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WELCOME:

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BROOKINGS INSTITUTION**

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PRESIDENT,
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BRUCE KATZ: Good morning everyone. If folks could take their seats, I think we're going to wait for a bunch of folks to come in from the anteroom there. Good morning everyone. I'm Bruce Katz and I'm the vice president at the Brookings Institution. And I'm director of the Metropolitan Policy Program. And I want to acknowledge and thank Rob Atkinson's Information Technology and Innovation Foundation, and the Council on Competitiveness for cosponsoring this event.

About five months ago, Brookings Metro Program launched what we call the Blueprint for American Prosperity, which is our effort to try to imagine a new federal partnership with states, localities, the private sector, and the voluntary sector to strengthen metropolitan economies, build a strong and resilient middle class, and help the country grow in environmentally sustainable ways. Why did we launch this five months ago? Someone told us there's a minor event happening; what is this, the first time since 1952 that neither party will have an incumbent president or vice president on the ticket. I'm surprised so many people are here today actually. You're not at home watching CNN, those people dribbling into the Philadelphia and Pittsburgh polling stations.

The proposition of the Blueprint for American Prosperity is really quite simple. It's that if this country is going to compete globally, if we're going to deal with some of the urgent economic, social, and environmental challenges of our time, we're going to focus on some critical assets that drive prosperity: innovation – which we'll talk about today – human capital, infrastructure, and quality places. And the curious thing about these assets and their disproportionate effect on our ability to meet national priorities is that they congregate and concentrate at unprecedented levels in the top major metropolitan areas of the United States. That's why we come together and we call this a metro nation. And why the sort of focus on this Blueprint for American Prosperity is to finally get our country to act like a metro nation.

Today, we're going to launch what we call a Blueprint Policy Series, over the course of the next several months, culminating in a summit in June, we will release a series of concrete legislatable ideas to inform the actions of the next administration and Congress. And today, we're pleased that we have two proposals by Brookings and ITIF in response to the nation's slipping standing on indices of commercial innovation. As we all know in this room, innovation is the vehicle for global competitiveness, new products, new processes, new business models are ultimately going to determine whether this country can maintain our competitive edge and, to be frank, whether we can unlock the key to sustainable solutions.

Before beginning the program, I would like to recognize a few notable guests here today: Mr. Al Frank, the former and first assistant secretary of Commerce for manufacturing and services who is a strong advocate for eliminating barriers and expanding opportunities to innovate and move concepts to customers. And I'd also like to recognize Roger Kilmer who is the director of NIS. Is Roger in the room?

MR. KATZ: So let me introduce our partner in crime today, Deborah Wince-Smith, president of the Council on Competitiveness, who is also a tireless advocate for United States competitiveness and recognized expert on technology policy, economic development, and global competition. Deborah?

DEBORAH WINCE-SMITH: Thank you, Bruce. And I want to thank the Brookings Institution for their leadership in convening this wonderful, exciting program today, as well as Rob Atkinson's foundation and all the people who have worked so hard to get us here.

I was just thinking that it's 2008 and it was 10 years ago that the council had our first ever innovation summit at MIT. And I remember back then, you know, the word innovation was something that people really didn't talk much about. In fact, I remember putting this together. A lot of people were saying inside the council's group of CEOs and university presidents and labor leaders, well, why don't we have a meeting on R&D? And so, getting this whole concept of innovation and what it means for our future prosperity, productivity has really been a long ride.

And of course, back in 2001 and then culminating in 2004 with the council's national innovation initiative, we now see that the understanding, our country, that we're not going to compete on low-wage or standardized products, but that we have to innovate across every sector of our economy, is really the name of the game. And of course, innovation occurs in regions, in states, and people working on the ground in a very dynamic ecosystem.

I just wanted to share a couple thoughts as we go forward on this exciting initiative and partnership. You know, we have kind of looked at innovation in terms of three core building blocks: talent, investment, and infrastructure. And you know, coming out of our MIT summit in 1998, one of the things we decided was, let's look at what's going on in regions and in clusters in the country.

And you know, we teamed with Mike Porter to do that first big study that was really looking at regional clusters of innovation. And Randal Kempner, our vice president for regional innovation who has been so active in this effort played a strong role in that, as did others in this room. But moving forward, we teamed with the federal government, with the Economic Development Agency, with Assistant Secretary DeRocco who has also been one of the great trailblazers with Al Frank and others to really begin to carry this out.

And what was exciting was that our governors picked up the message too. Governor Napolitano and the National Governors Association made this theme of regional innovation and what goes on in states and how you develop a cluster-based strategy part of their major initiative, and her chair's initiative.

Now, of course, all of this has to go on in a dynamic federal-policy system. We have to have our investments for research and development. We have to ensure more Americans go into math and science. We have to address our regulatory and our tax environment. And boy, are we working on that right now as we are all here together. But at the end of the day, it's in states and regions, how they work together and have the ingredients of talent, investment, and infrastructure, how they take all this tremendous assets and take them to new game-changing products and services that will shape our future.

So the Blueprint Initiative of Brookings and the Council's partnership and other groups in that is very, very timely. I will say that yesterday I had the opportunity to be with the new U.K. minister for innovation, universities, and skills, Minister Denham. And it was interesting to hear how in the U.K. they have reformulated that new portfolio out of the traditional ministry of industry and trade. And he actually said that one of their metrics has been looking at the United States and trying to understand how we have actually over the years really created a fabulous global leadership in how universities, industries work together, how we have dynamic startups coming out of this system, how we ensure that we bring together the whole ecosystem around this.

So the other thing he said, I think, that was very relevant to our discussion today is that no matter what we do in regions in our own countries, we have to, of course, participate in the global environment. And so as we think about how we want to build and expand dynamic clusters, from the get-go, these clusters – as they develop and thrive – have to be ready to participate in the global trading system. So ensuring that we have access to markets, to customers and consumers throughout the dynamic world in which we live, is also a very important part of this strategy.

So with Bruce, I'm going to turn it back to you but tell you the council is excited to work with you. And we commend you for being the next step forward in the journey for clusters, and also to discuss some innovative proposals on how, perhaps, our government at the national level might be better aligned for the investments to carry

forward the next stage in innovation-based growth for our economy. Thank you very much.

MR. KATZ: Thanks, Deborah. And to moderate today's session, we've picked the obvious choice, Randall Kempner. He is obviously a familiar figure to many of the people in town. But even more importantly, he has really made his way across the country, working closely with metropolitan leaders and state governments to recognize that that's where the intense interaction between universities and investors and firms and workers occur.

So Randall is the vice president for regional innovation at the Council for Competitiveness, and I will hand it over to you.

RANDALL KEMPNER: Thanks Bruce. Thanks very much, Bruce, for the chance to be here and to moderate this panel. What I want to do is not take a whole lot of time, but just mention, as Deborah said, that the council has been playing in this innovation policy space for over the last decade with lots of focus, as Bruce mentioned, on regional innovation issues and integrating regional, economic, and workforce development. In that work, I've had a chance to work with almost everybody on this stage. So it's a real pleasure to be here to moderate this panel and to introduce them.

What I want to do first is introduce all of the presenters who will actually share the overviews of the two papers that we're going to be discussing today. And then, the format is that after they speak, we will have questions and answers from the audience. And we'll have people walking around the audience with microphones to entertain questions.

