city.  
01:16:42 --> 01:16:44: On my block there is exactly one small St.  
01:16:44 --> 01:16:47: tree, and although I love the street tree program, I  
01:16:48 --> 01:16:48: love trees.  
01:16:49 --> 01:16:52: I hate that tree because I live on a small  
01:16:52 --> 01:16:54: side street.  
01:16:54 --> 01:16:57: The sidewalk is the minimum possible width it could be,  
01:16:57 --> 01:16:59: and that street tree causes a pinch point.  
01:16:59 --> 01:17:02: That means that to navigate the street, the sidewalk, you  
01:17:02 --> 01:17:05: need to step out into the street, which means my

01:17:05 --> 01:17:06: block is not accessible.

01:17:07 --> 01:17:09: And so I wonder if you could speak to any

01:17:10 --> 01:17:14: of you, any either challenges or opportunities that you've faced

01:17:14 --> 01:17:17: in terms of resilient community design when it comes to

01:17:17 --> 01:17:19: that intersection with accessibility?

01:17:26 --> 01:17:29: I am not going to have the best answer to

01:17:29 --> 01:17:30: that question.

01:17:30 --> 01:17:35: I you know, the requirements for ADA accessibility are 36

01:17:35 --> 01:17:35: inches.

01:17:36 --> 01:17:38: And as you've pointed out, a lot of our streets

01:17:38 --> 01:17:41: are just completely not possible for planting St.

01:17:41 --> 01:17:45: trees because you have to have, you know, a three

01:17:45 --> 01:17:49: by three foot pit is the barest of bare minimums

01:17:49 --> 01:17:51: that you could plant a tree in.

01:17:51 --> 01:17:56: Ideally, you want the largest soil volume you possibly,

01:17:56 --> 01:17:56: possibly

01:17:56 --> 01:17:56: could have.

01:17:57 --> 01:18:01: One thing that we are doing with this IRA grant

01:18:01 --> 01:18:04: that we got is working with the streets department to

01:18:04 --> 01:18:09: install underground soil volume, soil cells and things like that.

01:18:09 --> 01:18:13: That will allow the trees that have a smaller opening

01:18:13 --> 01:18:17: to allow for accessibility to have more soil volume and

01:18:17 --> 01:18:21: the soil will not be compacted and there will be,

01:18:21 --> 01:18:25: you know, there's opportunities for permeable pavers as well.

01:18:25 --> 01:18:28: So that is 1 way to kind of allow for

01:18:28 --> 01:18:32: accessibility, but also for a healthy tree.

01:18:32 --> 01:18:36: And we're pretty excited about being able to install soil

01:18:36 --> 01:18:40: cells because it's something that I don't think Philadelphia

01:18:40 --> 01:18:41: has

01:18:40 --> 01:18:41: really done at all very much.

01:18:45 --> 01:18:48: I don't we don't do a lot of implementation like

01:18:48 --> 01:18:50: we do more policy and pilots.

01:18:50 --> 01:18:53: So I don't have any good examples except maybe just

01:18:53 --> 01:18:56: thinking about heat and people that have, you know, limited

01:18:56 --> 01:18:57: mobility.

01:18:57 --> 01:19:00: I think those shade structures become really important, like

01:19:00 --> 01:19:03: waiting

01:19:00 --> 01:19:03: for public transportation and things of that nature.

01:19:03 --> 01:19:05: So I, I feel like we've thought of it and

01:19:05 --> 01:19:08: we talked about it, but I don't have great solutions.

01:19:08 --> 01:19:10: So anything else?

01:19:14 --> 01:19:15: Thank you guys very much.

01:19:15 --> 01:19:16: This is a great panel.

01:19:17 --> 01:19:19: So it's sort of a question for Caleb.

01:19:19 --> 01:19:20: But also the rest of you.

01:19:21 --> 01:19:24: I'm working on a project with early Mchenry's office in Hoboken and Jersey City.

01:19:24 --> 01:19:25: Hoboken and Jersey City.

01:19:25 --> 01:19:28: It's the development spans both municipalities and I was really

01:19:28 --> 01:19:30: interested to learn that.

01:19:30 --> 01:19:33: And I think it's Hoboken, there are these smart valves

01:19:33 --> 01:19:38: for developments with basically centralized control about when water leaves

01:19:38 --> 01:19:40: the development and enters the sewer system.

01:19:41 --> 01:19:43: So my question is really, you know.

01:19:43 --> 01:19:44: How has that?

01:19:44 --> 01:19:45: Worked.

01:19:45 --> 01:19:48: For you guys and how does, how does Philly see

01:19:48 --> 01:19:53: a sort of centralized solutions versus these more grass roots

01:19:53 --> 01:19:57: or you know specific developer driven solutions?

01:19:57 --> 01:20:00: So what Lawrence describing is we have a four part

01:20:00 --> 01:20:02: water management strategy.

01:20:02 --> 01:20:06: One of those parts is store, so creating capacity outside

01:20:07 --> 01:20:09: of the existing CSO and we have a.

