Well, good afternoon everyone. I have a sort of a humble title for this advancing urban resilience What U.S. Federalism teaches German federalism. I want this to be pretty humble. So this is teaching you maybe some good examples from the U.S., but also what not to do. Okay. And let's start with the definition of resilience. This is from Judith Rodin's 2014 book "The Resilient Dividend", which is really quite prescient.

So resilience is the capacity of any entity, individual, community, organization, etc. to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience. So when Judith wrote her book in 2014, she's the former head of the Rockefeller Foundation, former head of the University of Pennsylvania. She did not say this was a book about climate or a book about housing or a book about poverty.

It's really a book about all the different disruptors that are sweeping our world. This is why I think Judy saw the future, because we are living in a period where occasionally the media will like to tell us it's the new normal. It doesn't feel like a new normal. It feels like a new disorder, essentially. And this New York Times reporter had this great quote from earlier in the year.

It's almost like you took a snow globe. I don't know if you have those in Germany. Wherever you visit in the U.S., they give you a snow globe with the name of the city. And you just shook it up and nothing has really settled yet. And when you think about this, some of these dynamics were created or accelerated by the pandemic.

Right. Supply chain disruptions or remote work surging or affordable housing or affordable surging. I mean, the list goes on and on. But some of these are longstanding trends like climate, like technological innovation that are beginning to play out now in very visible and disruptive and destructive ways. Some of this is because government decisions in the U.S., as I'll talk about, we're going through a tsunami of firehose of federal investment that's creating its own disruption.

And then the real longstanding effect is the war in Ukraine. We focus on the short term effects on energy prices or commodity prices, but geopolitical instability is the long term effect. So as we think about advancing urban resilience, the first thing to think about is why cities and how do cities problem solve and how do urban solutions scale and spread?

Because if we want to talk about federalism or multilateral activity, it should really be in the service, in the image of cities. Cities are not governments. Cities are not like the federal government or state governments. They are networks of public, private, civic community leaders, institutions, intermediaries. The list goes on and on. So federal government, state governments are really vertically organized silos and stovepipe of bureaucracies, specialized agencies.

Cities are more horizontally organized. And when you solve a problem in a city, it's usually because of interdisciplinary action and actors. A book that I co-wrote a couple of years ago called This The New Localism. It basically said, In the 21st century, power belongs to the problem solvers, and the problem solvers disproportionately concentrated and congregate in cities and metropolitan areas, again as these horizontal networks.

So we're going to talk about climate. We're going to talk about competitiveness. If we're going to talk about really any of the major issues that we're all facing. Cities tend to be the vehicles for problem solving. Now let's talk about the United States. President Biden, The Biden-Harris Administration essentially is using this period to build back better through enormous investments, unprecedented investments once in a generation investment, that we've not seen in the United States since the New Deal under Franklin Roosevelt.

It started in March of 2021. The President Biden came into power after Donald Trump. I'm not going to talk about Donald Trump because I think I would have to be removed from the stage. But President Biden came in, immediately moved an American rescue plan, \$1.9 trillion, about 350 billion of that went directly to states, cities and counties, very flexible.

Then we had an infrastructure investment, energy, transportation, digital \$1.2 trillion. An Inflation Reduction Act, which is where an enormous amount of tax incentives are provided for climate solutions. And then finally, a chips and science Act, which is very focused on reshoring, production and enabling the competitiveness of the U.S. semiconductor. This is an enormous amount of funding, and this is how it basically goes down the pipes.

It's a Rubik's cube of investments. It is almost impossible to figure out how this works when you're actually on the ground in a city, in a metropolitan area, whether you're a government or a university or a corporation, you're a community group. But the job of cities is not just to take each of those siloed, stovepiped investments and carry them out.

It's to pull it all together. So, the feds invest and we are very happy that the federal government is investing. The states are investing, that we have 50 states and 50 different approaches to everything. But it's cities that deliver, because cities

think like systems and act like entrepreneurs and what they're able to do because they're horizontally organized is they can align federal investments with the distinctive aspects of a different place.

Phoenix is not Pittsburgh, which is not Portland. So these places have different priorities. They're able to layer all these different investments in a geography. It could be a downtown. It could be a waterfront. It could be an airport. It could be a lower income neighborhood. And they can use public investments. And this is a generally how the U.S. tends to think about the world.

Public, private or private public. The public investments lever up private and philanthropic investments. And in many cases, the private and philanthropic investments are the first money in that then levers up the public side. So here are just a couple early signals. We are what we would call using a baseball analogy is we're in the early innings of build back better.

A good portion of the money has not even begun to flow yet. So these are just early signals because right now it's a bit chaotic in the U.S. You know, every week a different program has a notice that goes out and everyone tries to adjust and adapt. One of the first signals is we're moving from planning to playbooks, from general plans of how to integrate land use and transportation and energy and housing to projects, a portfolio of projects.