So with no further ado, to my farthest right, Rob Atkinson is here. He's the president of the Information Technology and Innovation Foundation, previously at the Progressive Policy Institute, and always been one of the most thoughtful, most prolific, and tallest writers on new economy issues.

Howard Wial is the coauthor of the paper on the National Innovation Foundation, is an economist at the Metropolitan Policy program at Brookings, and prior to that seems to have taught at just about every small liberal-arts college in the United States, including a few big universities.

And Karen Mills is a successful venture capitalist, private-equity player. We know she's successful because she's been able to do it from Maine, so I'm impressed and would like to figure out how to pull that off. She is also a true thinker and thought leader on cluster development who, along with Liz Reynolds – who is out there; where's Liz – who is a doctoral candidate at MIT and Andrew Reamer who is also a fellow at the Metropolitan Policy program, wrote the paper on clusters. So Rob, start us off.

ROB ATKINSON: Okay, well thanks a lot, Randall. It's a pleasure to be here. And there we go, okay. And I want to thank Bruce again for really having the courage and the leadership to move forward on an idea like National Innovation Foundation because it's a relatively out of the box idea, and I think it's an idea that really the time has come. Deborah alluded to the U.K. looking at the U.S. And I think many countries around the world look at the U.S. But I think most of what they look at for the U.S. is our innovation system and our environment for innovation, which arguably is the best in the world.

But I would argue that our policy environment is not the best in the world. I'd argue that we have all these advantages on the market side, but we haven't matched those advantages with the policy side. Now, other countries are in the flip-side case. They're innovating; they're bold; they've got great ideas, a lot of money behind policies and institutions. But what they're trying to master is how do they get the market environment?

To me, it's the country that can put both of those things together – the market environment and the policy-institutional environment – that is going to really win on this. And that's really what NIF is all about is how do we match our business environment with an institutional environment that is going to be an effective catalyst for innovation.

I don't need to really say this. This is all really easy mantra stuff. But the core message really is – and most neoclassical economists, frankly, still don't understand this – is that innovation is responsible for the lion's share of economic growth. So all of the productivity pickup from 1995 to the present was due to innovation; 100 percent of it. With that innovation, the U.S. economy now is \$2 trillion bigger in GDP every year than it would have been otherwise. That's the equivalent of 1.5 Indian economies. So just in 12 years, we've created – excuse me – 2.5 Indian economies just through innovation. That's how powerful this is. And if we don't keep at it, we're going to fall behind.

Again, I don't really need to go through this. Lots of reports – the council has come out with reports, “The Gathering Storm,” many, many reports. And you can come up with many, many indicators. And I encourage you to look at the long report that's out on the table there that does that. There is clear evidence that U.S. share of global R&D is going down and that that is going down commensurate with the rise of R&D being done by U.S. multinationals overseas, particularly in China and India.

And then, I'll just point to the last bullet there. This was one of those things. We have these debates about this, but no one wants to talk about the elephant in the room, which is an almost \$800 billion trade deficit, which is certainly partly related to innovation. If we had stronger innovation, stronger companies, we would have a smaller trade deficit.

So what are the problems? What are the limitations of federal policy? Well, I think a main limitation of federal policy is we don't have one. That's kind of a problem. Now, if I'm going to be accurate, I would say, we don't have an explicit federal

innovation policy. We sort of do it on the sly; we do it on the side. If it happens, that's great.

But a key component of that is if you listen to the economic debates in Washington this year, and you go to other think tanks – not Brookings and not ITIF and not the council; I won't name who they are – the economic message is largely something along this. Its one side is saying we should just cut taxes so we can spur capital formation. And the other side is saying we should just increase spending so we increase consumer demand. Neither of those have any – there's no evidence that either of those strategies boost growth. All of the evidence suggests that the way you get growth is through innovation. So we don't really have even that kind of basic framework as an agreement in Washington.

Secondly, to the extent we have an innovation policy; it's largely on the supply side if you will. And by the way, very important – I'm not trying to diminish it – we've been big, big supporters of these efforts as emblematic in the America Competes Act, but they're not enough. They're an important first step; they're not enough.

Second, much of federal innovation is focused on large firms and top-tier research universities. And that's in part because it's hard to deal with smaller firms for the federal government. It's hard to deal with other universities that might not be in the top 50. Second problem – another problem is when you have an economy with over 80, 85 percent now in the services, almost all our innovation policy is directed at manufacturing. And as Howard and John Alic have written in a book on services innovation, this is a critical component for us to get right because we cannot grow in the future without more robust services innovation. Yet, we really have it as an afterthought.

To the extent we have federal programs, they're fragmented; they're diffuse. There's really nobody in Washington that wakes up every morning, maybe with the exception of some folks at NIST. Nobody wakes up every morning and says my job is to drive innovation in the U.S. economy. And as you'll see, that's very different overseas.

Another problem is that we hear a lot of good things about states. I actually worked for a governor and created innovation programs for the state of Rhode Island. And we hear a lot about the states doing all these interesting and great things – and that's true. The reality is state efforts are largely under-funded. There's no way we can rely on the states to solve our problems for us because states simply don't have the money to do this. And unless we get a true federal partnership with the states, we're not going to be able to take advantage of all of the good things they can bring to the table.

And then, the last piece is, we're under-funded. One of I think the most interesting things for Howard and I when we did this research, we looked around the world and looked at every single developed country to see what they were doing in this space. And what we found was that virtually every country with the exception that we could find of Canada and Germany has either dramatically expanded or created an effort in the last decade an institution to drive innovation.

They all have science agencies and by the way, they are all expanding their science agencies. But they also now all have innovation agencies. A good one, for example, just if we were on the per capita base, you can see they had a pretty GDP base; we would have to significantly increase funding. To me, the model is Tekes in Finland. Just give you an example – \$34 billion is what we would have to invest every year in innovation-based programs to match what Tekes is doing. Now, you can say, okay, it is a small country; it still is the same share of GDP coming out of their taxpayers as this would be. So we simply are not keeping up with our competitors overseas.

What do we need to do? We need to basically – what we are arguing is creating a new national innovation foundation to focus on this. And I will turn it over to explain that to Howard Wial.

HOWARD WIAL: Thanks, Rob. So what would our national innovation foundation be? It would be a new federally-funded organization. It is important that it be federally funded because the benefits of innovation are nationwide. They don't stop at the border of any state or locality. It needs to be new because existing programs in the federal government, even if they were adequately funded, aren't enough to do the job. There are too many activities, such as service sector innovation, that fall between the cracks. There are too many unrealized opportunities for synergy between activities.

NIF would be nimble. It would be on top of the latest developments in business organization and strategy and in technology and would be able to change as they changed. It would be lean. We envision the NIF as having a staff of about 250 people, an initial budget of about \$1 billion annually, building out eventually to a budget of about \$2 billion annually. And finally, NIF would be collaborative. It would work cooperatively with businesses and other actors that are important in the innovation space.

We envision NIF as having six major kinds of activities. First, it would fund national sector research grants. These would be grants awarded on a competitive basis to consortia of firms in a particular industry that came together voluntarily with proposals. The proposals would be designed to identify and then conduct research to overcome the major short- to medium-term technological obstacles in the industry that all firms share in common.

