EPISODE 2 TRANSCRIPT

According to the Federal Emergency Management Agency, FEMA in 2024, a major weather-related disaster was declared every four days. These disasters resulted in 568 deaths and a tremendous amount of damage to homes, hospitals, businesses, roads, and other community lifelines.

Unfortunately, 2024 was not an exception. Each year, since at least 1980, disasters have impacted an increasing number of communities across the country.

Today, an estimated 137 million people, which is 41% of the US population, live in areas that are regularly affected by major disasters. So we're starting to see a recurring cycle of disaster response and recovery.

We need to break that cycle.

Hi, I'm Stuart Yasgur and welcome to Economic Architecture. I'm the founder here at Economic Architecture, which is a nonprofit organization that partners with others to address problems of historic proportions that are fundamentally the result of how we've all collectively designed and built our markets.

You know what, what we need right now, Stuart, like, what the challenge is, is that we need to invest in all this infrastructure. To make sure that communities are ready to weather the impacts of climate change. You know, I think historically the climate movement has been seen to be something which is focused on prevention, preventing greenhouse gas emissions.

We need a move to be focused on building, to invest in new infrastructure. Uh, and that takes a lot of work. That takes years of planning, you know, years of, of pitching projects, and then also. A bank of resources to fund those, I think that's where the next bout of innovative policy should happen, ensuring the resources are available to the communities that need them to be able to do that work.

In this week's episode, I'm speaking with Manann Donahue. He's a climate resilience researcher at the Brookings Institution in Washington, D.C. and he is originally from Australia.

We need to ask ourselves, how do we build more resilient communities that can withstand the extreme weather events that are happening more and more frequently and becoming more severe?

He recognizes that we have a lot we can learn from the communities who are building their own resilience in the face of extreme weather.

In this conversation, he walks through how we might think about the assets that communities have to bring to bear to create resilience.

And how we can set out to learn from different communities across the country and importantly, where the largest opportunities are for concrete action.

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Manann, great to see you. Thank you so much for joining us today. We'd love to jump right in if that works for you. No problem at all. Please. Let's go ahead. Great. Manann, can you, can you get us started a little bit? Can you tell us a little bit about your work? What is it you do at the Brookings Institution?

So, the Brookings Institution, I'm in Brookings Metro where we do a lot of place-based and urban policy, and I work within a team called the Center for Community Uplift. Within that team, I'm working particularly on climate justice, environmental justice, right? And disaster, risk reduction, policy-orientated research.

So, everything that we're doing ultimately has end goal of structural changes, policy changes, uh, within the U.S.

That's fantastic. So, in that portfolio, what do you find the most exciting right now?

I mean, so this year, um, I have the opportunity to work on a really big project on climate resilience and trying to understand what, uh, what climate resilience, uh, means for different communities across the US and what are the drivers for resilience. And when I'm using the term resilience, you know, resilience is a technical term, especially within, the, the climate science field.

But what it basically means is that when there's a disaster, or maybe not even a disaster, but extreme weather, like a heat wave or a cold snap, uh, how much is the community that, that, that disaster or weather event is impacting? How much are they able to experience that event? Then come out the other side of it, just as the same as they went in.

How are we able to maintain the stability and the function of communities, in the face of disasters? So that's, that's what resilience is and I'm, I'm grateful to be able to do this project, to try to map and understand rates of communities, uh, rates of resilience within communities across the us, how resilient one community is compared to another, but then also to break that down and look analytically, you know, look through the data to try to understand.

What's driving resilience? Is it the fact that there's more civic infrastructure? Is it the fact that there's more public infrastructure? Maybe it's the fact that there's strong community groups. Maybe there are higher wealth communities. These kind of variables, which lead to one community being more or less resilient than another.

And that's the, that's the bulk of the, that's the main project I guess, I'm excited about working on this year.

That's really interesting. So there are a lot of different extreme weather events, different types of extreme weather events and across different communities. Like are you comparing like with like in terms of extreme weather events with extreme weather events and, what's creating the resilience, or are you seeing patterns that cut across different types of extreme weather events as well?

We're really looking across a broad range of different kinds of event types, but essentially what I'm doing, and to break it down in more detail, is kind of a, like an empirical side, a data side, and then a qualitative side. So on the data side, really what it means is pulling together a bunch of different publicly available data sets, um, and using those to build an index.

Which is, you know, a value of zero to one, which indicates how resilient one community is compared to another. And, and it's a comparative, uh, kind of work. So, you know, the idea is to see which communities, are more or less resilient to a broad range of events. Now, part of building that index will also be understanding what types of events are affecting communities.