01:20:10 --> 01:20:13: A law basically on the books with our sewage authority

01:20:13 --> 01:20:18: that requires any new development or substantial retrofit to capture

01:20:18 --> 01:20:22: 100% of on site rainfall in a subsurface storage container

01:20:22 --> 01:20:23: that that was an OPTI sensor.

01:20:24 --> 01:20:28: And our sewage authority monitors those so that after the

01:20:28 --> 01:20:32: rainfall curb hits the tide curb and we can start

01:20:32 --> 01:20:36: to naturally drain or their pumping system has capacity, they

01:20:36 --> 01:20:41: release those privately owned and maintained storm water management systems,

01:20:41 --> 01:20:45: indeed the public system, what we've seen in aggregate is

01:20:45 --> 01:20:49: millions of gallons of storage in different sites and Olympic

01:20:49 --> 01:20:53: swimming pools like 500,000 gallons of water and 1

01:20:53 --> 01:20:56: intersection

01:20:56 --> 01:20:59: not flooding is about 250,000 gallons.

01:20:59 --> 01:21:04: So like at the scale of at, at private development,

01:20:59 --> 01:21:04: we're seeing a tremendous amount of service in that disaggregated

01:21:04 --> 01:21:04: solution.

01:21:04 --> 01:21:07: And then we're in the city's doing the same kind

01:21:07 --> 01:21:10: of store projects under all of our park sites.

01:21:10 --> 01:21:13: So we're doing surface storage with green infrastructure and then

01:21:14 --> 01:21:15: engineered storage below grade.

01:21:16 --> 01:21:19: And I, I, we've just, it's been very successful.

01:21:19 --> 01:21:23: I think I've referenced it before, but we are able

01:21:23 --> 01:21:27: to handle more than 90% of all precipitation events without

01:21:27 --> 01:21:28: St.

01:21:28 --> 01:21:29: level flooding and the 10% of St.

01:21:29 --> 01:21:32: level flooding that Hoboken experiences.

01:21:32 --> 01:21:34: We have not seen longer St.

01:21:34 --> 01:21:35: flooding than one tide cycle.

01:21:35 --> 01:21:38: And each time one of the system comes on long

01:21:38 --> 01:21:41: online, we're seeing a decrease in duration of flooding, the

01:21:41 --> 01:21:45: extent of flooding, the depth of flooding, damage associated with

01:21:45 --> 01:21:46: flooding.

01:21:46 --> 01:21:49: So it is kind of like a all these things

01:21:49 --> 01:21:51: in aggregate are making a big significant impact.

01:21:54 --> 01:21:56: I'll just add, I mean, Philadelphia has the same law

01:21:56 --> 01:21:58: on the books where if you develop, you have to

01:21:58 --> 01:22:00: manage the first inch and a half of rain that

01:22:00 --> 01:22:01: falls on the site.

01:22:01 --> 01:22:05: So we also have incentive programs through our water department

01:22:05 --> 01:22:07: so that it's not just storage tanks underground.

01:22:07 --> 01:22:10: So hopefully building rain gardens and things that also have

01:22:10 --> 01:22:12: those benefits for carbon sequestration.

01:22:13 --> 01:22:16: But most of them do do tanks underground.

01:22:17 --> 01:22:19: But I don't think we have the smart valves.

01:22:19 --> 01:22:22: I don't think we're watching what's, you know, how much

01:22:22 --> 01:22:24: is going in and when.

01:22:24 --> 01:22:27: So that's a maybe something we could pilot here, so.

01:22:28 --> 01:22:28: Expensive.

01:22:29 --> 01:22:31: I don't even know it's expensive, right?

01:22:32 --> 01:22:33: Yeah, yeah, I.

01:22:37 --> 01:22:37: Think there's a question?

01:22:37 --> 01:22:40: Unfortunately, I think that's all the time we have for

01:22:40 --> 01:22:40: questions.

01:22:41 --> 01:22:43: I know that there's more hands in the room and

01:22:43 --> 01:22:46: I know there's a number of more questions in the

01:22:46 --> 01:22:48: online poll than we actually have time to get to,

01:22:48 --> 01:22:51: but that's why it's so important we stay on time.

01:22:51 --> 01:22:54: So over drinks, we're all able to engage one another

01:22:54 --> 01:22:57: more directly and and with some of those follow up  
01:22:57 --> 01:22:57: questions.  
01:22:57 --> 01:23:03: So Abby, Michelle, Karen, Caleb, Erica, thank you so much  
01:23:03 --> 01:23:07: for for joining us and an extra special round of  
01:23:07 --> 01:23:12: applause for for Erica, who I skipped during the introductions  
01:23:13 --> 01:23:16: and I feel very embarrassed about.  
01:23:16 --> 01:23:17: So thank you, Erica.  
01:23:19 --> 01:23:21: With that, we're going to take another quick 10 minute  
01:23:21 --> 01:23:24: refresh break and then we'll regroup for our final panel  
01:23:24 --> 01:23:27: where we'll really dig into two really inspiring case studies  
01:23:27 --> 01:23:27: as well.  
01:23:27 --> 01:23:29: So we'll see everyone again soon.

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