Second, we would build on the terrific, but underfunded efforts that states are now conducting in the innovation space. NIF would offer grants to states to boost their innovation-based economic development activities enabling them to do more and enabling them to ensure that their efforts were in the interests of the nation as a whole, and not only the interests of the individual states.

Innovation isn't worth that much if it isn't broadly diffused throughout the economy. So it is important to have NIF operate a national technology diffusion effort. We already have an outstanding technology diffusion effort in manufacturing in the form

of the Manufacturing Extension Partnership [MEP] program. What NIF would do would be to incorporate the activities of MEP, give them a lot more money, but add to them as well – giving the NIF responsibility for performance improvement and innovation, not only in shop-floor production in manufacturing, but throughout the manufacturing value chain, in services conducted by manufacturing companies and in services totally unrelated to manufacturing.

NIF would administer grants to regional industry clusters, as Karen Mills will elaborate later. Regional industry clusters are among the most under-recognized contributors to productivity and innovation in this country, and we think NIF should rectify that situation.

NIF's focus on accountability and performance would include developing new and better measures of productivity and innovation, working with the federal statistical agencies to implement those measures, evaluating the results of its own activities, making sure that the firms and others actors that were receiving assistance through NIF were actually making good use of those funds, and conducting research on innovation and productivity, in much the way that the Industry, Technology, and Employment section of the old Office of Technology Assessment used to do.

And finally, NIF would be a champion for innovation and innovation policy in the federal government and more broadly, in much the same way that the Small Business Administration is a champion for small business in the federal government and more broadly, except that we don't envision the NIF as having the veto power over the activities of any other federal agency.

NIF would incorporate the activities of several existing federal agencies and programs. The Manufacturing Extension Partnership program and Technology Innovation Program in NIST, the WIRED program (Workforce Innovation and Regional Economic Development) in the Labor Department, and three small programs in NSF: Partnerships for Innovation, Engineering Research Centers, and the Industry/University Cooperative Research Centers, which really sit uneasily within NSF because unlike most of NSF, which is focused on support for basic scientific research, these programs are more oriented towards promoting commercial innovation. And finally, something else that it would incorporate that is not up there because it doesn't exist anymore is the old Office of Technology Policy that used to exist up until last year. The activities of the old Office of Technology Policy in evaluating innovation and doing research on innovation and promoting innovation would, of course, be key to NIF.

So NIF would address all of the major flaws that Rob identified in our current federal innovation policy system. We don't have an explicit innovation policy right now. NIF would be the vehicle for creating one. We have a fragmented and diffuse system right now. NIF would bring together the major innovation promotion activities in one federally funded entity. Our system is under-funded right now. NIF would provide a very substantial boost in funding. If you take the core programs, the ones we saw in the

previous slide, they are currently funded at about \$400 million a year, give or take. NIF, when fully built out, would fund those and other related activities at \$2 billion a year.

Our current system is focused on larger firms and universities. NIF, largely working through the states, would help to incorporate the contributions of smaller universities and smaller colleges and smaller firms to the innovation process, which are so important these days. We pay little attention to service innovation now. NIF would pay explicit attention to service innovation, while not slightly manufacturing. And currently our system is not sufficiently federalist. It mostly doesn't work explicitly with or through the states. NIF's program of state-based grants would solve that problem.

Several things NIF wouldn't be. NIF is not a vehicle for administering a top-down industrial policy. It is not top-down because it works collaboratively with businesses and other actors in the innovation space. It is not an industrial policy because it doesn't pick winners. It doesn't choose which projects to fund on the basis of which industry they are on with some idea that some industries are strategically more important than others to the nation as a whole. We think that there are opportunities for productivity and innovation in virtually every industry and that all can make contributions to the national welfare.

NIF wouldn't give out corporate welfare with no strings attached either. There would be criteria for giving out these funds, and the results of NIF activities would be evaluated. NIF wouldn't be a regulatory agency. Regulation, for both better and worse, plays an important role in promoting or inhibiting innovation but that isn't the role that we envision NIF playing. And as Rob said earlier, although we think basic education of scientists and engineers and patenting are extremely important supports for the national innovation system, NIF would not get involved with them. NIF would do what we are not doing enough of now. Finally, NIF would not micromanage state innovation-based economic development efforts.

There are three possible ways that we could imagine NIF being organized. Like MEP and TIP presently, it could be housed within NIST in the Commerce Department. That would be the smallest departure from existing practice. It would draw on the existing expertise in this area of NIST. But there is a risk that like MEP and TIP, it would be perpetually under-funded and ignored. At the other extreme, it could be a publicly sponsored corporation like the Corporation for Public Broadcasting. That would give it the most flexibility in terms of program and in terms of budget, but probably at the cost of the least public accountability. Or finally, it could be a kind of intermediate version. It could be an independent federal agency like the Export-Import Bank or NSF. We think that has certain advantages, although one could argue that it has both the advantages and the disadvantages of an intermediate-type solution.

So that is what we think NIF should be and should do. Karen Mills will now elaborate on the cluster component of our proposal, which could be housed within NIF or if for some reason NIF were not adopted, it could be an independent program on its own. Karen.

KAREN MILLS: Thank you. The second proposal that we have for you today is for a much more robust role in industry cluster initiatives. Some of you are familiar with industry clusters in a geography that have an impact. As you know, I'm from Maine, so we have been relying on pulp and shoes and textiles. But today we are doing cluster initiatives in boat-building and composite technology and specialty food. Given the challenges that we have in this global economy, it is the evolution of these clusters and the way they drive regional growth that is important for us to fund and to emphasize. But currently, as Rob and Howard pointed out, the federal policy that we have is focused on inputs. It is focused on helping firms one-by-one, or individual workers one-by-one, and it is missing a middle strategy. Clusters are a vehicle to help fill this gap. So we are going to recommend today a cluster policy of a cluster program and a cluster information center in order to promote cluster initiatives and competitiveness across the country.

It wouldn't be a cluster presentation if I didn't give you a cluster map. And in this example, medical devices. Every region has some important clusters. In this example, we have medical devices, which have several geographic concentrations across the country.

There is a growing body of empirical evidence that suggests that clusters have strong positive economic effects. We know that clusters drive greater rates of entrepreneurship. They drive more innovation measured in the form of patents. And in this scatter diagram, which is the hundred largest metros, the places where there are strong clusters are highly correlated with higher wages.

We have been talking so far, though, about cluster concentrations. And I want to bring in another concept, which is cluster initiatives. This is the life science cluster initiative, and you see in a cluster, there are all kinds of interconnected organizations. In the center of this one are the firms. These biopharmaceutical firms spend a lot of time interacting with the teaching hospitals above, with the educational institutions in the Boston area down below. They interact with all kinds of other industries, such as medical devices, which we saw earlier. And there is always in a cluster, a great interconnection with suppliers, in this case, specialized suppliers like venture capitalists, banks. They could be accountants. Here some are in the service area. But it is the interactions between these entities that create the power, the positive economic spillovers, the economies of scale – it is the joint research projects, it is the collection – the pools of skilled workers and the connections to suppliers that create the economic benefits that you find through these cluster initiatives.