So, you know, in Gulf States, somewhere like New Orleans. Someone like Houston that might be more like a hurricane, more like flooding, extreme rain events, things like that. Uh, that's going to be completely different to, you know, a community like San Diego or like Los Angeles that has greater risk of wildfires.

So, you know, the different kind of risks the communities face, that's going to be a input into that index. Then I'll say the second part of it is. You can't see everything

within just the data. The data only tells you what you can see in the data, right? It's only one picture. So, what we really want to do with this index is to be able to identify highly resilient communities and then go and visit those communities and talk to civic leaders within those communities and understand what we're not seeing in the data.

Why do they feel like their community is coming up as highly resilient when others aren't? Once we go and do that work, do that qualitative work and talk to those leaders, what kind of policy solutions could we pull out of those conversations and scale up into something that's more of a, could be a state or a national, uh, policy package to increase resilience in other communities as well.

That's great. So in some ways it's, rather than trying to get an incredibly fine grain measure for exactly, you know, how communities compare to each other. You're using it, this as an approach to segment different communities, those who are more resilient to those who are kind of moderately resilient or lesser resilient, have lesser resiliency.

And then use that as kind of a almost identification mechanism. So then you can go to those kinds of communities and say, okay, what did we learn from you? Like, yes, there might be some things just on paper we can glean right off the bat, but there might be other things that you, that the different communities might be doing that are less obvious to people from outside.

Yeah, exactly right. I think the word there, like, it's an identification tool. I think that's spot on.You know, ultimately it's kind of a ranking, you're looking at across communities. The idea is not though, to identify and punish the communities that are doing poorly. Right.

Really what we're looking to do is also use this index as a narrative changing tool. So if you can identify the communities where things are going right. Then you can also orientate policy attention to those places. Right. And I'll add on just one more layer as well, is that a lot of the kind of climate mapping tools in the past, they've really focused on vulnerability.

And vulnerability is about, you know, what makes one community more likely to have severe impacts after disaster than another. And a lot of the communities that show up, they're black and Latino majority communities, people that had. Places that have these other intersecting kind of complex, uh, economic and social challenges as well.

You know, what we'd like to be able to do with this index is focus on bright spots and be able to identify highly resilient, you know, black and Latino majority communities,

especially to try to flip that narrative around instead of saying, these communities are just res just vulnerable to climate change.

Instead to say, in what ways are they resilient and. We know that those communities hold a lot of knowledge about what makes their community unique and what kinds of policy innovations would work or wouldn't work in those communities. We want to be able to up find and uplift, those kinds of innovations from across the us.

I think an interesting case is a city like Atlanta, you know, Atlanta is, uh, we think of as a relatively green city because it's, it's full of, uh, trees. You know, the idea is that, uh, Atlanta is this, um, when you fly over it, you know, you just. See green everywhere. But actually when you look at the data, the kind of distribution in green space across the city is really highly correlated with, race and ethnicity as well. And so, you know, black majority neighborhoods, historically red lined neighborhoods, they have less, uh, green space than others.

And so, you know, the city has put some energy into trying to solve this and, uh, really leaned on community groups. So community organizations in Atlanta, you know, there's been this effort. To do like community based mapping. So if you're a community member, you're part of this civic organization, you can take your phone out while you're walking around and track the temperature across different neighborhoods in the city.

So then the city itself can have information on, uh, how, how hard is it actually in different neighborhoods and what's the disparity between one neighborhood and another? Because this is one of the challenge when we get something like heat readings. You're getting them usually for a whole city of a particular, uh, segments of a city, but it's not really disaggregated.

But actually, you know, the really hyper-local picture of how a heatwave is affecting different communities can be highly variable. So a program like that in Atlanta, um, it's really leveraging residents to try to understand and, and try to map, uh, heat within their communities.

That's really interesting because, you know, it does seem that we're increasingly getting an understanding of, so much of the disparate effects are happening in these very micro, kind of locations within, within even the city. This is an example of where we look at the heat islands and we see like, okay, you know, block to block part of city to part of city, just the temperatures themselves can be so variable.

Yeah, no, absolutely. I mean, yeah, heat islands, heat is one of the, you know, they call it like the silent killer of climate impacts. My understanding is that, uh, heat causes one of the greatest number of, of deaths and illnesses, uh, in terms of climate impacts, much more than something like hurricanes, floods. But because we haven't thought of it as a disaster event in the same way that we have those other events. We don't have the same kind of tools to understand the impacts.