Because if you're in a neighborhood or if you're in a downtown or if you're in a waterfront, what you really want to think about are those 10 or 15 or 25 projects. They might be infrastructure, they might be housing, they might be small business. How does that all come together? So that two plus two equals five. So what cities are beginning to do.

This is Buffalo, New York. They took the East side of the city, a traditional low income African-American area of the city, and they created investment playbook with, you know, a few dozen projects, mostly around anchor properties, an old train station, an old food hall, investment in small business investment in entrepreneurs, etc.. And they basically attracted about \$70 million of philanthropic funding and \$150 million of state funding, which had come from the federal government.

So when you have a playbook, not a general plan, not vague, not general, but projects, you're able to basically take advantage of this moment. We then have a shift from traditional industry to next generation. Early in the Biden administration, they put just \$1,000,000,000 out and they basically said to cities and metropolitan areas and states, come to us and tell us about how to become more competitive around advanced industries.

Ultimately, about 529 applications came in. They chose about 60 that received technical assistance. They just selected two weeks ago 20 winners that received about 25 or 50 million apiece. Now, some of these were individual cities with individual clusters like Wichita has aerospace. Right. A very particular advance industry trying to think about how companies work with universities, work with investors on advanced materials, energy shifts and aircraft, all that.

Other states came in and said, wait a second, we're not going to focus on one cluster. We're going to focus on multiple clusters. So the state of Georgia came in and said, we're going to take artificial intelligence and move it across multiple manufacturing clusters. The third group of cities came in and said, Wait a second, let's talk about the next generation, the blue economy, the hydrogen economy.

It doesn't exist today. We haven't even really provided the evidence around it. But there's a mix of different kinds of competitive applications, the general connective tissue. These are our export industries. I mean, to be frank, the U.S. wants to be a little more like Germany, right? More production in that regard. And we're all following the Dolly Parton view of the world right.

I know this is going to be difficult, but follow me on this. This is our a great economic development theorist. Figure out who you are and do it on purpose. Figure out who you are and do it on purpose. Wichita is incredible in aerospace. Pittsburgh is amazing on robotics. The list goes on and on. We have many, many cities and metropolitan areas that do have specializations that have built up since the 19th century and the beginning of our industrial revolution.

So going through a purposeful and deliberate effort now backed by our national government, backed by our national government. What are your distinctive advantages? What are your competitive assets? Realize their full potential. And again, as I talked to you before, some of these are traditional clusters, the Michael Porter Theory of the World from the 1990s. But many of them are converging clusters, building on advanced technologies.

And then there's the next generation clean economy. Okay. The next bit is how we deal with the collapse of many small businesses during this COVID pandemic, particularly businesses owned by blacks and Latinos. What we're now

focusing on is given all this federal money that's coming down the pipeline is how do we use procurement to grow the next generation of diverse and local, smaller businesses that ultimately can scale?

The national government in the U.S. is the single biggest purchaser of stuff in the world. Goods and services, right? About 660 billion a year. A lot of that is our Department of Defense, but also our Department of Energy. We're now talking about the procurement economy as a way to basically grow and scale smaller firms that are locally based, that are moving up the value chain, higher profit.

We're doing this work in San Antonio. It's called a procurement playbook. We literally have looked at every single public authority because the public sector is as fragmented as everything else. We have a city government. We have a county government. We have a port, we have an airport, we have a transportation authority. The list goes on and on.

So we're now talking about public public partnerships in the United States to use federal spending to grow local business and black and Latino business. This could be one of the most innovative areas of domestic policy in the United States over the next several years. Money. I'm an American. We like to talk about money, and we particularly like to talk about capital stacks.

And we particularly like to talk about products and funds. I mean, we're taught this at the age of two and then we just keep getting, you know, our education and on the job training. So what we think about, if you want to do complex, impactful projects is what's the public investment? What's the private debt? What's the private equity?

What's the concessionary capital? What is philanthropy do? And we mix it all together. In the U.S. right now, on the entrepreneurial side, again, we lost a lot of businesses. We lost a lot of businesses during COVID, particularly black and Latino business. We're now talking about new products, financial products that are more revenue based than the usual collateral financing.

You look, you use your home, all right. Or another piece of property to back the bank loan. We're now talking about revenue based financing where banks and others will basically say, we think you have a good idea. We're going to use your revenue to help pay us back over time. Or supply chain finance, which has been around since the Phoenicians and the Romans and all the other great traders in Europe.

We're now thinking about new products with all that procurement I talked about before, to have new bank loans or other equity investments on the climate side. This is where I think you've got to watch the U.S. because Screen Banks TIFIA is the name of our innovative finance low cost debt mechanism coming out of the Department of Transportation. The U.S. loves to come up with names TIFIA "Transportation Infrastructure Finance", CIFIA, which sounds a little strange.

"Climate Innovative Finance", WIFIA "Water Innovative Finance". We got all this stuff flowing through the federal government right now. No one particularly knows how it works, right? So we're all now focused on putting this into action. Tax incentives. We love to use tax incentives for households, for corporations, for utilities. We got hundreds of billions of tax incentives and I've mentioned the low cost.