So why should government have a role? We know that if we believe that clusters should be part of our economic strategy that they will drive competitiveness and strong regional economic growth. Why not just let the market take care of it? And the answer is because the market will under-invest in cluster initiatives. And there are several reasons for this. First, firms are at the center of clusters, and firms are busy. And it is hard for them to take up the leadership task sometimes of organizing, particularly when

they know if they wait a little while and somebody else organizes it, and there is a lot of public good that comes of it, they can jump on and be a free rider.

So the states step in, and in many cases, the states are now promoting these cluster initiatives. But the states will also under-invest because sometimes clusters spill over geographic boundaries and they end up in a neighboring state that is competitive. And a state may not want to promote activity in that competitive region. So there is a role for the federal government. And in fact, the federal government is quite present in these regions. An analysis that we did – we actually looked at the activity of the federal government in regional economic development, and we found that they are spending quite heavily, but not very efficiently. So the federal government in 2006 spent \$77 billion on 250 programs through 14 different agencies and departments. And as many of you know who have engaged in these programs, they are very often in silos. They don't link with each other. They don't leverage the state and local activity, and they aren't connected to the industry sectors. So this information, by the way, if you are interested in the details, is going to be available through a Brookings website link on the specific programs.

So we think that the federal government should be a partner in cluster initiatives, and that it should build on the widespread activity that we have seen already. There is a real hotbed of cluster activity, along with the innovation activity that was described earlier coming from other countries. We see national involvement in cluster activities in the EU. We see it in other countries like Korea. We see it in Canada. And we see it at the state level, where a number of states have made central cluster initiative programs, such as Oregon. And we saw at least one program, the WIRED program, here at the federal level.

And through these activities, we have learned some principles on what would make a successful cluster initiative program. We know that it should be bottoms-up. It should not be prescriptive, top-down. It should not pick winners. We know that these clusters do well when they are industry-led. And we know that collaboration is the cornerstone of successful cluster activity because it is from those interactions that the positive economic benefits accrue.

We propose to you today, for reasons which will become immediately evident, that the cluster program be called Competitive Leadership for the United States Through its Economic Regions or CLUSTER. It will have two parts and the first part would be an information center. The cluster information center, the CLIC, would do a number of things. It would do cluster mapping and it would provide a registry of cluster initiatives. This registry is much in demand by practitioners and actually exists in Europe called the cluster observatory. In addition, we would have a center for best practices, so states don't have to keep reinventing the wheel.

The core of the program, however, is the cluster grants, and they would come also in two forms: startup grants available to states, regions, entities that are looking to begin cluster initiatives, and the core program which would be a cluster grant program to states,

multi-state regions or metro areas which would then at that level distribute those moneys to cluster initiatives for collaborative activities such as joint research projects, workforce training, marketing collaborations. It's really in those collaborative activities and in the ability of those cluster initiatives to pull and leverage some of those other \$77 billion that I mentioned that the power of this program exists.

We have, you know, a relatively modest funding scheme here. It's 10 for the information center plus 350, so \$360 million. Brookings charged us with doing something that was legislatable, could be implemented, as this could be.

When you look at the issues that we see today in the Pennsylvania primary, when you look at the global challenges and you look at this missing middle strategy, how are we going to turn innovation into jobs? How are we going to create opportunity here in the United States for our industries to have competitive advantage? This is an affordable, effective vehicle that can be implemented across the country in a distributed way and drive the kind of economic prosperity we hope for four regions. Thank you. I'm going to turn it back to Randall.

MR. KEMPNER: Just want to make sure that – Ron? So what we'd like to move to now is some responses from our fellow panelists here. So I'm going to briefly introduce all of them and then I'm going to start with a few questions, but as I said before, we will then allow the audience to also ask some.

To my left, Ron Blackwell is the chief economist at the AFL-CIO. He coordinates the economic agenda of the federation and represents that AFL-CIO on corporate and economic issues affecting American workers and their unions. Emily DeRocco is the president of the manufacturing institute and the senior vice president at the National Association of Manufacturers. She is indeed a tireless advocate for the integration of workforce and economic development. I say tireless because I had the chance to do a road show with her through 13 of the original wired regions and see that she was up later than everyone else on the trips. So it's good to be on stage with you again.

Ernie Dianastasis is the managing director of CAI, which is an IT consulting organization that focuses on IT productivity, has 2300 associates worldwide. He is also highly involved in community and regional economic development efforts. He's on the board of Innovation Philadelphia and is the founder of something called First State Innovation, which is an entrepreneurial support organization in his home state of Delaware. And Ray Sheppach is celebrating 25 years of being the executive director of the National Governors Association, which is an extraordinary tenure for anyone in this town, and in that role leads all sorts of initiatives that focus on issues relevant to governors and states, including a serious program, a major program that focuses on workforce and economic development.

So that's who we've got and, Ron, I want to start with you. You've often talked about the need for what you call a high road national economic strategy that focuses on helping firms compete on the basis of innovation, skills quality. In the context of that, I'm interested to know how you see current federal efforts failing or succeeding and how you think the NIF might impact that and move it forward.

RON BLACKWELL: Well, my take is that this is a very interesting initiative and it couldn't have come at a better time, and not just for the political reasons that Rob stated or someone stated earlier, but also for economic reasons. As Rob pointed out in his remarks, we're currently running a \$700 to \$800 billion trade deficit. We have some of the world's leading universities and we have some of the world's leading, most competitive companies, but our country is not competitive. As a nation we are consuming much more than we're able to produce. No one that I know in the economics world believes that this is sustainable, us borrowing 6.5 percent of our GDP every year.

We're either going to have to find a way to produce more of the value equivalent of what we consume or we will be forced, one way or another, to consume less, and I don't think the American people are ready to consume less. So we must develop a national economic strategy first, a part of which is a national competitive strategy, but for the United States or any other high wage, high standard country, an innovation strategy – a competitive strategy has got to be based on innovation. We've got to produce new things and produce them in new ways and have a continuous improvement in our ability to do both.

As again was mentioned earlier, we have no national economic or competitive strategy. And there's no national economic strategy. And there's no national innovation strategy. I would cut it a little differently than Rob did. We've got one school of thought in Washington that believes you cut taxes and hope for the best. We've got another school of thought that says you balance the budget and hope for the best. Alone or together, I do not believe that gets us down the road toward a very prosperous future.

So I think what this initiative calls for in a very modest way, in a very flexible way, is a focus on one of the key elements of the future that we have in becoming a productive economy, one that is socially just and one that is environmentally sustainable. And it's starting at a very modest level; we have to find our way here. I really like the federal structure of it because it's got to be tied to the local community and the collaborative relationship with business and local markets. And so I think this is an idea whose time has come.

MR. KEMPNER: Let me move to Emily. As a former assistant secretary at Labor, you fought long and hard to support a more integrated and less stove-piped approach to economic workforce development and education. The NIF idea gets at this in certain ways and we're interested to know how you think this fits with some of the work that you've done previously.

EMILY DEROCCO: Thank you, Randall. I obviously am here because I'm a deep believer in the federal, state, and local government support for regional economic development. It's there; unfortunately, it's hard to find. So I'm going to be very practical this morning and talk to you about some major opportunities that the NIF proposal presents for all of us, and then a few challenges that I believe we also will face. And the practical nature of my comments relates to these 39 regional economies that many of us worked in the course the WIRED initiative. We had boots on the ground and we felt the pain and the joy of those regional economic leaders as they attempted to tap the multitude and I would say staggering amount of federal resources and support and expertise that is available, oh, if only you can find it.