You know, we don't have as good a figures on, you know, how many people across the US uh, nationally, uh, and sorry, annually are being impacted by heatwave and, and by heat island effects. So, um, yeah, really important area. That's fascinating.

Yeah, because a lot of this is really about making things visible, right? That were previously unseen in a way. The project's already kind of a culmination of a number of years of work. You're seeing the next, next big horizon as being able to kind of build this index and then use that to identify communities that are doing really well, and where do we learn lessons from?

Where do you think some of the biggest opportunities in this work is?

Yeah. You know, more broadly, taking a kind of long time horizon. I think that what feels to me anyway, like in terms of climate policy, uh, disaster adaptation policy, risk reduction policy. We're reaching kind of a critical point where, uh, there is a movement which exists not just as kind of a advocacy and activists or a researcher movement. The climate change, climate impacts have shifted from being something that we think of as just a lane for a particular kind of researcher to being something, a lens, you know, that you can apply across different kinds of policy areas and, and that's how it should be. You know, I think, climate change is, climate impacts extreme weather. They're increasingly becoming an infrastructural problem, an economic problem that eats into business revenues. Right?

And so this kind of, uh, I think it's kind of reaching a critical mass where different segments of, you wouldn't usually think of being a part of addressing climate impacts or being kind of brought in because it's inevitably touches up against them.

So, you know, because of that, I'm interested for the way that can bring, you know, fruit fruitful collaborations, love to collaborate with folks in different kinds of sectors, right? Collaborating with folks who work on infrastructure policy, folks who work on urban land use policy, housing policy, etc.

I think the more pessimistic side is that maybe you're looking over a precipice a little bit and disaster damages, you know, the cost of, the impacts of extreme weather

increasing. But I think the optimistic side of that is without that galvanizes action as well. And that brings in people into the conversation who might not have been there 5, 10, 15 years ago.

Right, so one of the easy things, nice things about speaking with people who are in your silos, you all speak the same language. You all know what to, you all have similar agendas. You all, you know, there's people who have worked together for long periods of time. What are some of the biggest challenges now, as, as, as you're seeing new folks coming into the space?

One of the challenges is translation, you know, to be able to take what has been a hyper technical field. You know, climate change sciences, climate science, climate research has a lot of terms that mean something very specific. You know, that's why I define resilience at the outset. It's because when an average person hears resilience, they don't necessarily think of what I would think of or what somebody else doing this work thinks of. And so that's the same thing that's true when we're going and talking to city leaders, state leaders across the U.S. You have to think about your audience, right?

And, you know, I'm working in a think tank. Part of my job is not just to do research, but to go and, and, and put it out into the world and, and make sure people are looking at it and that it's, uh, hopefully, uh, influencing policy and, and helping to create better policies. But to be able to do that work effectively, it means that when I'm in a room with policy makers, if I'm talking about climate change and they're worried about, you know, economic mobility in their city, how can I connect? Climate impacts to economic mobility. How can I make those policy makers understand, in which ways it's part of that challenge that they have? Or how addressing climate change could also help address challenges with, say, economic mobility or, you know, with inequities in the housing market.

So, definitely, you know, that challenge of translation is a constant. It's constantly tough, but it's really core to, uh, being able to do this work effectively. Uh, how do you, so the, one of the other things is as we're speaking today, I think there's a, perception that, you know, federal policy related to climate, maybe, less of an open door at the moment.

But sitting at a think tank as you do, focusing on policy, where are the kind of policy opportunities given that, how do you think about that changed landscape? I couldn't stand here and say that, uh, the federal landscape hasn't changed. I think it certainly has, uh, and in ways it make it a little more challenging to talk about climate change.

You know, in particular climate change as a phrase, particularly climate justice, which is. Research I've been involved in for many years as well, but there are areas where there's definitely openings and one, you know, for example at the moment is disaster policy. There's a big conversation happening within the US at the moment, time to reform the disaster management system.

Organizations like FEMA, the Federal Emergency Management Agency, you know, part of the, uh, push is saying to kind of eliminate those agencies, put all of the responsibility in the hands of the states. Which is not something I agree with. But at the same time, that also opens a conversation to talk about, well, if that's not the reform that that should be made, what is the suite of reforms that should be made?

Right? So I think disaster policy is going to be continually on the table, whether or not there's federal or executive interests in addressing climate impacts. Disasters are going to keep happening. They're going to keep being visible, and they're going to keep creating headaches for local leaders, right? For people elected to make sure that the impacts of disasters on those communities that they serve on their constituents, you know, aren't too drastic, aren't too severe.