So if you want to watch the animal instincts of the U.S. take off around money because again, the federal government putting in trillions, how do you ten X that, right, how do you go from whatever the public sector is putting in and then lever it up with private and civic capital? We're changing our institutions. We've got mid-twentieth century institutions.

They are rigid. They are prescriptive. They don't work well together. They don't speak the same language. So at the city scale, we're creating development corporations backed by public and private and civic that are nimble, that are able to move into the market. They're nonprofits, right. So you can counter parasitic private money or public authorities. Tulsa, Oklahoma, has taken its parking authority, which is really where all the money is in the U.S..

Right. It's parking authority. It's convention authority, it's industrial authority. They merge them. They've looked at what you've done in Hamburg with Hafen City. They've looked at what Copenhagen has done with city and port, and they're basically creating a new public asset corporation that can redevelop whole portions of Tulsa and then have a revenue stream go back to regenerate the poorest neighborhood in that city.

So we're now using the crisis to innovate on capital and innovate on institutions. Not everyone. It's the U.S. it's chaos. No one's in charge. Everyone is in charge. But a bunch of places are beginning to use this moment to get really creative, really fast. And it is changing federalism. It's changing what different layers and levels do. Last piece, and this is really important because cities are not governments, they're networks.

That's why they're so powerful. That's why they're the 21st century means of problem solving. So everything I just talked about investment playbooks, clusters, financial products, institutions, climate change, housing, everything is a network. The government locally works with the universities and the corporations and the developers and the investors in the communities to basically come together and do it together. There's always a lead.

In the US, the lead is usually what we say. Anyone who has a pulse. Right. Do not ask permission. Ask forgiveness. Right. That's generally how we think about this. Whoever wants to take the lead, raise your hand, you're in charge, but set up networks. And this is Indianapolis, which is a formal structure of the companies working with the philanthropies, working with the universities, working with the state government, working with the local government.

It's a formal structure around competitiveness. So that's what's happening in the US. It is a work in progress. We will fail miserably multiple times in enormous amount of funding is going to get squandered. Make no doubt about that. Make no mistake about it. But in the end, we will innovate it off our cities and our metropolitan areas, will capture it, will codify it, will communicate it, and will blow it through the country.

So then we get back to our national government. And this is the last piece of just siloed be an ecosystem, not an ego-system. Easy to say, hard to do. A lot of people think they're in charge. Again, no one's really in charge, particularly when you're dealing with wicked problems. So get a grip. Relax. We're supposed to have radical collaboration is the way of the world.

Let me just go to the last thing, okay? What does this mean for Germany? And again, this is humble. You are so far ahead of us on certain things, particularly around climate solutions. I got to listen to Professor Schellnhuber. I mean, you're already moving in areas that we're just talking about, right? That doesn't mean we're not going to catch up.

That doesn't mean our competitive instincts are not going to kick in. They will. But we're watching you closely is the bottom line, particularly when it comes to next generation industries and your production sector is so much more powerful. So five things that we're trying to basically adapt from city purpose and then I'll stop. Maximize urban innovations and network governance.

The national government can make funding more flexible, right? They could give more room for innovation. And they can basically say, when you do compete, do it as a network. Don't come just in as your city government, don't just come in as your university, come in with stakeholders that can relate to you. Second is what I said before captured, codified, communicate these innovations.

We're a big country. We need basically urban resilience in a box. We need it to move across the country very fast. The things that move tend to be products, financial products, building codes, engineering protocols. That's where you begin to see innovations really spread, replicate, adapt and adopt. So we're very focused on how to do this because the capacity of many of our small places is not high.

So we've got to simplify all this stuff so we can move through the country, routinized the financing of urban innovations, capital flows where it knows. Right. You got to basically simplify this as well. Risk returns, investment expectations dept, equity, subsidy. Let this sort of move across the country in similar ways, still has to be adapted. But let's routinize, routines matter, common term sheets matter, a boost the capacity of intermediaries.

You can't build the capacity of every city to do this. It's impossible. We're too big. We have thousands of cities. It's ridiculous. We have to have intermediaries that can help advise different places on how to do their business. So it becomes more of a norm, more of a model. And then we can look back and say, we build back better.

Last piece, engage corporations, financial institutions and philanthropies. They've got the discretionary money, not the government. The government sends its money down in ways that's fairly rigid, fairly prescriptive, a lot of reporting requirements. It's not easy to take federal money, but philanthropies, corporations, financial institutions a lot easier. So as we think about building capacity, as we think about capturing codifying innovations, we look to our private and civic sector to help us do that.

The government is giving us the big funding for infrastructure project, Climate Solutions. But it's this other sector of our society that's giving us the glue money to make it happen. So that's an initial thought about what's happening in the United States. Land of the free, home of the brave, completely unstable, completely chaotic. But I think there are some lessons that you can take from what we're trying to do in this incredible period post pandemic.

Thank you very much.