So let's review the opportunities through the NIF. The first is finding, identifying this array of support, be it resources, technical assistance expertise that is available across 270 – Karen, is that right – 270 federal programs. They are, by authorizing statute, hidden within a multitude of federal agencies. We were fortunate by just the power of establishing relationships to have 12 federal agencies and their programs and resources supporting the WIRED regions as they moved forward, but position yourself as a regional economic leader in a community or in a region across the country, and ask how you would find, identify, tap and align and leverage those resources in support of your economic workforce development and education efforts. This is absolutely an incredible opportunity through the NIF to support the regional efforts by doing that hard work for our regional economic leaders. I think that's critically important.

I did mention leveraging and aligning. If we continue to spend federal resources, or for that matter state resources in the siloed programs, there is no effectiveness and efficiency or actual results from the expenditure of the taxpayer dollars. And we know now that you can leverage and align these resources in support of overall strategic economic visions within a region and that can be a powerful source of assistance. And I believe the NIF has the opportunity to be that power.

Other challenges that confronts regional economic leaders and even governors and states as they embark upon their new economic visions in this transformational global economy is the fact that number one, they need quick response, and number two, many federal agencies who take actions really have no concept of the unintended consequences for regional economic endeavors. So the NIF presents a single point at which, number one, we could foster quicker responses from a multitude of agencies and professionals in Washington, and number two, a place at which the unintended consequences on the ground of a regulation or other action in an agency could be identified and addressed.

And finally, despite the 270 programs and all those resources, there are gaps in our ability to support these extraordinarily creative activities that are occurring in transformational economies, but we don't know what the gaps are. And in order for Congress or the administration to begin to fill those gaps, we have to start identifying them. Karen really articulated the principal challenge we face and I hope I've

emphasized that again; it's the fact that each and every one of these programs is siloed with its own eligibility requirements, its own recipients of funds, its own bureaucracy to support it. Putting yourself again in the position of a regional economic leader responsible for pulling it all together and making sense of it wouldn't be so overwhelming if the National Innovation Foundation in fact could bring this together, make sense of it when you actually put the resources on the ground. It's an incredible challenge that NIF could address.

Another challenge for the NIF, it seems to me, is how empowered it is as a convener across federal agencies. I had the good fortune to either sit on or chair a multitude of interagency work groups. I know my colleague, the assistant secretary of Commerce, did as well. Interagency initiatives, as well intentioned as they are, really don't work because the convener doesn't have the power to impact the funding, to impact the policy decisions, to impact the outcome of federal action. So it is critically important to address this empowerment issue – where the NIF sits to actually impact the colleague federal agencies and programs. I know there is much discussion about how to make NIF as powerful an entity as our presenters have offered to all of us. And where it sits and how it's empowered and what it's authorized to do in drawing together the multitude of federal programs that have an impact on regional economic competitiveness are going to be critically important.

MR. KEMPNER: Thanks, Emily. Ray, innovation is not a new concept to you. You spent most of last year with your chair, Governor Janet Napolitano working on an initiative called Innovation America. A lot of issues were uncovered there that I think are relevant to the NIF idea, so can you give us a perspective from the state government and from governors in particular about the NIF and about the ideas within and the challenges and opportunities that exist?

RAY SHEPPACH: Sure. You're right. We did spend a whole year major initiative on innovation productivity change. We had the pleasure of working with Debbie and the council and Rob also assisted us with a major report. When we do these initiatives, we actually bring in a lot of independent speakers for the governor, so it's an education for them. But we also bring their staff together for three or four separate meetings during the year.

Our sense right now is that governors do understand a lot, that their long-run economic development strategies are about research and development, productivity change, clusters. I will not say that they don't wander off the reservation once in a while and do a few tax credits to move a plane across the state line, but I think they probably do it more for political reasons because I do think they in fact know better. At the state level, we do find now even though the federal government has not increased their R&D spending very much over the last four or five years, states actually over the last four or five years have increased it quite dramatically. It started to some extent in stem cell; it's going to biotechnology, nanotechnology. This is hundreds of millions of dollars in state after state, so they are really stepping up in that particular area.

But one of the things you do find is that once you stimulate a lot of additional activity at the state level, there's no place to connect back at the federal level. In fact, I couldn't even find an office to fund for a fairly small effort of \$300,000 part of this initiative. There really is no place to connect and we even got involved a little bit on the competitiveness bill on the Hill, and their thinking is similar that the federal role is up here and this connection between what's happening at the state level is really an afterthought. So what the Foundation would do would really be to fill that hole. I would almost look at it as a one stop place because it would help coordinate a lot of the activities that are done throughout the federal agencies as well as have some of the funding themselves. But that coordination then would allow states really to leverage the state money because I think governors do understand a lot more now that that money's going to state universities connecting it to the private sector.

And I think sometimes our friend Thomas Friedman should have named his book "The Spiked World" as opposed to "The Flat World" because I really think what's happening worldwide now is that we're competing with other clusters, not necessarily other nations, and that's a concept that I think governors are beginning to understand.

MR. KEMPNER: Ernie, you're an entrepreneur in a couple of ways. You have your own company which you are not employee number one, but almost, and you've been the founder of First State Innovation. You worked – kind enough to work with the Council on Competitiveness on the Wilmington regional competitiveness initiative. So from both the business perspective and from someone who's been involved in cluster initiatives, how do you respond to both of these ideas, to the National Innovation Foundation and specifically to some of the cluster information gathering and grant proposals that have been made?

ERNEST DIANASTASIS: Thank you, Randall. I think the concepts and the documents are insightful and very well done. And I think they have a huge potential to address and accelerate what I'll call the entrepreneurial economy throughout our country. You mentioned – one of the hats I wear – my day job is as an entrepreneur and I've been on a 25-year journey with this company CAI and it's basically stepped on every landmine you can step on. But you know, 25 years later we're a large global company with operations in Shanghai and the Philippines and Europe and working very hard to do the right things in the global economy from an IT perspective. It's very much a moving target.

I believe that the proposals and the things that are recommended in the documents and around NIF and the cluster approach could create outstanding roadmaps that would help entrepreneurs and investors really try to avoid many of those landmines as well as accelerate their ability to grow. I think when you really step back for a second and you look at it, it's really just ideas, people, and capital – putting together ideas, people, and capital. And it sounds really, really simple on the surface, and yet it's really like a three dimensional chess game and so it's – the most typical piece here is really figuring out how to put all those pieces together.

At a regional level, and one of the reasons we started First State Innovation was to try to get at that and try to accelerate the opportunity for entrepreneurs to really grow their business. And through the Council on Competitiveness's assessment of our area about a little over three years ago, we were able to pull the right stakeholders to the table, including the large corporations, their CEOs, their research organizations, the three major universities, six to eight successful entrepreneurs, all with various stages of growth of their companies, and then three or four venture capitalists. And by pulling these stakeholders together, we've been now working on ways to accelerate the entrepreneurial economy. I believe that the NIF proposal would be a wonderful shot in the arm in terms of being able to get at many of the barriers that are faced in terms of growing regional economies and in a couple of areas I think: one, the assessment component, being able to come and look at areas and do a gap analysis could eliminate a tremendous amount of thrashing and time that's spent trying to figure out where all the puzzle pieces are.