So, that's going to continue to be on the agenda. And then the second one, I'd say as well, is insurance, which is related as well to disaster policy. There's a big conversation happening in the US at the moment around home casualty insurance, you know, and insurers and mass pulling out of regions, which we're realizing are more vulnerable to climate impacts, to wildfires, to flooding, persistent flooding than we thought they were in the past.

I think that's waking up homeowners, individuals, but also the industry to think, okay, this is something we need to address. How, how would we do that? What would that look like? And okay, you're not using the language and the terms climate change, right? You're talking about insurance, but it's still a mechanism to address those impacts.

I think everybody living in the United States has a kind of idea when they think, when you talk about extreme weather events or you talk about disaster, they can picture, you know, they can picture hurricanes, they can picture floods, they can picture fires. The part of what resonates so strongly is the need to people are suffering and to help people who are suffering, right? And there's this, impetus to directly respond to help. At the same time, I think people are starting to recognize, oh wait, also this is starting to be as these events are. The magnitude of these events are so large and the recurring. At increasing frequency, and we're starting to see it's not just a fire, it's now fire season and it's fire seasoning across, you know, larger kind of geographies. Right?

It's in the California and up to the Northwest and it's in, in the Northeast and it's, you know, uh, and the Carolinas and, you know, and so it's becoming, as it's becoming, they're becoming larger, they're becoming more frequent, they're becoming more pervasive.

People recognizing, absolutely we need to respond, but also that there, we need to think about how do we, how do we prevent people from being harmed in the path, pathway of these things, right? I think one possibility is if it's not just a federal conversation that's happening, there's also a question for each of us, each of us, what do we do about it, right? What do we do in our communities to help promote a degree of resiliency here, and how do we think about resiliency in the face of it?

Yeah, absolutely. I mean. At the end of the day, the impacts of extreme weather, disaster impacts, climate impacts, things like sea level rise. You know, they, I think historically we've thought about them as a global problem, right?

For organizations like, COP and like the UN to address, covers Conference of the Parties that the organization that gathers to, to talk about climate science and regulate internationally every year. You know, we've thought about it in those international arenas and largely about reducing greenhouse gas emissions, right?

The emissions that have caused climate change impacts and are still causing them to worsen. But at the end of the day, the experience of climate impacts the experience of disasters. It's local. Really, really local, right ?

To the point where, like we talked about earlier, it, it might be different what a heatwave feels like, on one side of the neighborhood compared to the other.

Part of that means that while the federal government's there to, to, to ideally set standards and to help, uh, people across the US make sense of this, it's also on states and city governments to really be invested in understanding the risks that their constituents face.

And what kind of responses make sense to their unique, kind of vulnerabilities, social and economic vulnerabilities, but also exposure to climate disasters. What kind of threats do they face? What kind of risks?

If folks were learning about your work, and the issues you're focusing on, and they said, what do we do? Is there kind of, is there a suggestion or proposal, a kind of an opportunity that you'd invite them to participate in? You might be there as a resident,

you might be there as a, as a professional, as somebody who's employed as a voter, as a, you know, you know, we all wear many different hats.

How, how does somebody start to kind of, you know, say, recognize the importance of this? How does somebody start to contribute?

Yeah. At an individual level. You know, it's so, I mean, a lot of my writing, a lot of my research is really orientated around, trying to push on structural changes, right? Trying to, to come up with new policies that federal, state, local governments could pick up and implement to make people's lives better. Right. But, you know, at an individual level, I think a lot of it comes back to kind of getting to know and engaging with your community, trying to understand, climate in a really local way.

A lot of communities do have civic organizations which are orientated to address the impacts of climate change. You know, that either provide spaces like during a heatwave for you to come and shelter in or resources about what local impacts communities face. So, you know, at, at an individual level.

I think pushing folks to get involved with those organizations, second, you know, if you want to take this up a notch and, and really, uh, start to feel like you're part of a movement, I think. Connecting with others who are doing this work, who are interested in pushing more conversations on climate change, who are interested in, you know, disaster relief policy.

Connect with those folks and start to develop a community of practice. You know, people, a group of people that you can reach out to that are also interested in these issues. And, you know, literally, I don't think it has to be at an individual level. I don't think it has to be a lot. I don't think you have to have the weight of the world on your shoulders solving these things.

I think it is really about being in practice with other people. Having conversations about this and how it's affecting you and your family, your community, in a really personal level. I think at this point, you know, the statistic that I saw recently is something like seven out of 10 Americans in the last five years have, uh, can say or will say that they've experienced extreme weather.