I think the ability to develop best practices models, and all you have to do is look at manufacturing and what has occurred there over the last 30 to 40 years. The same thing – this isn't rocket science – the same thing needs to happen with how to build a successful cluster environment and to be able to develop a best practices roadmap that can be replicated and where folks can be trained, they can be taught, and that kind of guidance can be provided. I believe that the cluster initiative through the NIF would have the opportunity to do that very effectively.

And then finally, grants and funding that would help kick start a number of things obviously is a very critical component because up to now, from our perspective, our funding has come through private foundations, the private sector, and now most recently, the appropriation from the federal government which is going to really help us, but the focus would be this would be very laser beam focused, I think, and the opportunities are to do that to really help accelerate the activity. So it's a combination of all these things and I believe the proposal has great potential and certainly one that we would love to engage in.

MR. KEMPNER: Thanks, Ernie. Ray, you know a few things about clusters as well. One of the papers on the Innovation America effort was called "Cluster-Based Strategies for Growing State Economies" and I think primary author Stu Rosenfeld is somewhere in the room, so shout out to Stu. In the context of that document and the work that the NJ has done promoting clusters, how do you think that this proposal will help? What should be changed, if anything, about this or how can it be strengthened?

MR. SCHEPPACH: Well, it's interesting, when we started this initiative and we started talking about clusters, we got a pushback from a couple of states who said, that was last year's sort of fad. And I could remember going back through the literature and really digging down. So then I came to the conclusion it was yesterday's fad; it was actually where the innovation was taking place, where productivity was taking place. With the area that we're exporting from the particular region, it was the areas that were growing rapidly, had the high wages, and so on.

So it met most of our criteria really, so it came back around and said, no, we were essentially going forward. But again, the problem you've got is that I think in this particular area, states get it and they're moving on it. They're even, in a number of areas, working across state borders and so on. But again, there's no place to connect back to the federal level because the concept is really foreign, as far as I could tell in dealing with agencies. And right now as a follow on to that initiative, we're working in depth with about five states in what we call the academy process where we ask each governor to basically appoint the five people in your state who can move this thinking forward. And a lot of times that's not just state policy people; it's often a legislator. It's sometimes private sector people and so on, so people that really can move it.

And normally when we do that in other areas like Medicaid or reform or so, we always include the federal government at that table, but at this one, there's nobody to invite basically to the table to be part of that discussion, which is very unfortunate because it is part of our approach in general, so again I think this fills that real gap, I think, of a place to connect with what's going on at the grassroots level.

MR. KEMPNER: Emily, you two are no stranger to the concept of a cluster. Wired is in part based on that concept. In fact, it's pointed out in the report as one of the few federal government programs that specifically embraces clusters. We talked about this a little bit earlier, but why, based on – why is it so hard to get the government to focus on that sort of integrated approach and what can we do to improve the recommendations that are in this report or through others to sort of institutionalize the integrated thinking that wired represents and clusters is a way of thinking.

MS. DEROCO: Well, the whole process of thinking about and acting on cluster development is just plain hard work. I again want to commend Brookings and Karen's paper for identifying first and foremost the need for sound information. Federal agencies, again, have siloed databases and when you're talking about an innovation life cycle within any regional economy, you really need access to all of that data and information to inform and make your efforts intelligent. The information is not available in a transparent, integrated way.

Number two, it's just very, very hard work on the ground. This whole concept of asset mapping that the Council has supported, that is regional economic leaders having to figure out what their assets are in order to move intelligently forward in the development of clusters, is just such plain hard work. Then there's the strategic partnership that you mentioned. You can't speak too broadly about the partnership that's needed on the ground. But at the federal level and quite frankly even at the regional economic level, that old saying about collaboration, being an unnatural act among unconsenting adults still applies. It is very, very difficult to get all those strategic players on the ground together, although all players are necessary to move cluster development forward and to create and sustain the innovation life cycle.

It's even harder in Washington. And Ray, it's not that there isn't one federal person to sit at your table; there are at least 270 of them and you can't schedule them all

for the same meeting. I've tried,— talk about an unnatural act. And then we're also confronting just that natural tension in cluster development between state and local government. We had occasions where governors had one perspective on their economic regions and their approach to economic development, when in fact local leaders saw a cross-border regional economy, it was where the assets could be brought together and the action would occur. It's very difficult for the federal government to work through the state-local tensions and become a wholly supportive entity behind this.

I think, though, that it is critically important that we look to institutionalizing a way to support these important efforts. At the end of the day it is about legislative authorization to pull some of this together, through the NIF and where it's positioned ultimately. I have to commend Ohio Senator George Voinovich who has written and placed into the pending reauthorization of the Workforce Investment Act an entire section on WIRED because the effort was to try to align and leverage these resources in support of talent development, which is the driver in regional economic success. But WIA, may – is not the driving place for this; it's a much bigger issue. And it's an issue that I think the proposals here today on the NIF and cluster development could help address, if we can move to a legislative agenda in support of it.

MR. KEMPNER: Thanks, Emily. Ron, different topic: you've been pretty outspoken on the need for U.S. innovation policy to focus on capturing the benefits of innovation here in the United States, making sure that the jobs that get created and the technologies that get created get commercialized here and the jobs stay here. How do you see these proposals furthering that goal? Are there any challenges to that goal that are inherent in these proposals? How do you respond to that?

MR. BLACKWELL: Okay. Just before I do that, I wanted to talk a moment about clusters. One of the reasons this is such an important idea and the federal structure of this proposal is so important is that the notion of innovation appropriately broad. I think Deborah mentioned earlier that in the old days, people would talk about R&D and spending as innovation. It turns out that from a labor point of view, people who do their work every day actually know something about it which people who don't do it. The workplace is a very important source of innovation, and so too is for managers in the workplace an important stakeholder.

The workplace, as well as the laboratory, must be tapped as as a source of innovation. Innovation has both a radical dimension -- the brand new spectacular inventions -- but it also has an incremental dimension. And I'm not even sure what the proportions are in contributing to the productivity and the improvement in product quality which is important for our competitiveness. So the cluster idea which maps these relationships at a local level and supports them from a national level is an extremely important feature of this process and I congratulate this program for adopting that point of view.

There are two caveats that I need to raise. One is that, as Rob was mentioning, increasing productivity is extremely important, as is product innovation, which can't be

measured like increasing productivity. But increasing productivity doesn't necessarily result in rising wages or good jobs. Since 1980, only the top 10 percent of American families have seen incomes rise at or above the rate of productivity growth, meaning 90 percent of American families over the past generation have seen their incomes rise below the rate of growth of productivity or not rise at all.

Good jobs require specific institutions and measures and policy to compliment the kinds of things about increasing productivity. And I believe that they're complementary between the good jobs and the increasing productivity, people who are getting compensated for their work do it better and they're more inclined and incented to actually contribute to the innovation process. We cannot assume that rising productivity will produce broadly shared prosperity unless explicit measures are taken in that direction.

And then secondly, because working people incomes have stagnated and the only reason family incomes are rising is because we've got so many people working – Americans are now working longer hours than workers in any other developed country, longer than even the vaunted Japanese who have a word for the sickness that results from working so long. But we can't go to those same workers – as we can see in this political season – and say, we want to raise your taxes and pay for a process for making companies competitive if the benefits of increased competitiveness do not redound to economic benefit in this country.

There's simply no rationale for American taxpayers to pay to make a multinational company successful in its research operations in China, which is now one of the favorite places for corporate America to locate R&D facilities. So there has to be something that ties the public subsidy that is involved in this process to the productivity and prosperity of the American economy, as well as the corporate economy.

And I think this project has taken an important step in recognizing that and saying that the grants that would be given would take this consideration under account and would offer these grants initially only to research projects in the United States. But of course, that doesn't capture the full economic benefit and so there is a need to go further. So I would just table these two issues, and suggest that this proposal will get the support of a broad swath of American workers and American taxpayers if we can find a way to tie the unquestioned benefits of the productivity improvements that it will generate to good jobs and broadly shared prosperity in the United States as well as globally.

MR. KEMPNER: Thanks. Let me now open it up to the floor. You are free to ask questions of the presenters and the panelists with the simple admonition that, please, may the questions be short and also may the responses be short.

Q: Good morning, I'm Jeff Alexander with New Economy Strategies. One observation I make about industry clusters as a concept is actually I spoke to Minister Denham yesterday at AAAS, and he mentioned that in the U.K., they have – I believe – it's 13 national regions, 11 of which will be the national center of excellence for biotechnology. So this idea that we have this redundancy of industry clusters across

regions – and I’m wondering how your policy proposal would plan to deal with the eternal issue of trying to reduce redundancy and at the same time preserve the diversity among these regions in the American economy.

MS. MILLS: Thank you for that question. We call that issue “flavor of the month.” And we see it quite a bit in state-based TBED – technology-based economic development programs that we actually catalogued as part of this study. The benefit of clusters is that they come really from the bottom up. And when you look at the actual cluster initiatives that occur in this country, they’re in every type of industry. They’re in fishing; they’re in boat building; they’re in tourism.

Some are technology-based; some are flavor of the month. But most actually when you look at them, if you look at the list in Oregon, there’s the farmer food cooperative, which has the organic and natural farms supplying the restaurants. That drives the tourism cluster. So it turns out that clusters are a way in fact to go in an opposite direction to offset some of the political impetus that you see, the top-down impetus saying, well, we better have an alternative-energy cluster; we better have a biotech cluster. So in fact, I think clusters work the other way.

MR. KEMPNER: In the very back?

Q: Paul Faller, NACFAM, National Council for Advanced Manufacturing. My question is for Dr. Atkinson. First, we’d like to give support to this great idea. But I would like you to talk a little bit more about how demand-side policies would play a role in your proposed NIF, including tools such as innovation, procurement policies that are emerging in Europe, incentives, and yes, even regulatory changes to boost demand for improved products, processes, and services.

MR. ATKINSON: Well, thank you, Paul. You know, I think part of the challenge in this whole debate is that there’s so much pent-up demand for a robust innovation policy that there’s a risk of throwing everything into the NIF because it’s like we want so much. It’s like, oh, we’ve got this thing; let’s put everything in it. And I think that would be a mistake. If it tries to do too much, it won’t do anything well. And so, I would counsel that it really shouldn’t be involved in regulation.

Now, I think to the point though – it can play a coordinating role. And it can play a role. We envision this as the place in the federal government, as Howard alluded, like SBA, that goes around and says to agencies, are you thinking about your procurement policies? I mean, this is something that the U.K. just announced, I guess yesterday, or recently that they’re going to have a federal-aligned procurement policy related to innovation. I wouldn’t see NIF really having any power to do that. But it certainly could be an activity where they would maybe benchmark on it, maybe look at best practices, maybe help promote it. But their job really can’t be to control the rest of the federal government. It has to be much leaner and mean to make it work.

MR. KEMPNER: Other side, Egils?

Q: Good morning. Egils Milbergs with the Washington State Economic Development Commission. So I'm going to give you a perspective from the other Washington. My question is focused on what is a cluster: local, regional, or global? I'd like your comment on the importance of clusters not only competing globally but collaborating globally.

Washington State's exports are up 30 percent. Manufacturing employment is up. Housing prices are kind of flat. But why is that? Global companies – Boeing operates globally, Starbucks, Amazon, Microsoft, et cetera – a third of that economy is involved with international trade. That's the case with Sweden and Finland as well.

So the question I have is how do you see this proposal, which I think is very exciting and a very positive development, really supporting the development of clusters that are not only competing globally but collaborating globally?

MS. MILLS: Well, there are two parts to your question. And this is very much in the front of cluster thinking now. I think the first part is how do you have a geographic-based local set of companies, suppliers who compete, who have competitive advantage in the global market? One of the ways in which you develop competitive advantage is you have the collaboration with research and development; you have new innovation; you have the best-trained workforce.

In addition, you have access to export markets. And those are often things that cluster initiatives help with. It's very hard for single firms, particularly small firms, to get access to export markets, to learn how to export, to do the regulation. And that ends up being something that cluster initiatives very often support.

Now, the second question is what about this world is flat and we're all sort of having these virtual clusters? And its nodes and they really operate without sense of place? There is sort of an academic and practical discussion of that. What we find at the moment is that there is very often disaggregation of activities. You may very well have a cluster that involves sourcing your product and your parts from a manufacturing sector that is far away, or doing some kind of research in a faraway place.

But in general, geography and the physical proximity still drive the economic benefits, the spillover benefits that happen from clusters. These collaborations do occur virtually, but the notion of a virtual cluster having these same spillover effects is not in evidence as of yet. And those who are looking at it don't believe it is likely to be in the near term.

MR. KEMPNER: We'll go in the far back on this side. There's a gentleman.

Q: I'm Gary Ratner from Citizens for Effective Schools. But there appears to be a disconnect perhaps between the central problem that I've heard this morning in the federal role in innovation and the proposed solution. Specifically, what I'm hearing is

that there's a huge federal investment already in economic development with the \$77 billion. But the problem is that there are 250 programs and they're siloed. They've got different eligibility requirements. As a result, it's very hard for the firms and for the states and others to access these different programs.

So my question is, are you proposing – and I'm inferring maybe you're not proposing, but I'm wondering why not if this is so – are you proposing that with the NIF that it would directly address this great excessive number of programs, that the Congress would consolidate the programs, put them perhaps under a single federal agency, and exactly contrary to what one of the gentlemen was suggesting that there would be a strong operational role there, rather than merely a kind of coordination role for the very reason that one of the panelists said, that mere coordination tends often not to work with multiple federal agencies. You need a decider who is above the equals.

MR. WIAL: We decided that it would not make sense to try to consolidate all the activities of the 270-odd federally supported economic development programs in the NIF or in any one place. In part, that's a judgment about political feasibility. But in part, it's a conceptual judgment also. Just because various programs have some impact – maybe even important impact – on regional or national economic development doesn't mean that the knowledge, skills, or operational abilities that they require are sufficiently similar that they should all be put together in one place.

We decided to focus our efforts on a particular part of the innovation space, on a part of the innovation space that we think is currently occupied by a tiny number of good but extremely under-funded and often threatened federal programs. Bring them together and expand on their activities. That isn't to say that in the future there couldn't be more done. But we're starting here.