Wow. Their community has, I think that's it from Pew, um, from a study that they ran a couple of years ago. That's a lot of people, right? Everybody has these narratives now, these stories, this climate, climate change stories. How were they affected? Um, so I think just start sharing those, you know, with people around you.

That's great. And so, you know. Because the, your focus on system changes to the system and kind of structural changes, through the mechanism of policy you may be imagining things that other people are not yet imagining or saying, is there any one or two things you would leave us with of what people may not be aware of that we're likely to see kind of going forward?

So, what I'm interested in personally is more on the responding and adapting to impacts, right? There's a whole bunch of people who just work on decarbonizing economies, reducing emissions, right? And that's less of my work. My work is more on adaptation is what it's called in the climate science world, right?

The first thing that's really necessary to all of this, and I'll say this flat out, is just having stability in decision making. So, you know, I think we need to start thinking about addressing these impacts in the same way that we target inflation, unemployment, GDP, you know, those are things that both sides of the aisle in government agree on are worth targeting, that that's as a function of government, a fundamental function.

I think we should think of addressing climate change in the same way, and I think where the next kind of group of innovations is going to happen is on funding mechanisms that help to transfer wealth and resources to communities, to households, to start building up their resilience, to prepare for, uh, a world in which there's a more unstable, more uncertain climate system.

So, you know, internationally for example, there's been pushed for something called an adaptation funds, which is, a bunch of countries contribute into a pot of money, which other countries that have, difficulty that have, have a history of, uh, lower resources, you know, less, less wealth can dip into that to help bolster their resilience.

You know, a system in which wealthier, quote-unquote "developed countries" supporting those other countries who are in need to get the resources they need. And I think you could see a similar kind of mechanism. Existing, you know, within the US in which there's a pot of funding to help invest in disaster risk reduction, you know, uh, technologies to invest in infrastructure that help reduce the impacts of climate change that under-resourced communities can access, uh, and dip into when they're in need to fund those projects.

What we need right now, Stuart, like, what the challenge is, is that we need to invest in all this infrastructure. To make sure that communities are ready to weather the impacts of climate change. I think historically climate movement has been seen to be something which is focused on prevention, preventing greenhouse gas emissions.

We need a move to be focused on building, you know, to invest in new infrastructure. That takes a lot of work. That takes years of planning, you know, years of, of pitching projects, and then also a bank of resources to fund those, I think that's where the next bout of innovative policy should happen, ensuring the resources are available to the communities that need them to be able to do that work.

I, man, I think there's a great, that's a great kind of capstone line for this, for this conversation. Thank you for taking the time, sharing with us the kind of work that you're doing now, developing now, and kind of giving us a sense of where that may go and kind of how it's going to help us learn.

Yeah, no problem at all. Thank you for having me. Lovely talking to you. Great talking to you. Thanks.

That was a fascinating conversation with Manann. You know, there are a few things as I think about it that really kind of leap out at me. First, one of the things he said that was really notable is that so much of our climate resilience conversation is really focused on the problems and avoiding the problems and responding to them.

But Manann brought this interesting perspective to the table because he's really focused on solutions. He's looking not for where the vulnerabilities are, but where the potential solutions are and, and trying to really take stock of what's working.

The research Manann is doing that's doing this comparative assessment of different communities and who has solutions that are working and why, and then following it up with a qualitative understanding of why those solutions are working and using that understanding to inform policy, potential policy recommendations.

It's really the start of the conversation. So I think it's going to be fascinating for us to see how this work at the Brookings Institution starts, grows and matures. As he said, it really sets the table for collaboration with maybe uncommon suspects, people who are not necessarily have the history of collaborating in that way.

I think it's also really notable that Manann brought this optimistic, forward-looking approach, especially to the policy domain because, you know, while he's definitely pointed out that there are opportunities for action at the city and state level, he also noted that while big questions are being raised at the federal level, especially about disaster response, that these moments of big change can also be opportunities to propose new solutions.

One of the things that came out in the conversation with Manann is the need for new solutions that can really create impact at the magnitude of the problem. I think that one of the things that we're going to be looking for in these conversations is really an opportunity to learn about some of those solutions and some of the emerging innovations at the earliest stages.

I think Manann is inherently extending an invitation to each of us to step into the solution space and try and contribute to bringing about the kind of policy changes that would be beneficial for everybody.

I'm Stuart Yasgur. This is Economic Architecture, the podcast.

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