MS. DEROCCO: Could I just add though – because I suspect you were referencing something I said as well – I would agree that jurisdictionally and from the sheer size and weight of the programs impacted here, just talking about consolidating all of them doesn't make sense in today's reality. But transparency over what those programs are and the ability to have a point for information about the programs, at least for some of us who are definitively supporting this initiative, are critically important and the NIF at least holds promise of being that source of information.

MR. ATKINSON: Let me add one important point to that, which is, when we thought through this and had a lot of people engaged with us to help us think through this, one of the questions was, what do we do about an agency like EDA, Economic Development Administration, or ARC, Appalachian Regional Commission? And our view was, there is a legitimate and needed federal role to help disadvantaged places.

That's not what this program is about. This program could help disadvantaged places. But it could also help Boston. It could also help Silicon Valley. And I think if you try to force the square peg in the round hold of what are really programs to help

disadvantaged places and people in them, and force that to be an innovation effort, you end up missing what they are good at. And you don't get what you want, which is a real innovation effort. So what we did is we combined programs and initiatives that are really focused on national innovation that may happen at the regional level. And so, I think there's really – you need to think about this as a little bit of a division of labor. And that's one reason not to include the whole kitchen sink.

MR. KEMPNER: Deborah, you had a question?

MS. WINCE-SMITH: I just wanted to follow-up on the last comment. And I think you've sort of got – this is kind of the 100-pound gorilla in the room on this because, I think I saw Phil Singerman come in the room. But we had the – I don't know – task or responsibility, whatever you want to call it, to chair the SARCI initiative, Strengthening America's Regional Communities, which was the first look in 40 years at our whole economic development strategy. And the amount of money that is spent is indeed staggering. And it's throughout the government. And I think, building on this very exciting initiative, it would be good to go back and see to what extent there are pieces there, not the whole kit and caboodle but make sense.

So for instance, we're talking about, Ron, your wonderful comments about keeping this capability here. You know, earn it; keep it; and grow it, all our growth coming from small and medium-sized businesses. HUD has a huge set of resources to incubate these things. And the fact that Greenwich, Connecticut, a very underperforming part of our economy is still getting community-block development grants for – I mean, the amount of money is staggering. So I think carrying this forward, let's think big; maybe start small. And this is certainly an area the council is going to work on.

Let's think to the extent we could draw in some of these other pieces because at the end of the day, there has to be robust growth for everybody in our society. It can't just be that we're focusing on the very high end of innovation and not ensuring that the rest of the country come along with that. So I just throw that out; it is a challenge. And everybody – believe me – that was happy with the existing way of accessing that money came out of the woodwork to make sure there was no change.

MR. KEMPNER: George? Let's keep it on the same table.

Q: George Vradenberg. I'm currently vice-chair of the Chesapeake Crescent, which is an initiative here of the two governors, the mayor, and the federal government here in the three-state region to try and drive a variety of regional performance metrics. And I want to commend you for not trying to put together the federal agencies. In recent history, we've tried to put together through the Department of Homeland Security federal agencies. The DNI is now supposed to be sitting on top of the intelligence agencies. They have tremendous problems integrating at an operational level, distinct federal programs and agencies with different histories and different missions.

Having said that, I would like to commend to you a couple of things that are happening in the homeland security field as analogies. First, the urban area security initiative puts money into urban areas, which have tended to require local players to think regionally and not along state boundaries or necessarily around metro boundaries alone, so that the grant program there essentially requires local players to come together to define their problems, to define the gaps in what they need, in order to make better decision making at regional levels.

And the second operational aspect of what they've done is fusion centers, where basically bottoms up, tend to be state-run, efforts at putting together the local state and local assets, including the private sector into operational entities, which brings in federal players from a variety of federal agencies into a common or virtual place so that in fact operations are in fact coordinated between federal and state. If the national innovation foundation were to be a clear front end for the local communities to stimulate regional centers of technology diffusion or innovation, but at the same time provide a clear view into the federal government for local players, I think it would provide an enormously valuable function without the tremendous operational and political problems of trying to consolidate federal agencies and programs.

MR. KEMPNER: Any comments? I'm going to take one last question because we're just past 10:00. Were there any on this side of the room? Right here in front?

Q: My name is Scott Matthews. I'm with the Department of Commerce, manufacturing and services. And I actually do work on innovation on a daily basis. My question is about the clusters to some degree. And that is, I think everybody on the panel has talked about not choosing winners and losers in some sense, I think primarily in the sense of technologies and companies and sectors.

But isn't there also the danger of picking winners and losers in a political sense in that to whichever community or jurisdiction assistance is given, there is obviously political ramifications. When jobs are created and incomes rise, it provides assistance to the politicians that are in that particular jurisdiction at that time in terms of their reelection. So is there also that particular danger and how do you resolve that in not picking winners and losers in the political sense?

MR. KEMPNER: Want to take that one, Karen?

MS. MILLS: Yes. I'm a believer that when you invest in these clusters, in the fabric of our workforce, our entrepreneurs, that these things are lasting and that they last through political cycles. And if you stage these grants properly, one of the things that we did in our cluster grants actually in Maine is they're competitive. And they have a series of criteria about things that are really bipartisan political objectives in terms of competitive advantage, job creation, driving productivity and innovation, and that those structures tend to last throughout the political cycles and really be appealing in a bipartisan way.

MR. ATKINSON: I would also add, if you look at the programs and initiatives we're combining, like MEP and TIP and some of the NSF programs, you can say what you want about those programs, but I don't think anybody can make a claim that their decisions are politically motivated. They're largely peer reviewed, expert reviewed. And when you look at the long report, you'll see that we've got a pretty stringent process that we think should be put in place that these initiatives, whether it's state grants or industry-sector grants, would have a pretty strong peer-review process.

The other part of it, I think, that would help is we envision NIF having a fairly strong board that would be appointed by the president and Congress, with people from labor, from business, from academia, from state and local government. And I think they would help try to insulate it from some of the political pressures.

MR. KATZ: First of all, I'd like everyone to thank Randall and the panel. And I was really struck by Emily's comment about collaboration being an unnatural act in the federal government. And I think if anything, today's event is a sign that collaboration is alive and well in the NGO community in Washington. I want to thank Rob; I want to thank Deborah. You are great partners. And I think this is really the start, I hope, of more collaboration between our institutions.

My takeaways from this panel, which was superb was, in addition to the political moment – I think Ron's comments, other comments on the economic moment – and the need to think differently about competitiveness policy and innovation policy in the United States, and the challenge of shared prosperity is something that we obviously take very seriously at Brookings. As I said at the beginning, this is really the start of a series of concrete, legislatable ideas that can help the United States advance innovation, advance human-capital formation, advance infrastructure, and advance the quality of place, because those assets and the places in which those assets concentrate, I think, are going to be what drives us forward.

So in June, I would urge many of those here today, we're going to hold a national summit. And it won't be a summit just on innovation; it will really be a summit on American prosperity and how a metro nation can begin to re-envision its partnership with the federal government. And what I like so much about this conversation today was this constant refer back to the capacity of states, the capacity of localities and regions, really the need, the moment for bottom-up collaborative federalist responses to the big issues that face the country today.

So when you go outside, you can see the forms for June 12th national summit. And what I am told is that there are extra policy briefs and versions of the long reports that are also out there as well. I want to thank everyone for coming today and again thank ITIF and the Council on Competitiveness for being great partners. Thank you.

(END)